UNIVERSITY OF THE PHILIPPINES MANILA
COLLEGE OF ARTS AND SCIENCES
DEPARTMENTAL OF PHYSICAL SCIENCES AND MATHEMATICS

Tutorial and Online Examination System

a Special Problem submitted in partial
fulfillment of the requirements for the
degree of Bachelor of Science
in Computer Science

Submitted by:
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October 2006

ACCEPTANCE SHEET

The Special Problem entitled “Tutorial and Online Examination System” prepared and submitted by Mark Anthony P. Manalang in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science has been examined and is recommended for acceptance.

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ABSTRACT

The UP Manila Learning Resource Center's Tutorial and Online Examination System (TOES) is an information system that enables mock examination and tutorial scheduling to be conducted over the internet. It is an examination system wherein the staff creates questions, the admin administers exams, the students take exams, and the director examines exam results. It is also a tutorial scheduling system where the student requests/enlists in a tutorial, the admin posts tutorial schedules based on the availability of the tutor, and the staff records the tutorial attendance.

Keywords: information system, online examination system, tutorial schedule system, exam analysis, exam item analysis, exam data bank

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I. INTRODUCTION

A. Background of the Study

The University of the Philippines Manila Learning Resource Center (LRC) is mandated to supplement, complement and coordinate existing learning assistance programs to ensure that the goal of promoting academic excellence will be realized in a more caring and nurturing environment. [1] Mock examinations and tutorial programs are examples of learning assistance programs that LRC provides.

The mock examination provides simulation of exams in Mathematics, Chemistry and Physics. The questions in the exams are taken from previous mock exams and from tutors thus giving the student a hint on what to expect in the real exam. The tutorial program provides free tutorials on different subject areas in Mathematics, Communication, Chemistry and Physics subjects. Tutorials are done by competent peer tutor and/or volunteer faculty. [2]

To avail of the free tutorial program, students will have to go to LRC where they select a tutor whose availability suits their free time and LRC's office hours. After selecting a tutor a "tutorial appointment slip" is submitted to the LRC staff. Tutorial requests shall be made two days in advance to allow tutors to be informed. The tutee will have to return the following day to confirm if the appointment has been set. [2]

B. Statement of the Problem

The Learning Resource Center (LRC) of the University of the Philippines Manila (UPM) has been performing “mock exams” manually. During a mock exam, students are given test papers and answer sheets. Since this method is manually done, some written answers may not be easily readable and hence appear ambiguous thus contributing to error. The tutors check these answer sheets consuming precious time and effort. The latter takes more or less a week before a student gets the test results.

LRC has difficulties in managing their question records. They keep everything in folders for storage which slows down the retrieval of the questions. The schedules of tutorial or exam sessions are usually posted on bulletin boards and most of the time they fail to get the attention of students.

It is for these reasons that a new system should be introduced. This system should speed up the examination processes thru electronic checking of answer sheets and generation of performance reports.

C. Objectives of the Study

The main objective of the study is to create the University of the Philippines Manila Learning Resource Center’s Tutorial and Online Examination System (UPM LRC TOES) with the following features:

1.) Allows UP Manila students to:

a. enlist in tutorial schedules in Mathematics, Chemistry and Physics

b. request/petition a tutorial with preferred subject, day(s), and period(s)

c. take the mock exam in Mathematics, Chemistry and Physics

d. update personal account

2.) Allows peer tutor or faculty tutor to:

a. update tutor schedule

b. update personal account

3.) Allows LRC staff to:

a. record student attendance (enlisted or walk-in) in a tutorial session

b. add/edit/delete questions in the question bank

c. add/edit/delete subject in the question bank

d. add/edit/delete topic in the question bank

e. update personal account

4.) Allows the administration officer/system administrator to:

a. set a tutorial based on the online requests

b. set exam schedule

c. approve the registration request of student for an exam

d. generate HTML file of the recently given exam (for post exam discussions)

e. update personal account

f. add/edit/delete user accounts

g. to generate an exam in a specified subject

5.) Allow the LRC director to:

a. perform item analysis in a specified examination

b. update personal account

D. Significance of the Study

The system supports multiple choice, true-or-false and matching type question formats. Employing radio buttons for both multiple choice and true-or-false questions and drop down menus for matching type questions would eliminate the problems caused by ambiguous writings in the pen and paper method.

It will also perform the checking electronically freeing the LRC staff from the hassles of checking hundreds of test papers. Reports regarding the students performance (i.e. the frequency of errors) will help the tutor identify the topics that need more attention and elaboration thus resulting to a more detailed and relevant post-exam discussion.

The system should also provide a back-end module for administrative purposes. In this module the faculty tutors or staffs from LRC can create test questions either by supplying new questions or by extracting old questions from the test questions database.

E. Scope and Limitations

1. The system is designed for UP Manila LRC only.
2. A student can take the exam provided that he/she is currently enrolled in UP Manila with a valid TOES student account, is registered for the exam and is authorized by the assigned administrator. The validation of the account is done manually by the LRC office. Each account is deactivated after the end of each semester.
3. Computational or essay type of questions are not supported**.**

4. Unfortunately there is no feasible way to obtain the current enrollees for each semester so the registration of student accounts can not be improved.
5. The process involved in accommodating 'wait listed' students is not covered by the system.
6. A student may take a mock departmental exam only once. If for example a student took the 'first departmental' mock exam in Math 17 for the current semester he/she will not be allowed to register in any 'first departmental' mock exam for Math 17 in the current semester.
7. When a tutorial schedule or an exam batch schedule is cancelled, the LRC is not obliged to inform the affected students. It is the student's sole responsibility to track the status of his/her enlistments and registrations.
8. The LRC can only produce LIMITED exam batch schedules due to limited number of computers.

F. Assumptions

1. System date and time should always be accurate.
2. Staffs creating questions should be given proper instructions on how to compose questions using the TOES question editor.
3. All questions stored in TOES are free from misspellings or any other incorrectness.
4. The machine (PC) used in creating questions must have Microsoft Word 2002 installed. The macro scripts embedded in the question templates will not work if a different version is installed.
5. The machine (PC) used in creating questions must have a 'C:\toes\' folder. The macro scripts embedded in the question templates will only work if the templates are locally saved in this folder.

II. REVIEW OF RELATED LITERATURE

FSCREATIONS, INC. boasts streamline assessment from start to finish with ExamView Assessment Suite Professional Edition. The product is a complete toolset that enables the user to build comprehensive tests with Test Generator, administer tests with Test Player, and analyze results with Test Manager. A full-featured dedicated word processor allows the user to customize questions that can be selected from fourteen formats including Multiple Response, Bimodal, and Dynamic. Question Banks are used to compile questions into multiple study guides and tests. Tests created with the program can be administered on paper, over local area network, or online. To complete the package, the Test Manager grades the test through a variety of scanning methods, tracks examinee progress, and generates reports useful for analysis. [[3]]

The Republic of the Philippines Professional Regulation Commission (PRC) developed an online facility named Licensure Examination and Registration Information System (LERIS) for online licensure services. The LERIS services are Online Application, Online Payment, Walk-in Examination, and Online Registration. The Online Application requires applicants to fill up electronic forms and attach electronic/scanned copies of supporting documents which will be stored in the LERIS database as his/her permanent record. The initial implementation of LERIS requires the applicant to submit the original copies of the supporting documents for verification. Electronic linkages with related government agencies that provide data about the professional will soon be established to allow paperless transactions. After the applicant is verified he/she will be allowed to take the PRC Walk-in Examination System (WES). It is a multi-disciplinary examination system that allows professionals of various disciplines to take their respective examinations at the same time and at the same venue. It is a biometrically-secured interactive examination that randomly generates unique test set for each examinee and automatically computes test results. After taking oath, the new professional must apply to register his / her professional license and request for certificates and endorsements using the Online Registration system. Subsequent registration renewal will also be through the latter. [4]

The Computer-Assisted Testing (CAT) of the Philippines Civil Service Commission (PCSC) is a software program designed to administer the PCSC's Career Service Professional or Sub professional examinations - the entrance test for the second and first level employees, respectively, in the government. It facilitates the systematic storage, updating and retrieval of pertinent examinee data as well as checking and scoring of examinee answers to test questions from computerized software. It is also able to generate reports of ratings and statistics of the test scores. [5]

CourseWebs is a Learning Management System (LMS) that enables distance learning courses to be conducted over the Internet. CourseWebs has a built in content management system, exam system, discussion forums, and user management system. The LMS lets any instructor create an online classroom that includes exams and quizzes, discussion forums, a course calendar, and HTML content. The entire system is browser-based and can be deployed over the internet, intranets and LANS. [6]

Moodle is a software package for producing internet-based courses and web sites. It's an ongoing development project designed to support a social constructionist framework of education. Moodle is provided freely as Open Source software (under the GNU Public License). Moodle will run on any computer that can run PHP, and can support many types of database (particularly MySQL). [7]

Random Test Generator – Pro is designed for educators at any level to develop TestBanks of test items from which randomly selected test items are then extracted to create student tests. Test Items may comprise of multiple choice, True/False, Fill-in and/or essay types. The Test Builder option can be set to identify exactly how many questions to select from each TestBank to create a single test. These tests may be administered on the computer with an optional timer, printed on paper or administered via the Internet. [8]

The PNP Examination System processes files and records of examinees to the PNP Examinations conducted biannually by the Commission. The system allows users to generate Room Assignment lists, Examinee Master List, and statistical reports such as passed/failed, item analysis, frequency distribution, and certified list of eligibles. [9]

WebCT is a leading provider of e-learning systems for educational institutions. Thousands of colleges and universities in more than 70 countries worldwide are expanding the boundaries of teaching and learning with WebCT. WebCT is a web application with course tools for the convenience and unique learning needs of individual students. The course software includes communication tools, assessments, and course materials. Communication tools include chat rooms, whiteboards, discussion threads, and internal course email. Assessments on the other hand can be by self-tests, surveys, and quizzes. Lastly, course materials may include presentations, syllabi, and links to other sites. [10]

ParSYSTEM is Scantron's integrated suite of powerful software modules that allow users to create, administer and score tests on paper, via networks or over the Internet. With ParTEST, teachers can develop multi-format tests from item banks. ParTEST Online enables test takers to take tests online or on a network. ParSCORE completes the suite allowing educators to manage student records, analyze test outcomes and create reports. [[11]]

MindwebX is an Online Examination System that provides a complete solution to Create, Process, Manage, Publish, and Deliver examination online. Today the number of students aspiring to take examination is growing. Under such a situation the traditional examination methods are not much efficient considering a large number of students dispersed in various geographic locations. So this online examination system provides a reliable and efficient method to conduct exams for universities, distant education systems, bank recruitments and other large recruitment firms. This system can easily and flexibly handle examination of thousands of students simultaneously dispersed across distant geographic locations, providing completely secure and efficient web based solution for conducting Online Examination. [[12]]

III. THEORETICAL FRAMEWORK

A. Learning Resource Center (LRC)

Established on April 17, 1997, its task is to supplement, complement, and coordinate existing learning assistance programs wherein the goal of academic excellence will be realized in a more caring and nurturing environment. [[1]]

Its goals include the following: 1) Upgrade student capabilities to meet the demands of UP education, particularly in the Natural Sciences, Mathematics, Arts and Communications, and the Social Sciences. 2) Provide alternative avenues for personal growth. 3) Provide assistance to student's psychosocial development through specific activities and programs 4) Coordinate with other offices/units and organizations within the university regarding student progress and welfare. 5) Determine the effectiveness of learning assistance programs. [[1]]

The three major components of LRC are: 1) Instructional and Enrichment Assistance Program which includes a) Summer Bridge Program for Admitted Freshmen b) Self-Instructional and Tutorial Program, 2) Life Skills Development Program, and 3) Monitoring and Evaluation of the Learning Assistance Programs. The available services at the LRC consist of tutorial program, simulated examinations, reviewers, and computer and internet use. The accessible facilities comprise a Multimedia Library, Audio Visual Room, and the IT Room. [[1]]

B. Item Analysis in an Examination

Item analysis is a statistical summary of the results of an exam administered to a group of examinees. As such, it is used to evaluate the effectiveness of the exam. More specifically, the information included on the item analysis is used to identify miskeyed or malfunctioning items, as well as items that simply do not discriminate between the better candidates and the poorer candidates. Item analysis information is also useful when revising items for future administrations of the exam.

C. Information System

Any means for communicating knowledge from one person to another, such as by simple verbal communication, punched-card systems, optical coincidence systems based on coordinate indexing, and completely computerized methods of storing, searching, and retrieving of information. [13]

It is made up of the database, application programs and manual and machine procedures. It also encompasses the computer systems that do the processing. The database stores the subjects of the business (master files) and its activities (transaction files). The application programs provide the data entry, updating, query and report processing. The manual procedures document how data are obtained for input and how the system's output is distributed. Machine procedures instruct the computer how to perform scheduled activities, in which the output of one program is automatically fed into another. The daily work is the online, interactive processing of the business transactions and updating of customer, inventory and vendor files (master files). At the end of the day or other period, programs print reports and update files that were not updated on a daily basis. Periodically, files must be updated for routine maintenance such as adding and deleting employees and making changes to product descriptions. [13]

D. Database Management System

MySQL is defining a new database standard. This is based on its dedication to providing a less complicated solution suitable for widespread application deployment at a greatly reduced TCO. MySQL's robust database solutions embody an ingenious software architecture while delivering dramatic cost savings. With superior speed, reliability, and ease of use, MySQL has become the preferred choice of corporate IT Managers because it eliminates the major problems associated with downtime, maintenance, administration and support. [14]

MySQL is a key part of LAMP (Linux, Apache, MySQL, PHP / Perl / Python), a fast growing open source enterprise software stack. More and more companies are using LAMP as an alternative to expensive proprietary software stacks because of its lower cost and freedom from lock-in. [14]

E. Scripting Language

Scripting languages are designed for "gluing" applications; they use typeless approaches to achieve a higher level of programming and more rapid application development than system programming languages. Scripting languages such as Perl, Python, Rexx, Tcl, Visual Basic, and the Unix shells represent a very different style of programming than system programming languages. Scripting languages assume that there already exists a collection of useful components written in other languages.

Scripting languages aren't intended for writing applications from scratch; they are intended primarily for plugging together components. [15]

PHP, which stands for “PHP: Hypertext Processor”, is a widely used open source general purpose server-side scripting language. It is especially suited for web development and can be embedded into web pages. Its main goal is to write dynamically generated web pages. [16]

JavaScript is the Netscape-developed object scripting language used in millions of web pages and server applications worldwide. In a nutshell, JavaScript is a dynamic scripting language supporting prototype based object construction. The basic syntax is intentionally similar to both Java and C++. JavaScript can function as both a procedural and an object oriented language. [17] Client-side JavaScript extends the core JavaScript language by supplying objects to control a browser and its Document Object Model (DOM). Client-side JavaScript statements embedded in an HTML page can respond to user events such as mouse clicks, form input, and page navigation. [18]

IV. DESIGN AND IMPLEMENTATION

A. Entity Relationship Diagram

The Entity Relationship Diagram is shown in Figure 1. The database contains twenty two tables namely answer, attendance, batch, degree programs, enlistment, exam, exam item, file, LRC personnel, question, registration, request, statistics exam, statistics item, student, subject, topic, tutor, tutor schedule, tutorial, UPM colleges, UPM departments. The data table is seen in the succeeding pages.

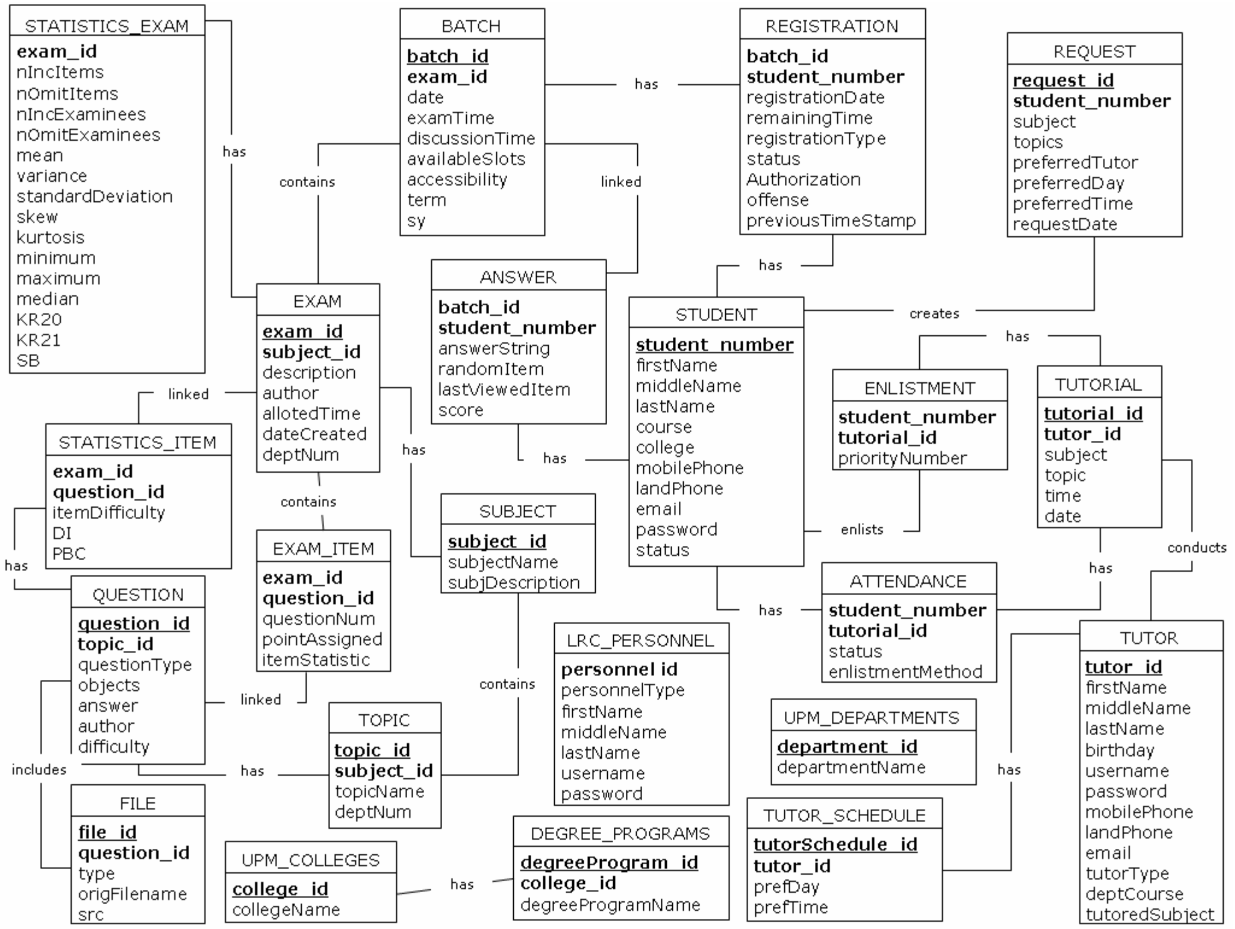


Figure 1: Entity Relationship Diagram, UPM LRC TOES

B. Data Table

ANSWER – A table representing a virtual answer sheet.

Field	Data Type	Data Element
batch_id	smallint	foreign key (BATCH)
student_number	varchar(10)	foreign key (STUDENT table)
answerString	text	contains sequential answers concatenated by "-" whose order is determined by the randomItem
randomItem	text	determines the order in which the exam items are shown during the examination
lastViewedItem	smallint	foreign key (QUESTION) that identifies the last exam item viewed by the examinee
score	smallint	examinee's score after taking the examination

ATTENDANCE – A table for storing the attendees for each tutorial schedule.

Field	Data Type	Data Element
student_number	varchar(10)	foreign key (STUDENT) identifies the attendee
tutorial_id	smallint	foreign key (TUTORIAL) identifies the tutorial schedule
status	enum('present','absent')	marks the attendee if he/she is present or absent in the tutorial schedule
enlistmentMethod	enum('online', 'walk in')	an attendee is marked as 'walk in' if he/she is not enlisted in the tutorial schedule but was able to attend based on LRC's discretion

BATCH – Lists all the exam batch schedule for each exam.

Field	Data Type	Data Element
batch_id	smallint	primary key
exam_id	smallint	foreign key (EXAM) identifies the exam for this exam batch schedule

date	date	date of the examination
examTime	tinytext	examination period using the hh:mm-hh:mm 24 HR format
discussionTime	tinytext	discussion period using the hh:mm-hh:mm 24 HR format
availableSlots	int(3)	reflects the number of computers that can be used for the exam batch schedule
accessibility	enum('open', 'closed')	'closed' indicates that the answer sheets for the exam batch schedule was checked
term	enum('first', 'second', 'summer')	'first' for first semester, 'second' for second semester
sy	varchar(9)	school year using the format yyyy-yyyy

DEGREE_PROGRAMS – Lists the degree programs offered in UP Manila.

Field	Data Type	Data Element
degreeProgram_id	smallint	primary key
college_id	smallint	foreign key (UPM_COLLEGES) identifies the assigned college for the degree program
degreeProgramName	tinytext	specifies the degree program name

ENLISTMENT – Stores the enlistees for the tutorial schedules.

Field	Data Type	Data Element
student_number	tinytext	foreign key (STUDENT) identifies the enlistee
tutorial_id	smallint	foreign key (TUTORIAL) identifies the tutorial schedule
priorityNumber	smallint(3)	helps the system to identify the priority and wait listed enlistees

EXAM – Lists the available exams.

Field	Data Type	Data Element
exam_id	smallint	primary key
subject_id	smallint	foreign key (SUBJECT) identifies the subject of the exam

description	tinytext	short description of the exam
author	tinytext	creator of the exam
allotedTime	time	exam’s duration in hh:mm:ss format
dateCreated	dateTime	YYYY-MM-DD hh:mm:ss format specifying the date when the exam was created
deptNum	text	specifies the departmental number

EXAM_ITEM – Lists the questions for every exam.

Field	Data Type	Data Element
exam_id	smallint	foreign key (EXAM) identifies the exam
question_id	smallint	foreign key (QUESTION) identifies the question
questionNum	smallint(6)	specifies the order of the question in a non-randomized exam
pointAssigned	tinyint(4)	specifies the weight of each exam item
itemStatistic	mediumtext	stores system code which helps in performing item analysis

FILE – Lists all files that are embedded in some questions.

Field	Data Type	Data Element
file_id	smallint	primary key
question_id	smallint	foreign key (QUESTION) identifies the question where the file is embedded
type	tinytext	specifies the type of the file
origFilename	tinytext	stores the original filename of the file
src	tinytext	stores the local path of the file

LRC_PERSONNEL – Lists all LRC personnel.

Field	Data Type	Data Element
personnel_id	smallint	primary key
personnelType	enum('administration officer', 'lrc director', 'staff')	specifies the type of personnel
firstName	tinytext	personnel first name
middleName	tinytext	personnel middle name
lastName	tinytext	personnel last name

username	varchar(16)	personnel username
password	varchar(16)	personnel password

QUESTION – Stores all questions.

Field	Data Type	Data Element
question_id	smallint	primary key
topic_id	smallint	foreign key (TOPIC) identifies the topic of the question
questionType	enum('matching type', 'multiple choice', 'true or false')	specifies the type of question
objects	mediumtext	links the question to the html file and auxialliary files
answer	text	contains the answer for the question
author	tinytext	specifies the author of the question
difficulty	enum('very easy', 'easy', 'medium', 'hard', 'very hard')	rate of difficulty according to the author

REGISTRATION – Stores the registered students for every exam batch schedule.

Field	Data Type	Data Element
batch_id	smallint	foreign key (BATCH) identifies the exam batch schedule
student_number	varchar(10)	foreign key (STUDENT) identifies the registered student
registrationDate	dateTime	date when the student registered using the format YYYY-MM-DD hh:mm:ss
remainingTime	time	stores the students' remaining time during the examination
registrationType	enum('online', 'submitted')	'submitted' registrations are registrants that are directly registered by the exam administrator
status	enum('waiting', 'answering', 'blocked', 'finished')	stores the status of the examinee during the examination
authorization	enum('no', 'yes')	this flag tells the system if a registrant is allowed to access the exam
offense	tinytext	stores examinee's offense when he/she commits a

		violation
previousTimeStamp	dateTime	marks the examinees last time of access

REQUEST – Lists all tutorial requests from students.

Field	Data Type	Data Element
request_id	smallint	primary key
student_number	varchar(10)	foreign key (STUDENT) identifies student
subject	smallint	identifies the subject of the tutorial request
topics	text	stores the topics of the tutorial request
preferredTutor	smallint	identifies the preferred tutor for the tutorial request
preferredDay	date	specifies the preferred date for the tutorial using the YYYY-MM-DD format
preferredTime	tinytext	specifies the preferred time for the tutorial using the hh:mm-hh:mm 24 HR format
requestDate	datetime	specifies when the request was made using the YYYY-MM-DD hh:mm:ss format

STATISTICS_EXAM – Stores all exam statistics.

Field	Data Type	Data Element
exam_id	smallint	foreign key (EXAM) identifies the exam
nIncItems	float	The number of selected items
nOmitItems	float	The number of omitted items
nIncExaminees	float	The number of selected examinees
nOmitExaminees	float	The number of omitted examinees
mean	float	the average score
variance	float	a measure of spread of test scores
standardDeviation	float	another measure of spread of test scores. (The standard deviation is the square root of the variance)
skew	float	This index summarises the extent of symmetry in the disribution of candidates

		scores. A symmetrical distribution has a skewness of 0; negative values indicate more high scores than low scores and positive values indicate more low scores than high scores.
kurtosis	float	This index compares the distribution of candidate scores with a particular mathematical distribution of scores known as the Normal or Gaussian distribution. Positive values indicate a more peaked distribution than the specified distribution; negative values indicate a flatter distribution
minimum	float	This is the lowest candidate score in this group.
maximum	float	This is the highest candidate score in this group.
median	float	This is the middle score when all candidates scores in this group are arranged in order.
KR20	float	This statistic measures test reliability of inter-item consistency. A higher value indicates a strong relationship between items on the test. The Kuder Richardson 20 will always be greater or equal to the Kuder Richardson 21. It is considered more accurate than the Kuder Richardson 21.
KR21	float	The Kuder Richardson 21 approximates inter-item consistency. A high value indicates a strong relationship between items and a lower value a weaker relationship. The mean or average score of the exam is part of the formula. The values of

		both KR20 and KR21 range from 0 to 1
SB	float	The Spearman-Brown method divides the corrected test into odd and even halves. Each half is scored as though it were a separate test.

STATISTICS_ITEM – Stores all exam item statistics.

Field	Data Type	Data Element
exam_id	smallint	foreign key (EXAM) identifies the exam
question_id	smallint	foreign key (QUESTION) identifies the question
itemDifficulty	float	The percentage of examinees who got the item correct.
DI	float	Measures the extent to which item responses can discriminate between individuals who have a high score on the test and those that get a low score.
PBC	float	A point biserial correlation is the correlation between the student scores for a given item and the student scores for the test as a whole.

STUDENT – List all students who have TOES STUDENT accounts.

Field	Data Type	Data Element
student_number	varchar(10)	primary key
firstName	tinytext	first name of student
middleName	tinytext	middle name of student
lastName	tinytext	last name of student
course	tinytext	course of student
college	tinytext	college of student
mobilePhone	varchar(15)	mobile phone of student
landPhone	varchar(15)	land line of student
email	tinytext	email address of student
password	varchar(16)	student password
status	enum('inactive', 'suspended', 'active')	status of student’s account, ‘suspended’ when a student fails to attent his/her enlisted tutorial schedule, while ‘active’ when he/she is currently enrolled in the current

		term otherwise ‘inactive’

SUBJECT – Lists all subjects supported by TOES.

Field	Data Type	Data Element
subject_id	smallint	primary key
subjectName	tinytext	subject name
subjDescription	text	subject description

TOPIC – Lists all topics for every subject.

Field	Data Type	Data Element
topic_id	smallint	primary key
subject_id	smallint	foreign key (SUBJECT) identifies the subject of the topic
topicName	tinytext	topic name
deptNum	text	specifies departmental number

TUTOR – Lists all LRC tutors.

Field	Data Type	Data Element
tutor_id	smallint	primary key
firstName	tinytext	first name of tutor
middleName	tinytext	middle name of tutor
lastName	tinytext	last name of tutor
birthday	date	birth day of tutor using YYYY-MM-DD format
username	varchar(16)	tutor’s username
password	varchar(16)	tutor’s password
mobilePhone	varchar(15)	mobile phone of tutor
landPhone	varchar(15)	land line of tutor
email	tinytext	email address of tutor
tutorType	enum('f', 'p')	‘f’ for faculty while ‘p’ for peer
deptCourse	smallint	identifies the department or course of the tutor
tutoredSubject	tinytext	lists the tutor’s tutored subjects

TUTOR_SCHEDULE – Lists the schedule of each tutor.

Field	Data Type	Data Element
tutorSchedule_id	smallint	primary key
tutor_id	smallint	foreign key (TUTOR) identifies the tutor for the schedule
prefDay	tinytext	tutor’s preferred day
prefTime	tinytext	tutor’s preferred time using the hh:mm-hh:mm

		24 HR format

TUTORIAL – Lists all the tutorial schedules.

Field	Data Type	Data Element
tutorial_id	smallint	primary key
tutor_id	smallint	foreign key (TUTOR) identifies the tutor for the tutorial schedule
subject	smallint	identifies the subject for the tutorial
topic	text	lists all the topics to be discussed in the tutorial schedule
time	tinytext	time of the tutorial schedule in hh:mm-hh:mm 24 HR format
date	date	date of the tutorial schedule in YYYY-MM-DD format

UPM_COLLEGES – Lists all UP Manila colleges.

Field	Data Type	Data Element
college_id	smallint	primary key
collegeName	tinytext	college name

UPM_DEPARTMENTS – Lists all UP Manila departments.

Field	Data Type	Data Element
department_id	smallint	primary key
departmentName	tinytext	department name

C. Context Diagram

The context diagram is seen in Figure 2. There are five main entities of the system namely admin, student, director, tutor and staff.

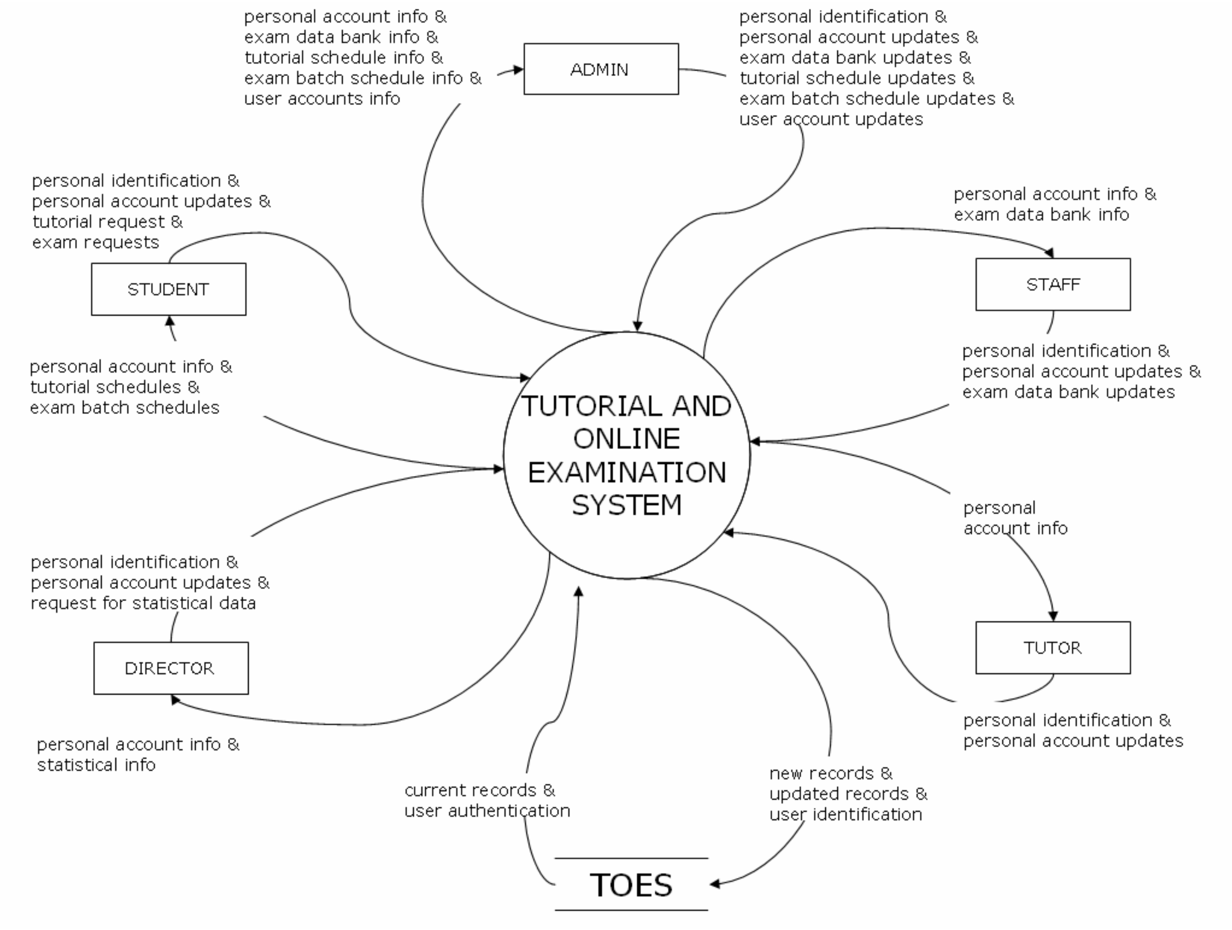

ADMIN
personal account info & exam data bank info & tutorial schedule info & exam batch schedule info & user accounts info
personal identification & personal account updates & exam data bank updates & tutorial schedule updates & exam batch schedule updates & user account updates
STUDENT
personal identification & personal account updates & tutorial request & exam requests
personal account info & tutorial schedules & exam batch schedules
STAFF
personal account info & exam data bank info
personal identification & personal account updates & exam data bank updates
TUTORIAL AND ONLINE EXAMINATION SYSTEM
personal account info
TUTOR
personal identification & personal account updates
DIRECTOR
personal identification & personal account updates & request for statistical data
personal account info & statistical info
current records & user authentication
new records & updated records & user identification
TOES

Figure 2: Context Diagram, UPM LRC TOES

D. Data Flow Diagram

Figure 3 shows the top level Data Flow Diagram (DFD). TOES has seven main processes. These are namely: 1) TOES login, 2) Update Tutor Schedules, 3) Update Exam Data bank, 4) Request Tutorial, 5) Process Examination Request, 6) Perform Exam Analysis and 7) Updat7e User Account. Process 1 has two subexplosions and is seen in Figure 4.

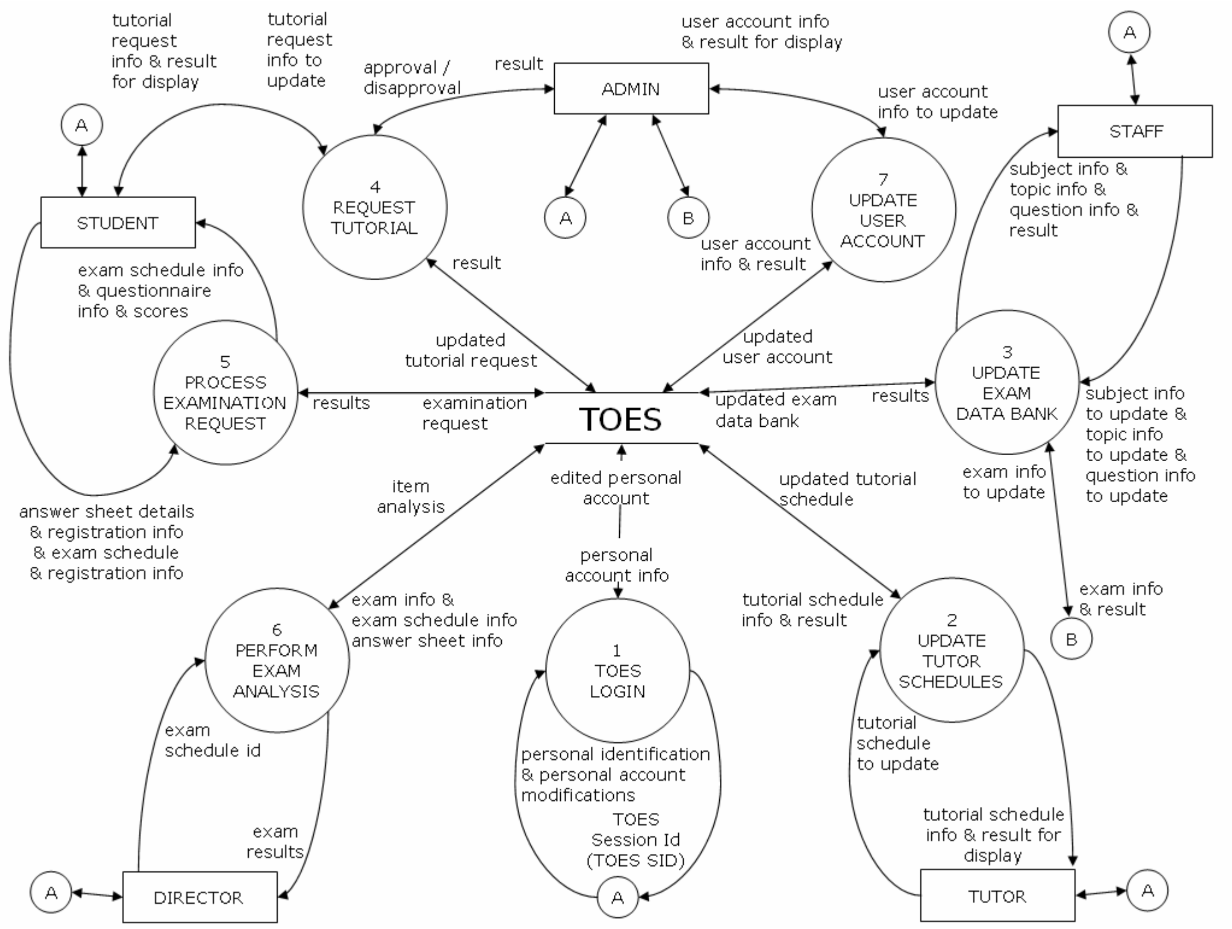

tutorial request info & result for display
tutorial request info to update
approval / disapproval
result
ADMIN
user account info & result for display
A
STAFF
user account info to update
A
STUDENT
4 REQUEST TUTORIAL
A
B
7 UPDATE USER ACCOUNT
subject info & topic info & question info & result
user account info & result
result
exam schedule info & questionnaire info & scores
updated tutorial request
updated user account
5 PROCESS EXAMINATION REQUEST
results
examination request
TOES
updated exam data bank
results
3 UPDATE EXAM DATA BANK
subject info to update & topic info to update & question info to update
item analysis
edited personal account
updated tutorial schedule
exam info to update
answer sheet details & registration info & exam schedule & registration info
personal account info
exam info & exam schedule info answer sheet info
tutorial schedule info & result
exam info & result
B
6 PERFORM EXAM ANALYSIS
1 TOES LOGIN
2 UPDATE TUTOR SCHEDULES
exam schedule id
personal identification & personal account modifications
tutorial schedule to update
exam results
TOES Session Id (TOES SID)
tutorial schedule info & result for display
A
DIRECTOR
A
TUTOR
A

Figure 3: Top Level DFD, UPM LRC TOES

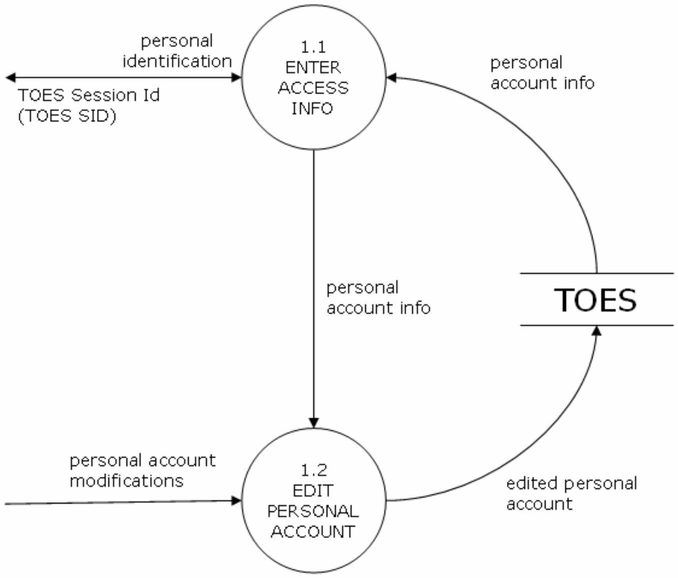


Figure 4: Subexplosion of Process 1: TOES Login, UPM LRC TOES

The subexplosion of Process 2 (Update Tutor Schedules) is shown in Figure 5. The subprocesses are: 2.1) Add Tutorial Schedules, 2.2) Edit Tutorial Schedules and 2.3) Delete Tutorial Schedules. On the other hand Figure 6 shows the subexplosions of Process 3 (Update Exam Data Bank) with four subprocesses. These are 3.1) Update Subject, 3.2) Update Topic, 3.3) Update Question and 3.4) Update Exam. Further subexplosions of these subprocesses are seen in Figures 7-12.

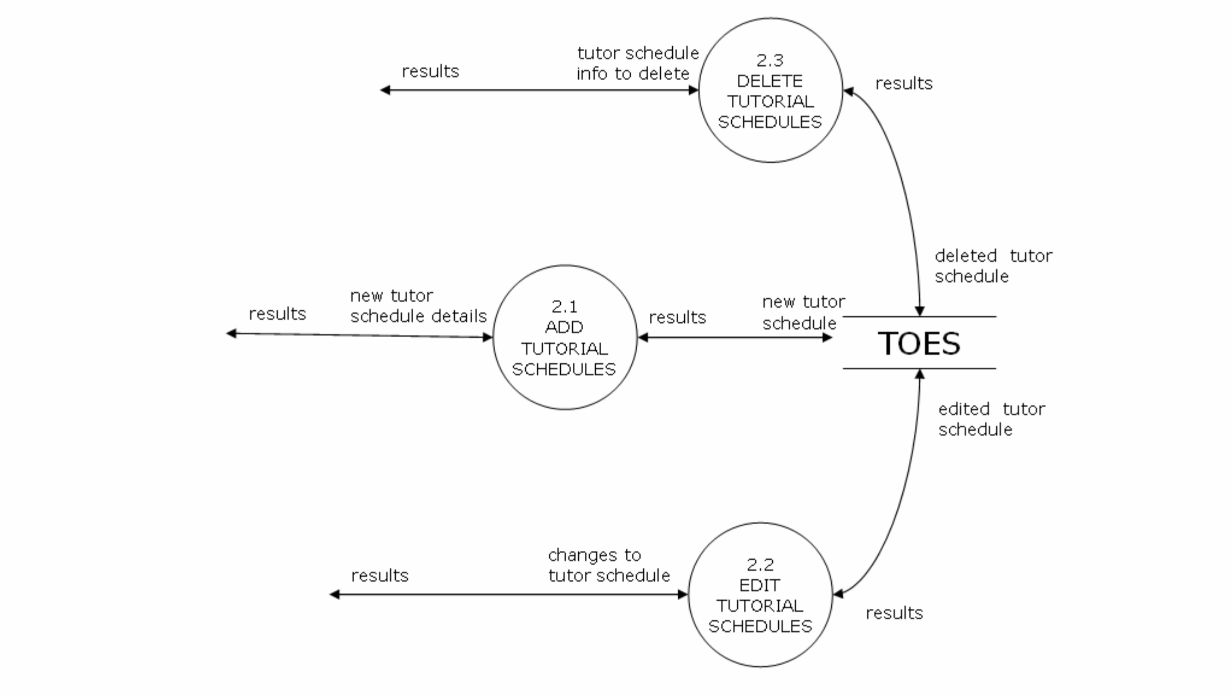


Figure 5: Subexplosion of Process 2: Update Tutor Schedules, UPM LRC TOES

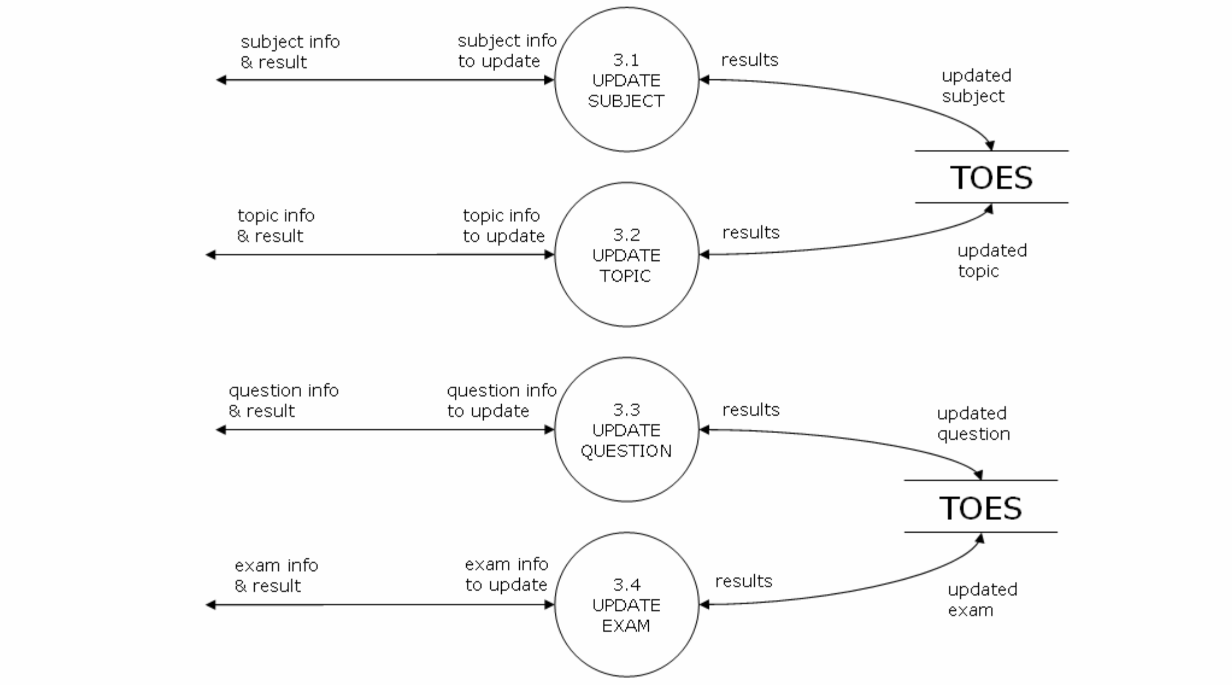


Figure 6: Subexplosion of Process 3: Update Exam Data Bank, UPM LRC TOES

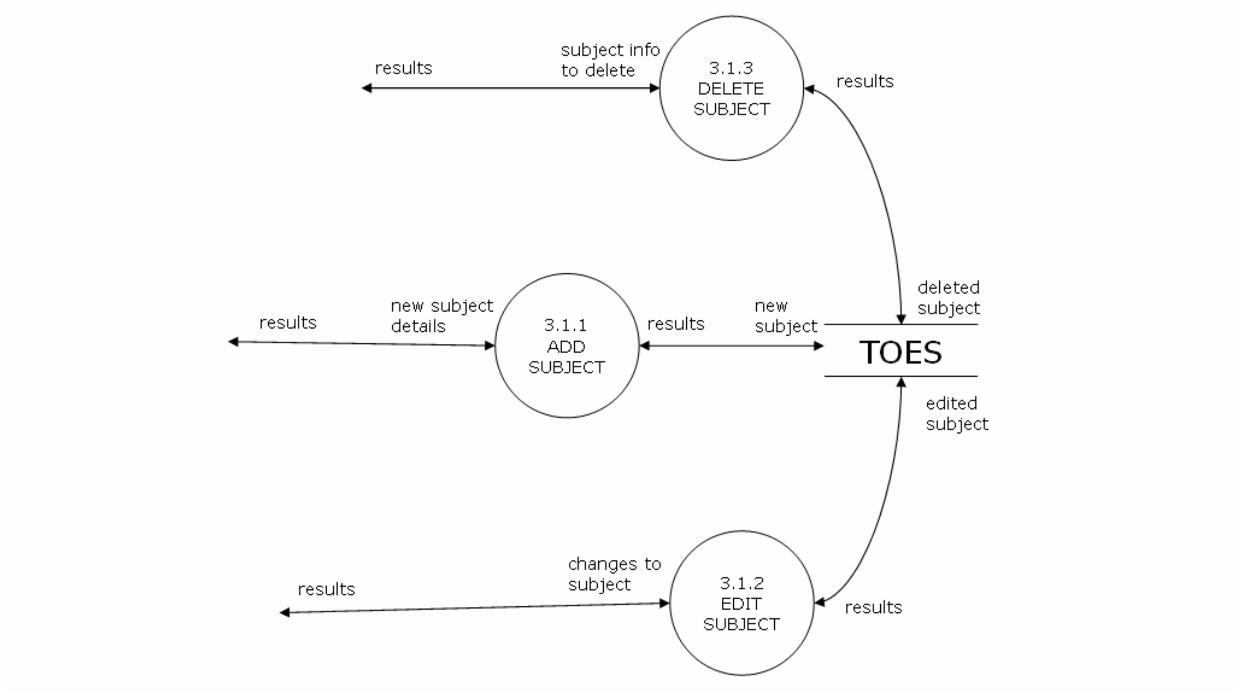


Figure 7: Subexplosion of Process 3.1: Update Subject, UPM LRC TOES

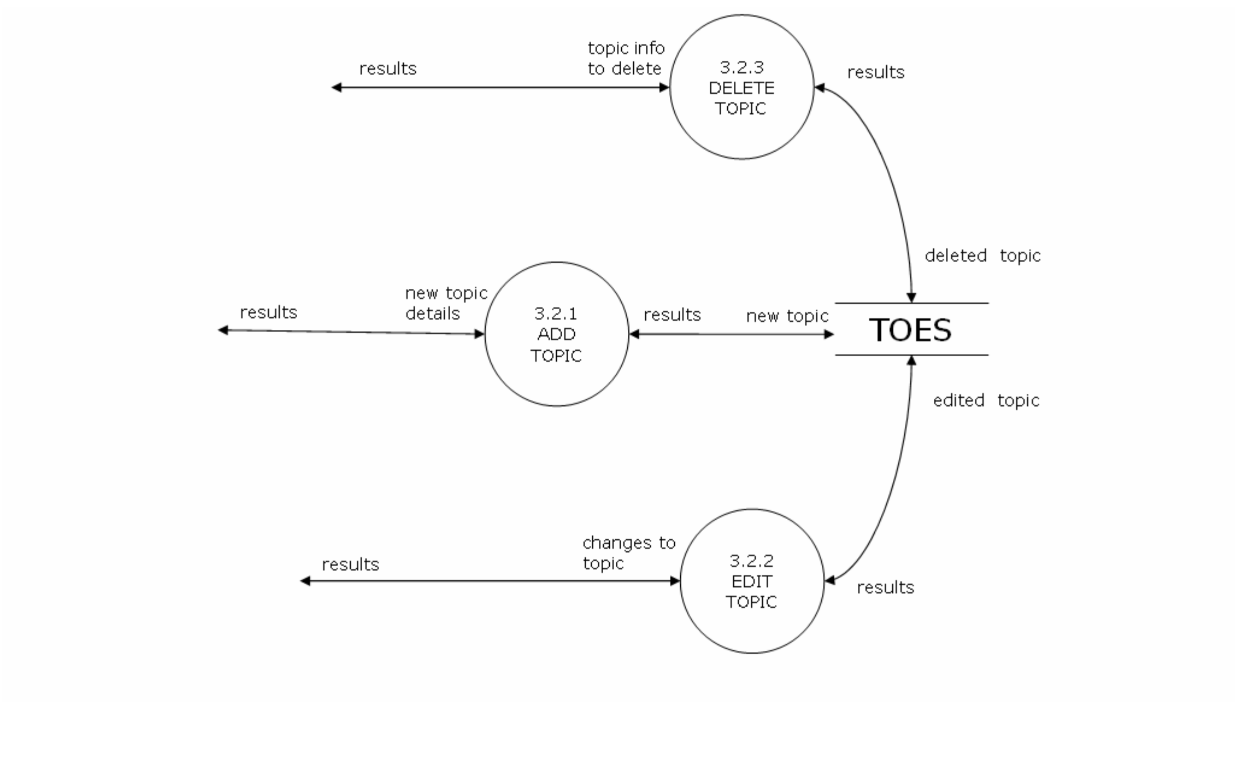


Figure 8: Subexplosion of Process 3.2: Update Topic, UPM LRC TOES

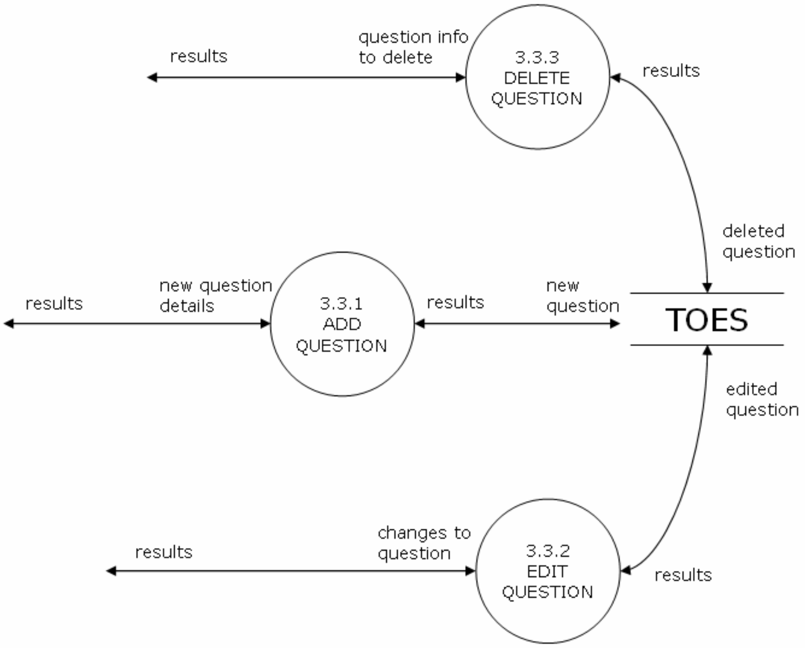


Figure 9: Subexplosion of Process 3.3: Update Question, UPM LRC TOES

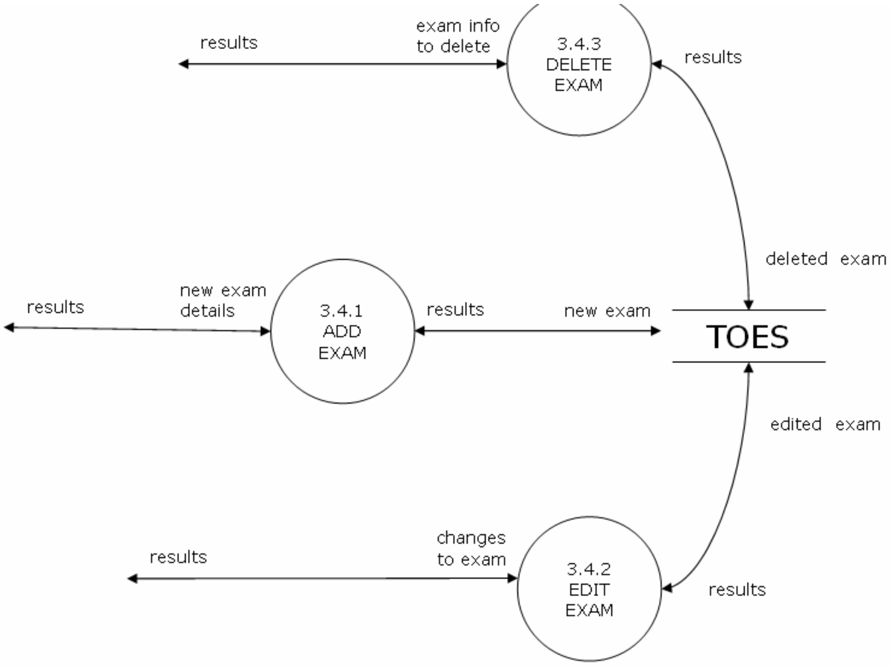


Figure 10: Subexplosion of Process 3.4: Update Exam, UPM LRC TOES

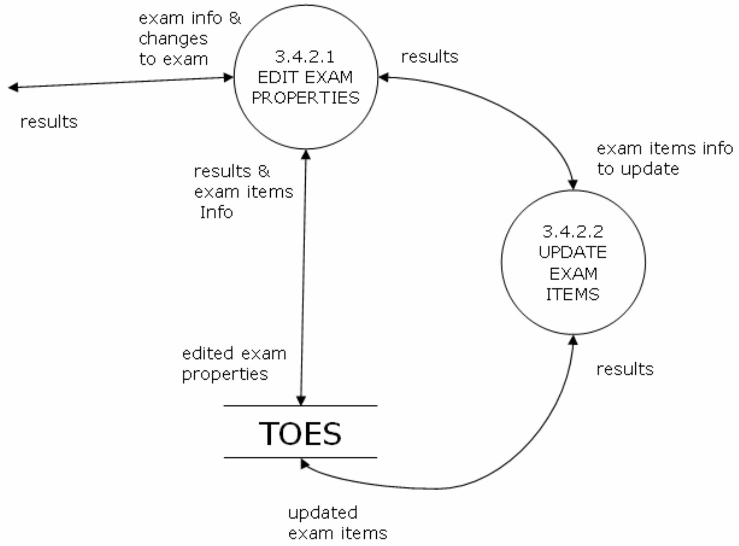


Figure 11: Subexplosion of Process 3.4.2: Edit Exam, UPM LRC TOES

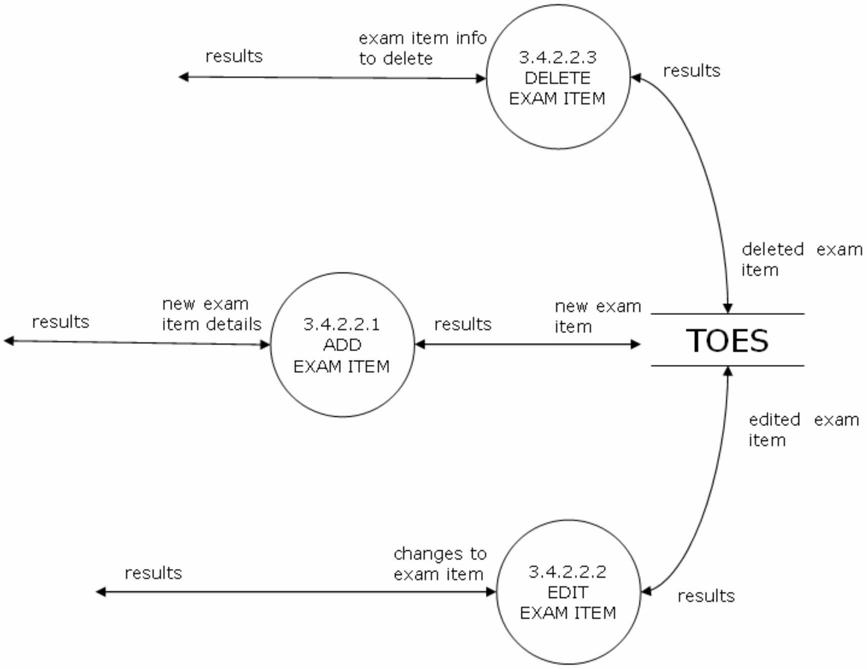


Figure 12: Subexplosion of Process 3.4.2.2: Update Exam Items, UPM LRC TOES

Figure 13 shows the subexplosion of Process 4 (Request Tutorial). It has four subprocesses: 4.1) Create Tutorial Schedule, 4.2) Petition Tutorial Schedule, 4.3) Enlist/Delist Tutorial Schedule and 4.4) Approve/Disapprove Petition. On the other hand, the subexplosions of Process 5 (Process Examination Request) and that of Process 6 (Perform Exam Analysis) are found in Figures 14 and 15 respectively.

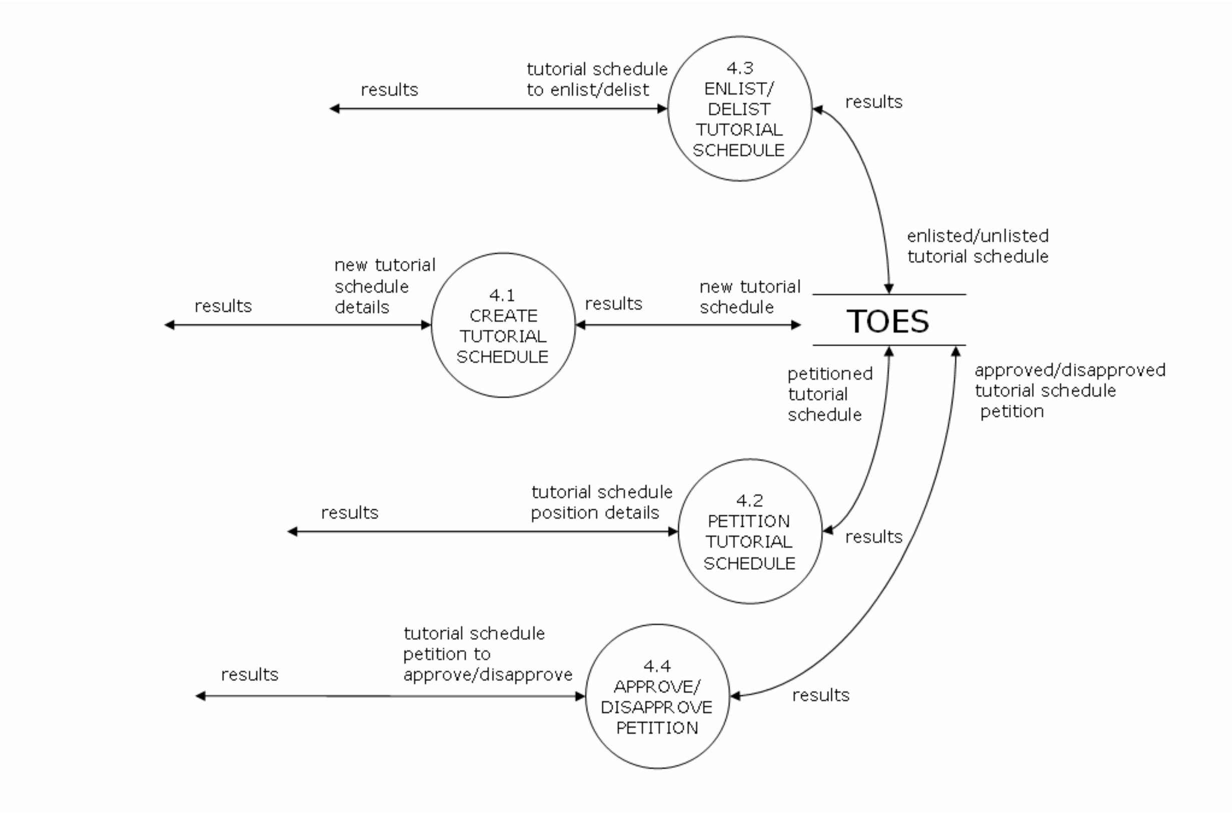

results
tutorial schedule to enlist/delist
4.3 ENLIST/ DELIST TUTORIAL SCHEDULE
results
enlisted/unlisted tutorial schedule
results
new tutorial schedule details
4.1 CREATE TUTORIAL SCHEDULE
results
new tutorial schedule
TOES
petitioned tutorial schedule
approved/disapproved tutorial schedule petition
results
tutorial schedule position details
4.2 PETITION TUTORIAL SCHEDULE
results
results
tutorial schedule petition to approve/disapprove
4.4 APPROVE/ DISAPPROVE PETITION
results

Figure 13: Subexplosion of Process 4: Request Tutorial, UPM LRC TOES

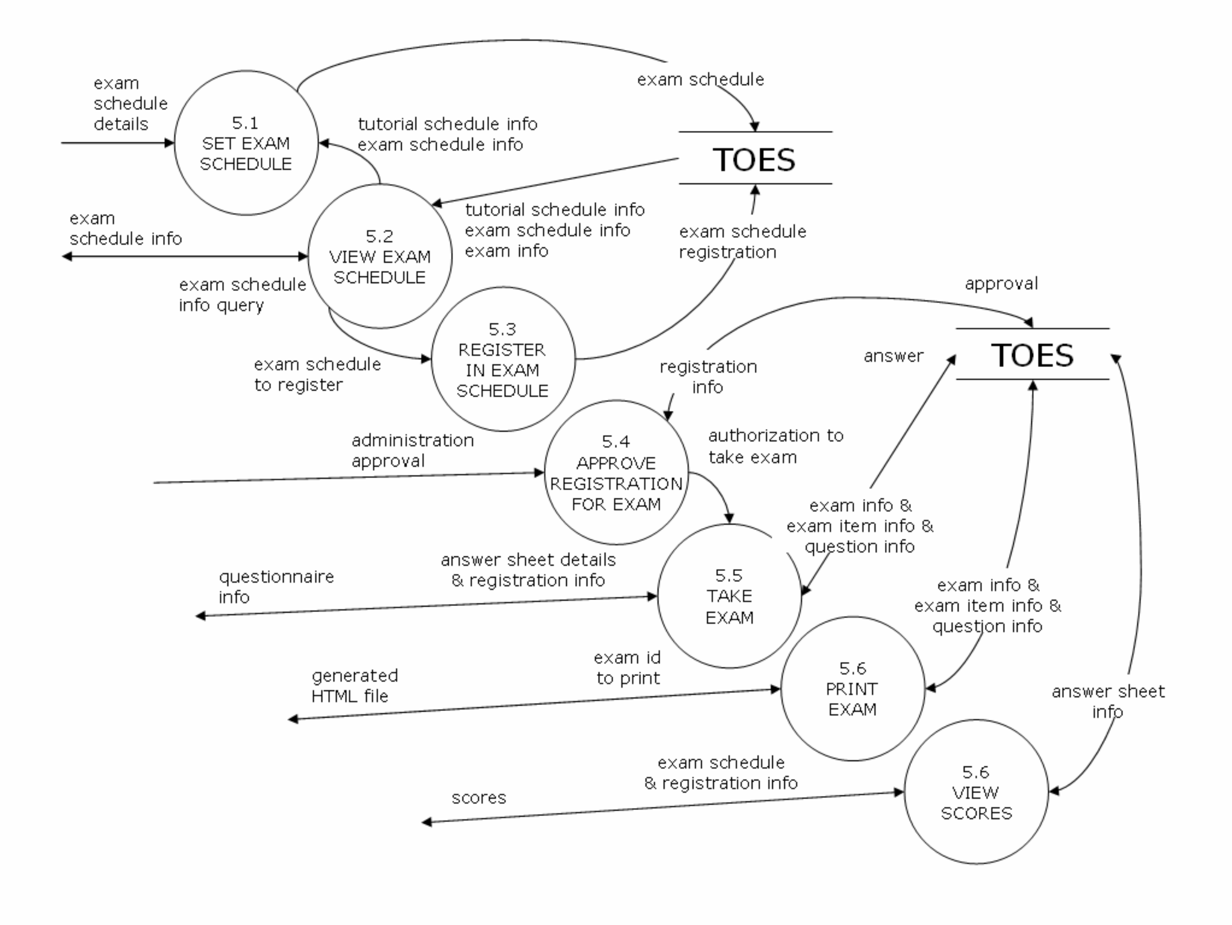


Figure 14: Subexplosion of Process 5: Process Examination Request, UPM LRC TOES

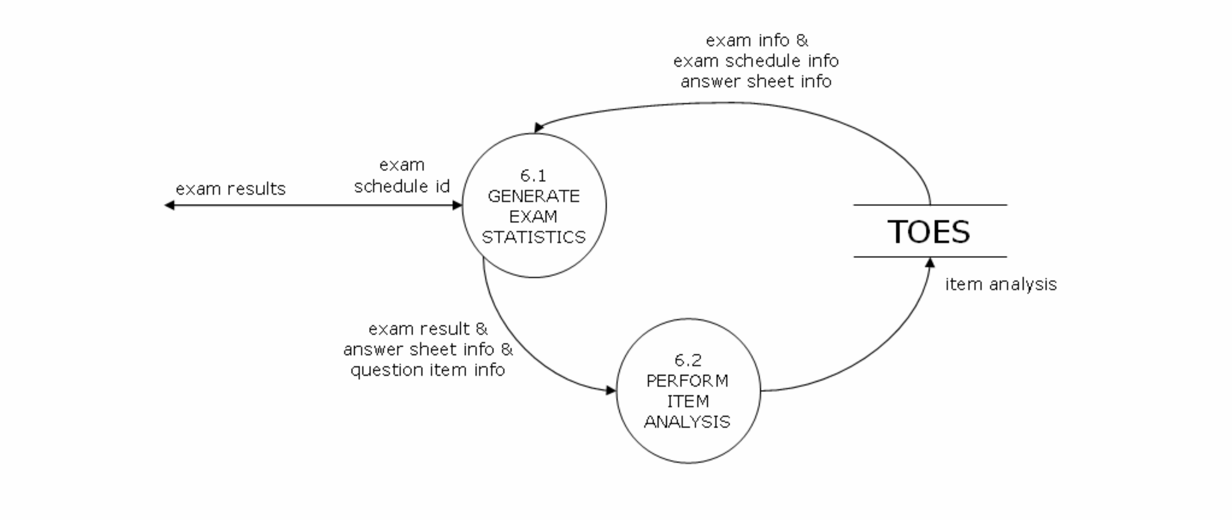


Figure 15: Subexplosion of Process 6: Perform Exam Analysis, UPM LRC TOES

The administrative functionalities are seen in Figure 16. It shows the subprocesses 7.1) Add User Account, 7.2) Edit User Account and 7.3) Delete User Account.

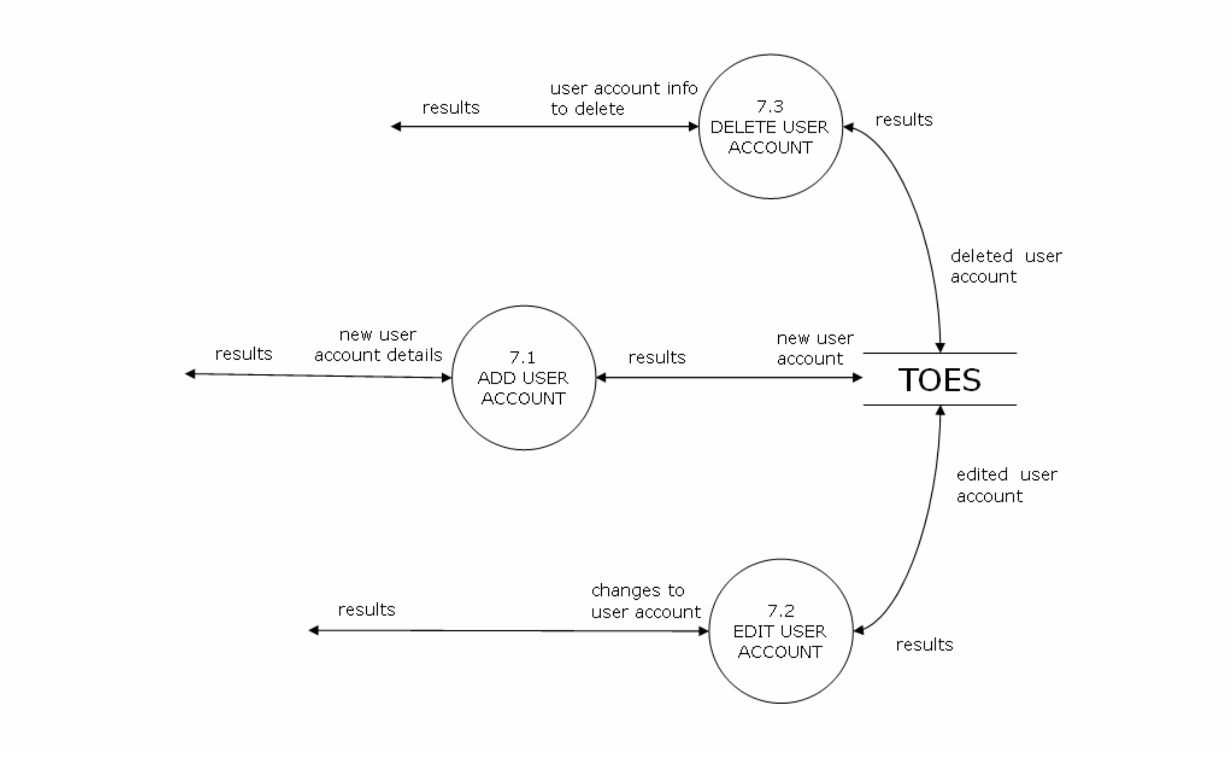


Figure 16: Subexplosion of Process 7: Update User Account, UPM LRC TOES

E. Technical Architecture

The Learning Resource Center's Tutorial and Online System (TOES) is implemented using client-server architecture. TOES clients need a computer with internet access to send requests to the server. The server processes requests and returns results through the internet. The clients represent the TOES users who access any TOES page.

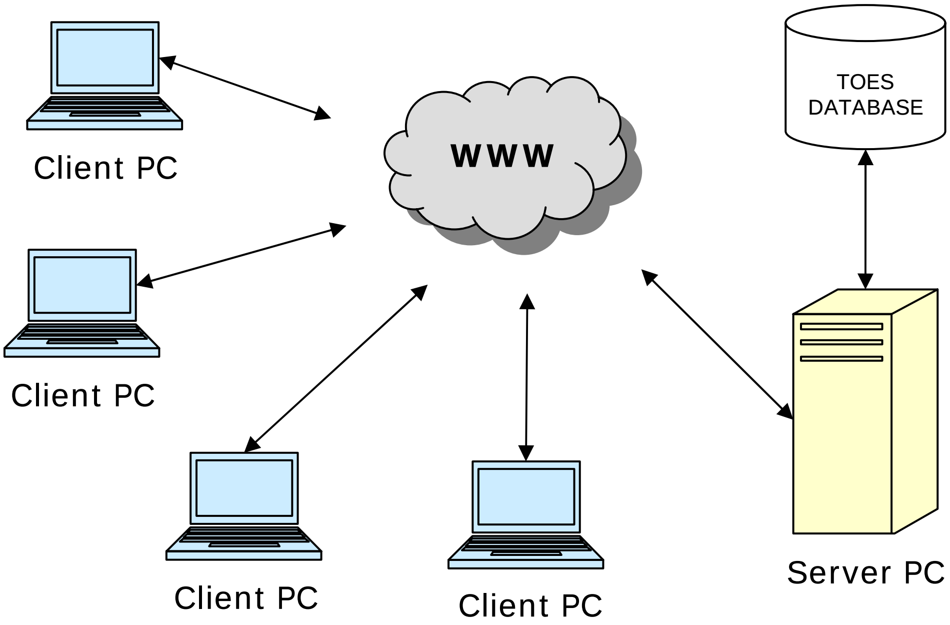


Figure 17: client-server architecture, UPM LRC TOES

1. **Server**

Minimum Hardware Requirements

- Intel Pentium IV 2.0 GHz or AMD equivalent processor with 1 GB RAM
- DSL internet connection

Software Requirements

- Microsoft Windows XP operating system

- Apache HTTP server v1.3.23
- PHP v4.1.1
- MySQL v3.23.48

2. **Client**

Minimum Hardware Requirements

- Intel Pentium IV 1.0 GHz or AMD equivalent processor with 512 MB RAM
- video card capable of displaying 1024 x 768 32 bit resolution at the minimum
- DSL internet connection

Software Requirements for all TOES users

- Windows XP or Linux operating system
- Internet Explorer v6.0 or Mozilla Firefox with enabled javascript and cookies

Specific Software Requirements for TOES Staff

- c:\toes folder must be present in the client PC where ‘question templates’ will be saved
- Microsoft Office Word 2002 with ‘Macro Security’ set to ‘Medium’
- Windows XP operating system

V. RESULTS

The home page of the UP Manila LRC Tutorial and Online Examination System (TOES) is shown in Figure 18. The logo on the left is the University of the Philippines Manila logo while the figure on the right is the UP Manila Learning Resoure Center logo. The menu contains the links to the login page of each TOES user type – student, tutor, staff, admin, and director.

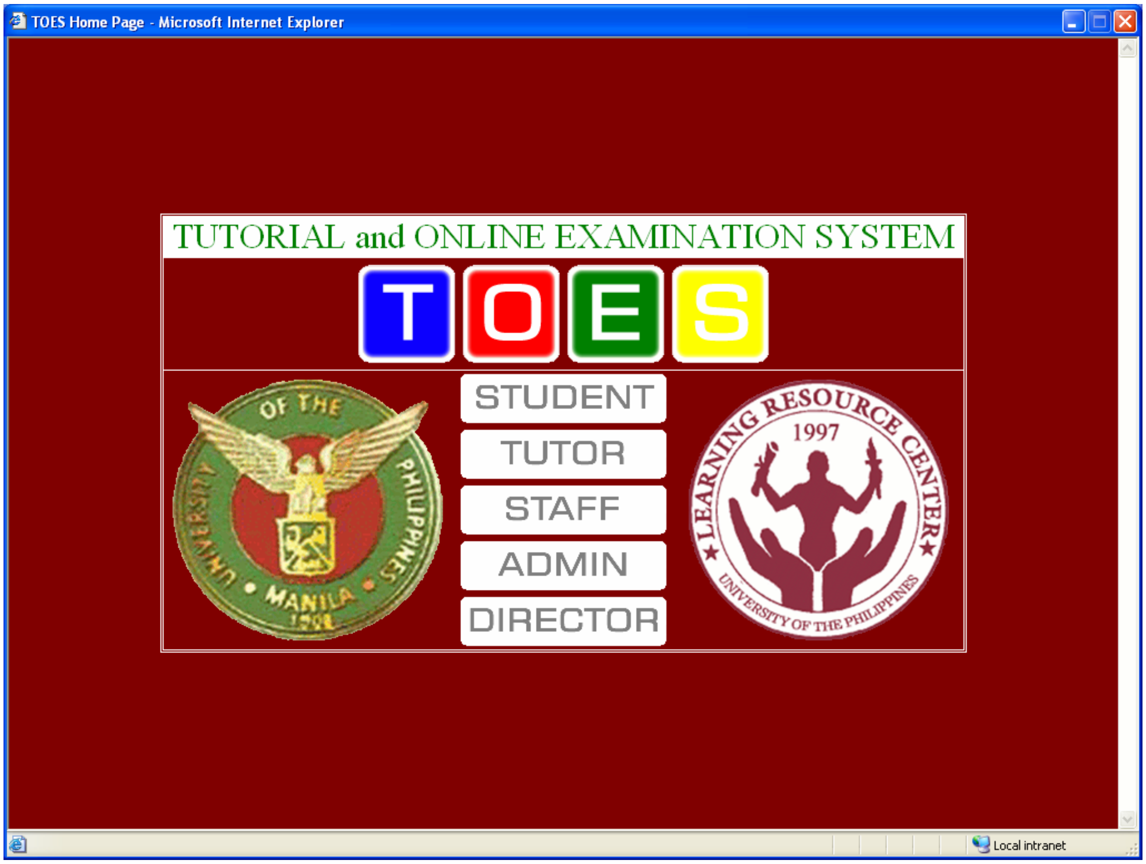
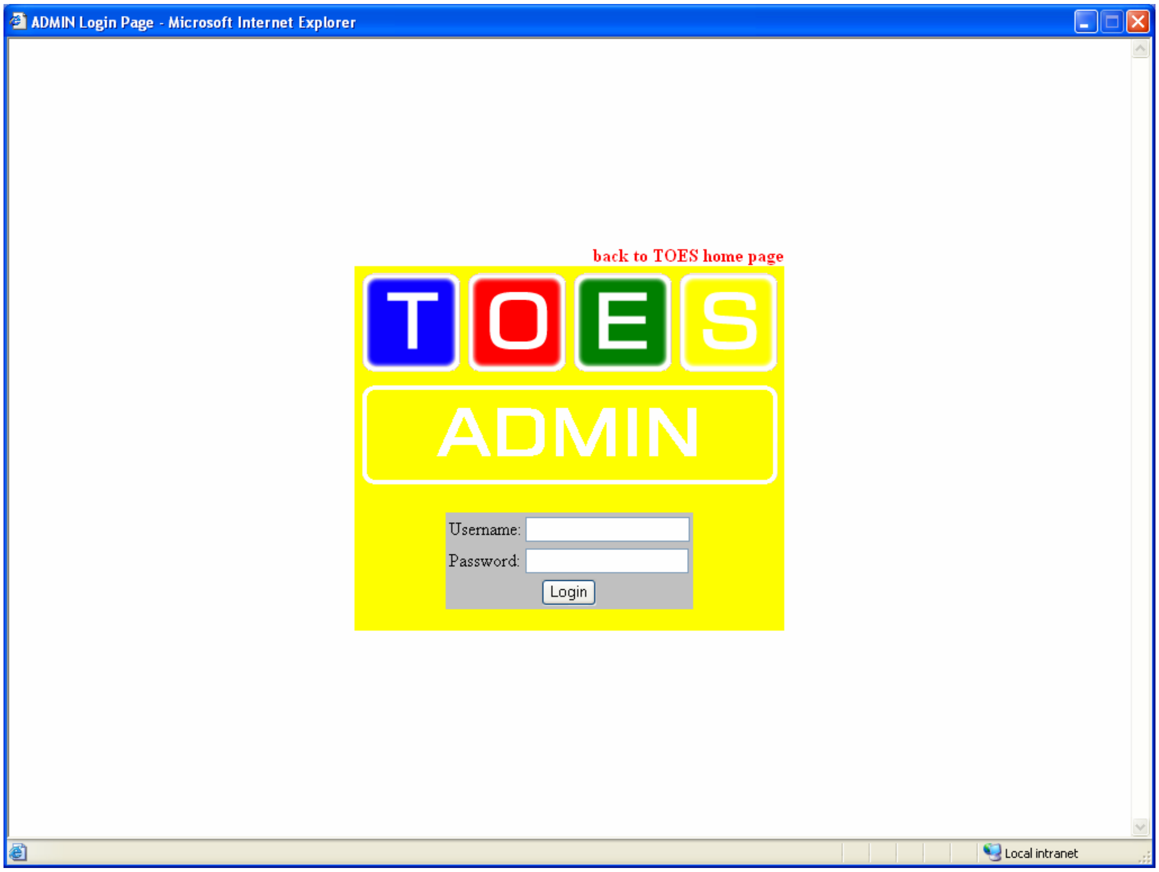

TOES Home Page - Microsoft Internet Explorer
TUTORIAL and ONLINE EXAMINATION SYSTEM
T O E S
STUDENT
TUTOR
STAFF
ADMIN
DIRECTOR
UNIVERSITY OF THE PHILIPPINES MANILA 1908
LEARNING RESOURCE CENTER 1997 UNIVERSITY OF THE PHILIPPINES
Local intranet

Figure 18: Home Page, UPM LRC TOES

Figure 19 shows the login page for a TOES admin. The login page for the other TOES user types is similar to this one.


ADMIN Login Page - Microsoft Internet Explorer

back to TOES home page

TOES

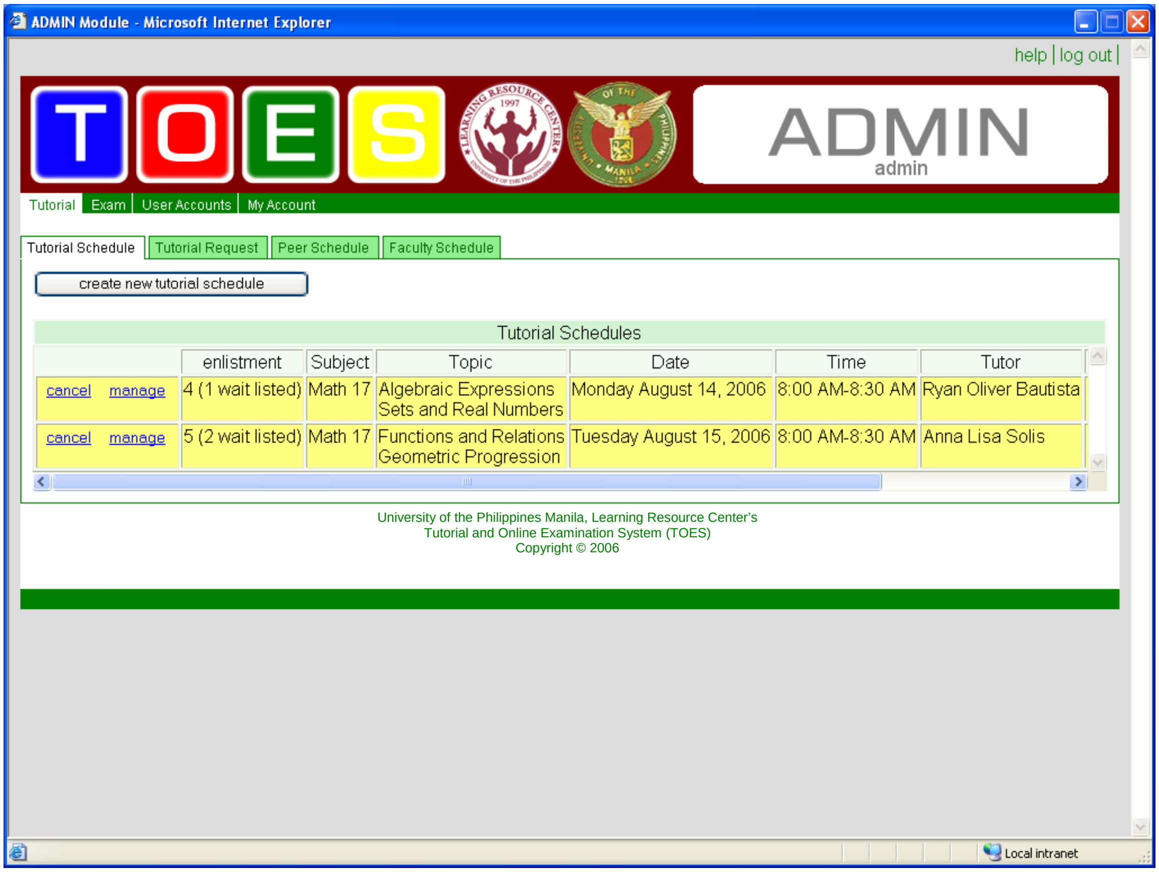
ADMIN

Username:

Password:

Figure 19: Admin Login Page, UPM LRC TOES

Figure 20 shows the initial TOES admin page after logging in. The main options panel is found below the TOES logo. The panel contains Tutorial, Exam, User Accounts, and My Account. The tabs below the panel - Tutorial Schedule, Tutorial Request, Peer Schedule, and Faculty Schedule are subordinate options for the main option Tutorial. All TOES user's initial page displays the page for the first subordinate option of the first main option.



Tutorial Schedules

	enlistment	Subject	Topic	Date	Time	Tutor
cancel manage	4 (1 wait listed)	Math 17	Algebraic Expressions Sets and Real Numbers	Monday August 14, 2006	8:00 AM-8:30 AM	Ryan Oliver Bautista
cancel manage	5 (2 wait listed)	Math 17	Functions and Relations Geometric Progression	Tuesday August 15, 2006	8:00 AM-8:30 AM	Anna Lisa Solis

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Figure 20: Admin Initial Page, UPM LRC TOES

The TOES admin manages all user type accounts – student accounts, tutor accounts, and LRC accounts. Figure 21 shows the student account management page.

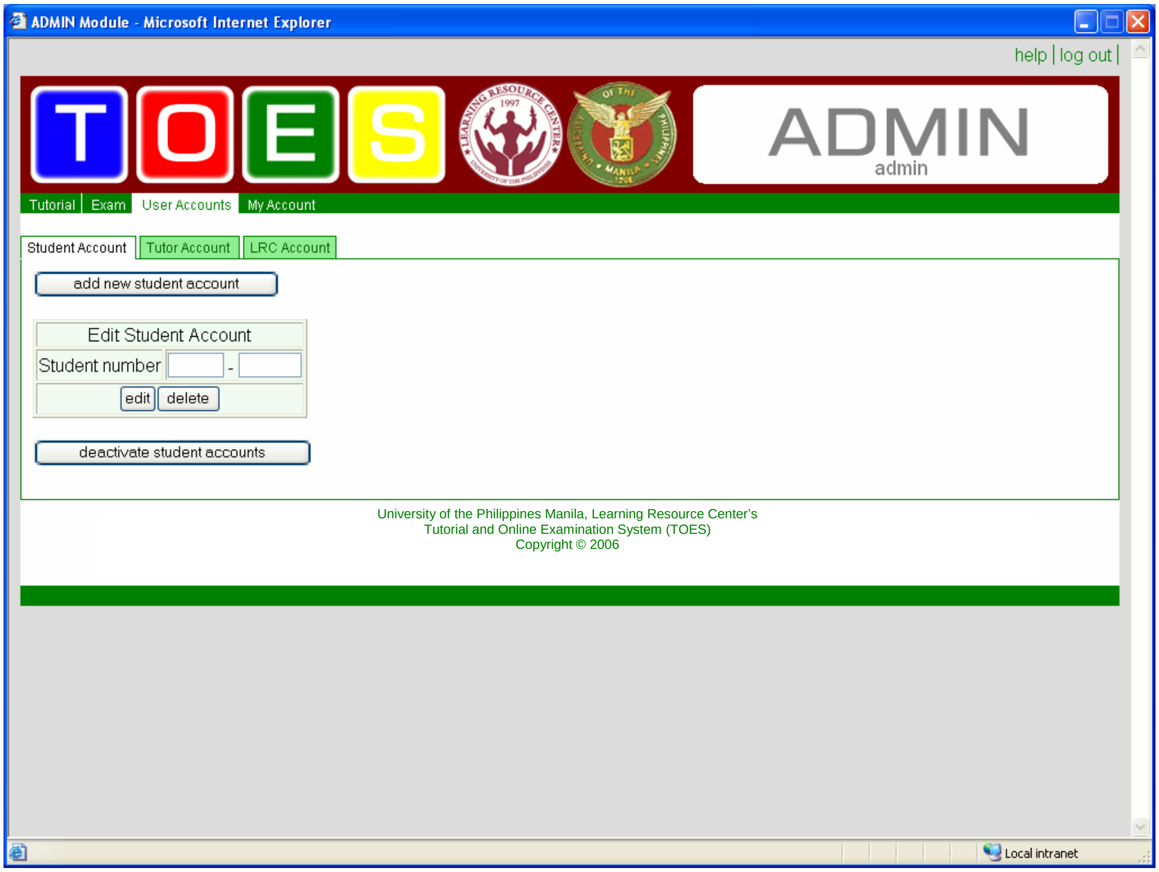

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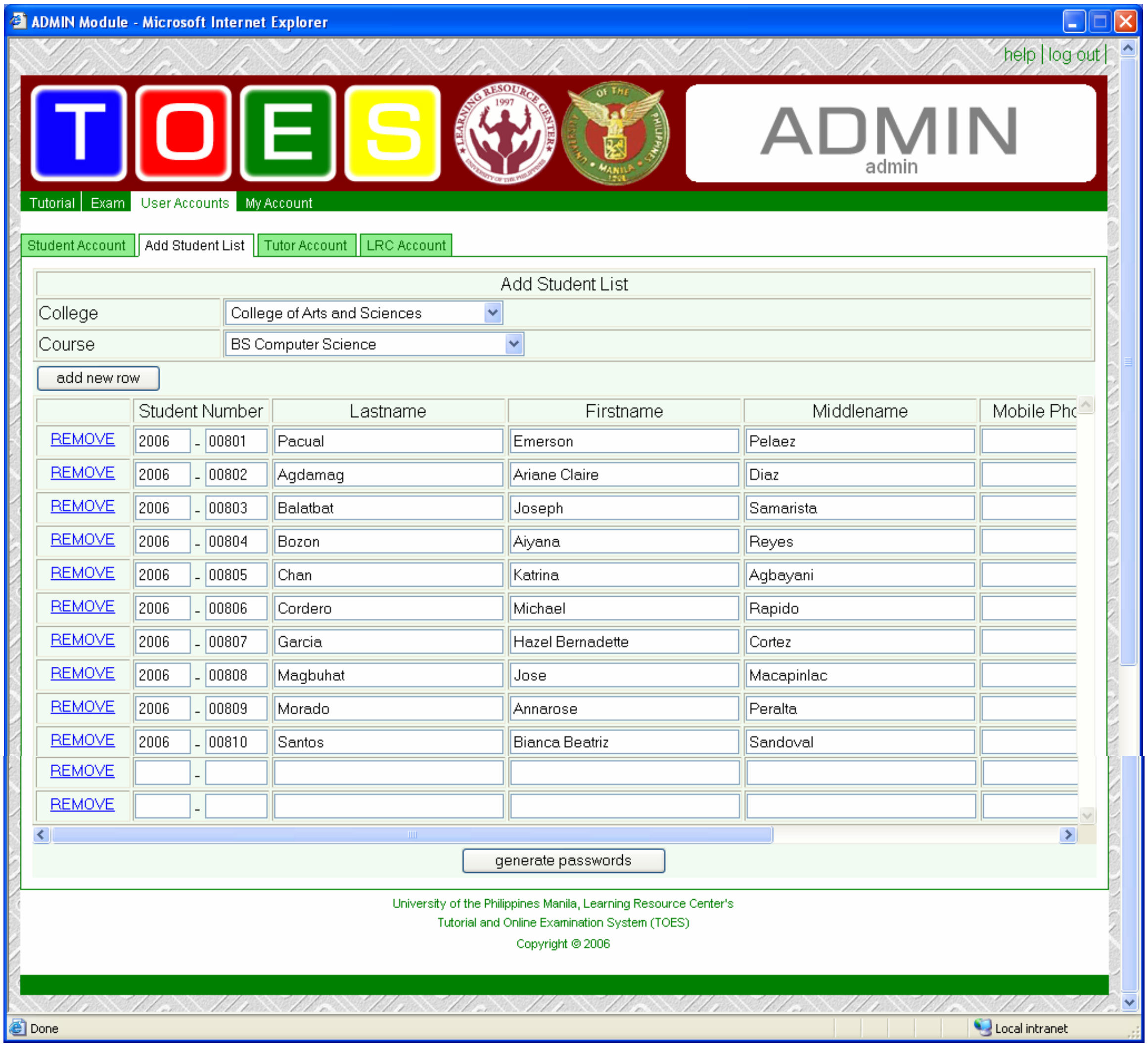
Figure 21: Student Account Management, UPM LRC TOES

Every first semester the admin requests for a copy of 'student list' for each freshman block from the Office of the University Registrar (OUR). Using these lists the admin registers new TOES student accounts using the form seen in Figure 22.



Add Student List

College	College of Arts and Sciences
Course	BS Computer Science

	Student Number		Lastname	Firstname	Middlename	Mobile Phc
REMOVE	2006	00801	Pacual	Emerson	Pelaez	
REMOVE	2006	00802	Agdamag	Ariane Claire	Diaz	
REMOVE	2006	00803	Balatbat	Joseph	Samarista	
REMOVE	2006	00804	Bozon	Aiyana	Reyes	
REMOVE	2006	00805	Chan	Katrina	Agbayani	
REMOVE	2006	00806	Cordero	Michael	Rapido	
REMOVE	2006	00807	Garcia	Hazel Bernadette	Cortez	
REMOVE	2006	00808	Magbuhat	Jose	Macapinlac	
REMOVE	2006	00809	Morado	Annarose	Peralta	
REMOVE	2006	00810	Santos	Bianca Beatriz	Sandoval	
REMOVE						
REMOVE						

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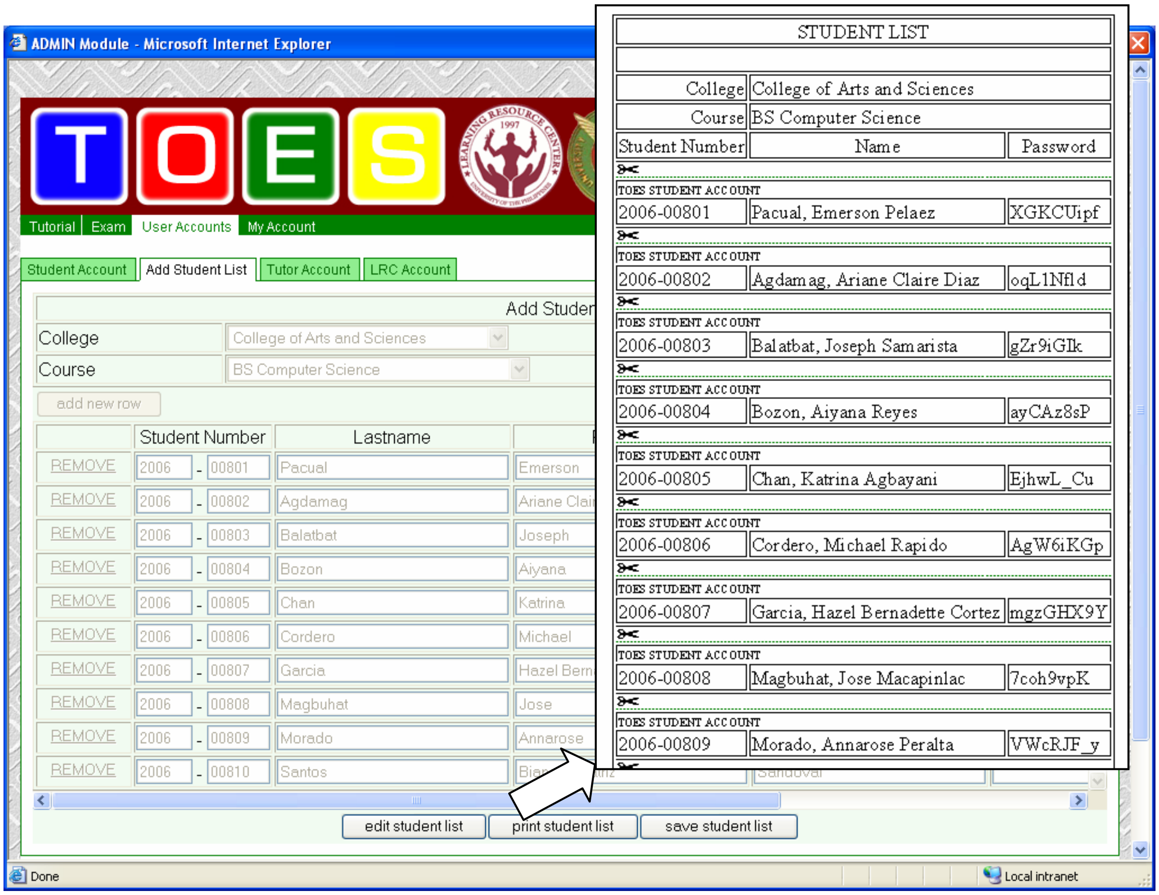
Figure 22: Add Student List, UPM LRC TOES

Each newly registered block receives a printed ‘student list’ that comes with a system generated password (see Figure 23). The OUR hands the printed list to freshman block coordinators (FBC) or to block heads who distribute the passwords to each student in the list. Aside from the registration of student accounts by blocks, single registration is made available for transferees from other universities (see Figure 24).



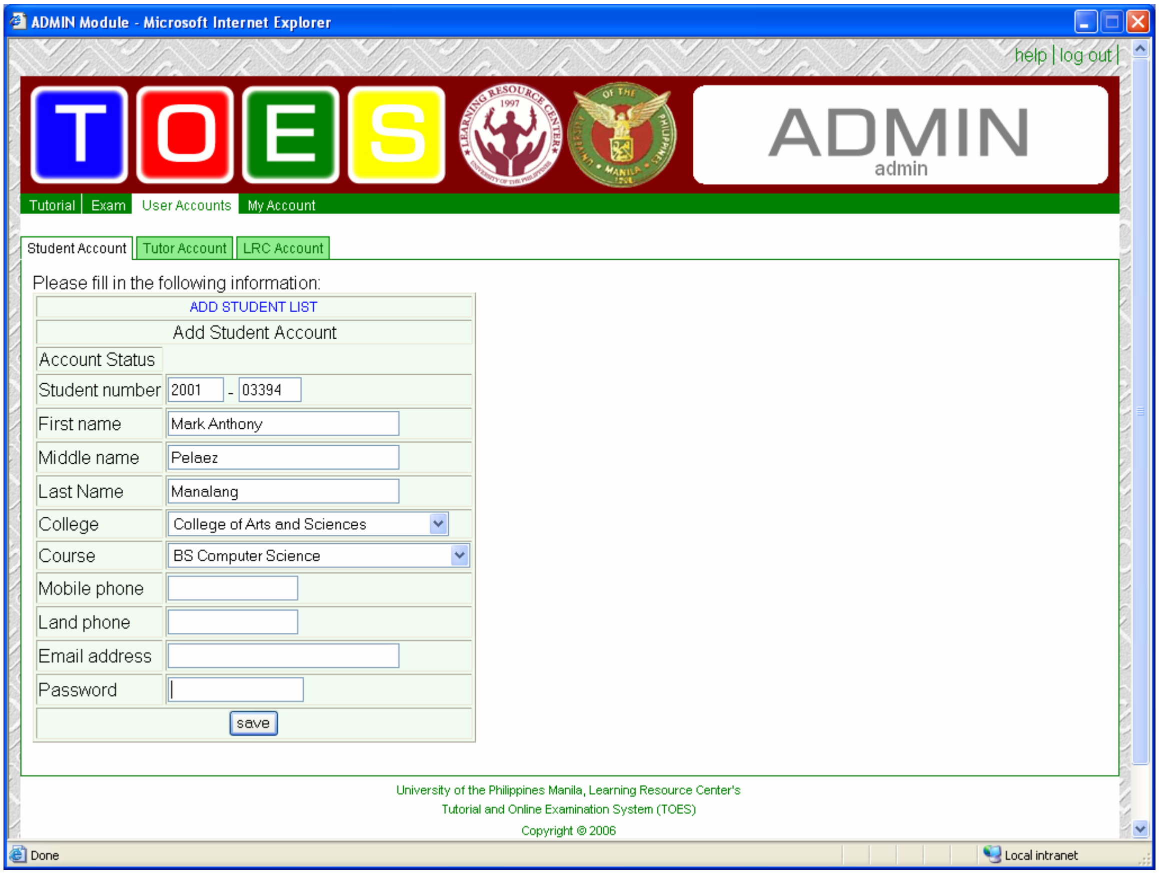
College	College of Arts and Sciences
Course	BS Computer Science

	Student Number	Lastname	
REMOVE	2006 - 00801	Pacual	Emerson
REMOVE	2006 - 00802	Agdamag	Ariane Clai
REMOVE	2006 - 00803	Balatbat	Joseph
REMOVE	2006 - 00804	Bozon	Aiyana
REMOVE	2006 - 00805	Chan	Katrina
REMOVE	2006 - 00806	Cordero	Michael
REMOVE	2006 - 00807	Garcia	Hazel Bern
REMOVE	2006 - 00808	Magbuhat	Jose
REMOVE	2006 - 00809	Morado	Annarose
REMOVE	2006 - 00810	Santos	Bie

STUDENT LIST

College	College of Arts and Sciences	
Course	BS Computer Science	
Student Number	Name	Password
TOES STUDENT ACCOUNT		
2006-00801	Pacual, Emerson Pelaez	XGKCUipf
TOES STUDENT ACCOUNT		
2006-00802	Agdamag, Ariane Claire Diaz	oqL1Nfld
TOES STUDENT ACCOUNT		
2006-00803	Balatbat, Joseph Samarista	gZr9iGIk
TOES STUDENT ACCOUNT		
2006-00804	Bozon, Aiyana Reyes	ayCAz8sP
TOES STUDENT ACCOUNT		
2006-00805	Chan, Katrina Agbayani	EjhwL_Cu
TOES STUDENT ACCOUNT		
2006-00806	Cordero, Michael Rapido	AgW6iKGp
TOES STUDENT ACCOUNT		
2006-00807	Garcia, Hazel Bernadette Cortez	mgzGHX9Y
TOES STUDENT ACCOUNT		
2006-00808	Magbuhat, Jose Macapinlac	7coh9vpK
TOES STUDENT ACCOUNT		
2006-00809	Morado, Annarose Peralta	VWcRJF_y

Figure 23: Printed Student List, UPM LRC TOES



Please fill in the following information:

Add Student Account

Account Status	
Student number	2001 - 03394
First name	Mark Anthony
Middle name	Pelaez
Last Name	Manalang
College	College of Arts and Sciences
Course	BS Computer Science
Mobile phone	
Land phone	
Email address	
Password	

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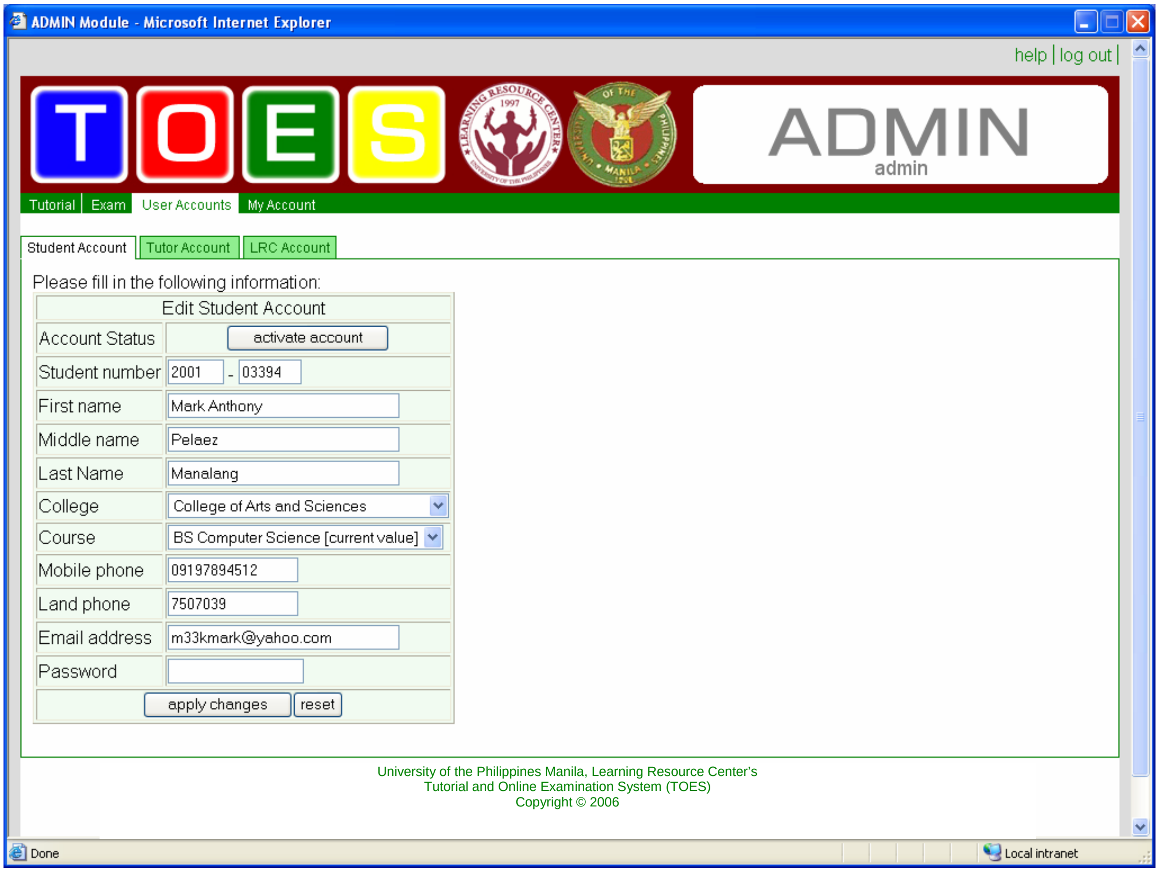
Figure 24: Single Registration of Student Account, UPM LRC TOES

The registration of a TOES student account is a one-time event while the reactivation is performed at the start of every semester. The reactivation process requires a returning student (that is with an existing TOES student account) to submit their Form 5 to the TOES admin at the LRC office. Figure 25 shows the page for editing and reactivating student accounts. At end of each semester the admin deactivates all TOES student accounts (see Figure 21).



Please fill in the following information:

Edit Student Account

Account Status	activate account
Student number	2001 - 03394
First name	Mark Anthony
Middle name	Pelaez
Last Name	Manalang
College	College of Arts and Sciences
Course	BS Computer Science [current value]
Mobile phone	09197894512
Land phone	7507039
Email address	m33kmark@yahoo.com
Password	

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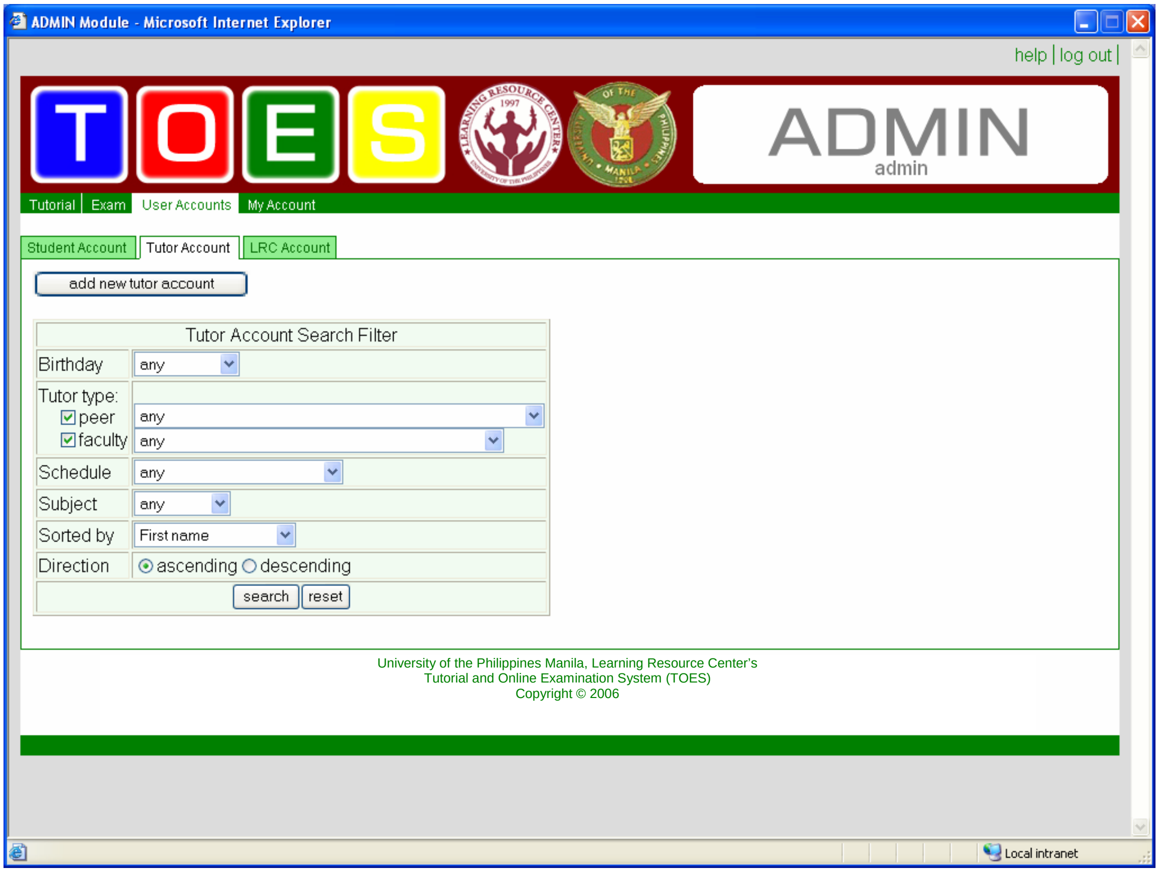
Figure 25: Edit Student Account, UPM LRC TOES

Figure 26 shows the tutor account management page. There are two types of tutor accounts – peer tutor and faculty tutor. A peer tutor is a volunteer competent UP Manila student while a faculty tutor is a resident UP Manila faculty.


ADMIN Module - Microsoft Internet Explorer
help | log out |
T O E S
ADMIN
admin
Tutorial | Exam | User Accounts | My Account
Student Account | Tutor Account | LRC Account
add new tutor account
search
reset
Local intranet

Tutor Account Search Filter

Birthday	any
Tutor type:	
☑ peer	any
☑ faculty	any
Schedule	any
Subject	any
Sorted by	First name
Direction	● ascending ○ descending

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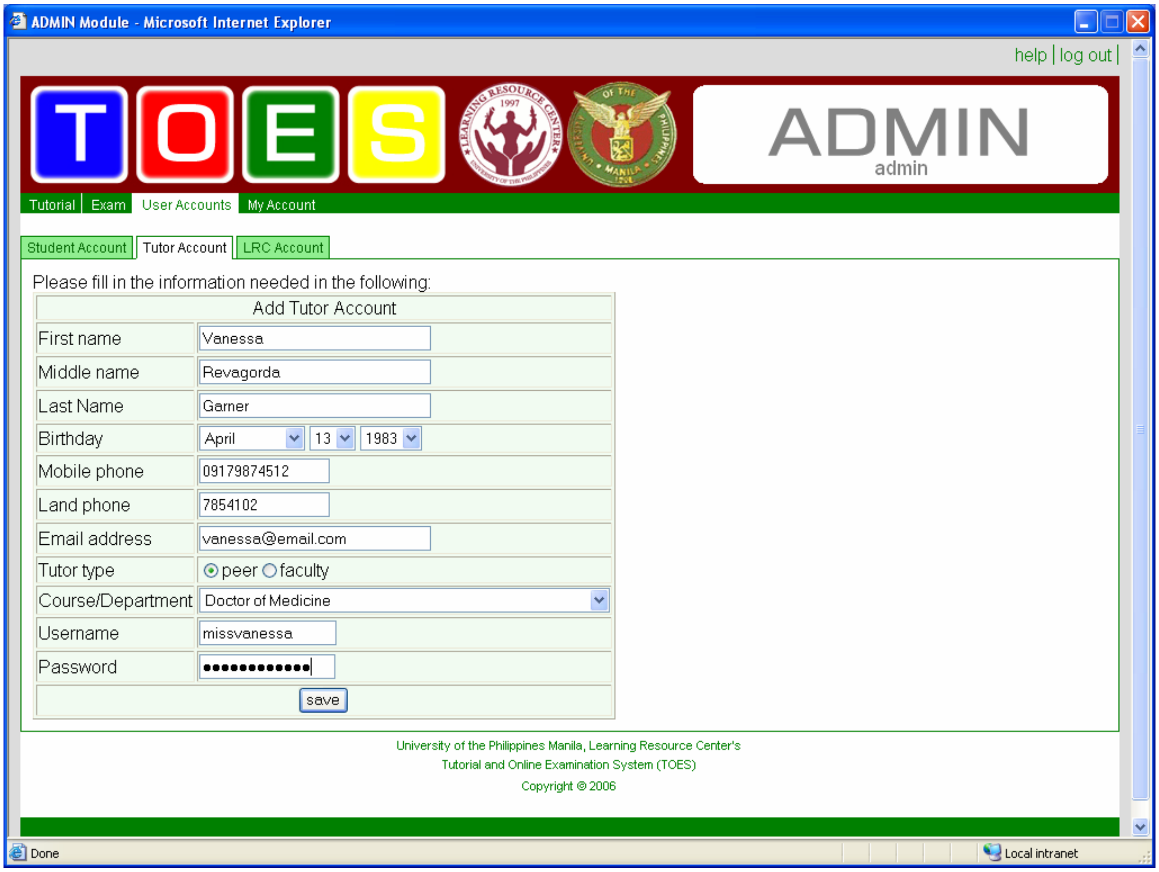
Figure 26: Tutor Account Management, UPM LRC TOES

Figure 27 shows a new peer tutor account being added. Adding a new tutor account involves supplying the initial personal information followed by the tutor schedule details. The tutor account search tool in Figure 26 is very useful when searching for tutors with desired qualities. Figure 28 shows the results in a scenario where the admin is looking for a peer tutor who is available on Monday and handles Math 17.


ADMIN Module - Microsoft Internet Explorer
help | log out |
TOES
ADMIN
admin
Tutorial | Exam | User Accounts | My Account
Student Account | Tutor Account | LRC Account
Done
Local intranet

Please fill in the information needed in the following:

Add Tutor Account	
First name	Vanessa
Middle name	Revagorda
Last Name	Garner
Birthday	April 13 1983
Mobile phone	09179874512
Land phone	7854102
Email address	vanessa@email.com
Tutor type	● peer ○ faculty
Course/Department	Doctor of Medicine
Username	missvanessa
Password	●●●●●●●●●●●●●
save	

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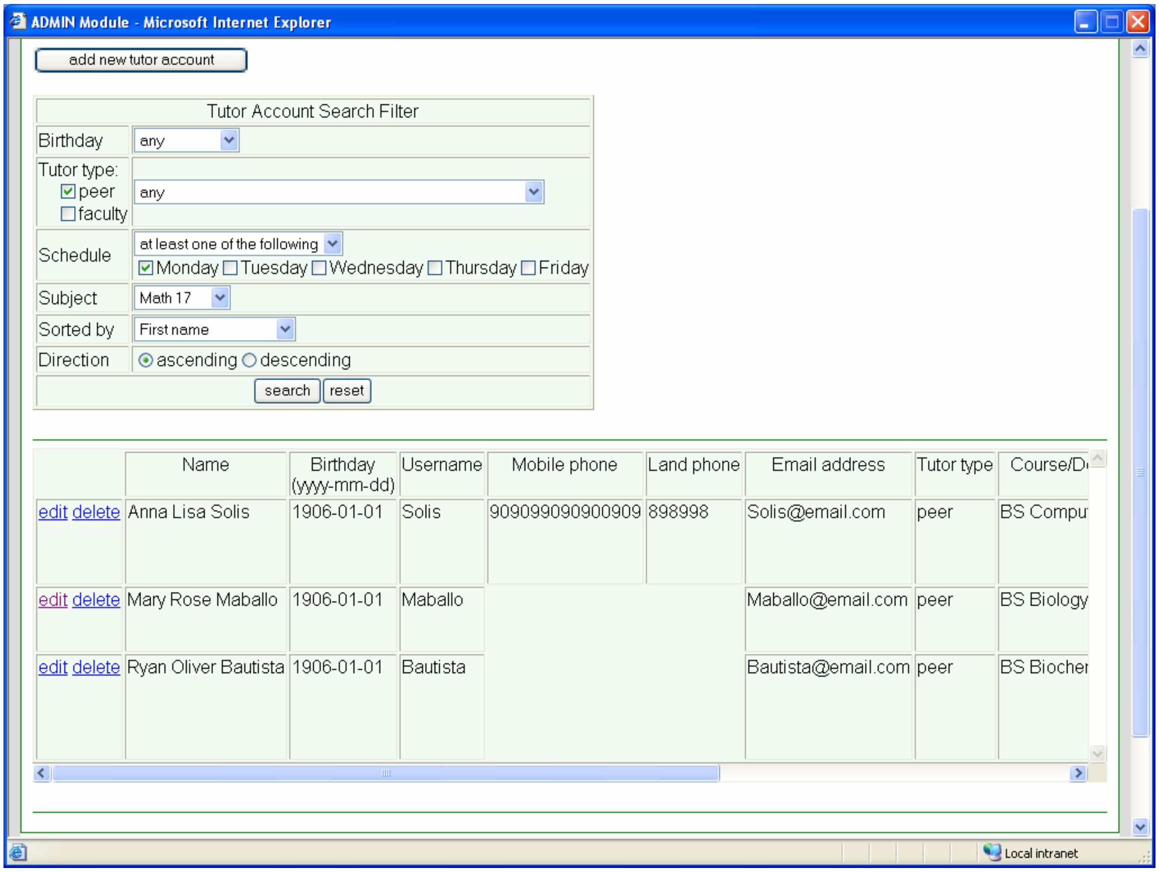
Figure 27: Add Tutor Account, UPM LRC TOES

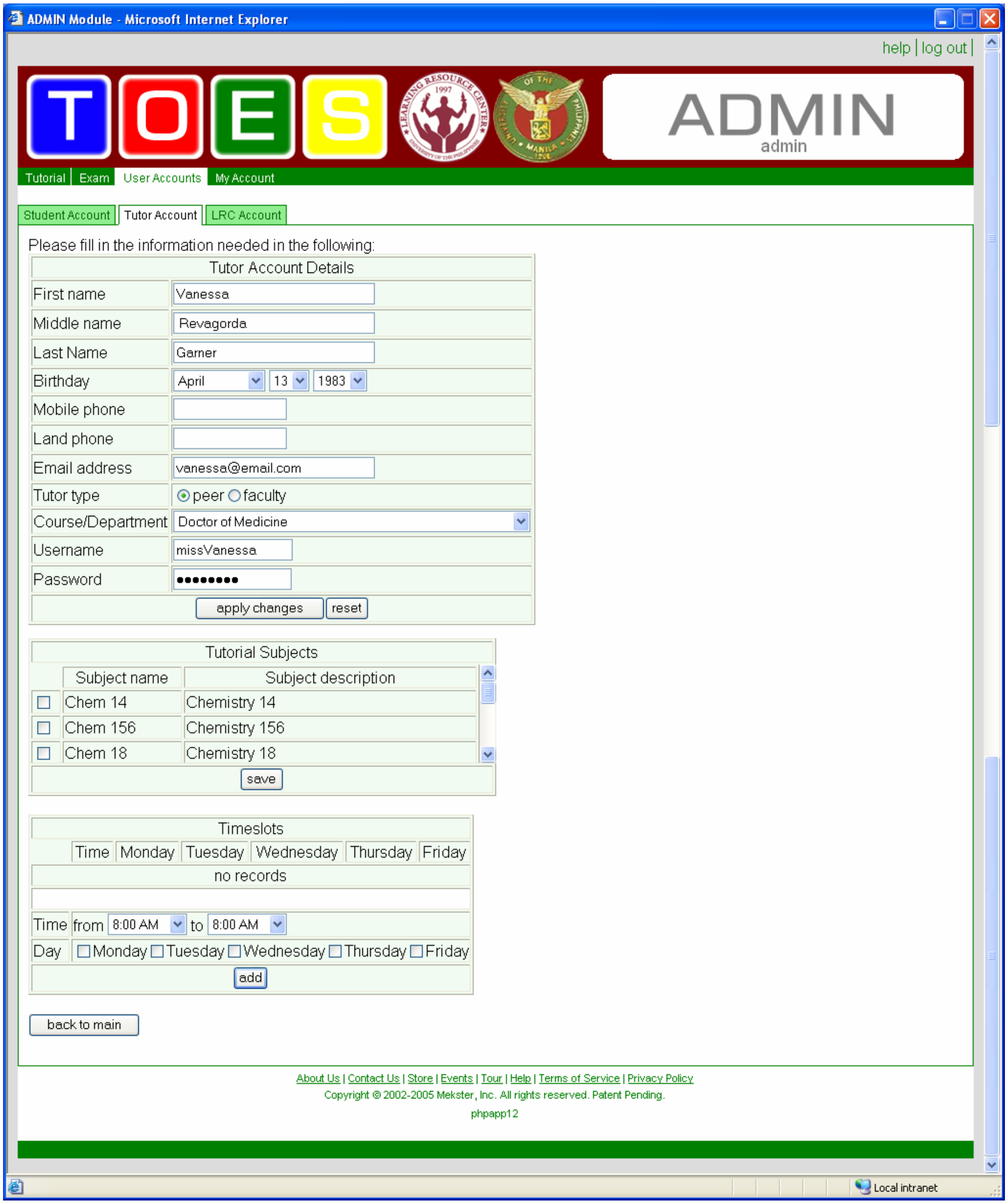


Tutor Account Search Filter	
Birthday	any
Tutor type: ☑ peer ☐ faculty	any
Schedule	at least one of the following ☑ Monday ☐ Tuesday ☐ Wednesday ☐ Thursday ☐ Friday
Subject	Math 17
Sorted by	First name
Direction	● ascending ○ descending

	Name	Birthday (yyyy-mm-dd)	Username	Mobile phone	Land phone	Email address	Tutor type	Course/D
edit delete	Anna Lisa Solis	1906-01-01	Solis	909099090900909	898998	Solis@email.com	peer	BS Compu
edit delete	Mary Rose Maballo	1906-01-01	Maballo			Maballo@email.com	peer	BS Biology
edit delete	Ryan Oliver Bautista	1906-01-01	Bautista			Bautista@email.com	peer	BS Biocher

Figure 28: Tutor Search, UPM LRC TOES

In Figure 28 the admin can also edit or delete existing tutor accounts. The edit page contains the tutor's personal information and schedule details (see Figure 29).


ADMIN Module - Microsoft Internet Explorer
help | log out |
TOES
ADMIN
admin
Tutorial | Exam | User Accounts | My Account
Student Account | Tutor Account | LRC Account

Please fill in the information needed in the following:

Tutor Account Details	
First name	Vanessa
Middle name	Revagorda
Last Name	Garner
Birthday	April 13 1983
Mobile phone	
Land phone	
Email address	vanessa@email.com
Tutor type	● peer ○ faculty
Course/Department	Doctor of Medicine
Username	missVanessa
Password	●●●●●●●●●
	apply changes · reset

Tutorial Subjects

	Subject name	Subject description
□	Chem 14	Chemistry 14
□	Chem 156	Chemistry 156
□	Chem 18	Chemistry 18

save

Timeslots

Time	Monday	Tuesday	Wednesday	Thursday	Friday
no records					

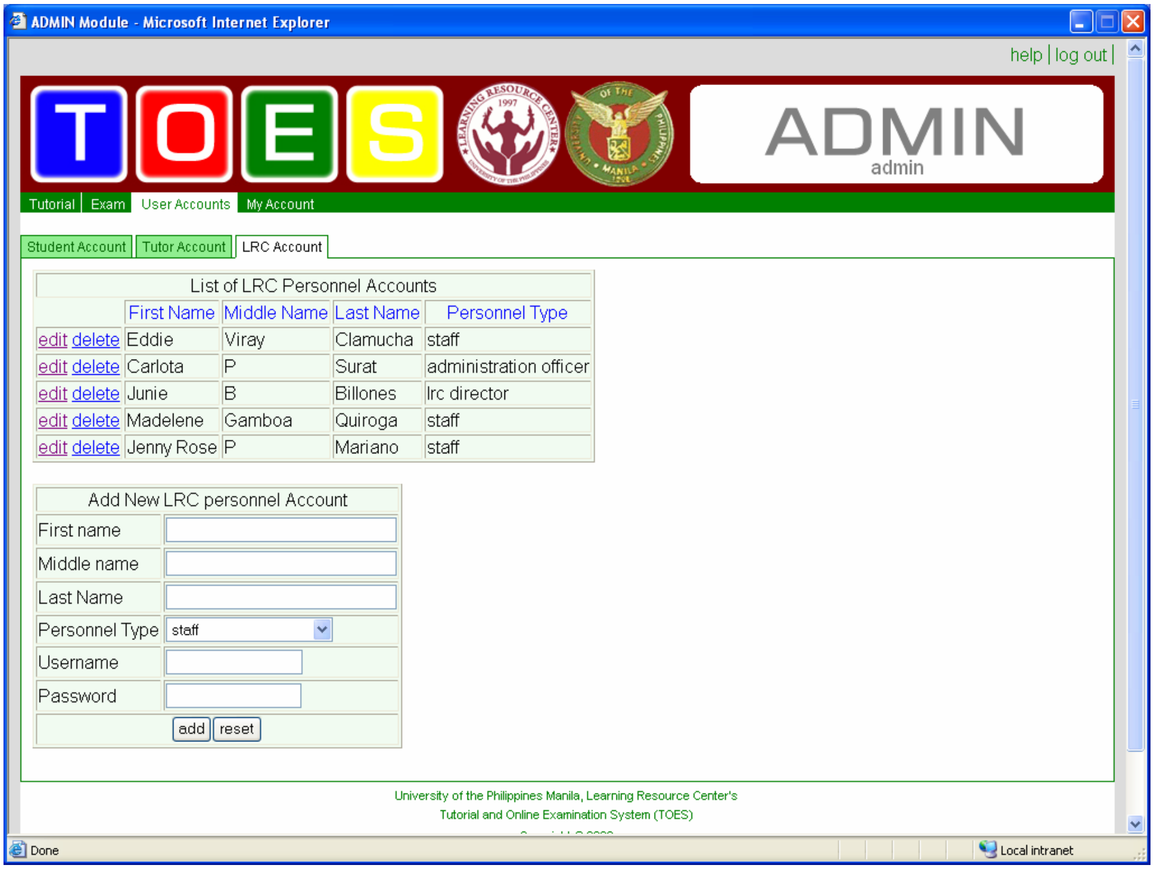
Time from 8:00 AM to 8:00 AM
Day □ Monday □ Tuesday □ Wednesday □ Thursday □ Friday
add

back to main

About Us | Contact Us | Store | Events | Tour | Help | Terms of Service | Privacy Policy
Copyright © 2002-2005 Mekster, Inc. All rights reserved. Patent Pending.
phpapp12
Local intranet

Figure 29: Tutor Account Edit Page, UPM LRC TOES

The LRC account management page contains the list of all LRC accounts and an add tutor form (see Figure 30). The LRC accounts available are – staff, director, and admin.


ADMIN Module - Microsoft Internet Explorer
help | log out |
TOES
ADMIN
admin
Tutorial | Exam | User Accounts | My Account
Student Account | Tutor Account | LRC Account
Done
Local intranet

List of LRC Personnel Accounts				
	First Name	Middle Name	Last Name	Personnel Type
edit delete	Eddie	Viray	Clamucha	staff
edit delete	Carlota	P	Surat	administration officer
edit delete	Junie	B	Billones	lrc director
edit delete	Madelene	Gamboa	Quiroga	staff
edit delete	Jenny Rose	P	Mariano	staff

Add New LRC personnel Account	
First name	
Middle name	
Last Name	
Personnel Type	staff
Username	
Password	
add reset	

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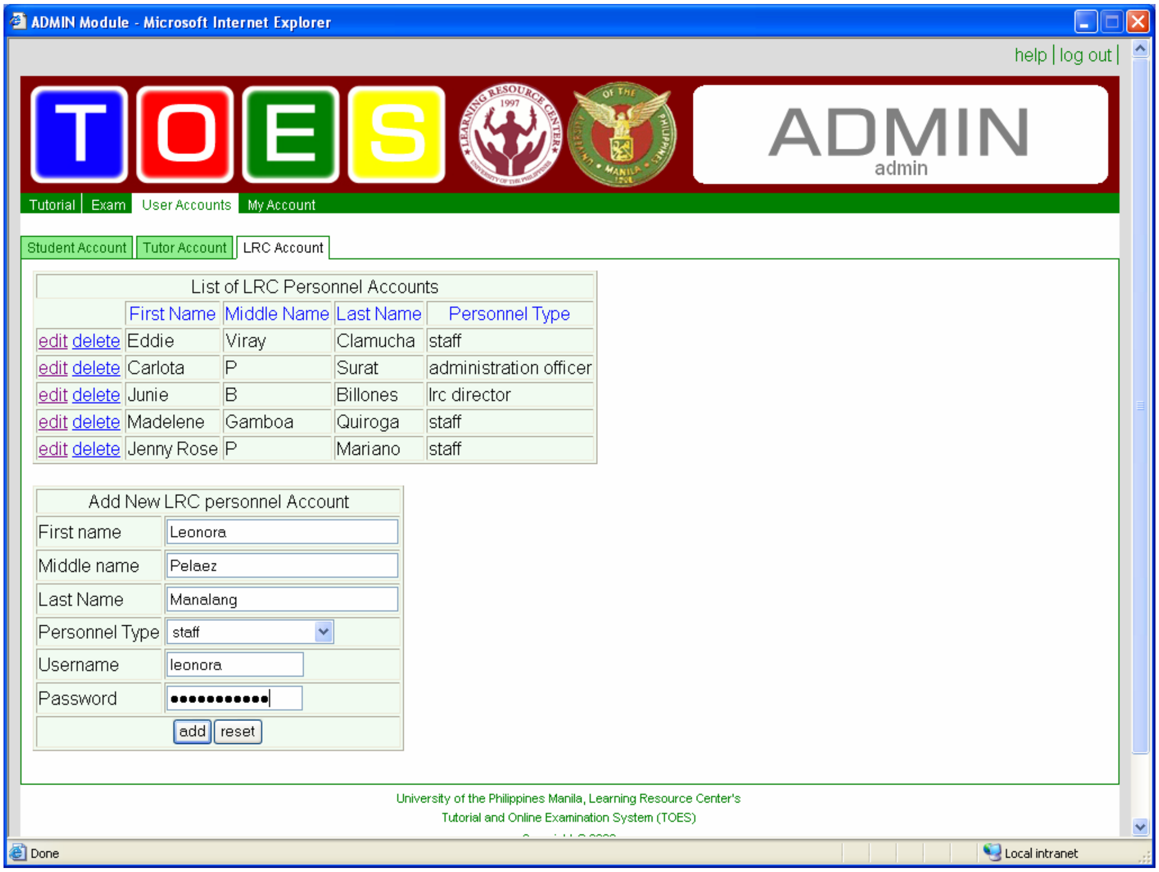
Figure 30: LRC Account Management Page, UPM LRC TOES

The add LRC account form becomes an edit LRC account form when an existing account is currently being edited. Figure 31 and 32 illustrates the difference between the add LRC account form and the edit LRC account form. Figure 31 shows a staff account being created while Figure 32 shows a director account being edited.



List of LRC Personnel Accounts

	First Name	Middle Name	Last Name	Personnel Type
edit delete	Eddie	Viray	Clamucha	staff
edit delete	Carlota	P	Surat	administration officer
edit delete	Junie	B	Billones	lrc director
edit delete	Madelene	Gamboa	Quiroga	staff
edit delete	Jenny Rose	P	Mariano	staff

Add New LRC personnel Account

First name	Leonora
Middle name	Pelaez
Last Name	Manalang
Personnel Type	staff
Username	leonora
Password	••••••••••••
	add reset

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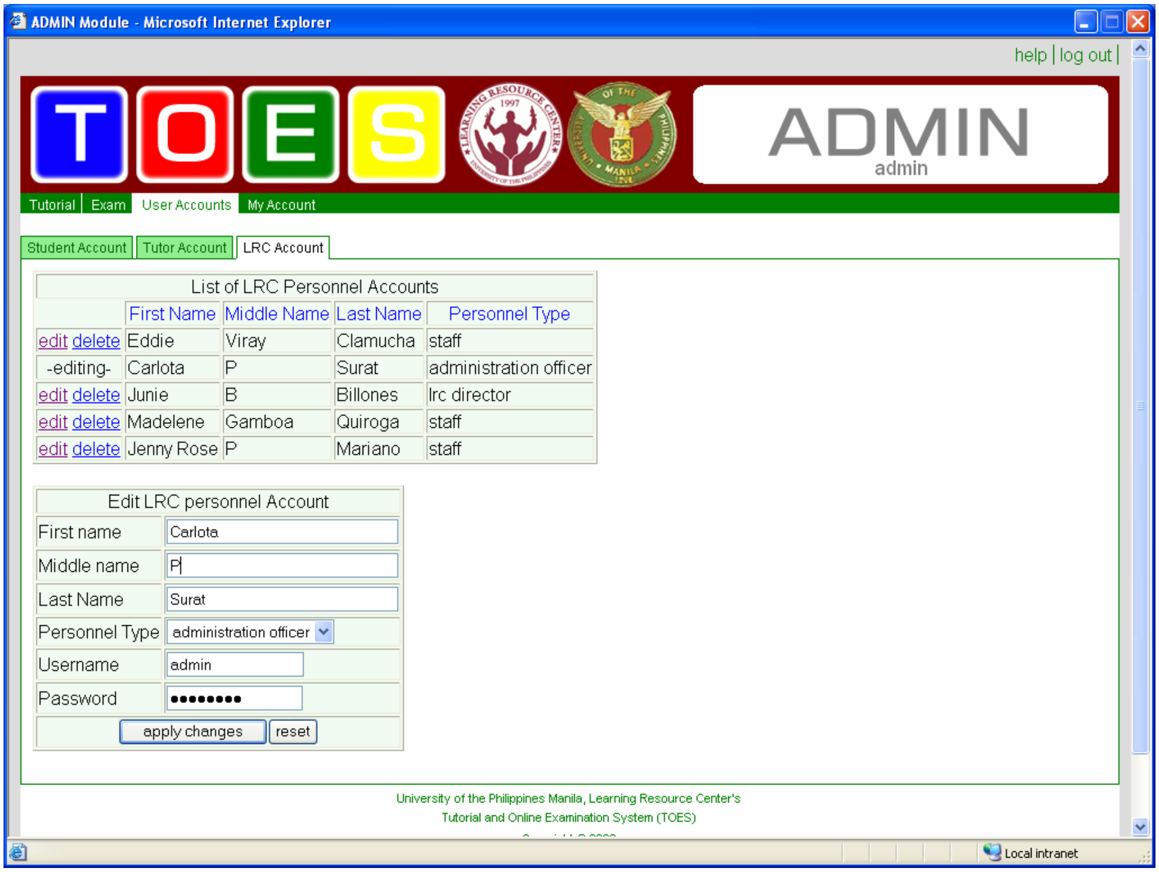
Figure 31: Add LRC Account, UPM LRC TOES


ADMIN Module - Microsoft Internet Explorer
help | log out |
TOES
ADMIN
admin
Tutorial | Exam | User Accounts | My Account
Student Account | Tutor Account | LRC Account
Local intranet

List of LRC Personnel Accounts

	First Name	Middle Name	Last Name	Personnel Type
edit delete	Eddie	Viray	Clamucha	staff
-editing-	Carlota	P	Surat	administration officer
edit delete	Junie	B	Billones	lrc director
edit delete	Madelene	Gamboa	Quiroga	staff
edit delete	Jenny Rose	P	Mariano	staff

Edit LRC personnel Account

First name	Carlota
Middle name	P
Last Name	Surat
Personnel Type	administration officer
Username	admin
Password	●●●●●●●●●

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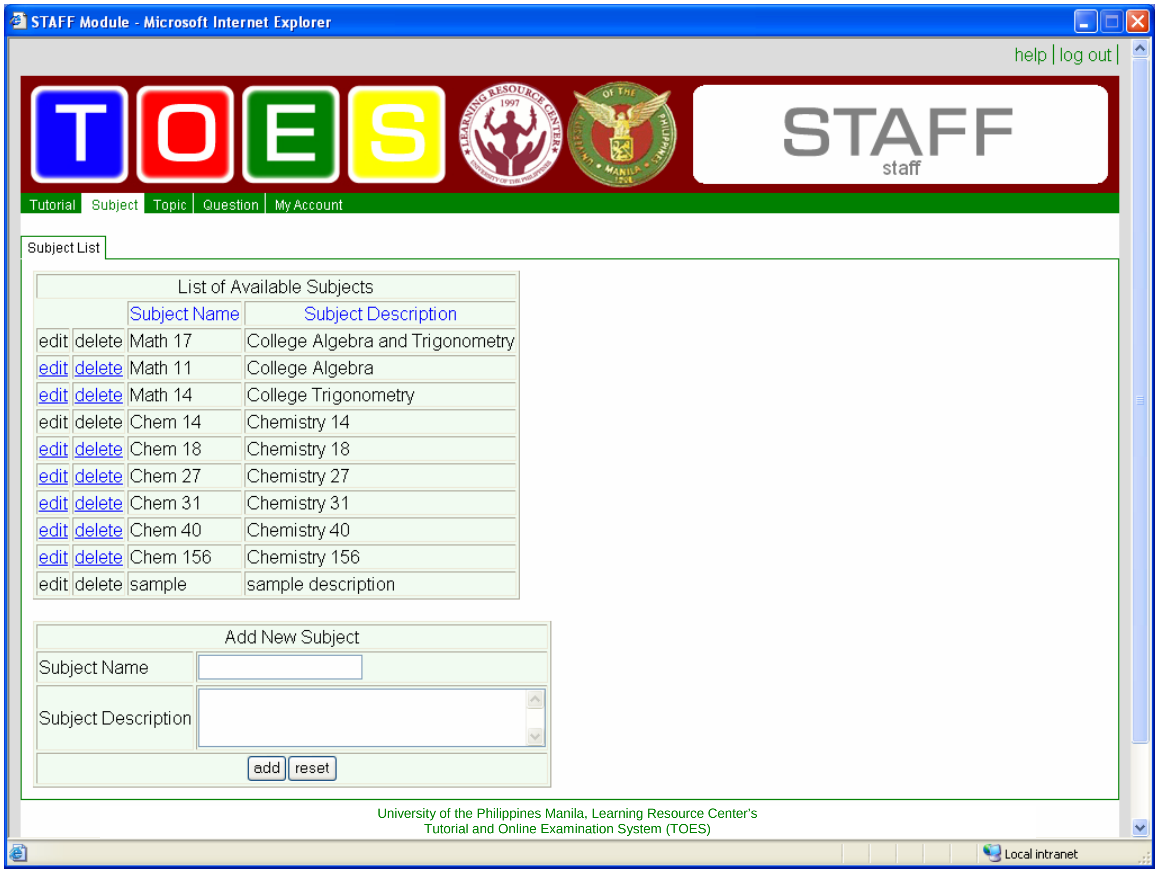
Figure 32: Edit LRC Account Page, UPM LRC TOES

The TOES staff is responsible for managing the TOES question bank. This task includes managing subjects, topics, and questions. Questions are grouped by topics while topics are grouped by subjects. The subject management page is shown in Figure 33 while the topic management page is shown in Figure 34. Both cited pages perform add, edit, and delete processes. Topics containing questions can no longer be edited or deleted. Similarly, subjects with recorded topics can not be edited or deleted.



List of Available Subjects

		Subject Name	Subject Description
edit	delete	Math 17	College Algebra and Trigonometry
edit	delete	Math 11	College Algebra
edit	delete	Math 14	College Trigonometry
edit	delete	Chem 14	Chemistry 14
edit	delete	Chem 18	Chemistry 18
edit	delete	Chem 27	Chemistry 27
edit	delete	Chem 31	Chemistry 31
edit	delete	Chem 40	Chemistry 40
edit	delete	Chem 156	Chemistry 156
edit	delete	sample	sample description

Add New Subject

Subject Name	
Subject Description	

add reset

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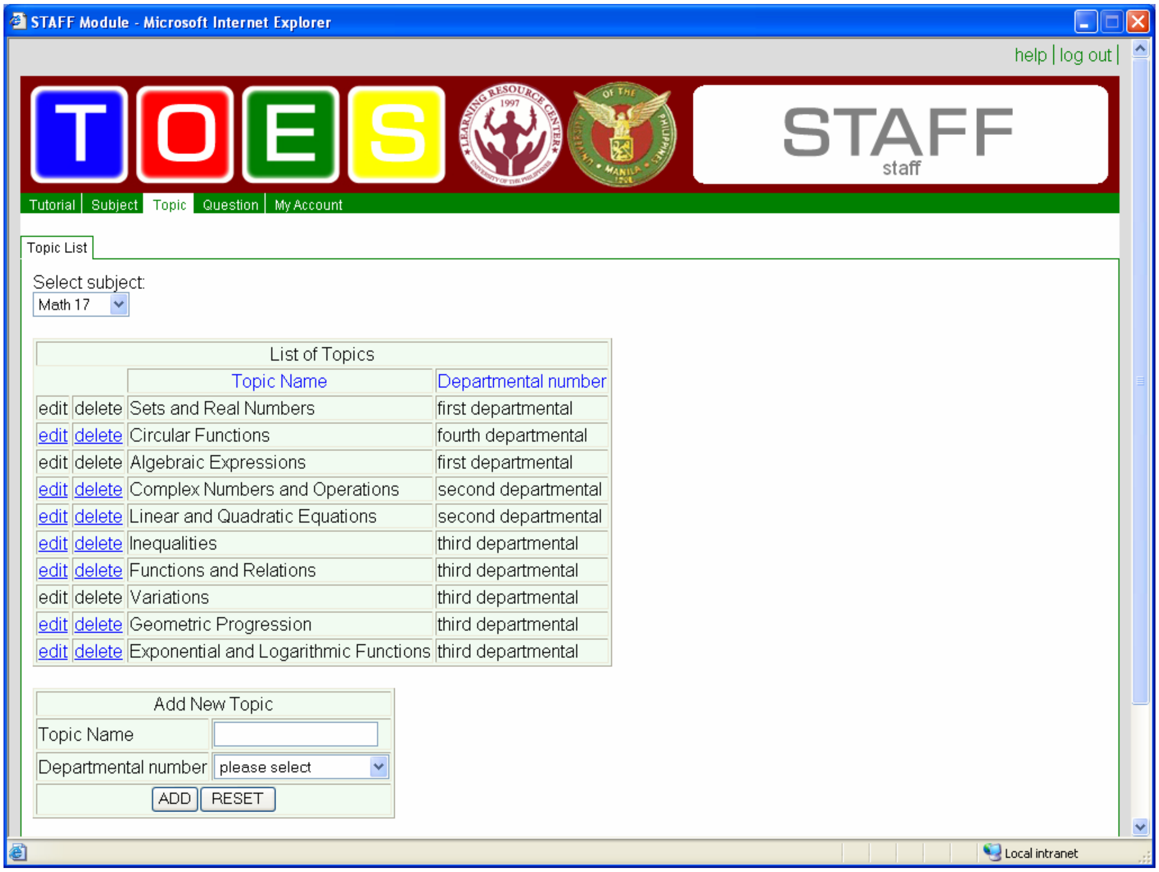
Figure 33: Subject Management Page, UPM LRC TOES


STAFF Module - Microsoft Internet Explorer
help | log out |
TOES
STAFF
staff
Tutorial | Subject | Topic | Question | My Account
Topic List
Local intranet

Select subject: Math 17

List of Topics

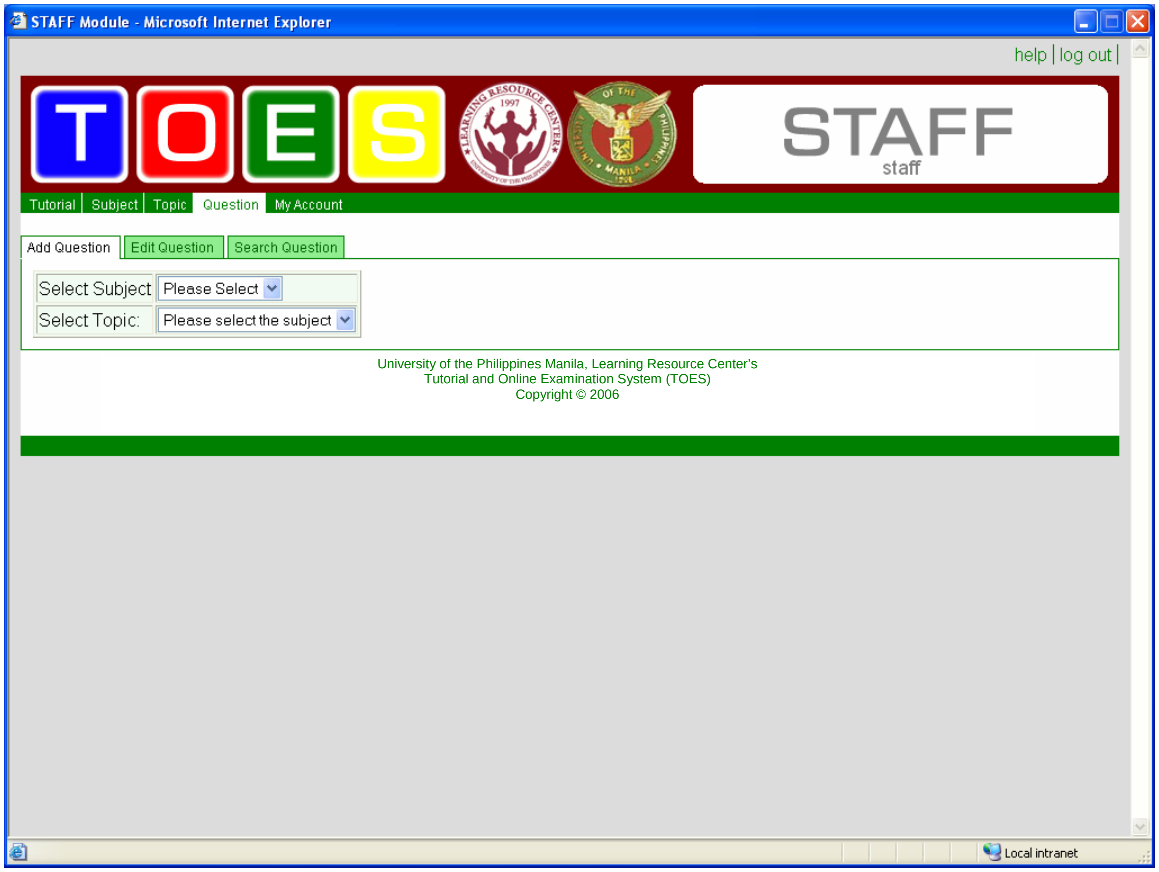
		Topic Name	Departmental number
edit	delete	Sets and Real Numbers	first departmental
edit	delete	Circular Functions	fourth departmental
edit	delete	Algebraic Expressions	first departmental
edit	delete	Complex Numbers and Operations	second departmental
edit	delete	Linear and Quadratic Equations	second departmental
edit	delete	Inequalities	third departmental
edit	delete	Functions and Relations	third departmental
edit	delete	Variations	third departmental
edit	delete	Geometric Progression	third departmental
edit	delete	Exponential and Logarithmic Functions	third departmental

Add New Topic

Topic Name	
Departmental number	please select

Figure 34: Topic Management Page, UPM LRC TOES

The LRC guarantees that TOES questions are both top notch and comprehensive by soliciting exam questions from UP Manila faculties. The question management page is displayed in Figure 35. The page contains the subordinate options – Add Question, Edit Question, and Search Question. Figures 36.1 to 36.10 explain a detailed step by step process of adding questions.


STAFF Module - Microsoft Internet Explorer
help | log out |
TOES
STAFF
staff
Tutorial | Subject | Topic | Question | My Account
Add Question
Edit Question
Search Question
Local intranet

Select Subject: Please Select

Select Topic: Please select the subject

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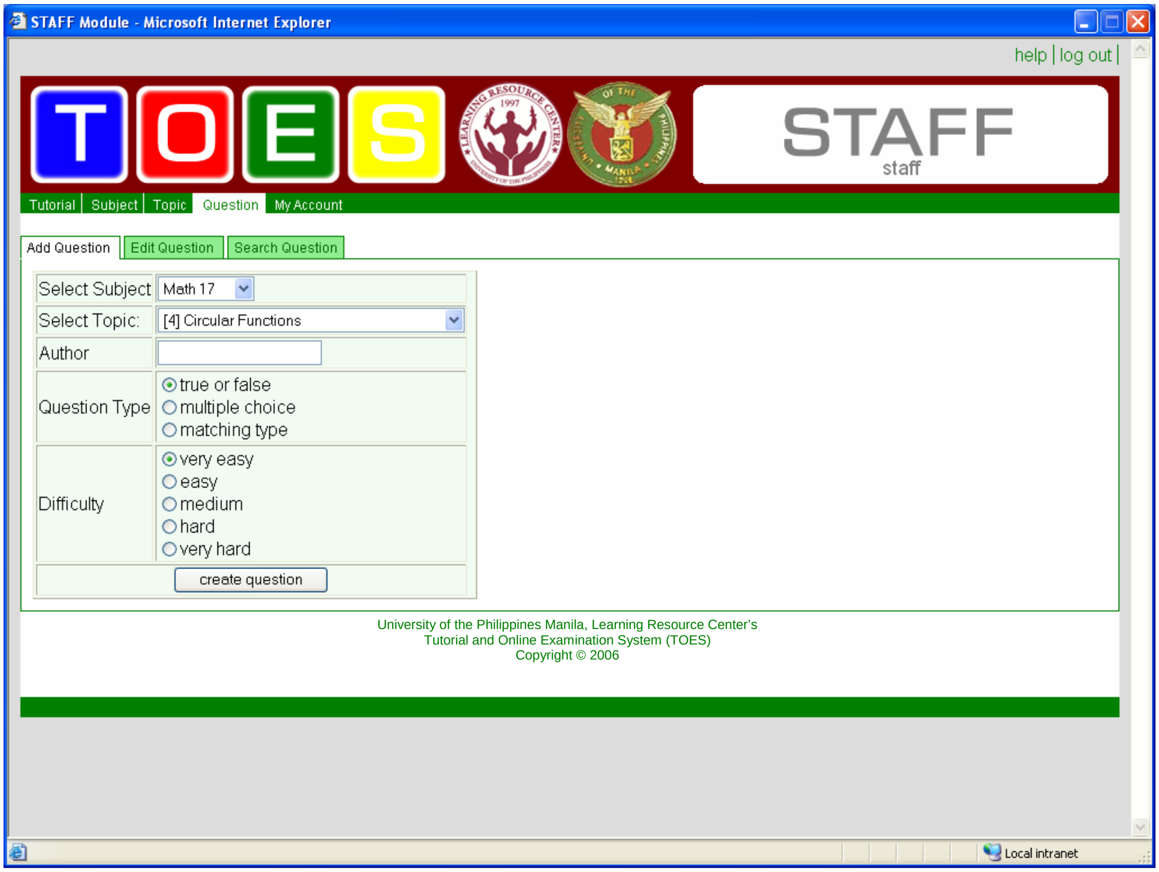
Figure 35: Question Management Page, UPM LRC TOES

Adding questions requires the following – subject, topic, author, question type, and difficulty (see Figure 36.1). This form is only displayed after specifying the subject in Figure 35.



Select Subject	Math 17
Select Topic:	[4] Circular Functions
Author	
Question Type	● true or false ○ multiple choice ○ matching type
Difficulty	● very easy ○ easy ○ medium ○ hard ○ very hard

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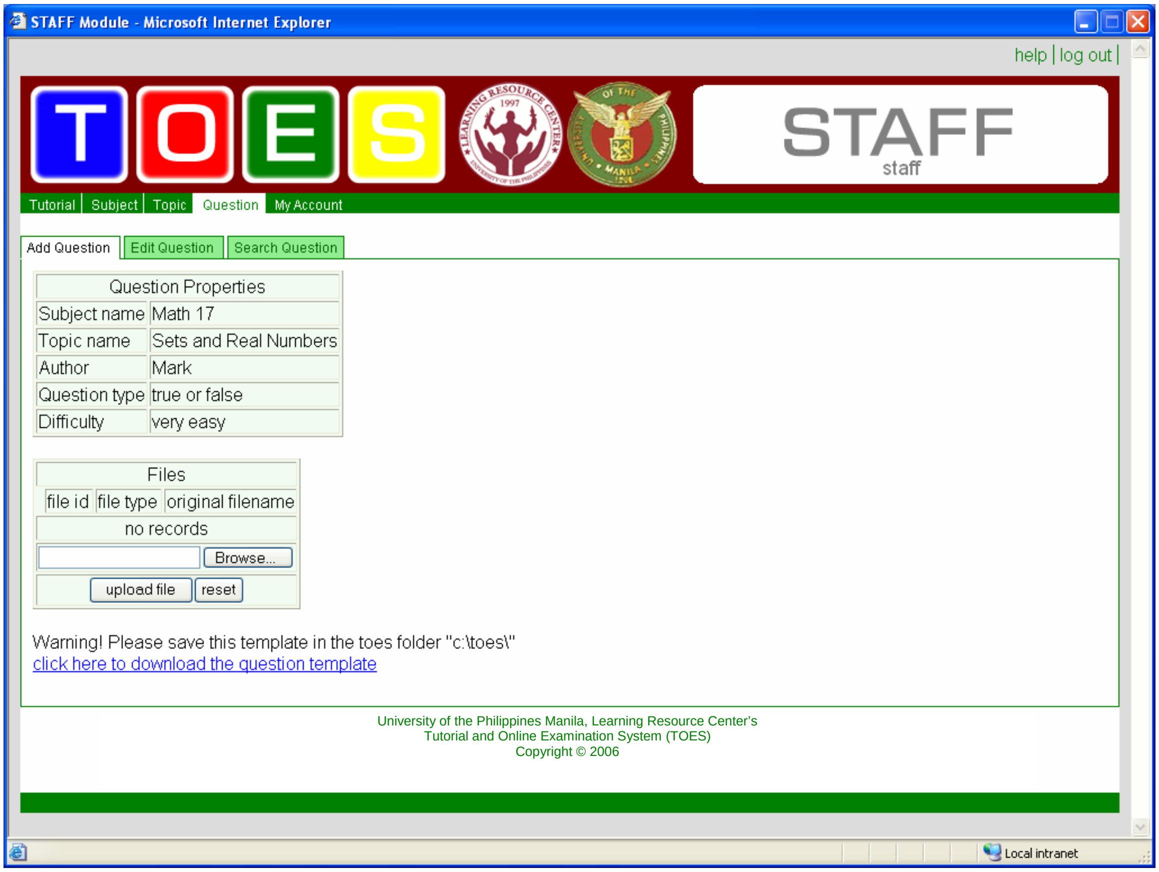
Figure 36.1: Add Question, UPM LRC TOES

Figure 36.2 displays the question properties that were supplied by the staff in Figure 36.1. TOES questions supports multimedia file attachments which can be uploaded via the Files form. Multimedia files can either be sound files, movie files, or animation files. Figure 36.3 shows a Macromedia Flash file being uploaded.


STAFF Module - Microsoft Internet Explorer
help | log out |
TOES
STAFF
staff
Tutorial | Subject | Topic | Question | My Account
Add Question | Edit Question | Search Question
Browse...
upload file | reset
Local intranet

Question Properties	
Subject name	Math 17
Topic name	Sets and Real Numbers
Author	Mark
Question type	true or false
Difficulty	very easy

Files		
file id	file type	original filename
no records		

Warning! Please save this template in the toes folder "c:\toes\"

click here to download the question template

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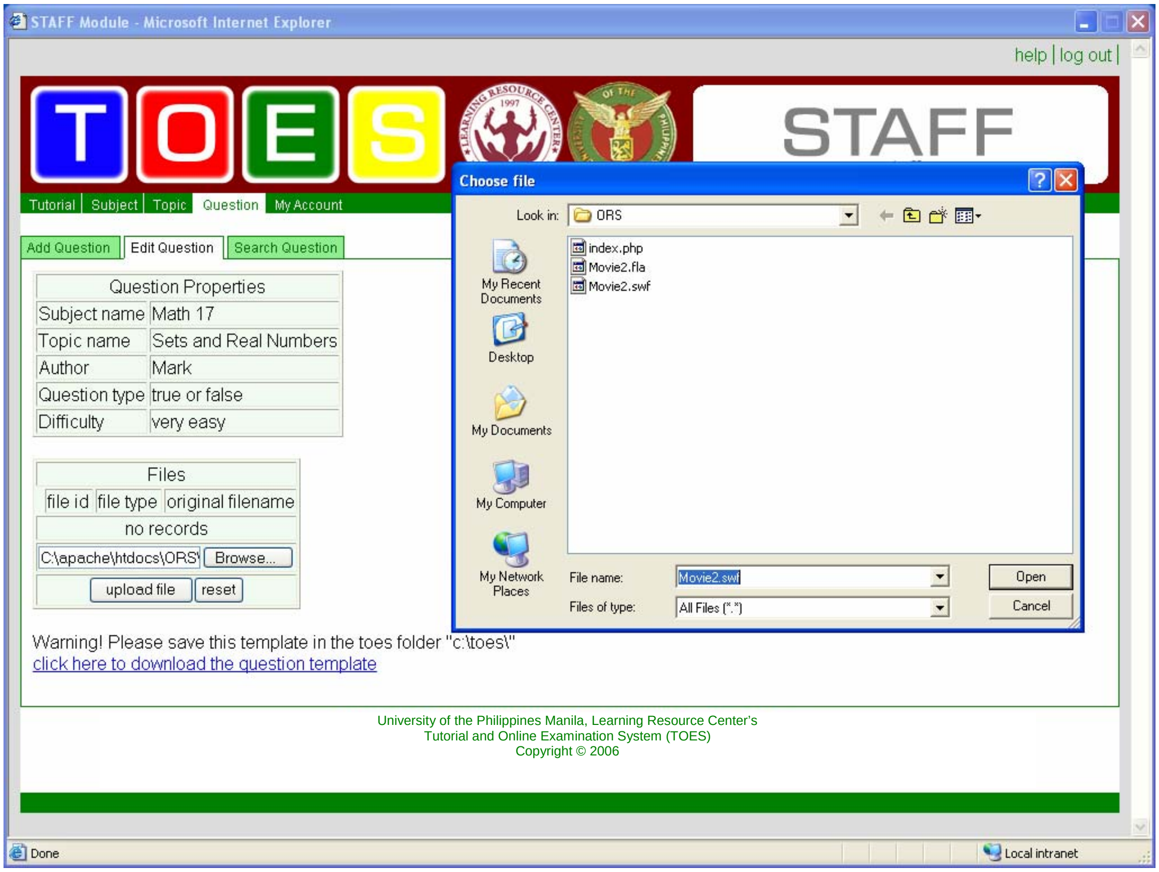
Figure 36.2: Add Question, UPM LRC TOES



Question Properties	
Subject name	Math 17
Topic name	Sets and Real Numbers
Author	Mark
Question type	true or false
Difficulty	very easy

Files		
file id	file type	original filename
no records		
C:\apache\htdocs\ORS\		

File name: Movie2.swf

Files of type: All Files (*.*)

Warning! Please save this template in the toes folder "c:\toes\"

click here to download the question template

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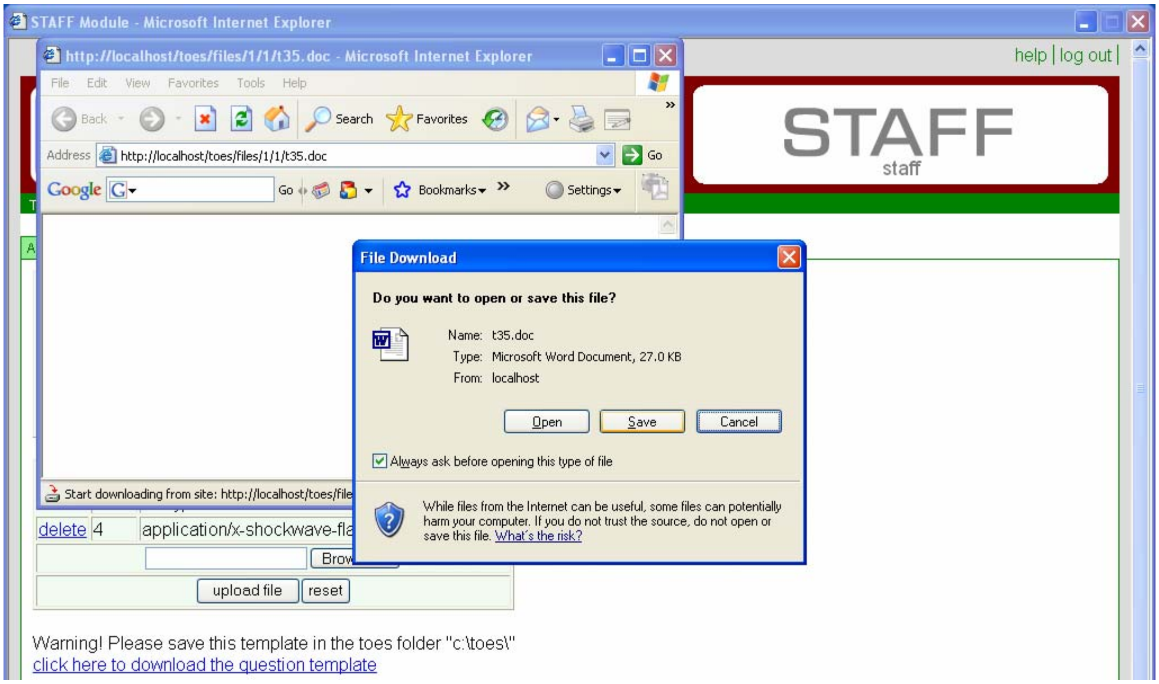
Figure 36.3: Add Question, UPM LRC TOES

Once the necessary file attachments are uploaded the staff downloads the question template (see Figure 36.4) and saves it locally in the C:\toes folder (see Figure 36.5). After the download completes the staff opens the local question template (see Figure 36.6) and enables macro script (see Figure 36.7).



Address: http://localhost/toes/files/1/1/t35.doc

Do you want to open or save this file?

Name: t35.doc
Type: Microsoft Word Document, 27.0 KB
From: localhost

☑ Always ask before opening this type of file

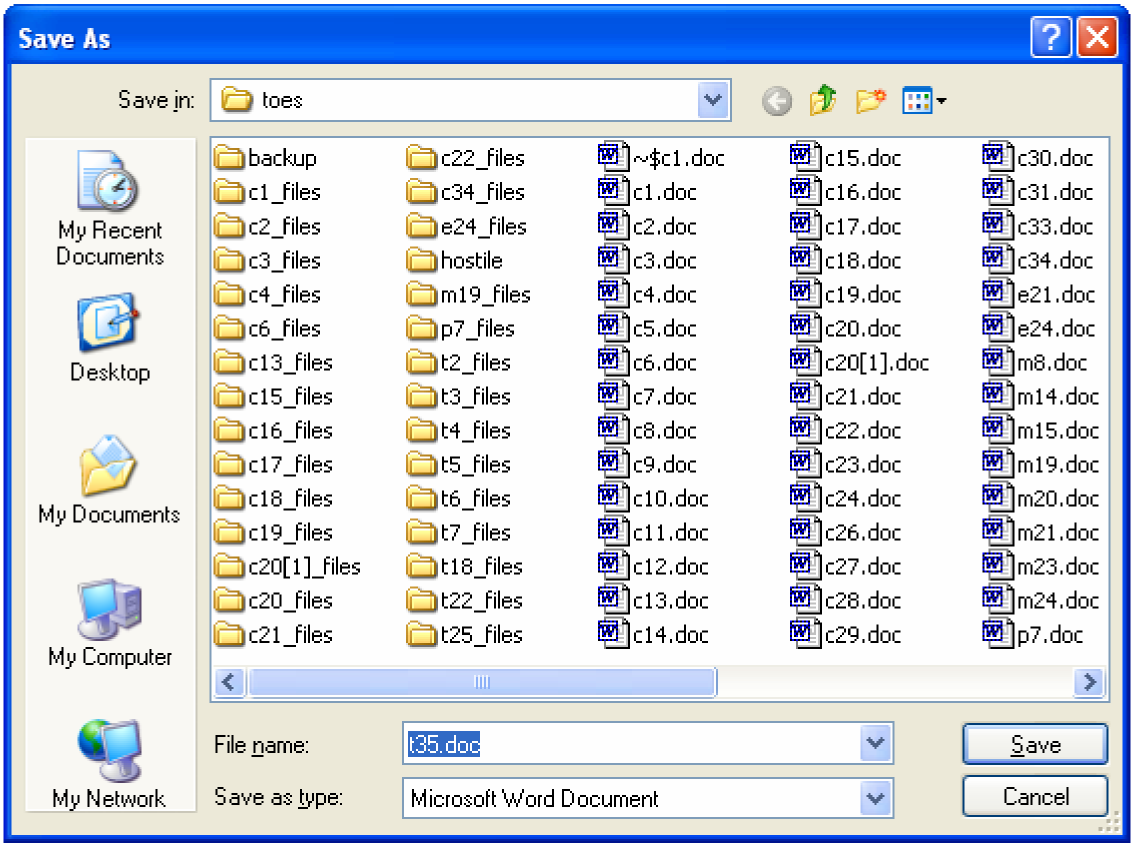
While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not open or save this file. What's the risk?

Start downloading from site: http://localhost/toes/file

delete	4	application/x-shockwave-fla

Warning! Please save this template in the toes folder "c:\toes\"
click here to download the question template

Figure 36.4: Download Question Template, UPM LRC TOES



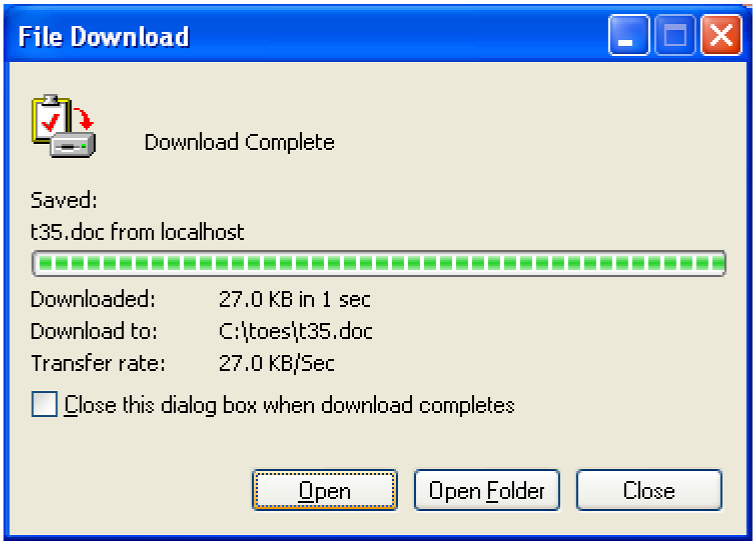
Save in: toes

backup
c1_files
c2_files
c3_files
c4_files
c6_files
c13_files
c15_files
c16_files
c17_files
c18_files
c19_files
c20[1]_files
c20_files
c21_files
c22_files
c34_files
e24_files
hostile
m19_files
p7_files
t2_files
t3_files
t4_files
t5_files
t6_files
t7_files
t18_files
t22_files
t25_files
~$c1.doc
c1.doc
c2.doc
c3.doc
c4.doc
c5.doc
c6.doc
c7.doc
c8.doc
c9.doc
c10.doc
c11.doc
c12.doc
c13.doc
c14.doc
c15.doc
c16.doc
c17.doc
c18.doc
c19.doc
c20.doc
c20[1].doc
c21.doc
c22.doc
c23.doc
c24.doc
c26.doc
c27.doc
c28.doc
c29.doc
c30.doc
c31.doc
c33.doc
c34.doc
e21.doc
e24.doc
m8.doc
m14.doc
m15.doc
m19.doc
m20.doc
m21.doc
m23.doc
m24.doc
p7.doc

File name: t35.doc

Save as type: Microsoft Word Document

Figure 36.5: Save Question Template, UPM LRC TOES



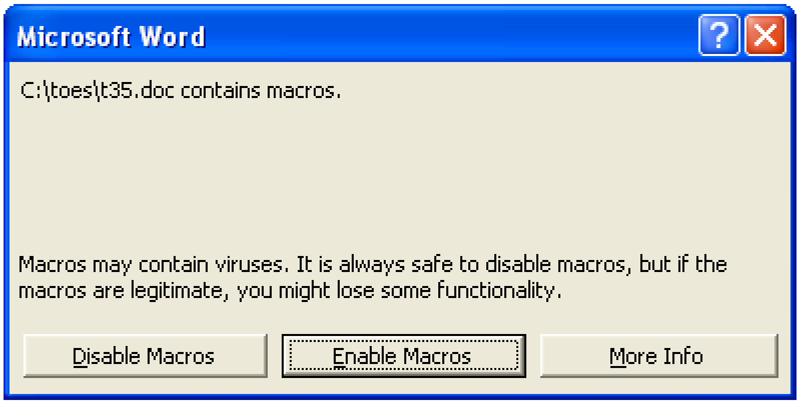
Download Complete

Saved:
t35.doc from localhost

Downloaded: 27.0 KB in 1 sec
Download to: C:\toes\t35.doc
Transfer rate: 27.0 KB/Sec

□ Close this dialog box when download completes

Figure 36.6: Open Local Question Template, UPM LRC TOES

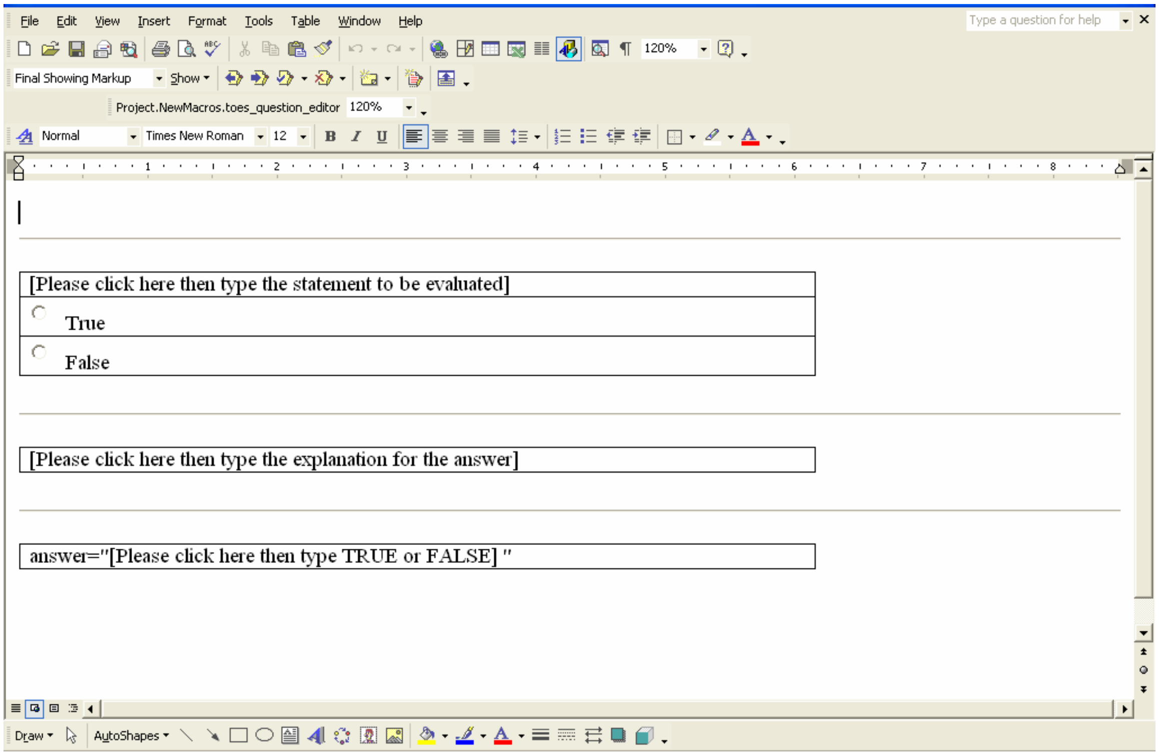


C:\toes\t35.doc contains macros.

Macros may contain viruses. It is always safe to disable macros, but if the macros are legitimate, you might lose some functionality.

Figure 36.7: Enable Macro Scripts, UPM LRC TOES

Figures 36.8.1 to 36.8.3 shows the question template for each question type. The templates serve as a guide when constructing questions. The templates contain clickable texts called Macro Buttons. These buttons carry descriptive texts that describe their function. They precisely instruct the staff where question elements should go.



[Please click here then type the statement to be evaluated]

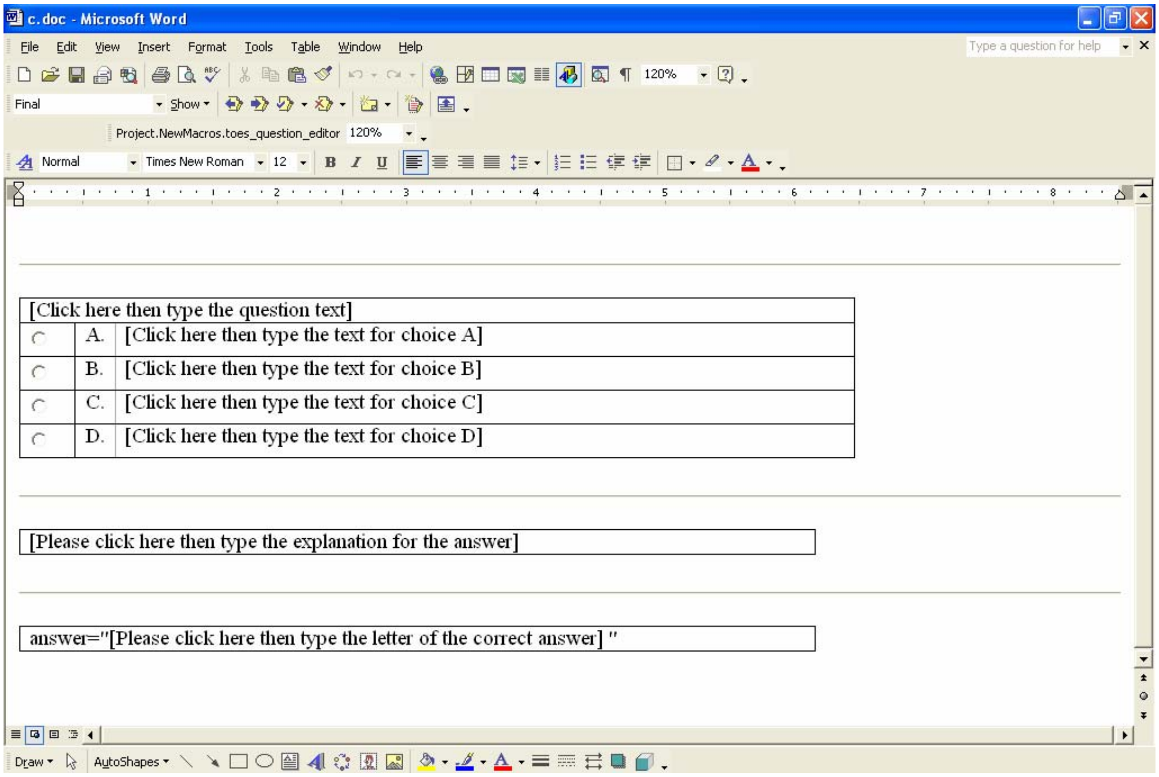
○ True

○ False

[Please click here then type the explanation for the answer]

answer="[Please click here then type TRUE or FALSE] "

Figure 36.8.1: True or False Question Template, UPM LRC TOES

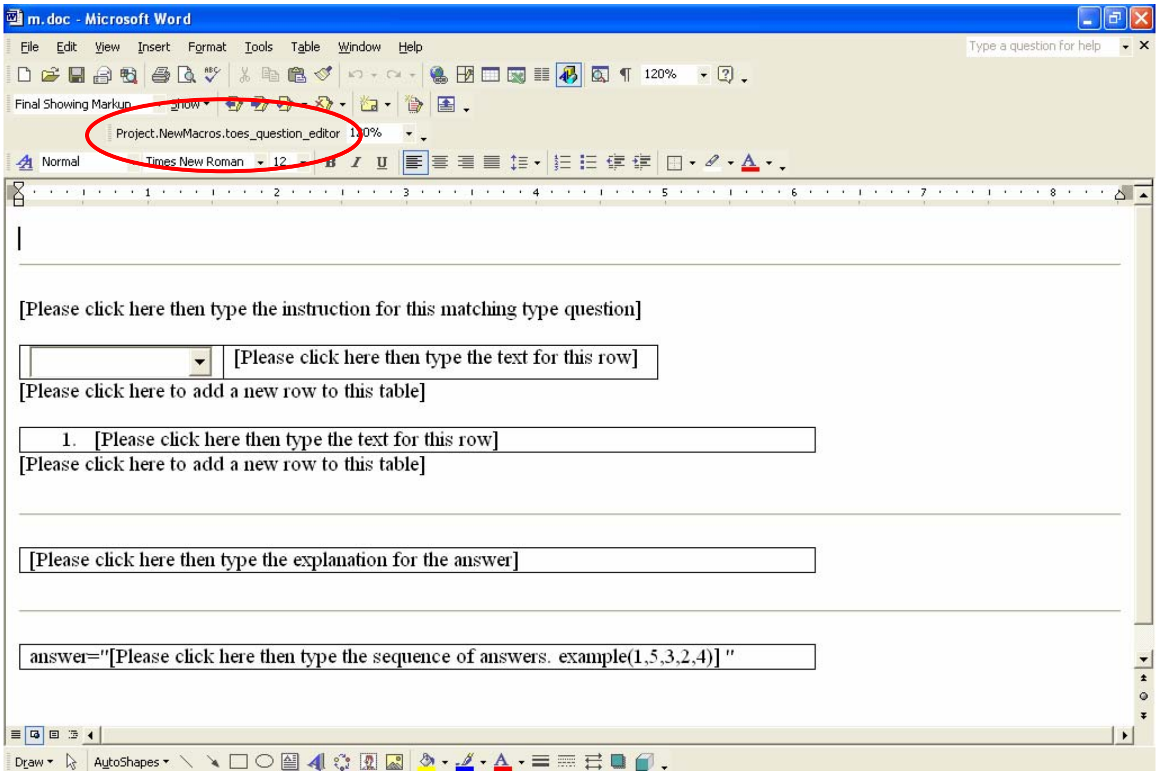


[Click here then type the question text]		
○	A.	[Click here then type the text for choice A]
○	B.	[Click here then type the text for choice B]
○	C.	[Click here then type the text for choice C]
○	D.	[Click here then type the text for choice D]

[Please click here then type the explanation for the answer]

answer="[Please click here then type the letter of the correct answer] "

Figure 36.8.2: Multiple Choice Question Template, UPM LRC TOES



[Please click here then type the instruction for this matching type question]

▾	[Please click here then type the text for this row]

[Please click here to add a new row to this table]

1. [Please click here then type the text for this row]

[Please click here to add a new row to this table]

[Please click here then type the explanation for the answer]

answer="[Please click here then type the sequence of answers. example(1,5,3,2,4)] "

Figure 36.8.3: Matching Type Question Template, UPM LRC TOES

Each question template contains a toes_question_editor toolbar highlighted in Figure 36.8.3. This toolbar launches the Toes Question Editor Form (Figure 36.9) which is a compact tool that contains all the necessary functionalities needed in question construction. Inserting the uploaded file attachments (see Figure 36.3) require keying in the 'file id' in (1) then pressing (2). (3) is used for inserting image files. (4) launches the Microsoft Equation Editor. (5) resets the question template in its original form. (6) saves the question template into a .doc and .htm file.

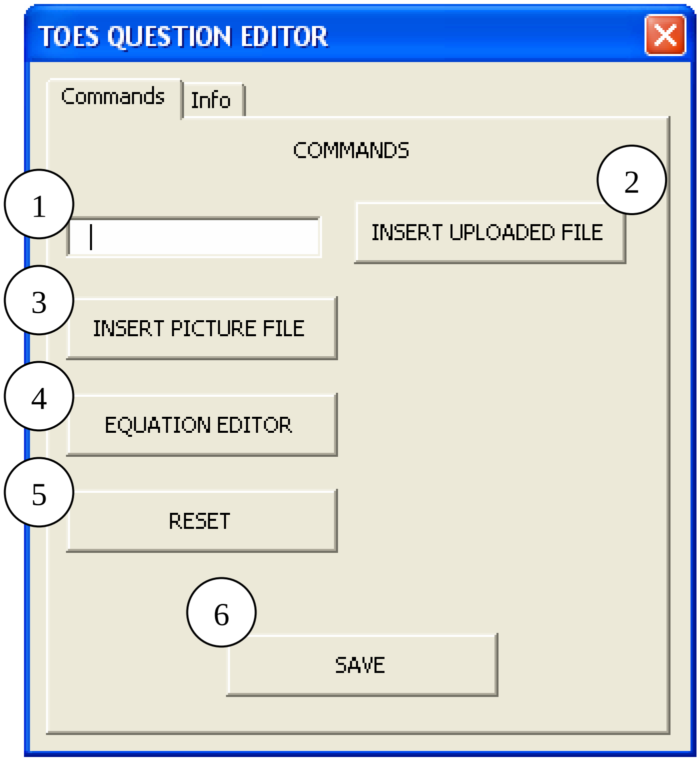
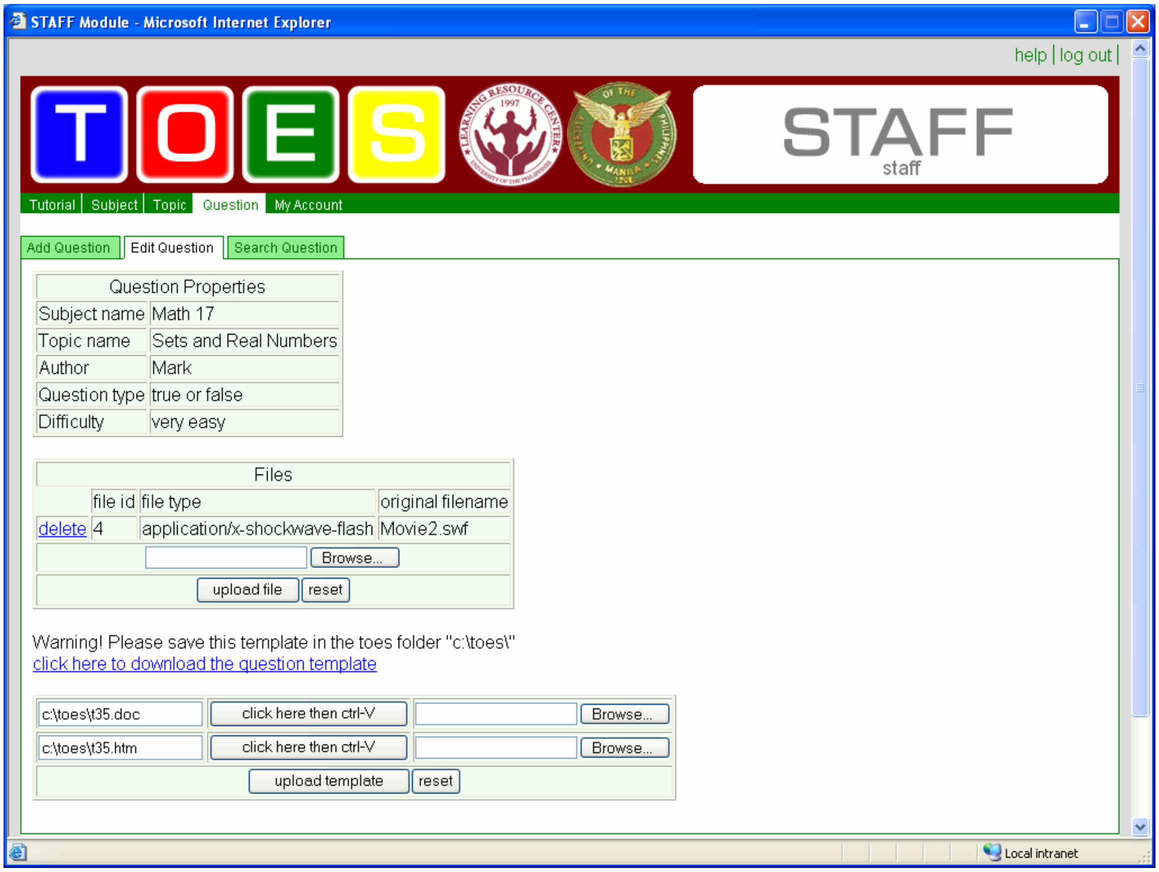


Figure 36.9: Toes Question Editor Form, UPM LRC TOES

Lastly the staff uploads the .doc and .htm file (see Figure 36.10). TOES Question Bank keeps the .doc file to allow future question modifications. On the other hand, the .htm is solely used for browser display.


STAFF Module - Microsoft Internet Explorer
help | log out |
TOES
STAFF
staff
Tutorial | Subject | Topic | Question | My Account
Add Question | Edit Question | Search Question
Browse...
upload file
reset
click here then ctrl-V
Browse...
upload template
Local intranet

Question Properties	
Subject name	Math 17
Topic name	Sets and Real Numbers
Author	Mark
Question type	true or false
Difficulty	very easy

Files

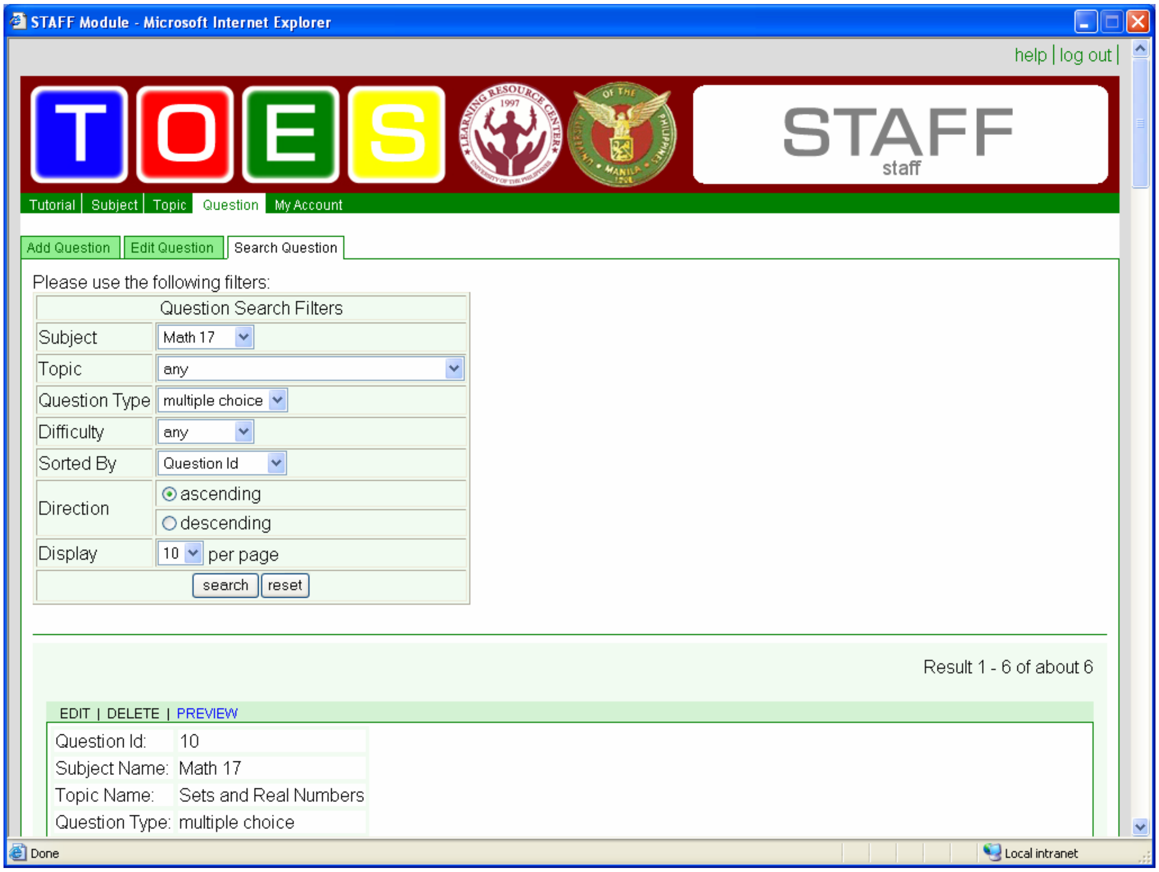
	file id	file type	original filename
delete	4	application/x-shockwave-flash	Movie2.swf

Warning! Please save this template in the toes folder "c:\toes\"
click here to download the question template

c:\toes\t35.doc
c:\toes\t35.htm

Figure 36.10: Uploading .doc and .html File, UPM LRC TOES

The question search page allows the staff to perform a thorough search for a desired set of questions (see Figure 37). The staff may edit, delete, or preview a question from the resulting question set. Questions can be edited or deleted as long as they are not yet used in any exam. In addition to the preliminary view of the question in the search results page, the preview offers an interactive view (see Figure 38).



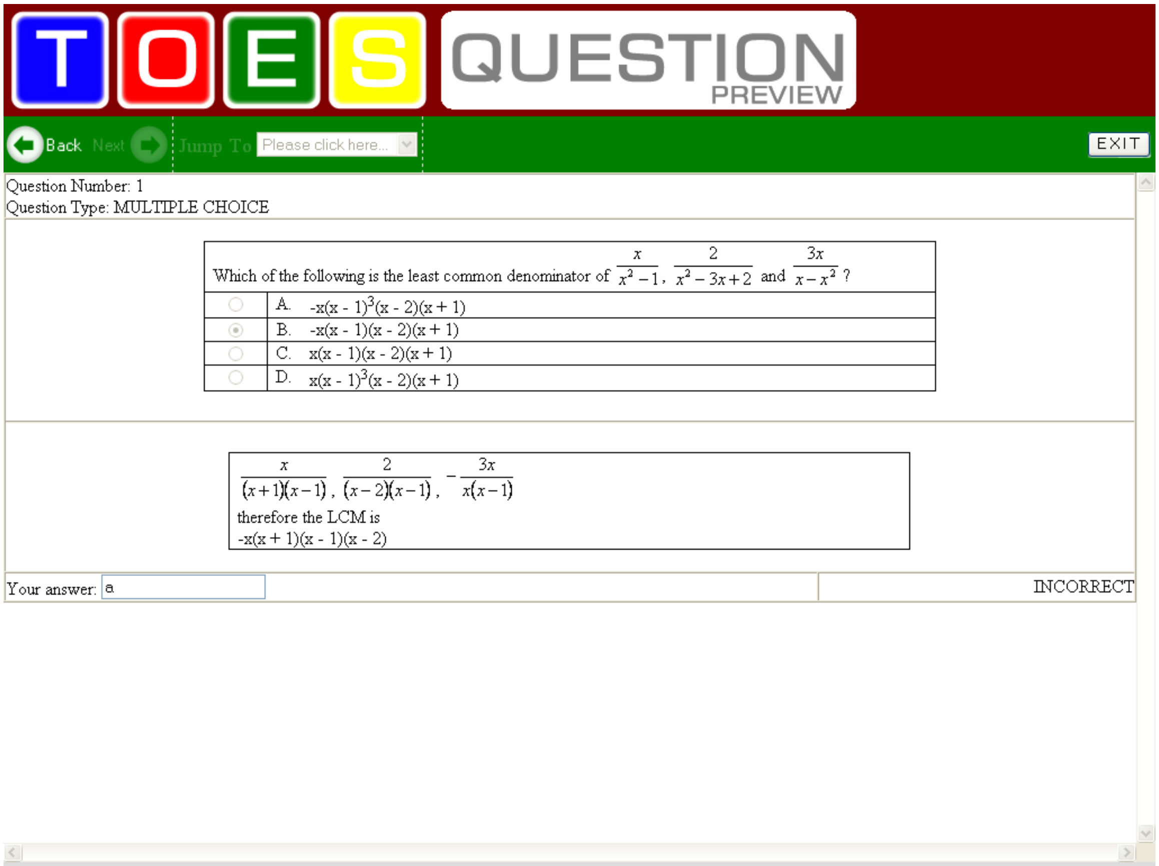
Please use the following filters:

Question Search Filters	
Subject	Math 17
Topic	any
Question Type	multiple choice
Difficulty	any
Sorted By	Question Id
Direction	● ascending ○ descending
Display	10 per page

Result 1 - 6 of about 6

Question Id:	10
Subject Name:	Math 17
Topic Name:	Sets and Real Numbers
Question Type:	multiple choice

Figure 37: Question Search Page, UPM LRC TOES



Question Number: 1
Question Type: MULTIPLE CHOICE

Which of the following is the least common denominator of $\frac{x}{x^2-1}$, $\frac{2}{x^2-3x+2}$ and $\frac{3x}{x-x^2}$?

○	A. $-x(x-1)^3(x-2)(x+1)$
●	B. $-x(x-1)(x-2)(x+1)$
○	C. $x(x-1)(x-2)(x+1)$
○	D. $x(x-1)^3(x-2)(x+1)$

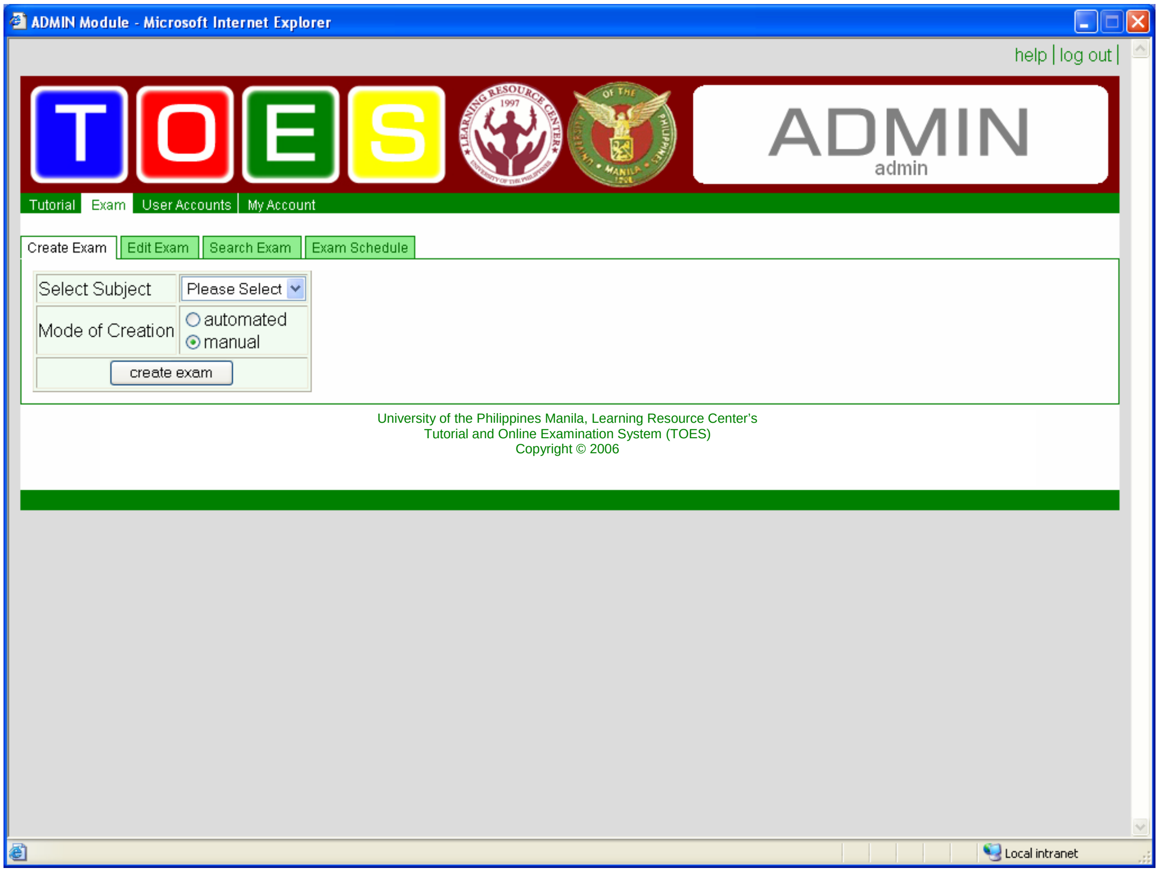
$\frac{x}{(x+1)(x-1)}$, $\frac{2}{(x-2)(x-1)}$, $-\frac{3x}{x(x-1)}$
therefore the LCM is
$-x(x+1)(x-1)(x-2)$

Your answer: a

INCORRECT

Figure 38: Question Preview, UPM LRC TOES

With sufficient amount of questions in the Question Bank the TOES admin creates exams automatically or manually (see Figure 39).



Select Subject	Please Select
Mode of Creation	○ automated ● manual

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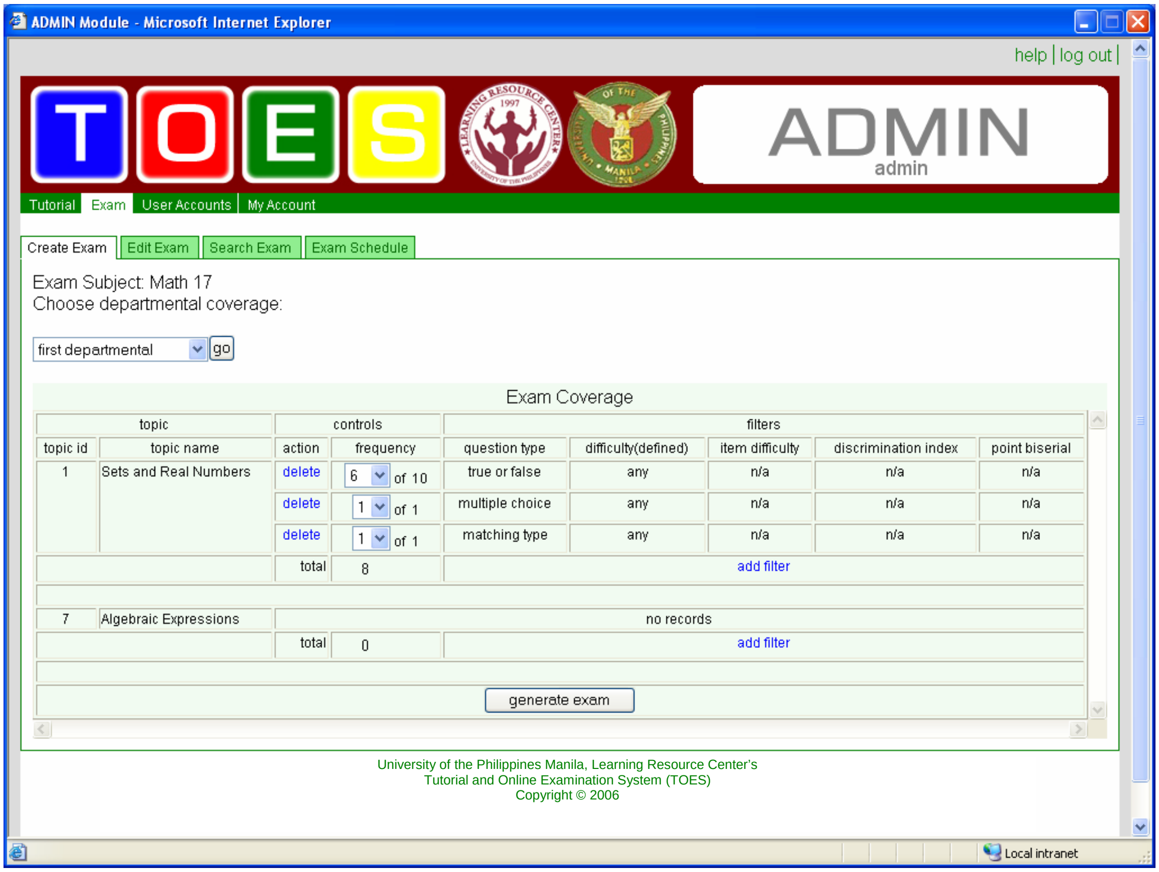
Figure 39: Create Exam, UPM LRC TOES

In an automatic exam creation the admin provides a descriptive Exam Coverage filters which selects questions based on different combinations of criteria – question type, difficulty (as defined by the question author), and item statistics (see Figure 40).



Exam Subject: Math 17
Choose departmental coverage:

first departmental

Exam Coverage

topic		controls		filters				
topic id	topic name	action	frequency	question type	difficulty(defined)	item difficulty	discrimination index	point biserial
1	Sets and Real Numbers	delete	6 of 10	true or false	any	n/a	n/a	n/a
		delete	1 of 1	multiple choice	any	n/a	n/a	n/a
		delete	1 of 1	matching type	any	n/a	n/a	n/a
		total	8	add filter				
7	Algebraic Expressions	no records						
		total	0	add filter				

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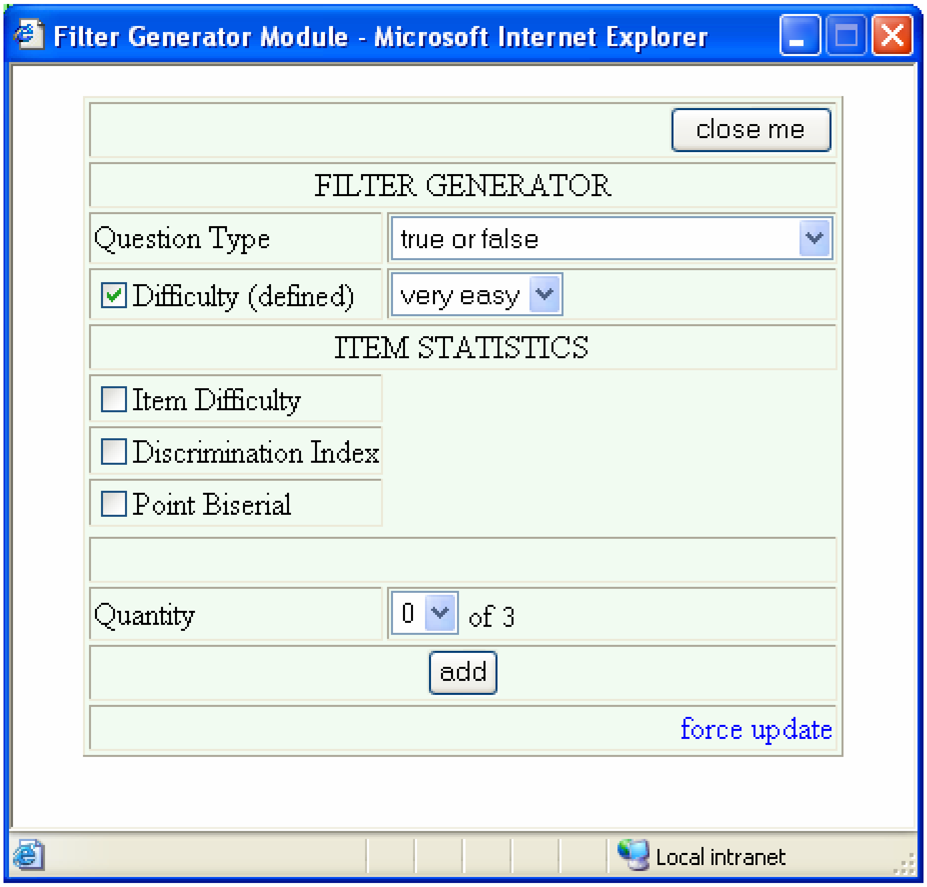
Figure 40: Automatic Exam Creation, UPM LRC TOES

Filters can be added in Figure 40 using the Filter Generator Module in Figure 41. The admin specifies the combination then the generator dynamically displays the number of relevant of questions from which a required quantity will be drawn.



FILTER GENERATOR

Question Type: true or false

☑ Difficulty (defined): very easy

ITEM STATISTICS

□ Item Difficulty

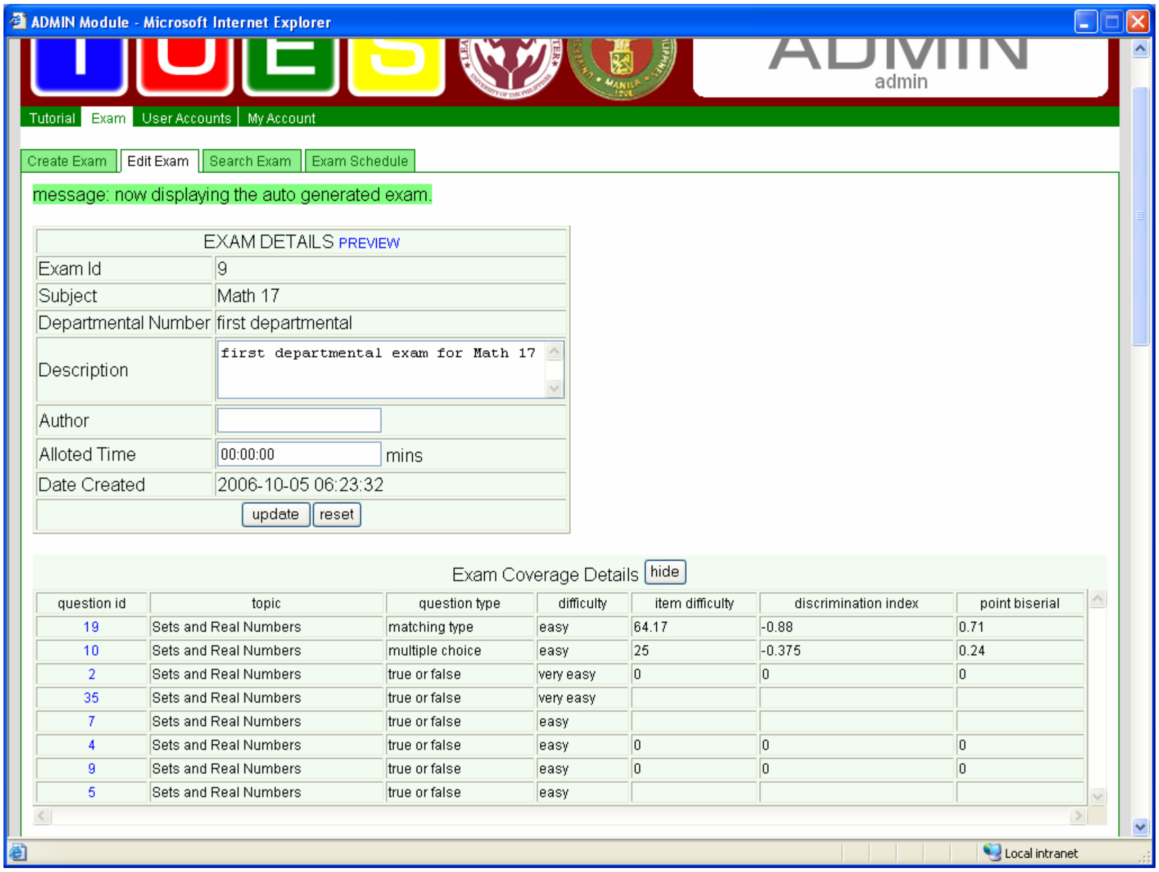
□ Discrimination Index

□ Point Biserial

Quantity: 0 of 3

Figure 41: Filter Generator, UPM LRC TOES

The edit exam page is shown in Figures 42.1 to 42.3. The automatically generated exam is shown in Figure 42.1. The page contains the exam details and the exam coverage details. The latter provides a detailed summary of the exam items. These exam items can be added by using their question id (Figure 42.2) or by selecting them from a question query result. In the first method the exam items are grouped by question type. Also, they can - be minimized/maximized individually or by group, be previewed, and be given weights. The second method lacks the functionalities found in the first method, however, provides an indispensable question search tool (see Figure 42.3). Switching between these methods is done with a simple click of a button. Manually creating an exam, on the other hand, starts with a blank exam coverage details.



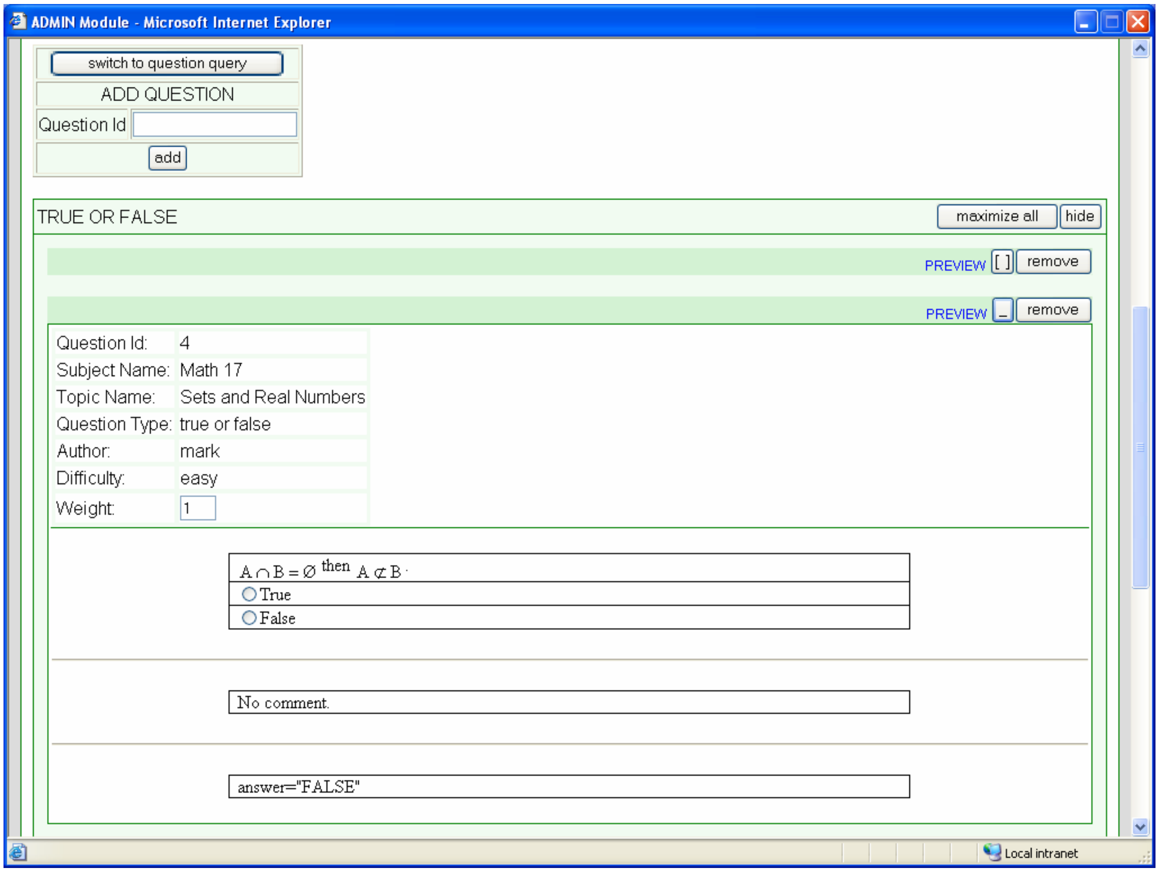
message: now displaying the auto generated exam.

EXAM DETAILS PREVIEW	
Exam Id	9
Subject	Math 17
Departmental Number	first departmental
Description	first departmental exam for Math 17
Author	
Alloted Time	00:00:00 mins
Date Created	2006-10-05 06:23:32
	update reset

Exam Coverage Details hide

question id	topic	question type	difficulty	item difficulty	discrimination index	point biserial
19	Sets and Real Numbers	matching type	easy	64.17	-0.88	0.71
10	Sets and Real Numbers	multiple choice	easy	25	-0.375	0.24
2	Sets and Real Numbers	true or false	very easy	0	0	0
35	Sets and Real Numbers	true or false	very easy			
7	Sets and Real Numbers	true or false	easy			
4	Sets and Real Numbers	true or false	easy	0	0	0
9	Sets and Real Numbers	true or false	easy	0	0	0
5	Sets and Real Numbers	true or false	easy			

Figure 42.1: Edit Exam, UPM LRC TOES



Question Id:	4
Subject Name:	Math 17
Topic Name:	Sets and Real Numbers
Question Type:	true or false
Author:	mark
Difficulty:	easy
Weight:	1

$A \cap B = \varnothing$ then $A \not\subset B$ ·

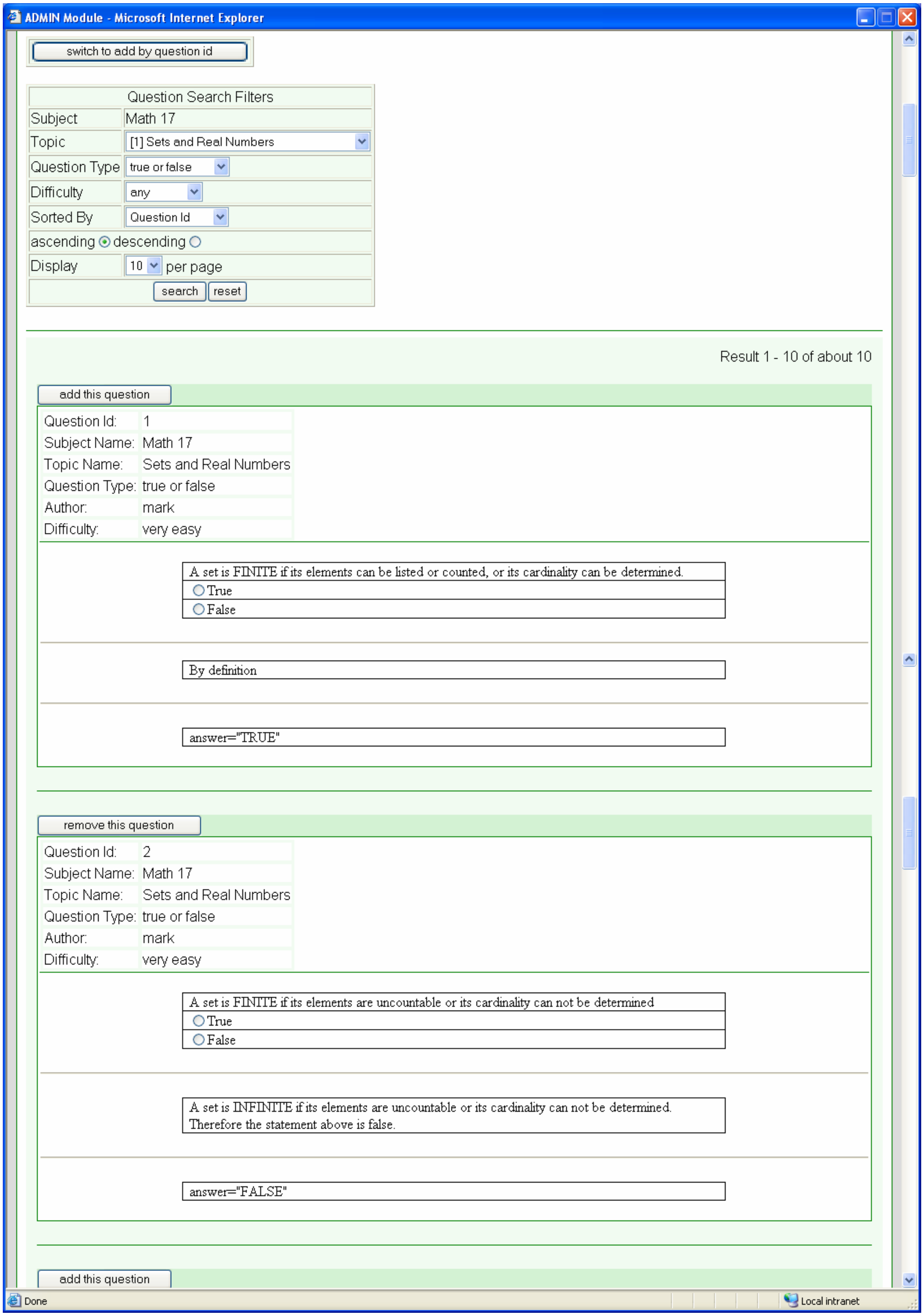
○ True

○ False

No comment.

answer="FALSE"

Figure 42.2: Edit Exam - Adding by Question Id, UPM LRC TOES



Question Search Filters	
Subject	Math 17
Topic	[1] Sets and Real Numbers
Question Type	true or false
Difficulty	any
Sorted By	Question Id
ascending ● descending ○	
Display	10 per page

Result 1 - 10 of about 10

Question Id:	1
Subject Name:	Math 17
Topic Name:	Sets and Real Numbers
Question Type:	true or false
Author:	mark
Difficulty:	very easy

A set is FINITE if its elements can be listed or counted, or its cardinality can be determined.

○ True

○ False

By definition

answer="TRUE"

Question Id:	2
Subject Name:	Math 17
Topic Name:	Sets and Real Numbers
Question Type:	true or false
Author:	mark
Difficulty:	very easy

A set is FINITE if its elements are uncountable or its cardinality can not be determined

○ True

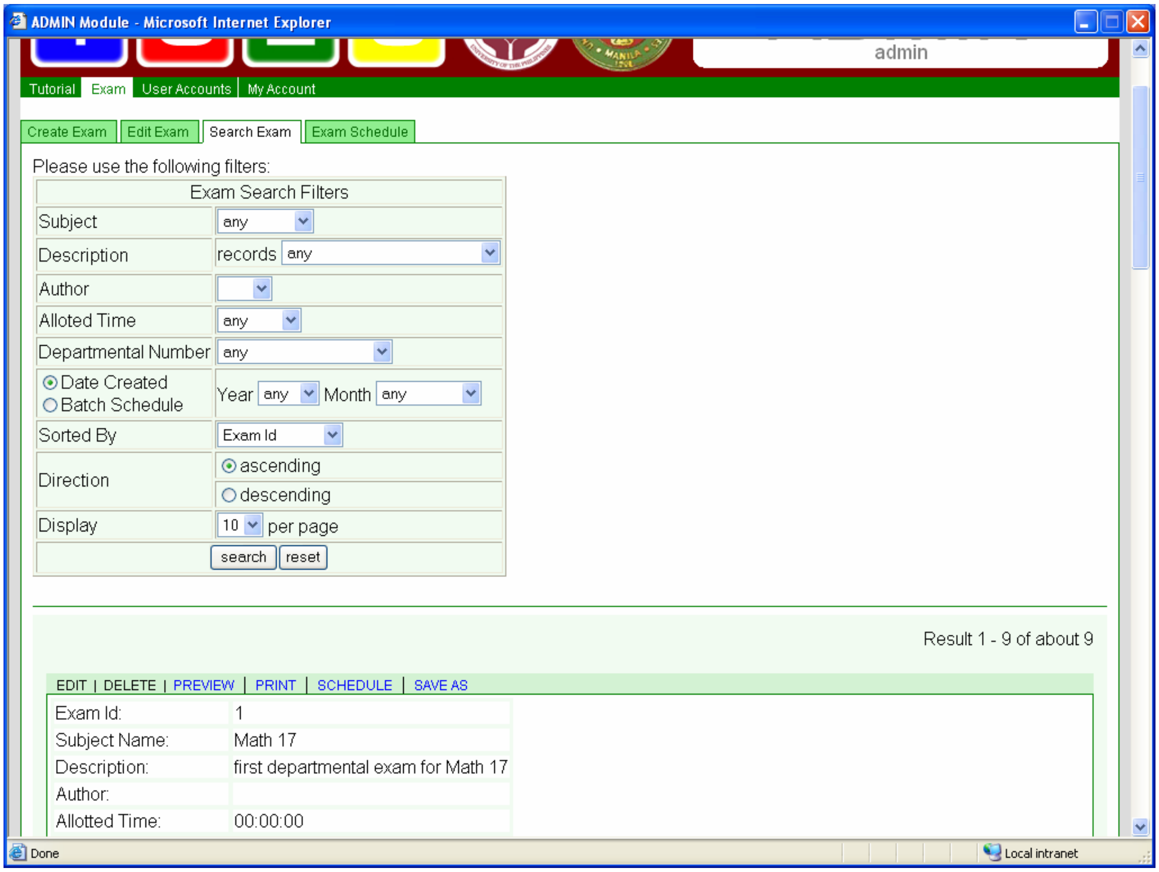
○ False

A set is INFINITE if its elements are uncountable or its cardinality can not be determined. Therefore the statement above is false.

answer="FALSE"

Figure 42.3: Edit Exam - Adding From Question Query, UPM LRC TOES

Existing exams are easily available to the admin using the exam search form (see Figure 43). The exams in the search results can further be managed with edit, delete, preview, print, schedule, and ‘save as’ processes. Only unused exams can be edited or deleted.



Please use the following filters:

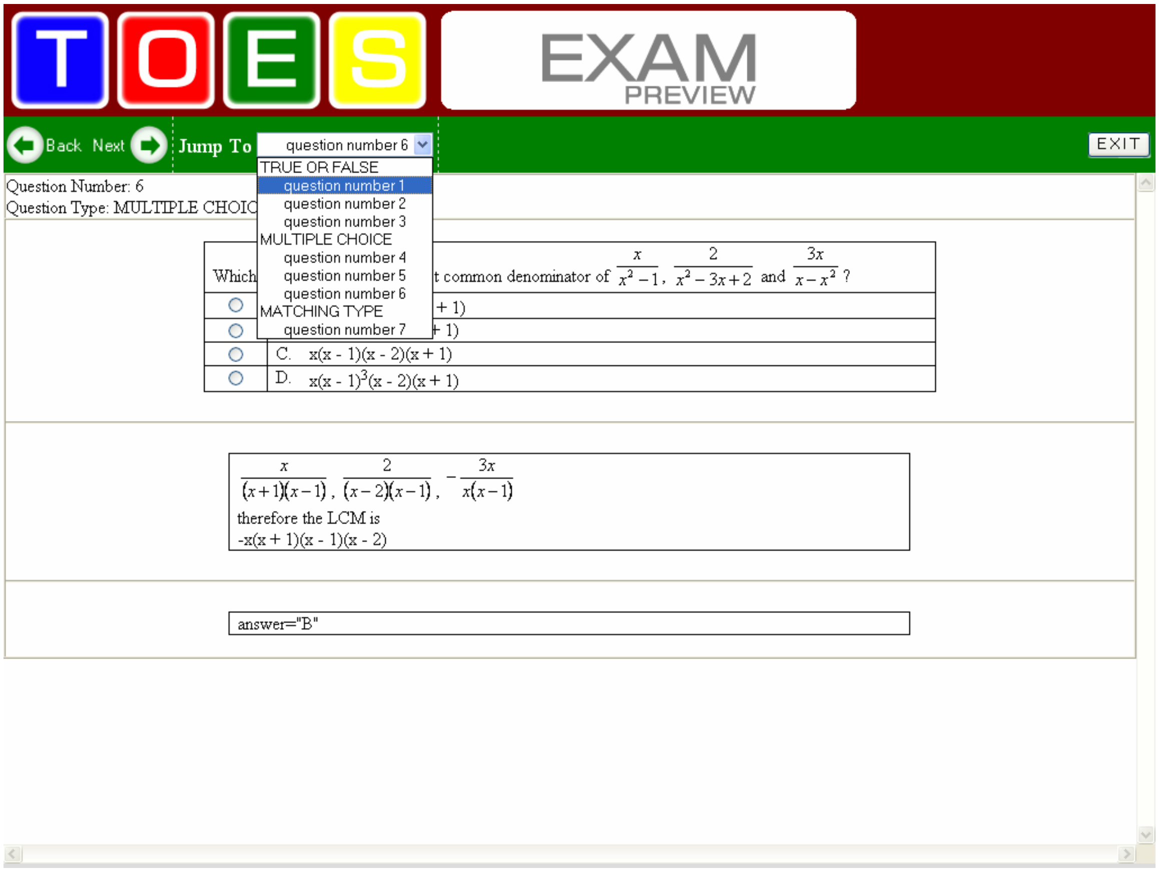
Exam Search Filters	
Subject	any
Description	records any
Author	
Alloted Time	any
Departmental Number	any
● Date Created ○ Batch Schedule	Year any Month any
Sorted By	Exam Id
Direction	● ascending ○ descending
Display	10 per page

Result 1 - 9 of about 9

Exam Id:	1
Subject Name:	Math 17
Description:	first departmental exam for Math 17
Author:	
Allotted Time:	00:00:00

Figure 43: Exam Search, UPM LRC TOES

The exam preview gives a sneak peek of the actual exam (see Figure 44). The question body, explanation, and answer are displayed for each exam item. One can cycle through the exam items using back, next, and 'jump to' buttons. Hard copies of the exam can be prepared using the print function (see Figure 45). The 'save as' function creates a duplicate of the specified exam.



Question Number: 6
Question Type: MULTIPLE CHOIC

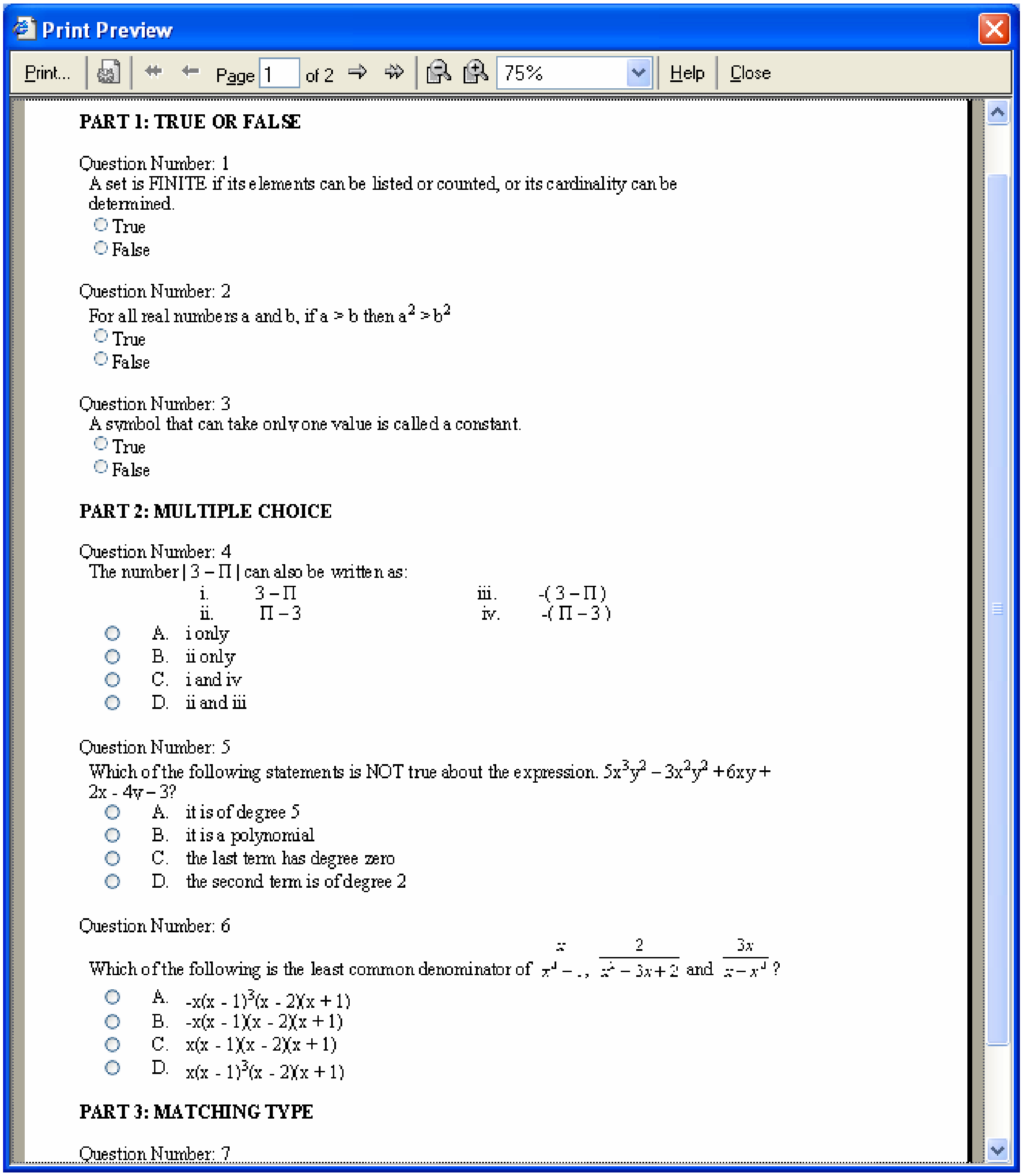
Which … t common denominator of $\frac{x}{x^2-1}$, $\frac{2}{x^2-3x+2}$ and $\frac{3x}{x-x^2}$?

○ … + 1)
○ … + 1)
○ C. x(x - 1)(x - 2)(x + 1)
○ D. x(x - 1)^3(x - 2)(x + 1)

$\frac{x}{(x+1)(x-1)}$, $\frac{2}{(x-2)(x-1)}$, $-\frac{3x}{x(x-1)}$
therefore the LCM is
-x(x + 1)(x - 1)(x - 2)

answer="B"

Figure 44: Exam Preview, UPM LRC TOES



PART 1: TRUE OR FALSE

Question Number: 1
A set is FINITE if its elements can be listed or counted, or its cardinality can be determined.
○ True
○ False

Question Number: 2
For all real numbers a and b, if a > b then $a^2 > b^2$
○ True
○ False

Question Number: 3
A symbol that can take only one value is called a constant.
○ True
○ False

PART 2: MULTIPLE CHOICE

Question Number: 4
The number | 3 – Π | can also be written as:

i.	3 – Π	iii.	-(3 – Π)
ii.	Π – 3	iv.	-(Π – 3)

○ A. i only
○ B. ii only
○ C. i and iv
○ D. ii and iii

Question Number: 5
Which of the following statements is NOT true about the expression. $5x^3y^2 - 3x^2y^2 + 6xy + 2x - 4y - 3$?
○ A. it is of degree 5
○ B. it is a polynomial
○ C. the last term has degree zero
○ D. the second term is of degree 2

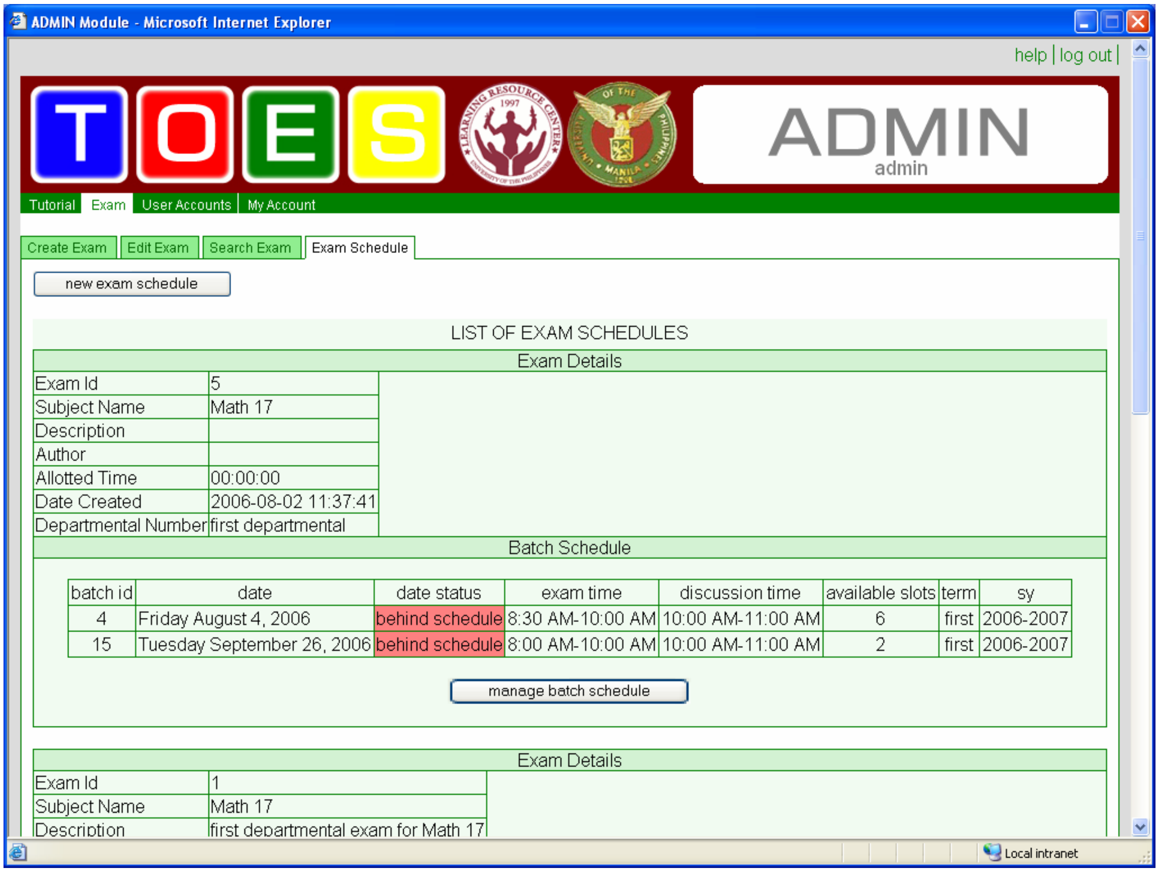
Question Number: 6
Which of the following is the least common denominator of $\frac{x}{x^2-1}$, $\frac{2}{x^2-3x+2}$ and $\frac{3x}{x-x^2}$?
○ A. $-x(x-1)^3(x-2)(x+1)$
○ B. $-x(x-1)(x-2)(x+1)$
○ C. $x(x-1)(x-2)(x+1)$
○ D. $x(x-1)^3(x-2)(x+1)$

PART 3: MATCHING TYPE

Question Number: 7

Figure 45: Print Exam, UPM LRC TOES

The TOES admin schedules exams by batches. An exam batch schedule (EBS) is determined by date, exam time, discussion time, term and school year, and slots (see Figure 46.1 and 46.2). The admin can also administer, edit, or delete existing EBS. Students can register in these mock exam schedules in their Exam Schedule page shown in Figure 47.



LIST OF EXAM SCHEDULES

Exam Details

Exam Id	5
Subject Name	Math 17
Description	
Author	
Allotted Time	00:00:00
Date Created	2006-08-02 11:37:41
Departmental Number	first departmental

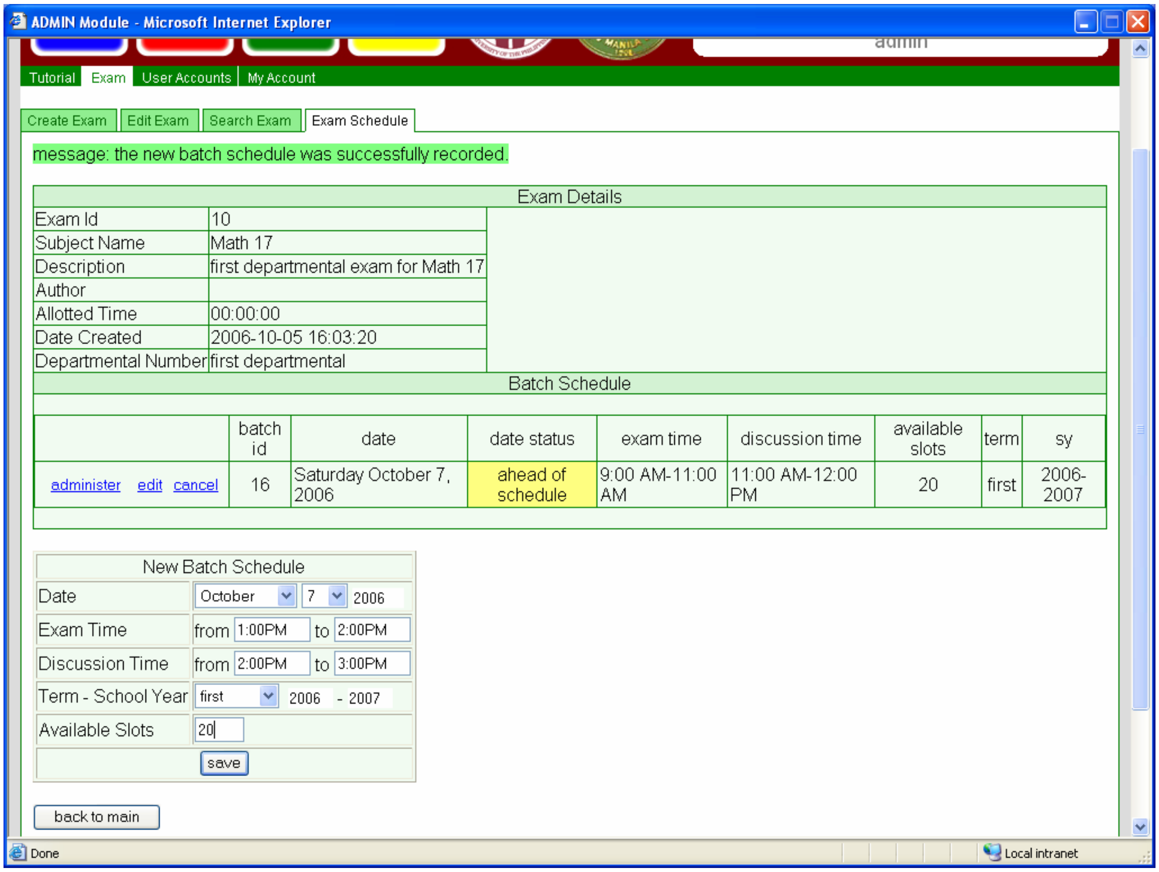
Batch Schedule

batch id	date	date status	exam time	discussion time	available slots	term	sy
4	Friday August 4, 2006	behind schedule	8:30 AM-10:00 AM	10:00 AM-11:00 AM	6	first	2006-2007
15	Tuesday September 26, 2006	behind schedule	8:00 AM-10:00 AM	10:00 AM-11:00 AM	2	first	2006-2007

Exam Details

Exam Id	1
Subject Name	Math 17
Description	first departmental exam for Math 17

Figure 46.1: Exam Schedule Management, UPM LRC TOES



message: the new batch schedule was successfully recorded.

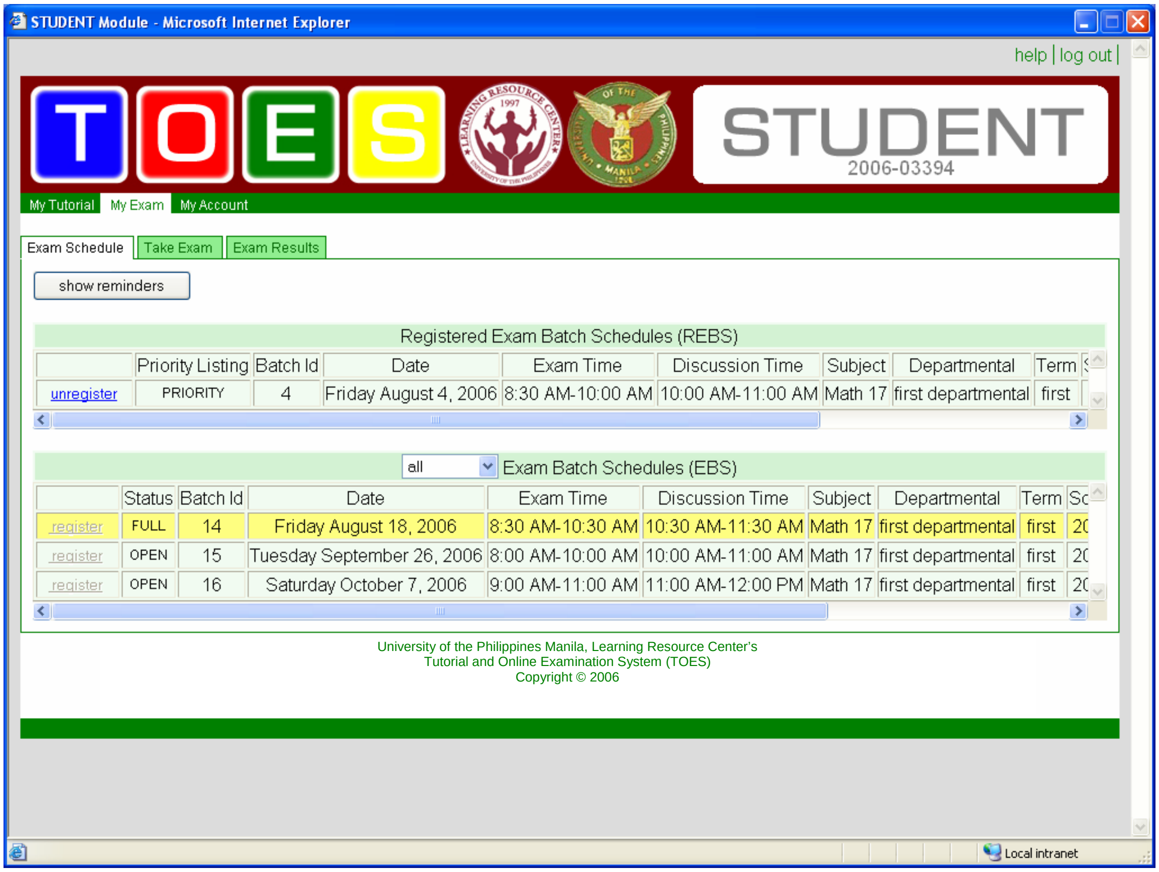
Exam Details	
Exam Id	10
Subject Name	Math 17
Description	first departmental exam for Math 17
Author	
Allotted Time	00:00:00
Date Created	2006-10-05 16:03:20
Departmental Number	first departmental

Batch Schedule

	batch id	date	date status	exam time	discussion time	available slots	term	sy
administer edit cancel	16	Saturday October 7, 2006	ahead of schedule	9:00 AM-11:00 AM	11:00 AM-12:00 PM	20	first	2006-2007

New Batch Schedule	
Date	October 7 2006
Exam Time	from 1:00PM to 2:00PM
Discussion Time	from 2:00PM to 3:00PM
Term - School Year	first 2006 - 2007
Available Slots	20

Figure 46.2: Exam Batch Schedule Management, UPM LRC TOES



Registered Exam Batch Schedules (REBS)

	Priority Listing	Batch Id	Date	Exam Time	Discussion Time	Subject	Departmental	Term	S
unregister	PRIORITY	4	Friday August 4, 2006	8:30 AM-10:00 AM	10:00 AM-11:00 AM	Math 17	first departmental	first	

all Exam Batch Schedules (EBS)

	Status	Batch Id	Date	Exam Time	Discussion Time	Subject	Departmental	Term	Sc
register	FULL	14	Friday August 18, 2006	8:30 AM-10:30 AM	10:30 AM-11:30 AM	Math 17	first departmental	first	20
register	OPEN	15	Tuesday September 26, 2006	8:00 AM-10:00 AM	10:00 AM-11:00 AM	Math 17	first departmental	first	20
register	OPEN	16	Saturday October 7, 2006	9:00 AM-11:00 AM	11:00 AM-12:00 PM	Math 17	first departmental	first	20

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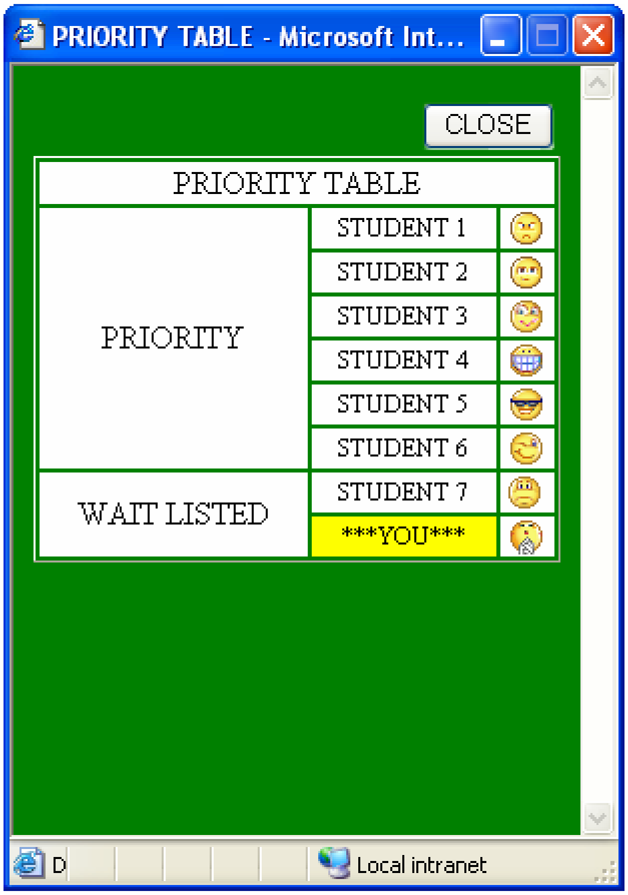
Figure 47: Exam Schedule, UPM LRC TOES

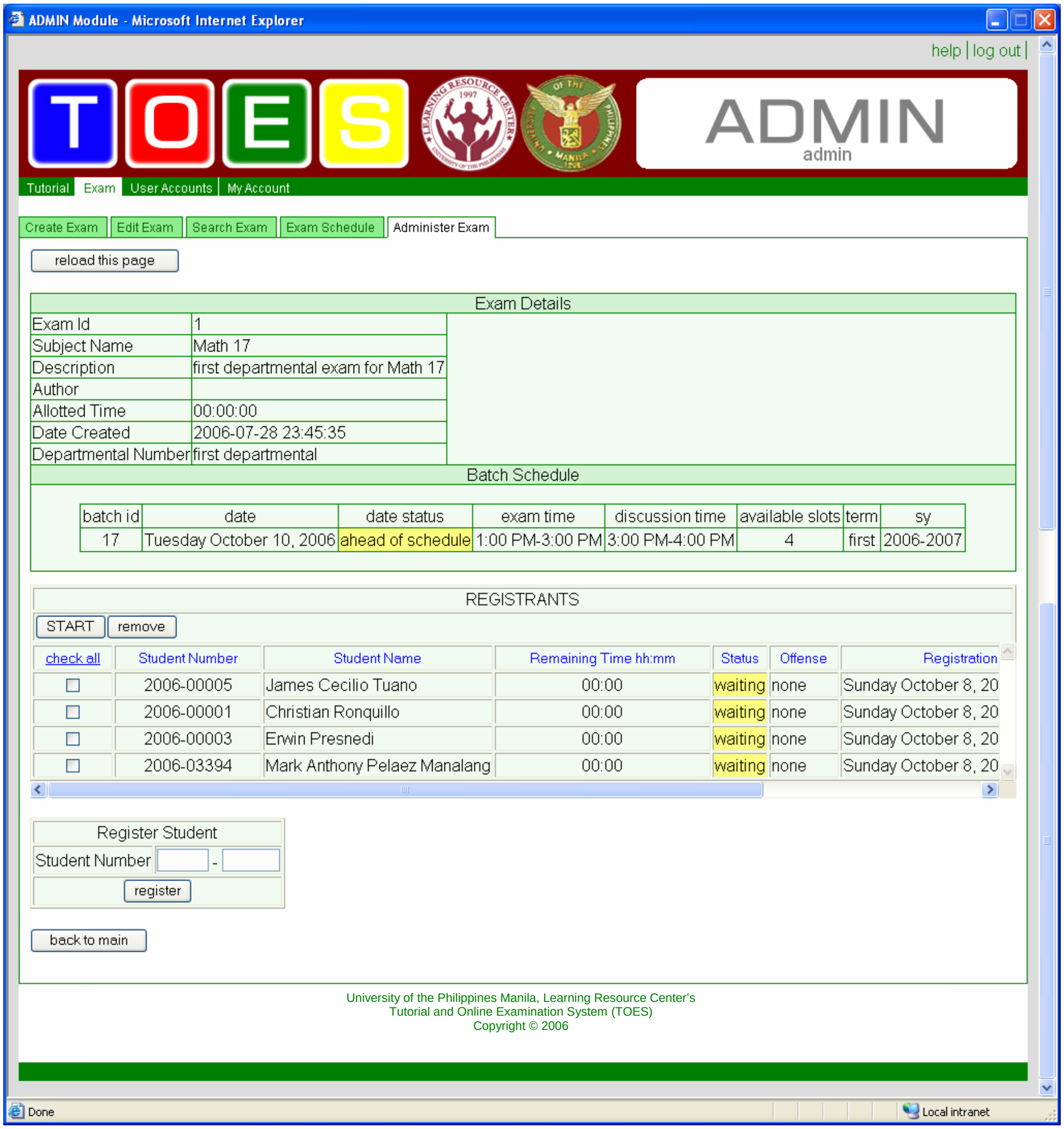
Due to limited resources, the LRC held students responsible for monitoring their registration. Each EBS comes with a 'remaining slots' number. In real world this number reflects the quantity of available computers for that EBS. If this number becomes 0 the EBS's status will be marked as full otherwise open. When a student registers a full EBS his/her 'Priority Listing' will be marked as ‘wait listed'. Priority students are the ones with reserved slots. The priority table shown in the popup window lists the registered students on a first-come-first-serve basis (see Figure 48). Wait listed students are encouraged to transfer to other EBS. The only chance they have to make it to the actual examination is when a significant number of students before them unregisters or comes late.



PRIORITY TABLE		
PRIORITY	STUDENT 1	😠
	STUDENT 2	😐
	STUDENT 3	🙄
	STUDENT 4	😬
	STUDENT 5	😎
	STUDENT 6	😉
WAIT LISTED	STUDENT 7	😟
	YOU	🤔

Figure 48: Priority Table, UPM LTC TOES

The initial Administer Exam page is shown in Figures 49.1. The page displays the exam details, EBS details, and the list of registrants. The LRC obliges examinees especially the priority ones to arrive ten minutes before their EBS. When a priority student comes late in a full EBS, he/she loses the slot to succeeding examinees that are present. On the other hand, late examinees may still take the ongoing exam provided that only half of the whole exam period has passed and that their ‘remaining time’ is decreased accordingly. Figure 49.2 shows the resulting page when the exam has started.



Exam Details

Exam Id	1
Subject Name	Math 17
Description	first departmental exam for Math 17
Author	
Allotted Time	00:00:00
Date Created	2006-07-28 23:45:35
Departmental Number	first departmental

Batch Schedule

batch id	date	date status	exam time	discussion time	available slots	term	sy
17	Tuesday October 10, 2006	ahead of schedule	1:00 PM-3:00 PM	3:00 PM-4:00 PM	4	first	2006-2007

REGISTRANTS

check all	Student Number	Student Name	Remaining Time hh:mm	Status	Offense	Registration
□	2006-00005	James Cecilio Tuano	00:00	waiting	none	Sunday October 8, 20
□	2006-00001	Christian Ronquillo	00:00	waiting	none	Sunday October 8, 20
□	2006-00003	Erwin Presnedi	00:00	waiting	none	Sunday October 8, 20
□	2006-03394	Mark Anthony Pelaez Manalang	00:00	waiting	none	Sunday October 8, 20

Register Student

Student Number [ ] - [ ]

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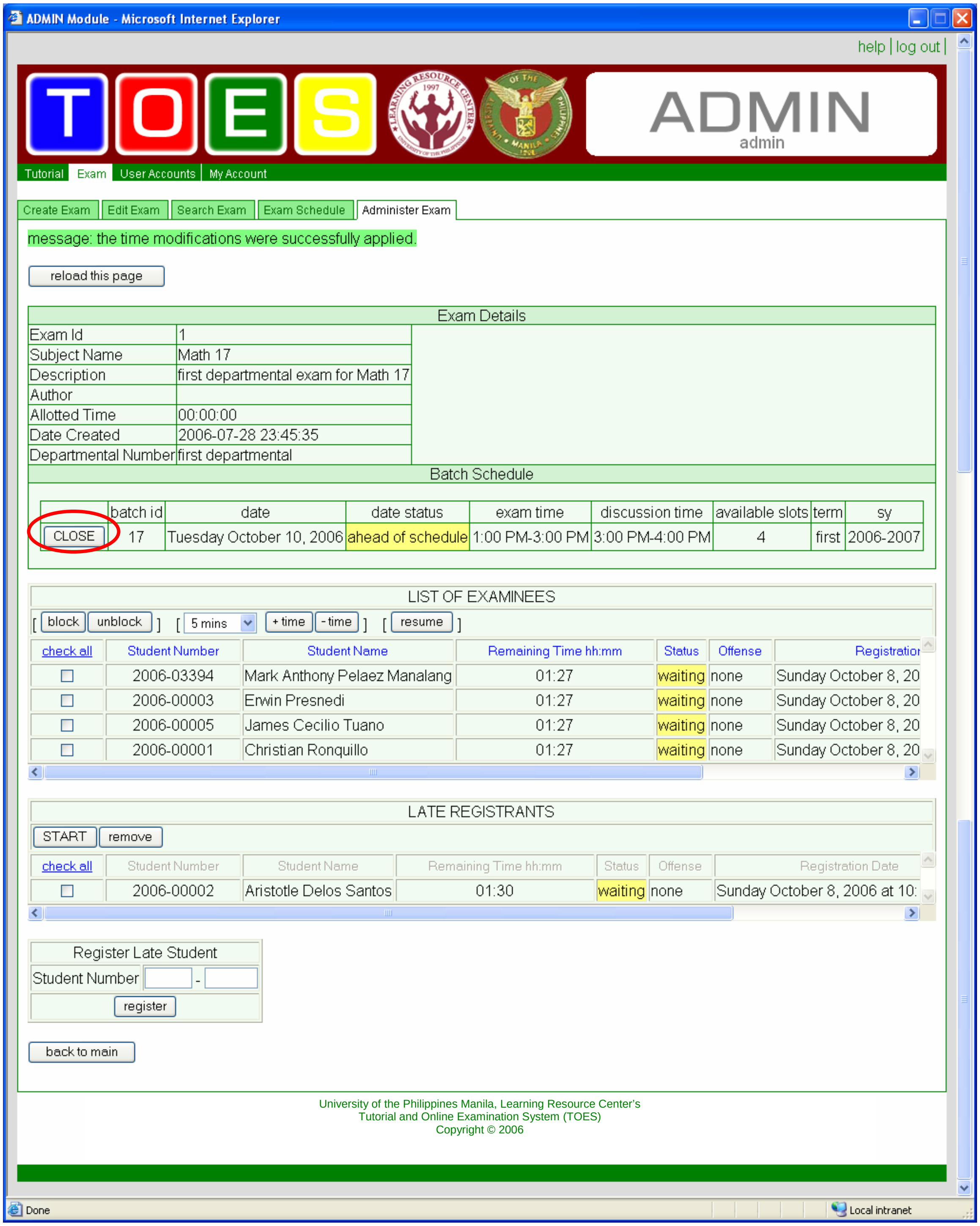
Figure 49.1: Administer Exam, UPM LRC TOES



message: the time modifications were successfully applied.

Exam Details	
Exam Id	1
Subject Name	Math 17
Description	first departmental exam for Math 17
Author	
Allotted Time	00:00:00
Date Created	2006-07-28 23:45:35
Departmental Number	first departmental

Batch Schedule

	batch id	date	date status	exam time	discussion time	available slots	term	sy
CLOSE	17	Tuesday October 10, 2006	ahead of schedule	1:00 PM-3:00 PM	3:00 PM-4:00 PM	4	first	2006-2007

LIST OF EXAMINEES

[block unblock] [5 mins + time - time] [resume]

check all	Student Number	Student Name	Remaining Time hh:mm	Status	Offense	Registratio
□	2006-03394	Mark Anthony Pelaez Manalang	01:27	waiting	none	Sunday October 8, 20
□	2006-00003	Erwin Presnedi	01:27	waiting	none	Sunday October 8, 20
□	2006-00005	James Cecilio Tuano	01:27	waiting	none	Sunday October 8, 20
□	2006-00001	Christian Ronquillo	01:27	waiting	none	Sunday October 8, 20

LATE REGISTRANTS

START remove

check all	Student Number	Student Name	Remaining Time hh:mm	Status	Offense	Registration Date
□	2006-00002	Aristotle Delos Santos	01:30	waiting	none	Sunday October 8, 2006 at 10:

Register Late Student

Student Number ______ - ______

register

back to main

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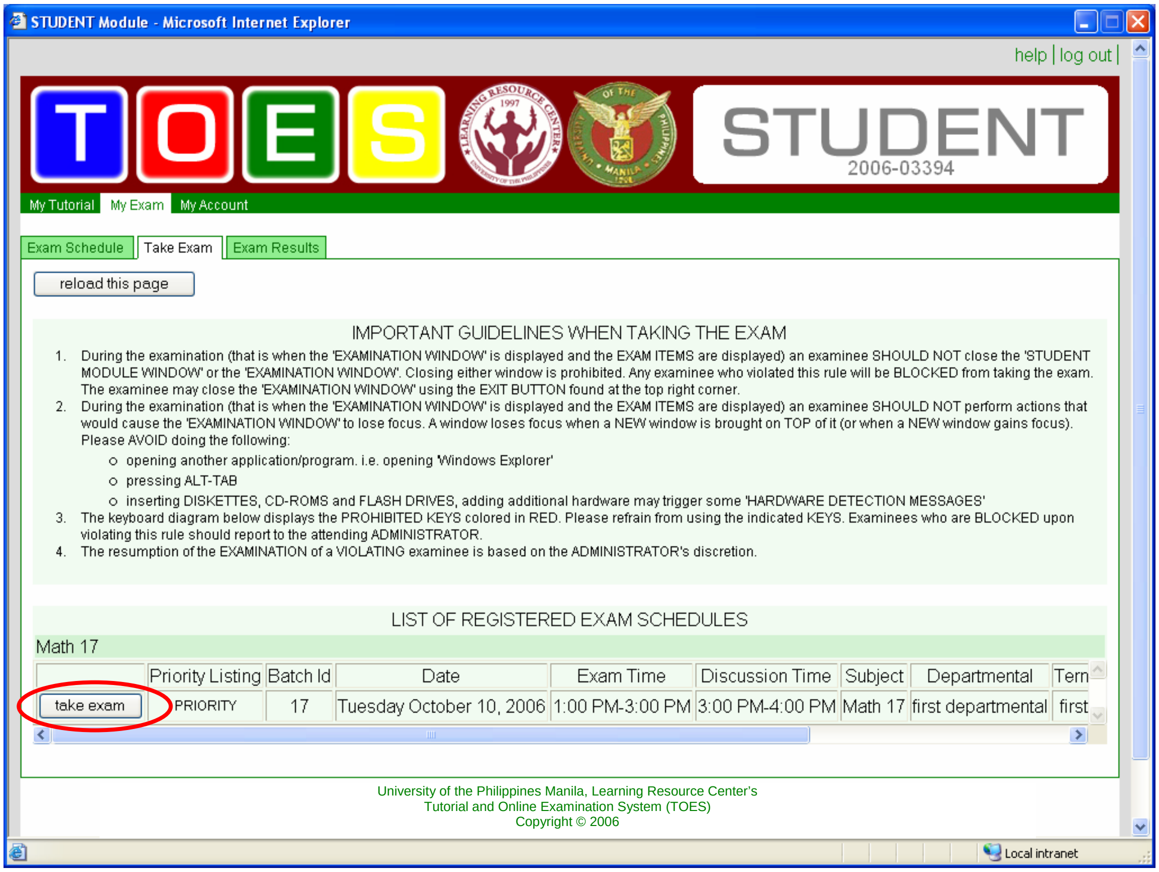
Figure 49.2: Administer Exam, UPM LRC TOES

The started exam will be available to 'listed examinees' in the Take Exam page of the 'Student Module Window' (SMW) (see Figure 50). The highlighted 'take exam' button launches the 'Toes Exam Window' (TEW) seen in Figure 51.



IMPORTANT GUIDELINES WHEN TAKING THE EXAM

1. During the examination (that is when the 'EXAMINATION WINDOW' is displayed and the EXAM ITEMS are displayed) an examinee SHOULD NOT close the 'STUDENT MODULE WINDOW' or the 'EXAMINATION WINDOW'. Closing either window is prohibited. Any examinee who violated this rule will be BLOCKED from taking the exam. The examinee may close the 'EXAMINATION WINDOW' using the EXIT BUTTON found at the top right corner.
2. During the examination (that is when the 'EXAMINATION WINDOW' is displayed and the EXAM ITEMS are displayed) an examinee SHOULD NOT perform actions that would cause the 'EXAMINATION WINDOW' to lose focus. A window loses focus when a NEW window is brought on TOP of it (or when a NEW window gains focus). Please AVOID doing the following:
    - opening another application/program. i.e. opening 'Windows Explorer'
    - pressing ALT-TAB
    - inserting DISKETTES, CD-ROMS and FLASH DRIVES, adding additional hardware may trigger some 'HARDWARE DETECTION MESSAGES'
3. The keyboard diagram below displays the PROHIBITED KEYS colored in RED. Please refrain from using the indicated KEYS. Examinees who are BLOCKED upon violating this rule should report to the attending ADMINISTRATOR.
4. The resumption of the EXAMINATION of a VIOLATING examinee is based on the ADMINISTRATOR's discretion.

LIST OF REGISTERED EXAM SCHEDULES

Math 17

	Priority Listing	Batch Id	Date	Exam Time	Discussion Time	Subject	Departmental	Tern
take exam	PRIORITY	17	Tuesday October 10, 2006	1:00 PM-3:00 PM	3:00 PM-4:00 PM	Math 17	first departmental	first

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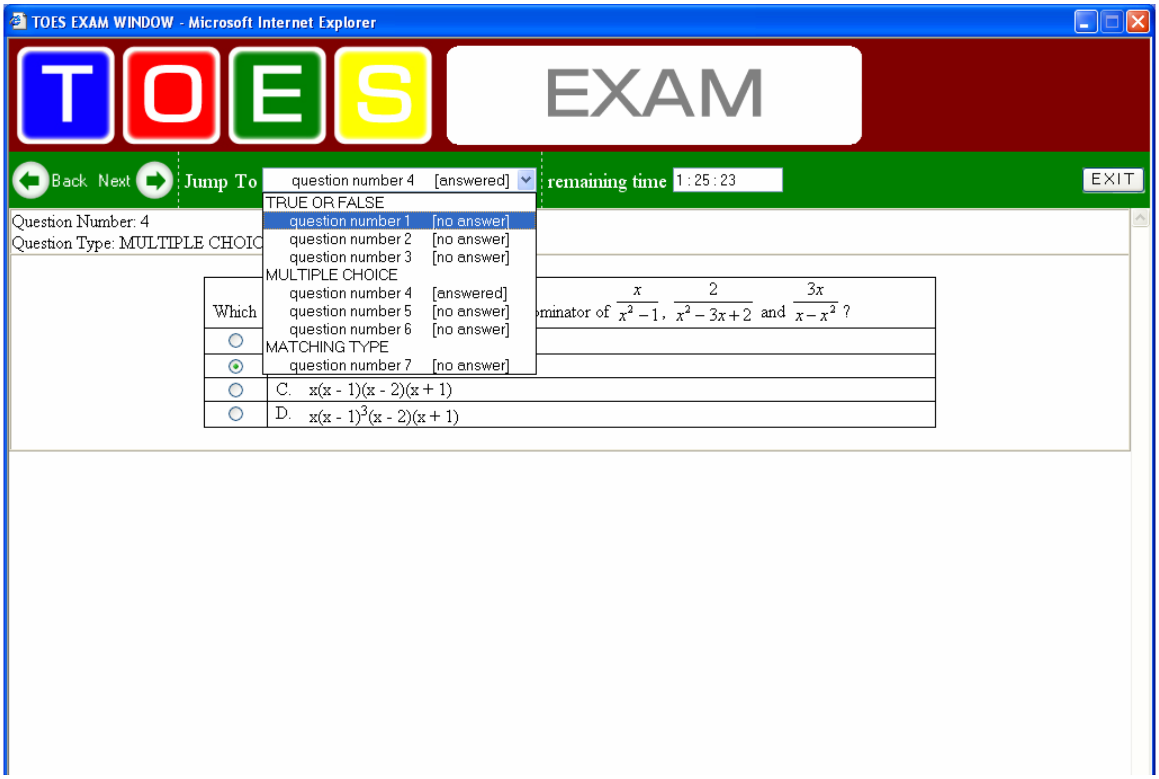
Figure 50: Take Exam, UPM LRC TOES



question number 4 [answered]

TRUE OR FALSE
question number 1 [no answer]
question number 2 [no answer]
question number 3 [no answer]
MULTIPLE CHOICE
question number 4 [answered]
question number 5 [no answer]
question number 6 [no answer]
MATCHING TYPE
question number 7 [no answer]

remaining time 1 : 25 : 23

Question Number: 4
Question Type: MULTIPLE CHOIC

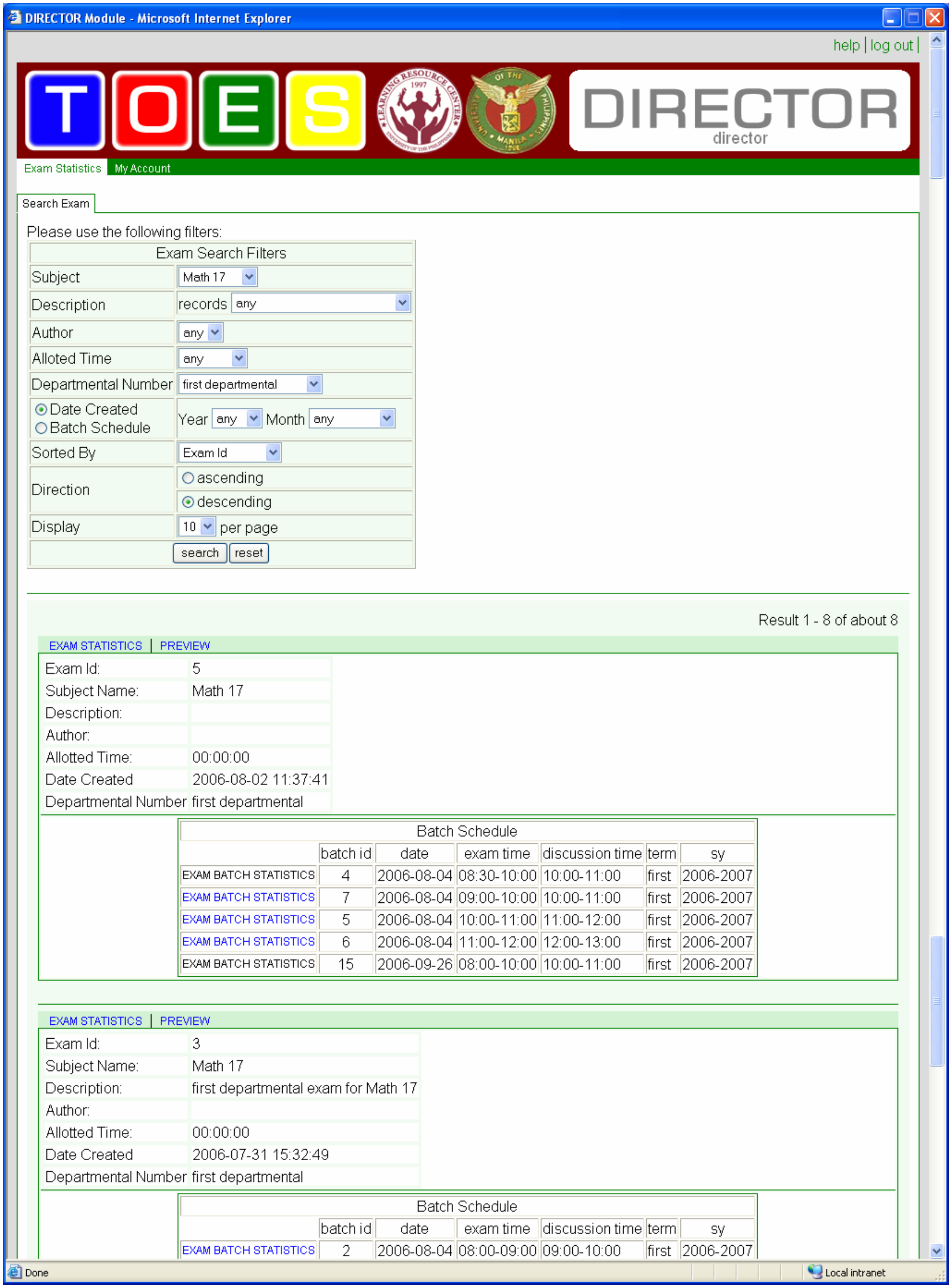
Which ...minator of $\frac{x}{x^2-1}$, $\frac{2}{x^2-3x+2}$ and $\frac{3x}{x-x^2}$?

○
●
○ C. x(x - 1)(x - 2)(x + 1)
○ D. $x(x-1)^3(x-2)(x+1)$

Figure 51: Toes Exam Window, UPM LRC TOES

Students who take these mock examinations will get an experience similar to taking the real exam because the exam items came from reliable sources. It is for this reason that the LRC has to protect this university property. During a TOES examination, students are expected to do just one thing, that is, to answer. To achieve this, TOES has included the following nifty features: 1) The TEW, being an always-on-top window, can not be minimized. 2) If the student closes TEW or SMW he/she will be blocked from taking the exam. 3) When the TEW loses focus the student will be blocked. TEW loses focus when another window is on top of it. 4) To deter cheating the TEW displays the exam items in random order. All blocked students will be reported to the admin through the ‘Administer Exam’ page (see Figure 49.2). The resumption of the examination of blocked examinees depends on the admin’s discretion.

When the examinees finish answering the exam the admin will have to close the exam (see Figure 49.2). TOES automatically computes for the scores and performs exam analysis and exam item analysis. At this point the examinees may view their exam results in the ‘Exam Results’ page. On the other hand, the analysis data may be viewed by the TOES Director. These data are recorded and can be used in the Filter Generator (see Figure 41). Figure 52 shows an exam query results page for the director. ‘Exam Analysis’ (EA) and ‘Exam Batch Analysis’ (EBA) provide the same statistical reports, however, they differ in scope. The population for EBA covers only a single batch of examinees while the population for EA covers all batches for a particular exam.



Please use the following filters:

Exam Search Filters	
Subject	Math 17
Description	records any
Author	any
Alloted Time	any
Departmental Number	first departmental
● Date Created ○ Batch Schedule	Year any Month any
Sorted By	Exam Id
Direction	○ ascending ● descending
Display	10 per page
	search reset

Result 1 - 8 of about 8

EXAM STATISTICS | PREVIEW

Exam Id:	5
Subject Name:	Math 17
Description:	
Author:	
Allotted Time:	00:00:00
Date Created	2006-08-02 11:37:41
Departmental Number	first departmental

Batch Schedule

	batch id	date	exam time	discussion time	term	sy
EXAM BATCH STATISTICS	4	2006-08-04	08:30-10:00	10:00-11:00	first	2006-2007
EXAM BATCH STATISTICS	7	2006-08-04	09:00-10:00	10:00-11:00	first	2006-2007
EXAM BATCH STATISTICS	5	2006-08-04	10:00-11:00	11:00-12:00	first	2006-2007
EXAM BATCH STATISTICS	6	2006-08-04	11:00-12:00	12:00-13:00	first	2006-2007
EXAM BATCH STATISTICS	15	2006-09-26	08:00-10:00	10:00-11:00	first	2006-2007

EXAM STATISTICS | PREVIEW

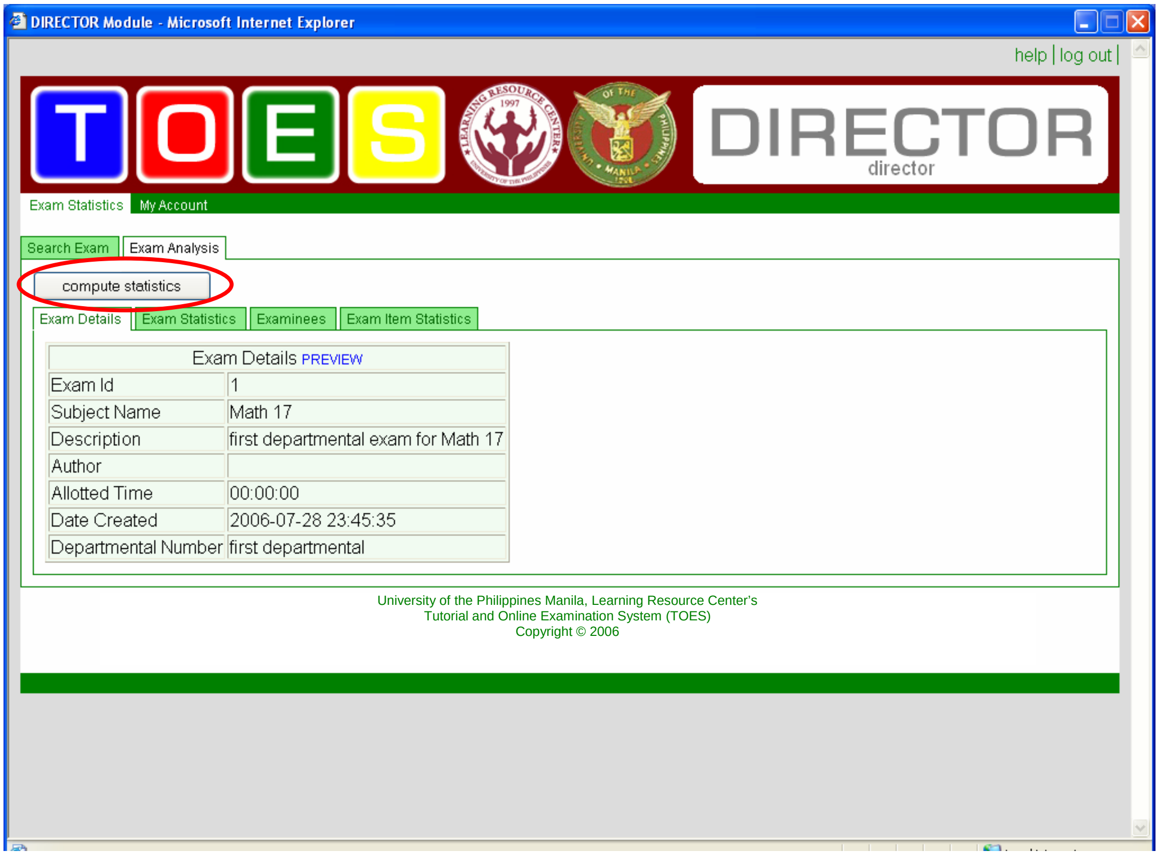
Exam Id:	3
Subject Name:	Math 17
Description:	first departmental exam for Math 17
Author:	
Allotted Time:	00:00:00
Date Created	2006-07-31 15:32:49
Departmental Number	first departmental

Batch Schedule

	batch id	date	exam time	discussion time	term	sy
EXAM BATCH STATISTICS	2	2006-08-04	08:00-09:00	09:00-10:00	first	2006-2007

Figure 52: Director Module - Search Exam, UPM LRC TOES

An analysis page contains the Exam Details, Exam Statistics/Exam Batch Statistics, Examinees, and Exam Item Statistics. Figure 53 exhibits 'Exam Details' table for an 'Exam Analysis'. Figure 54 displays the different statistical measurements used in 'Exam Statistics.' Figure 55 exhibits the Examinees page containing examinee scores grouped by batch. Figure 56 demonstrates TOES ability to compute for 'Exam Item Statistics.' It is worth mentioning that the director may change some variables, thus, influencing the results of the computation. These adjustments include removing examinees or removing an entire batch (see Figure 55), and taking away exam items (see Figure 56). Recomputations can be done using the 'compute statistics' button (see Figure 53), however the controlled results are not recorded. Another noteworthy feature is that TOES gives interpretations on most of the computed statistical values.



Exam Details PREVIEW	
Exam Id	1
Subject Name	Math 17
Description	first departmental exam for Math 17
Author	
Allotted Time	00:00:00
Date Created	2006-07-28 23:45:35
Departmental Number	first departmental

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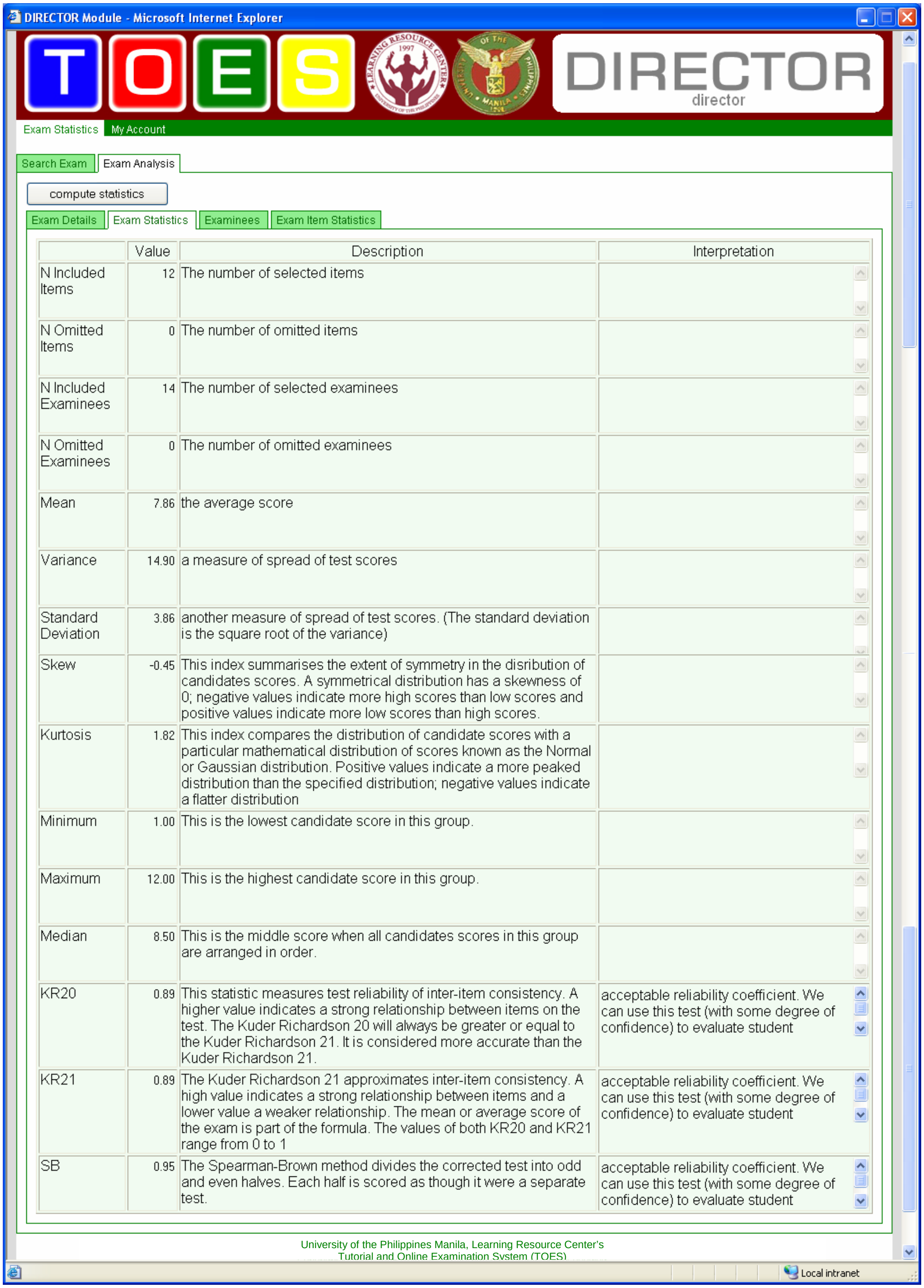
Figure 53: Analysis - Exam Details, UPM LRC TOES



	Value	Description	Interpretation
N Included Items	12	The number of selected items	
N Omitted Items	0	The number of omitted items	
N Included Examinees	14	The number of selected examinees	
N Omitted Examinees	0	The number of omitted examinees	
Mean	7.86	the average score	
Variance	14.90	a measure of spread of test scores	
Standard Deviation	3.86	another measure of spread of test scores. (The standard deviation is the square root of the variance)	
Skew	-0.45	This index summarises the extent of symmetry in the disribution of candidates scores. A symmetrical distribution has a skewness of 0; negative values indicate more high scores than low scores and positive values indicate more low scores than high scores.	
Kurtosis	1.82	This index compares the distribution of candidate scores with a particular mathematical distribution of scores known as the Normal or Gaussian distribution. Positive values indicate a more peaked distribution than the specified distribution; negative values indicate a flatter distribution	
Minimum	1.00	This is the lowest candidate score in this group.	
Maximum	12.00	This is the highest candidate score in this group.	
Median	8.50	This is the middle score when all candidates scores in this group are arranged in order.	
KR20	0.89	This statistic measures test reliability of inter-item consistency. A higher value indicates a strong relationship between items on the test. The Kuder Richardson 20 will always be greater or equal to the Kuder Richardson 21. It is considered more accurate than the Kuder Richardson 21.	acceptable reliability coefficient. We can use this test (with some degree of confidence) to evaluate student
KR21	0.89	The Kuder Richardson 21 approximates inter-item consistency. A high value indicates a strong relationship between items and a lower value a weaker relationship. The mean or average score of the exam is part of the formula. The values of both KR20 and KR21 range from 0 to 1	acceptable reliability coefficient. We can use this test (with some degree of confidence) to evaluate student
SB	0.95	The Spearman-Brown method divides the corrected test into odd and even halves. Each half is scored as though it were a separate test.	acceptable reliability coefficient. We can use this test (with some degree of confidence) to evaluate student

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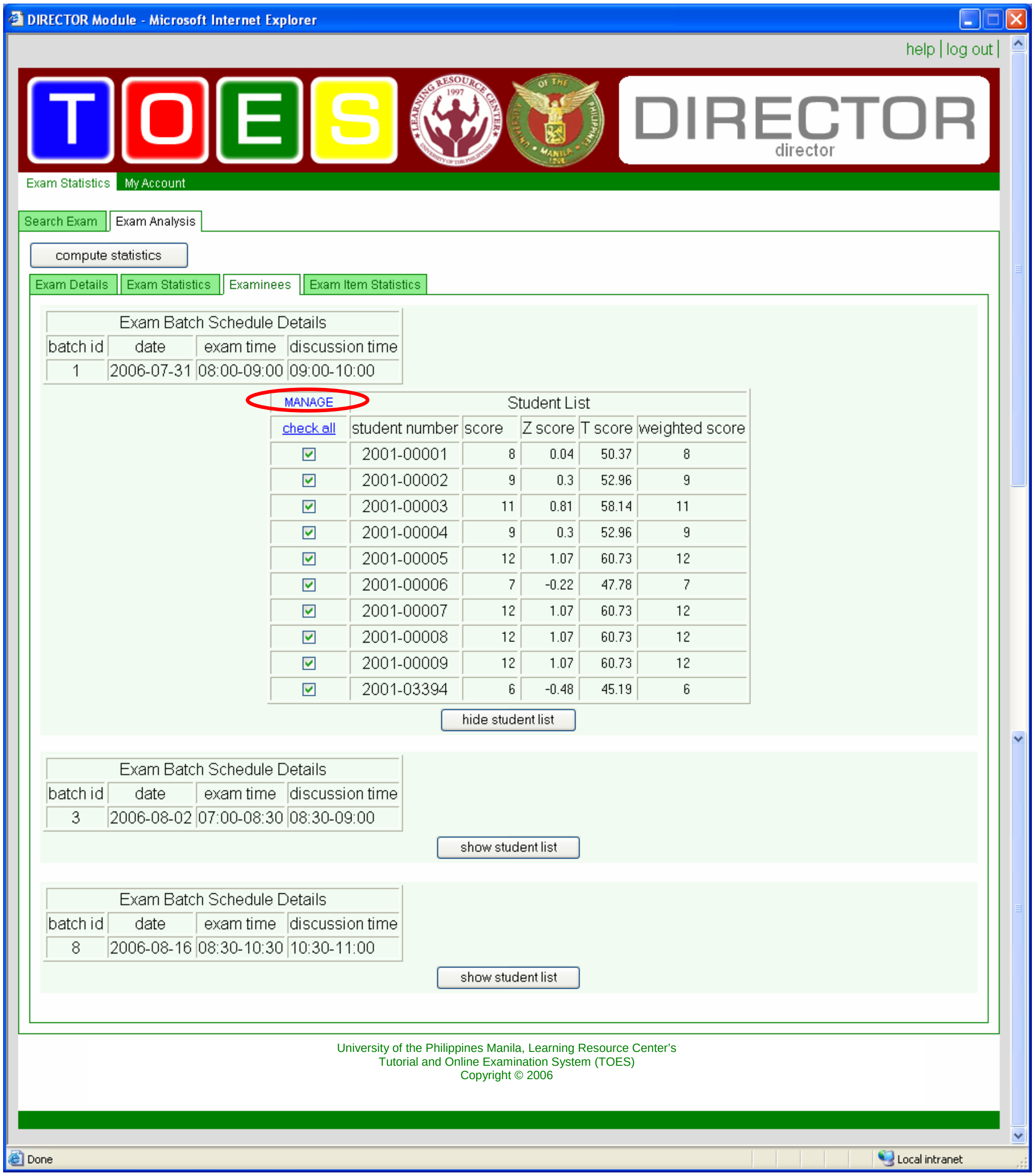
Figure 54: Analysis - Exam Statistics, UPM LRC TOES



Exam Batch Schedule Details

batch id	date	exam time	discussion time
1	2006-07-31	08:00-09:00	09:00-10:00

Student List

check all	student number	score	Z score	T score	weighted score
☑	2001-00001	8	0.04	50.37	8
☑	2001-00002	9	0.3	52.96	9
☑	2001-00003	11	0.81	58.14	11
☑	2001-00004	9	0.3	52.96	9
☑	2001-00005	12	1.07	60.73	12
☑	2001-00006	7	-0.22	47.78	7
☑	2001-00007	12	1.07	60.73	12
☑	2001-00008	12	1.07	60.73	12
☑	2001-00009	12	1.07	60.73	12
☑	2001-03394	6	-0.48	45.19	6

Exam Batch Schedule Details

batch id	date	exam time	discussion time
3	2006-08-02	07:00-08:30	08:30-09:00

Exam Batch Schedule Details

batch id	date	exam time	discussion time
8	2006-08-16	08:30-10:30	10:30-11:00

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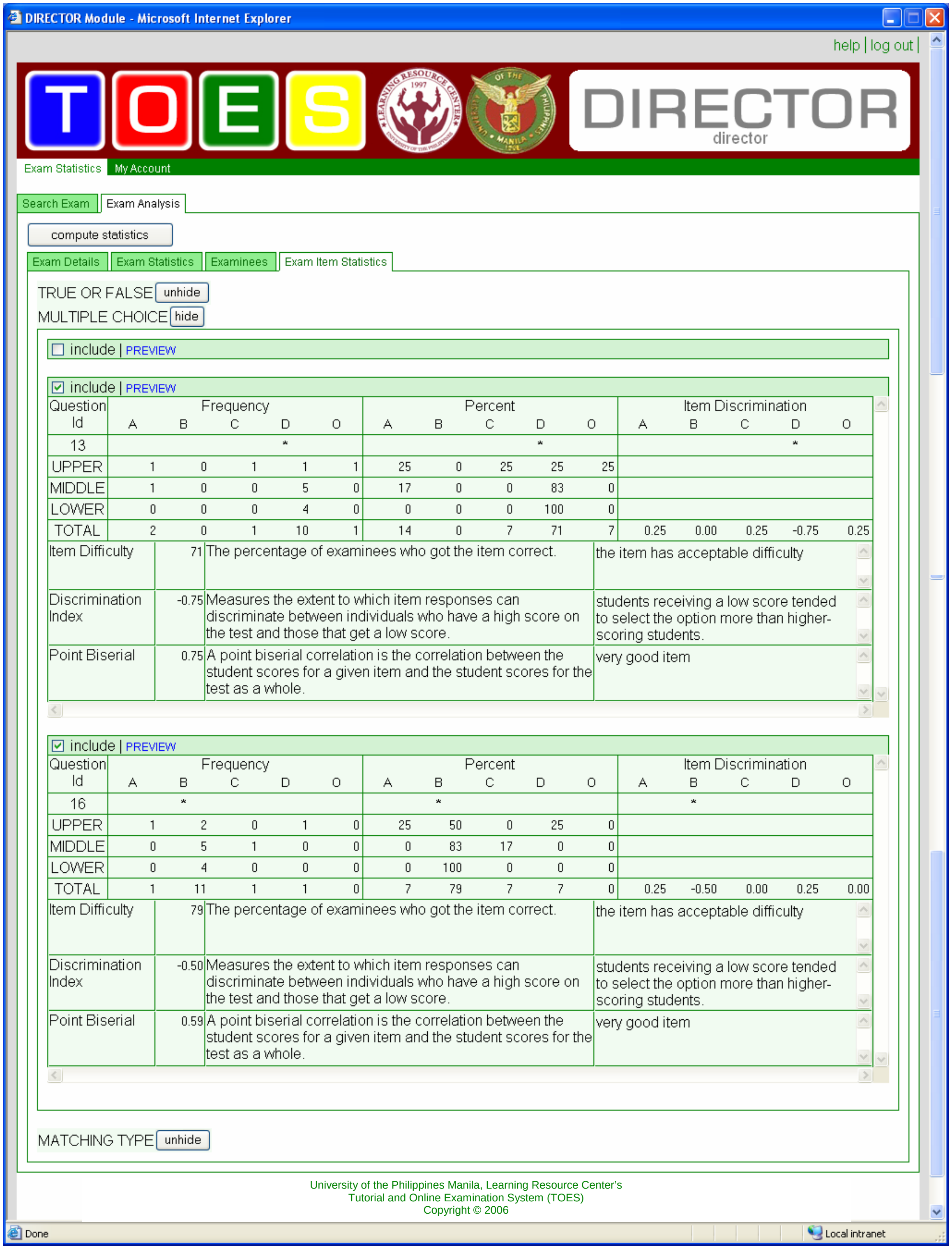
Figure 55: Analysis - Examinees, UPM LRC TOES



Question Id	Frequency					Percent					Item Discrimination				
	A	B	C	D	O	A	B	C	D	O	A	B	C	D	O
13				*					*					*	
UPPER	1	0	1	1	1	25	0	25	25	25					
MIDDLE	1	0	0	5	0	17	0	0	83	0					
LOWER	0	0	0	4	0	0	0	0	100	0					
TOTAL	2	0	1	10	1	14	0	7	71	7	0.25	0.00	0.25	-0.75	0.25

Item Difficulty	71	The percentage of examinees who got the item correct.	the item has acceptable difficulty
Discrimination Index	-0.75	Measures the extent to which item responses can discriminate between individuals who have a high score on the test and those that get a low score.	students receiving a low score tended to select the option more than higher-scoring students.
Point Biserial	0.75	A point biserial correlation is the correlation between the student scores for a given item and the student scores for the test as a whole.	very good item

Question Id	Frequency					Percent					Item Discrimination				
	A	B	C	D	O	A	B	C	D	O	A	B	C	D	O
16		*					*					*			
UPPER	1	2	0	1	0	25	50	0	25	0					
MIDDLE	0	5	1	0	0	0	83	17	0	0					
LOWER	0	4	0	0	0	0	100	0	0	0					
TOTAL	1	11	1	1	0	7	79	7	7	0	0.25	-0.50	0.00	0.25	0.00

Item Difficulty	79	The percentage of examinees who got the item correct.	the item has acceptable difficulty
Discrimination Index	-0.50	Measures the extent to which item responses can discriminate between individuals who have a high score on the test and those that get a low score.	students receiving a low score tended to select the option more than higher-scoring students.
Point Biserial	0.59	A point biserial correlation is the correlation between the student scores for a given item and the student scores for the test as a whole.	very good item

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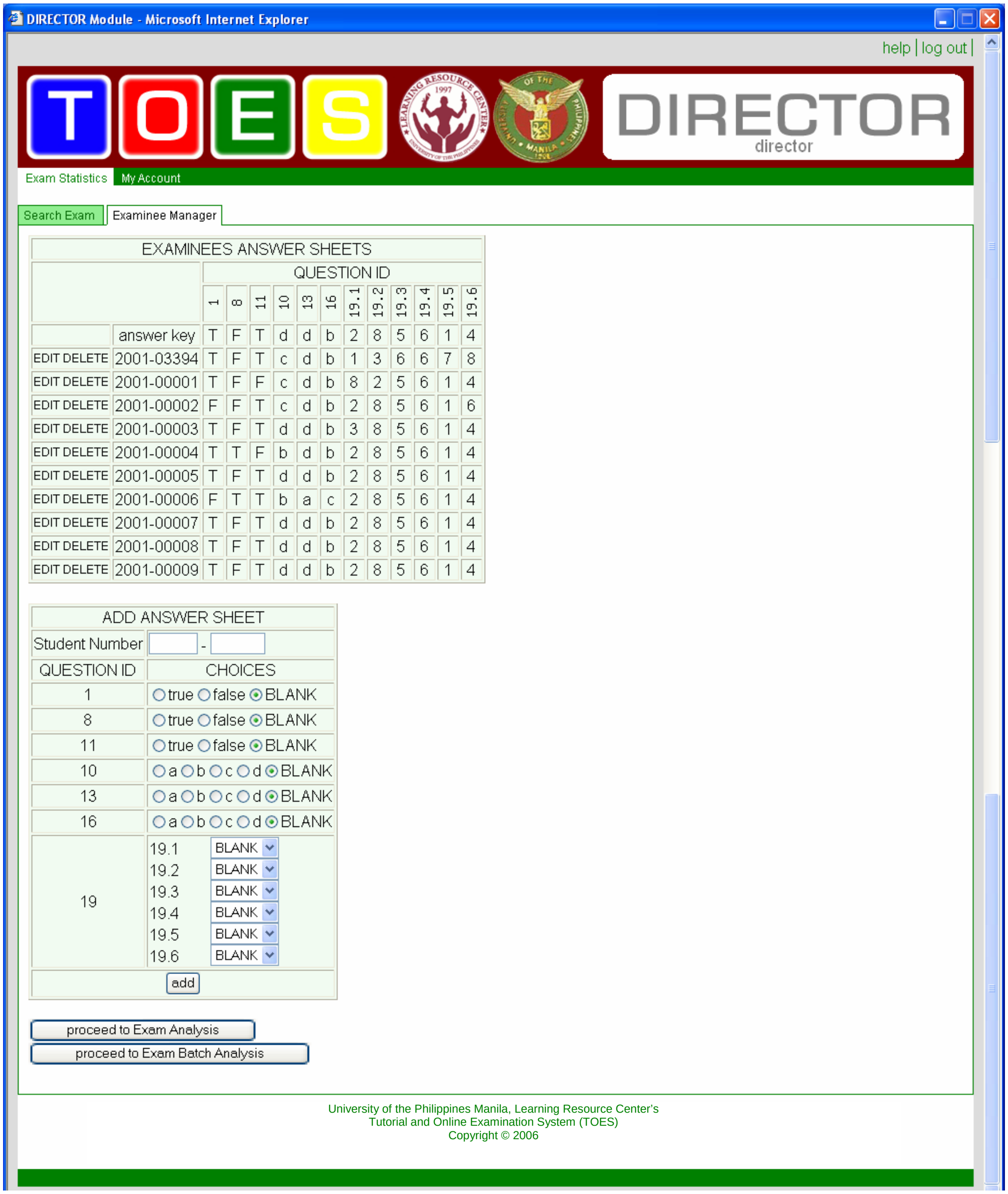
Figure 56: Analysis – Exam Item Statistics, UPM LRC TOES

To deal with the inevitable, TOES included an ‘Examinee Manager’ which can be accessed using the manage button in Figure 55. The manager shown in Figure 57 allows the director to transfer answer strings from an examinee’s answer sheet in the pen and paper method.



EXAMINEES ANSWER SHEETS

		QUESTION ID											
		1	8	11	10	13	16	19.1	19.2	19.3	19.4	19.5	19.6
	answer key	T	F	T	d	d	b	2	8	5	6	1	4
EDIT DELETE	2001-03394	T	F	T	c	d	b	1	3	6	6	7	8
EDIT DELETE	2001-00001	T	F	F	c	d	b	8	2	5	6	1	4
EDIT DELETE	2001-00002	F	F	T	c	d	b	2	8	5	6	1	6
EDIT DELETE	2001-00003	T	F	T	d	d	b	3	8	5	6	1	4
EDIT DELETE	2001-00004	T	T	F	b	d	b	2	8	5	6	1	4
EDIT DELETE	2001-00005	T	F	T	d	d	b	2	8	5	6	1	4
EDIT DELETE	2001-00006	F	T	T	b	a	c	2	8	5	6	1	4
EDIT DELETE	2001-00007	T	F	T	d	d	b	2	8	5	6	1	4
EDIT DELETE	2001-00008	T	F	T	d	d	b	2	8	5	6	1	4
EDIT DELETE	2001-00009	T	F	T	d	d	b	2	8	5	6	1	4

ADD ANSWER SHEET

Student Number	____ - ____
QUESTION ID	CHOICES
1	○ true ○ false ● BLANK
8	○ true ○ false ● BLANK
11	○ true ○ false ● BLANK
10	○ a ○ b ○ c ○ d ● BLANK
13	○ a ○ b ○ c ○ d ● BLANK
16	○ a ○ b ○ c ○ d ● BLANK
19	19.1 BLANK 19.2 BLANK 19.3 BLANK 19.4 BLANK 19.5 BLANK 19.6 BLANK
	add

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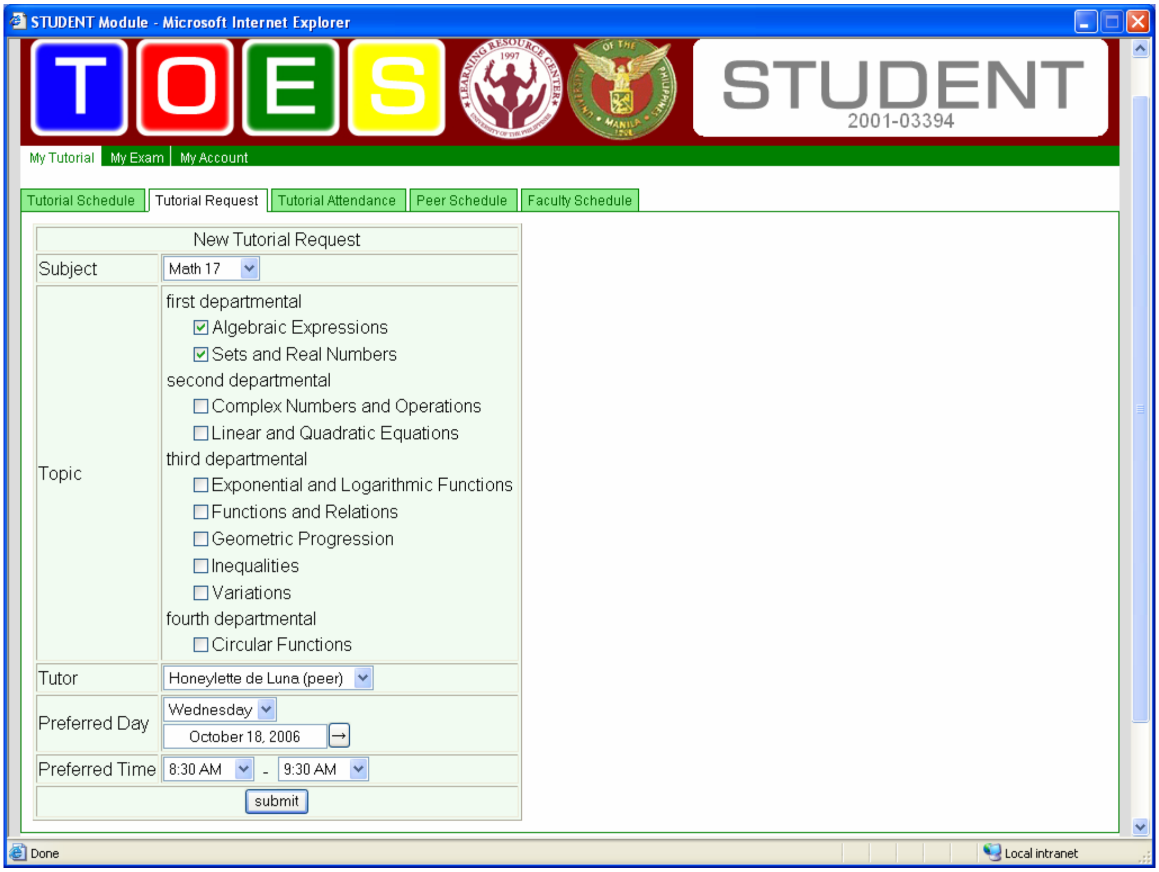
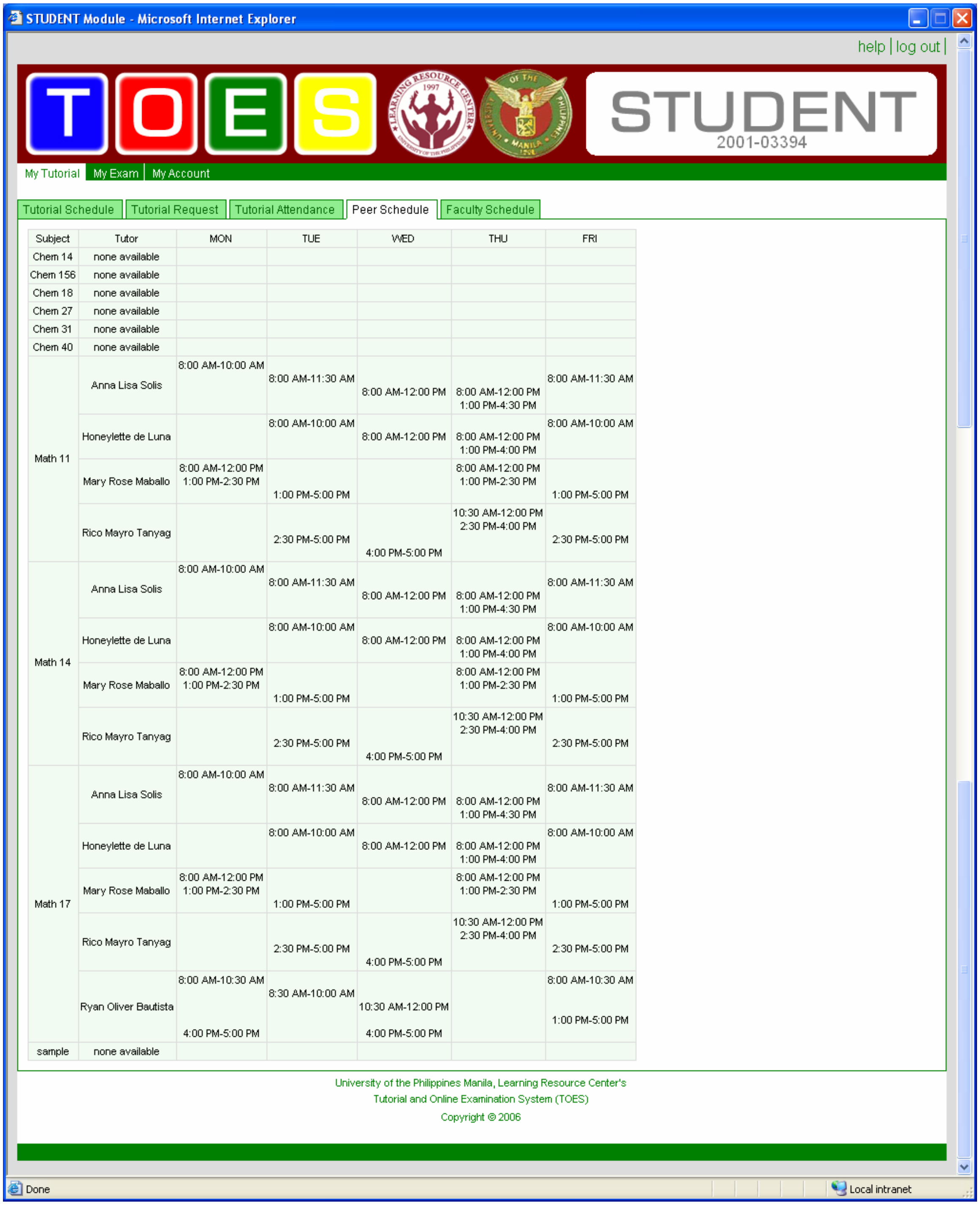
Figure 57: Examinee Manager, UPM LRC TOES

Aside from being an Examination System, TOES is also a Tutorial Scheduling System. Students request a Tutorial Schedule by specifying the following: subject, topic, tutor, preferred day, and the preferred time (see Figure 58). The ‘Peer Schedule’ table and the ‘Faculty Schedule’ table in Figures 59 and 60 aid students in making their requests.



New Tutorial Request	
Subject	Math 17
Topic	first departmental ☑ Algebraic Expressions ☑ Sets and Real Numbers second departmental ☐ Complex Numbers and Operations ☐ Linear and Quadratic Equations third departmental ☐ Exponential and Logarithmic Functions ☐ Functions and Relations ☐ Geometric Progression ☐ Inequalities ☐ Variations fourth departmental ☐ Circular Functions
Tutor	Honeylette de Luna (peer)
Preferred Day	Wednesday October 18, 2006
Preferred Time	8:30 AM - 9:30 AM
	submit

Figure 58: Tutorial Request, UPM LRC TOES



Subject	Tutor	MON	TUE	WED	THU	FRI
Chem 14	none available					
Chem 156	none available					
Chem 18	none available					
Chem 27	none available					
Chem 31	none available					
Chem 40	none available					
Math 11	Anna Lisa Solis	8:00 AM-10:00 AM	8:00 AM-11:30 AM	8:00 AM-12:00 PM	8:00 AM-12:00 PM 1:00 PM-4:30 PM	8:00 AM-11:30 AM
	Honeylette de Luna		8:00 AM-10:00 AM	8:00 AM-12:00 PM	8:00 AM-12:00 PM 1:00 PM-4:00 PM	8:00 AM-10:00 AM
	Mary Rose Maballo	8:00 AM-12:00 PM 1:00 PM-2:30 PM	1:00 PM-5:00 PM		8:00 AM-12:00 PM 1:00 PM-2:30 PM	1:00 PM-5:00 PM
	Rico Mayro Tanyag		2:30 PM-5:00 PM	4:00 PM-5:00 PM	10:30 AM-12:00 PM 2:30 PM-4:00 PM	2:30 PM-5:00 PM
Math 14	Anna Lisa Solis	8:00 AM-10:00 AM	8:00 AM-11:30 AM	8:00 AM-12:00 PM	8:00 AM-12:00 PM 1:00 PM-4:30 PM	8:00 AM-11:30 AM
	Honeylette de Luna		8:00 AM-10:00 AM	8:00 AM-12:00 PM	8:00 AM-12:00 PM 1:00 PM-4:00 PM	8:00 AM-10:00 AM
	Mary Rose Maballo	8:00 AM-12:00 PM 1:00 PM-2:30 PM	1:00 PM-5:00 PM		8:00 AM-12:00 PM 1:00 PM-2:30 PM	1:00 PM-5:00 PM
	Rico Mayro Tanyag		2:30 PM-5:00 PM	4:00 PM-5:00 PM	10:30 AM-12:00 PM 2:30 PM-4:00 PM	2:30 PM-5:00 PM
Math 17	Anna Lisa Solis	8:00 AM-10:00 AM	8:00 AM-11:30 AM	8:00 AM-12:00 PM	8:00 AM-12:00 PM 1:00 PM-4:30 PM	8:00 AM-11:30 AM
	Honeylette de Luna		8:00 AM-10:00 AM	8:00 AM-12:00 PM	8:00 AM-12:00 PM 1:00 PM-4:00 PM	8:00 AM-10:00 AM
	Mary Rose Maballo	8:00 AM-12:00 PM 1:00 PM-2:30 PM	1:00 PM-5:00 PM		8:00 AM-12:00 PM 1:00 PM-2:30 PM	1:00 PM-5:00 PM
	Rico Mayro Tanyag		2:30 PM-5:00 PM	4:00 PM-5:00 PM	10:30 AM-12:00 PM 2:30 PM-4:00 PM	2:30 PM-5:00 PM
	Ryan Oliver Bautista	8:00 AM-10:30 AM 4:00 PM-5:00 PM	8:30 AM-10:00 AM	10:30 AM-12:00 PM 4:00 PM-5:00 PM		8:00 AM-10:30 AM 1:00 PM-5:00 PM
sample	none available					

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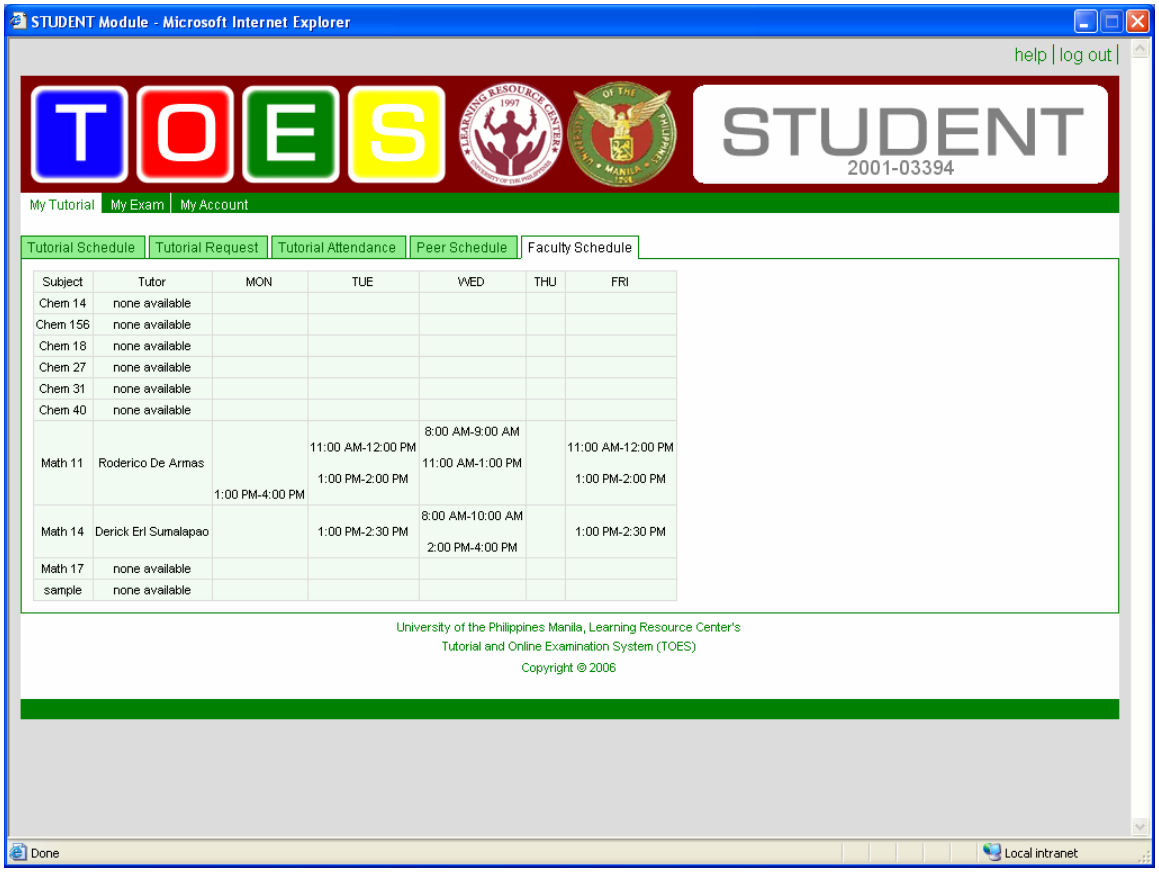
Figure 59: Peer Schedule: UPM LRC TOES



Subject	Tutor	MON	TUE	WED	THU	FRI
Chem 14	none available					
Chem 156	none available					
Chem 18	none available					
Chem 27	none available					
Chem 31	none available					
Chem 40	none available					
Math 11	Roderico De Armas	1:00 PM-4:00 PM	11:00 AM-12:00 PM 1:00 PM-2:00 PM	8:00 AM-9:00 AM 11:00 AM-1:00 PM		11:00 AM-12:00 PM 1:00 PM-2:00 PM
Math 14	Derick Erl Sumalapao		1:00 PM-2:30 PM	8:00 AM-10:00 AM 2:00 PM-4:00 PM		1:00 PM-2:30 PM
Math 17	none available					
sample	none available					

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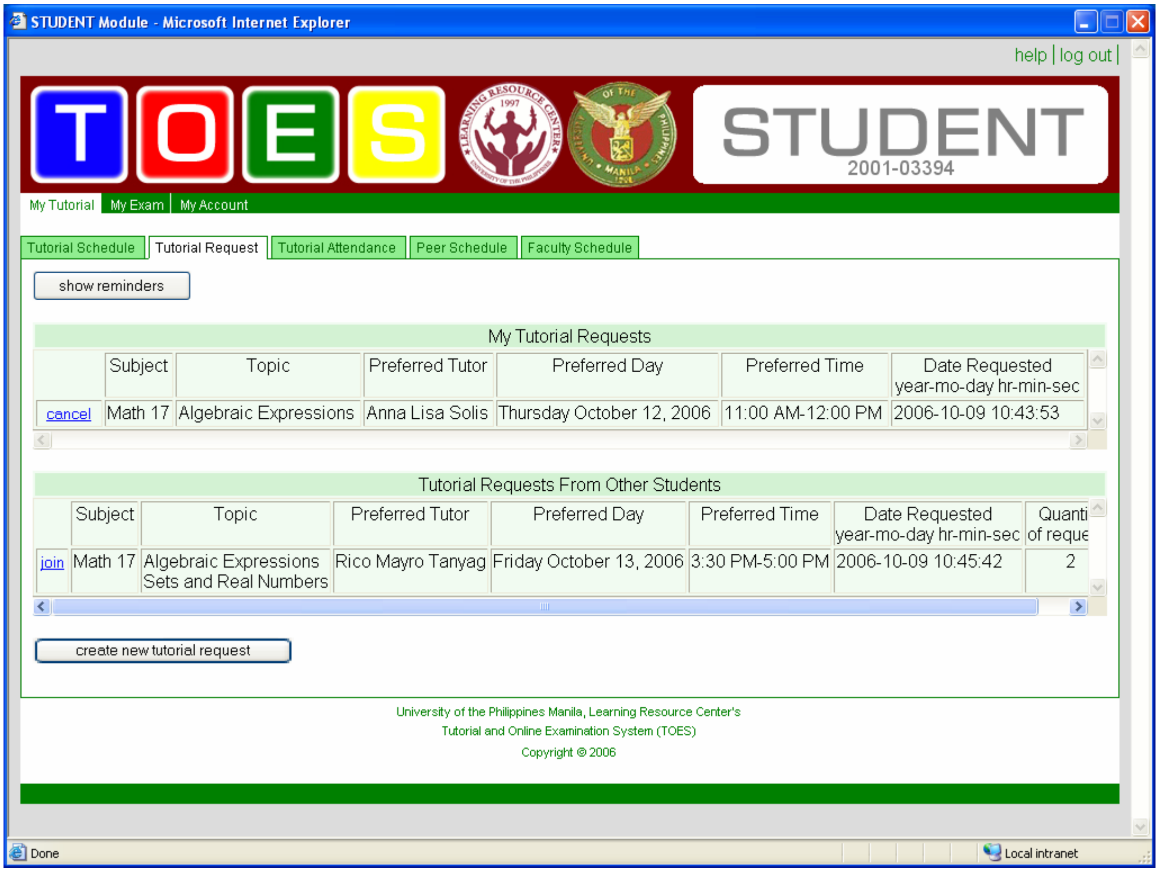
Figure 60: Faculty Schedule, UPM LRC TOES

Figure 61 shows the student's 'Tutorial Request' page. A student may view his/her own request in the 'My Tutorial Requests' table. A student may also join an existing request from the 'Tutorial Request From Other Students' table. Requests should be submitted two working days before the tutorial schedule date.



My Tutorial Requests

	Subject	Topic	Preferred Tutor	Preferred Day	Preferred Time	Date Requested year-mo-day hr-min-sec
cancel	Math 17	Algebraic Expressions	Anna Lisa Solis	Thursday October 12, 2006	11:00 AM-12:00 PM	2006-10-09 10:43:53

Tutorial Requests From Other Students

	Subject	Topic	Preferred Tutor	Preferred Day	Preferred Time	Date Requested year-mo-day hr-min-sec	Quanti of reque
join	Math 17	Algebraic Expressions Sets and Real Numbers	Rico Mayro Tanyag	Friday October 13, 2006	3:30 PM-5:00 PM	2006-10-09 10:45:42	2

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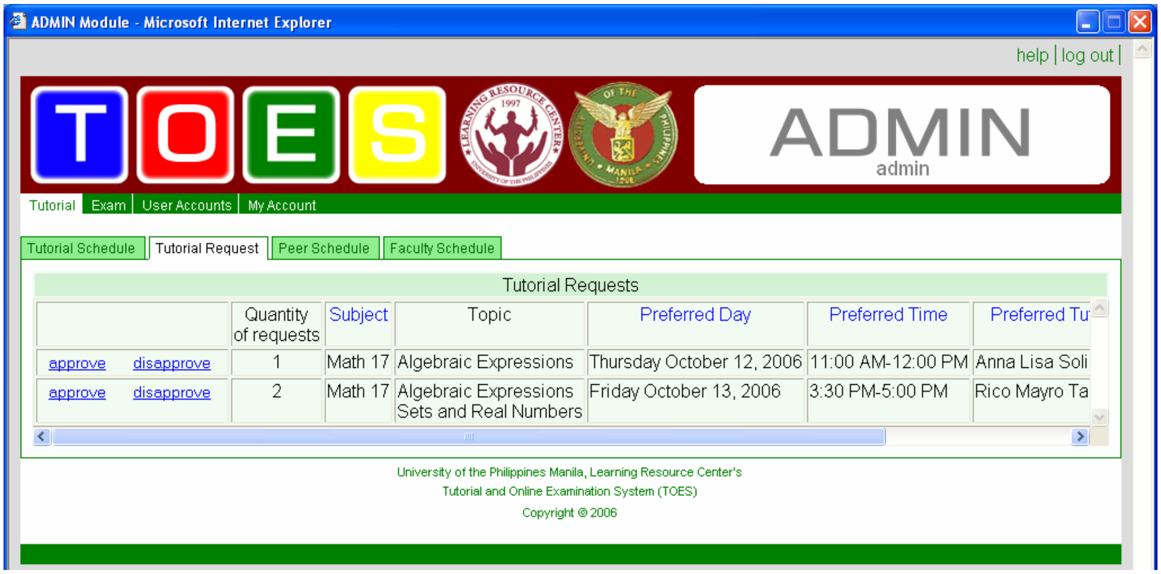
Figure 61: Student Tutorial Request, UPM LRC TOES

The two day advance allows the LRC office confirm the availability of the requested tutor. Figure 62 lists all the tutorial requests. In case the requested tutor is not available the admin consults the other available tutors (see Figure 63).


ADMIN Module - Microsoft Internet Explorer
help | log out |
TOES
ADMIN
admin
Tutorial | Exam | User Accounts | My Account
Tutorial Schedule | Tutorial Request | Peer Schedule | Faculty Schedule

Tutorial Requests

		Quantity of requests	Subject	Topic	Preferred Day	Preferred Time	Preferred Tu
approve	disapprove	1	Math 17	Algebraic Expressions	Thursday October 12, 2006	11:00 AM-12:00 PM	Anna Lisa Soli
approve	disapprove	2	Math 17	Algebraic Expressions Sets and Real Numbers	Friday October 13, 2006	3:30 PM-5:00 PM	Rico Mayro Ta

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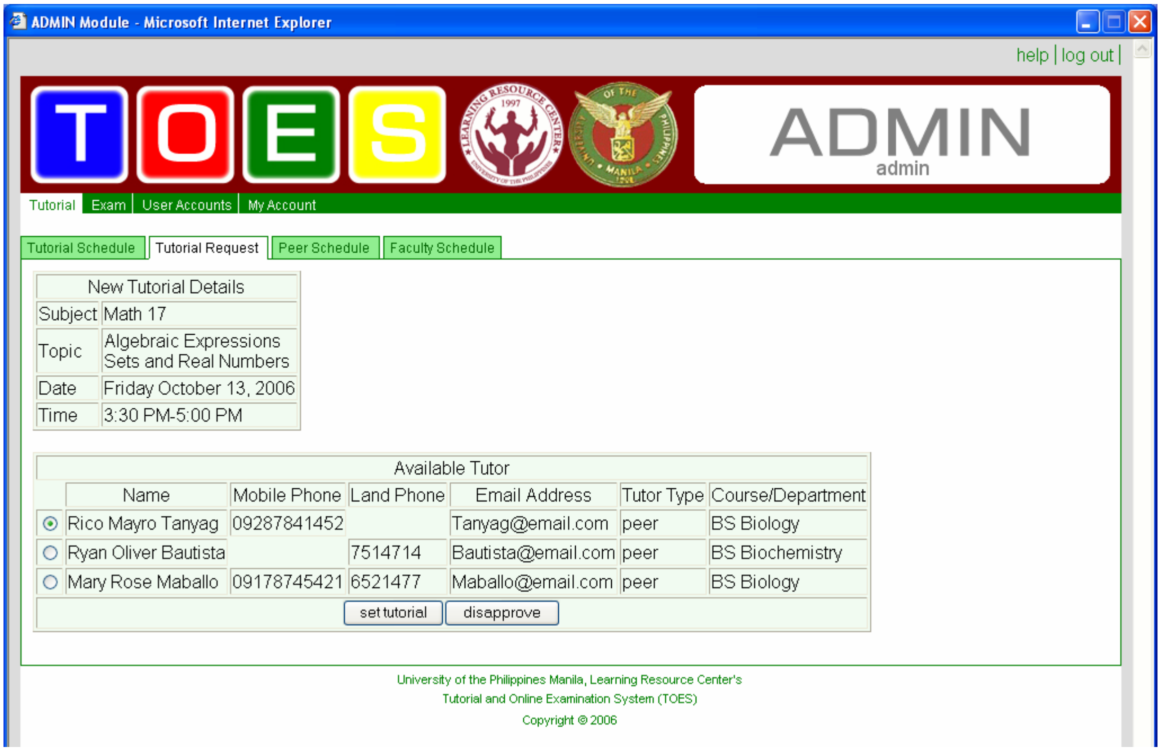
Figure 62: Admin – Tutorial Requests, UPM LRC TOES


ADMIN Module - Microsoft Internet Explorer
help | log out |
TOES
ADMIN
admin
Tutorial | Exam | User Accounts | My Account
Tutorial Schedule | Tutorial Request | Peer Schedule | Faculty Schedule

New Tutorial Details	
Subject	Math 17
Topic	Algebraic Expressions Sets and Real Numbers
Date	Friday October 13, 2006
Time	3:30 PM-5:00 PM

Available Tutor

	Name	Mobile Phone	Land Phone	Email Address	Tutor Type	Course/Department
●	Rico Mayro Tanyag	09287841452		Tanyag@email.com	peer	BS Biology
○	Ryan Oliver Bautista		7514714	Bautista@email.com	peer	BS Biochemistry
○	Mary Rose Maballo	09178745421	6521477	Maballo@email.com	peer	BS Biology

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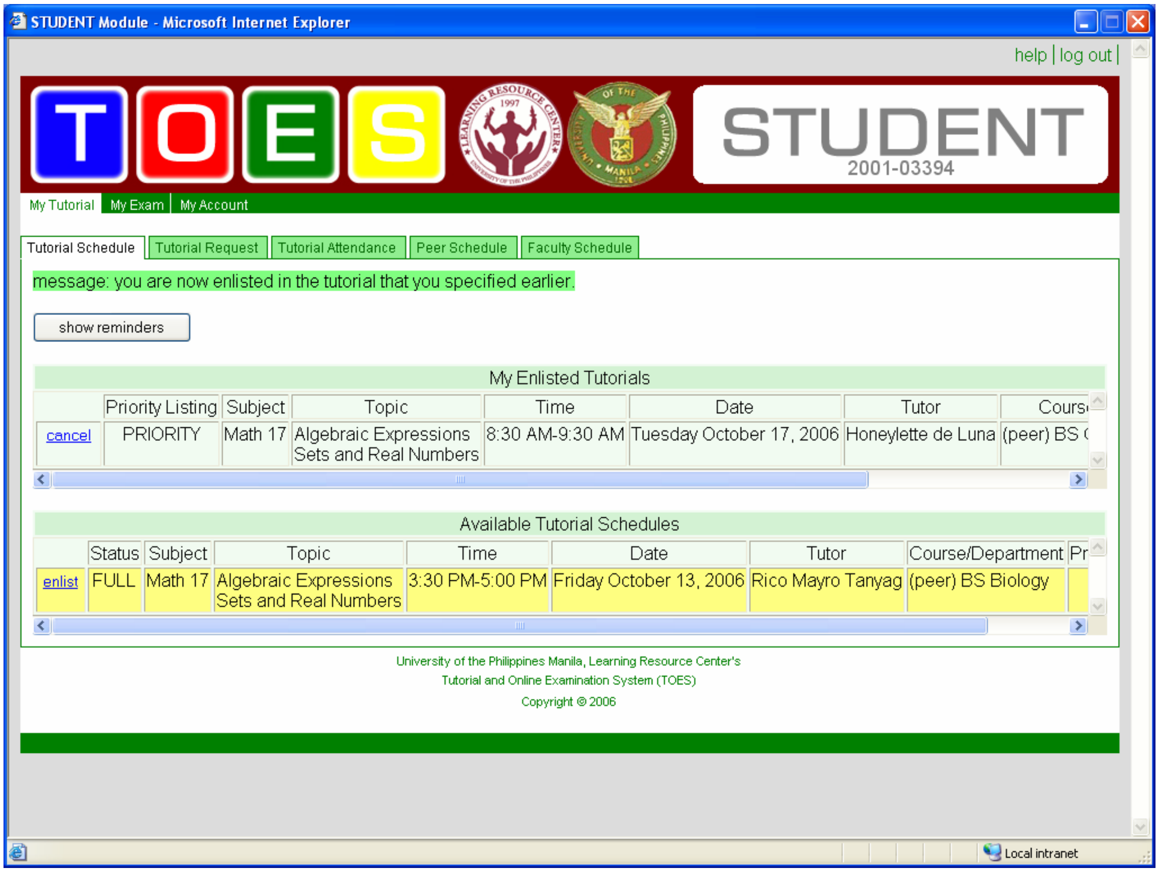
Figure 63: Admin – Approve Tutorial Request, UPM LRC TOES

An approved ‘Tutorial Request’ results into a new ‘Tutorial Schedule’ and the students who submitted the request are automatically enlisted in the new schedule. Students enlist in these schedules in the ‘Tutorial Schedule’ page in Figure 64 while the admin manages them in Figure 65. Like the exam registration tutorial, slots are given on a first-come-first-serve basis. The LRC audio visual rooms ideally accommodate thirty tutees. This number marks the ‘maximum priority slots’. The priority table in Figure 48 is also available for viewing the ‘priority listing’ in a tutorial schedule. A ‘tutorial slot’ reserves a seat for the student, however, it does not mean that a ‘wait listed’ tutee can not attend the tutorial. Students who submitted a disapproved request will be notified in Figure 66.



message: you are now enlisted in the tutorial that you specified earlier.

My Enlisted Tutorials

	Priority Listing	Subject	Topic	Time	Date	Tutor	Cours
cancel	PRIORITY	Math 17	Algebraic Expressions Sets and Real Numbers	8:30 AM-9:30 AM	Tuesday October 17, 2006	Honeylette de Luna	(peer) BS

Available Tutorial Schedules

	Status	Subject	Topic	Time	Date	Tutor	Course/Department	Pr
enlist	FULL	Math 17	Algebraic Expressions Sets and Real Numbers	3:30 PM-5:00 PM	Friday October 13, 2006	Rico Mayro Tanyag	(peer) BS Biology	

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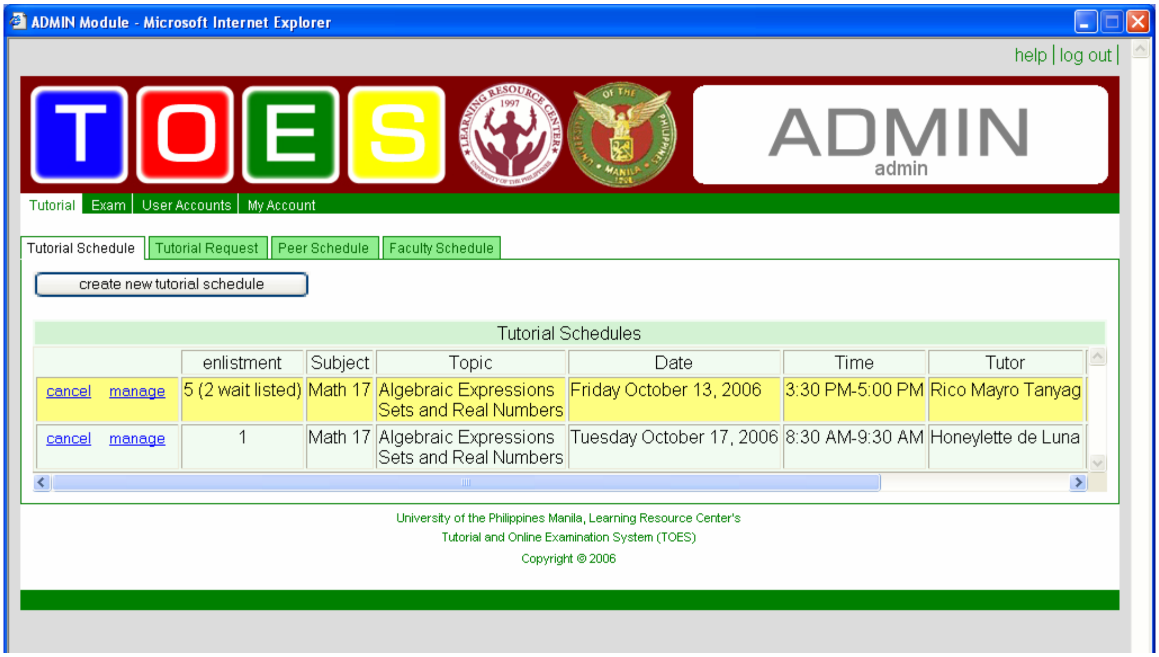
Figure 64: Student – Tutorial Schedule, UPM LRC TOES



Tutorial Schedules

	enlistment	Subject	Topic	Date	Time	Tutor
cancel manage	5 (2 wait listed)	Math 17	Algebraic Expressions Sets and Real Numbers	Friday October 13, 2006	3:30 PM-5:00 PM	Rico Mayro Tanyag
cancel manage	1	Math 17	Algebraic Expressions Sets and Real Numbers	Tuesday October 17, 2006	8:30 AM-9:30 AM	Honeylette de Luna

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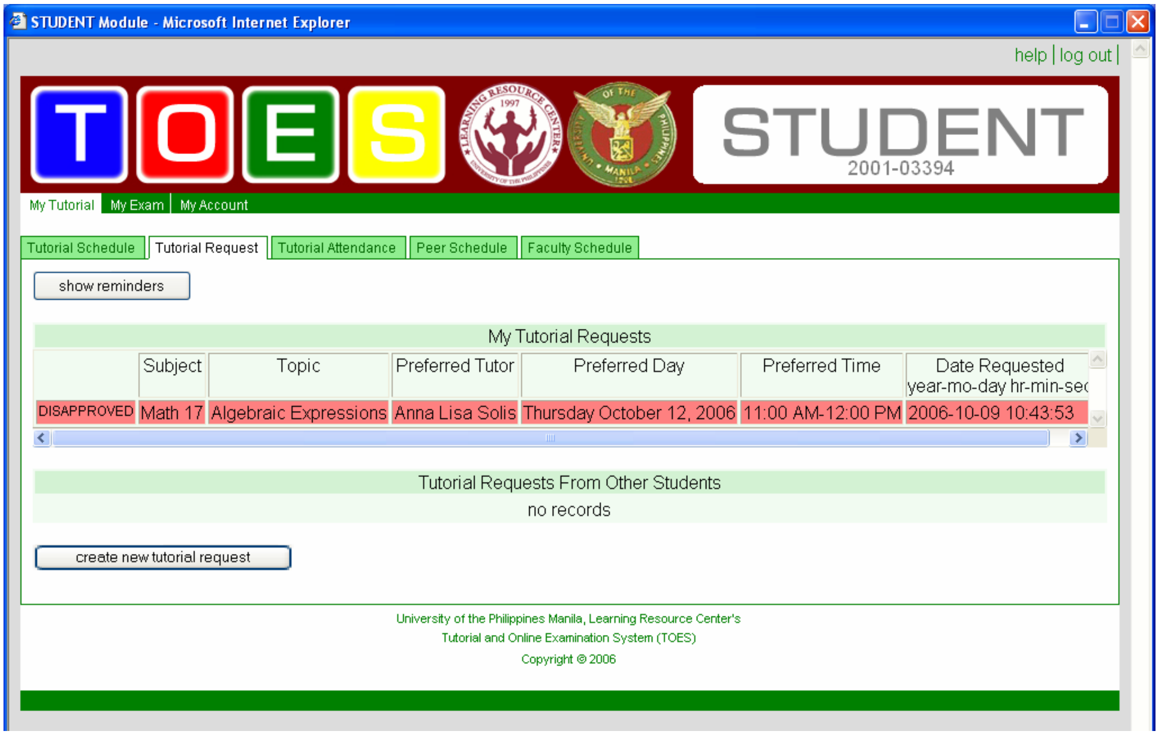
Figure 65: Admin – Tutorial Schedule, UPM LRC TOES



My Tutorial Requests

	Subject	Topic	Preferred Tutor	Preferred Day	Preferred Time	Date Requested year-mo-day hr-min-sec
DISAPPROVED	Math 17	Algebraic Expressions	Anna Lisa Solis	Thursday October 12, 2006	11:00 AM-12:00 PM	2006-10-09 10:43:53

Tutorial Requests From Other Students

no records

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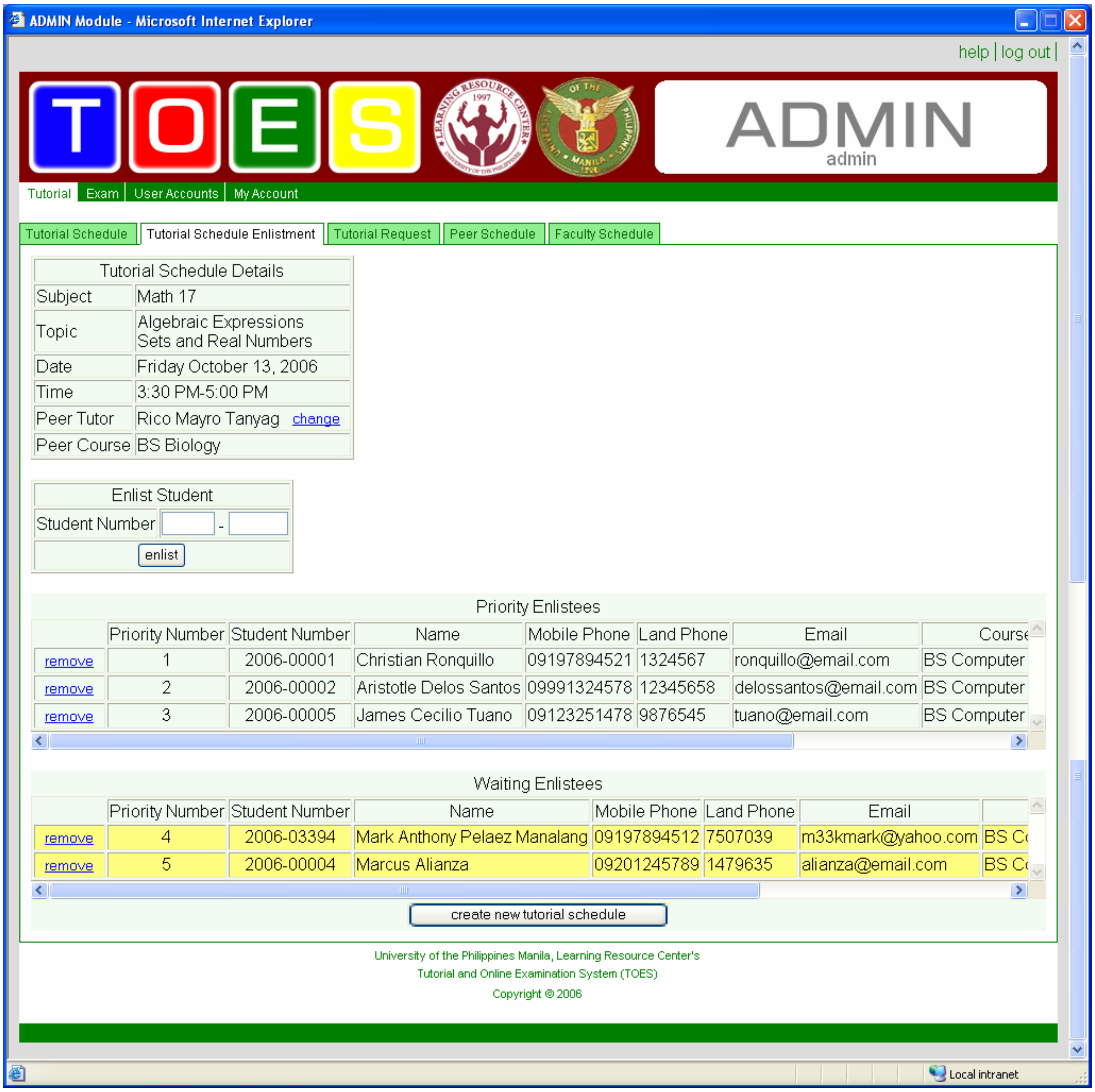
Figure 66: Student – Tutorial Request (disapproval), UPM LRC TOES

The ‘Tutorial Schedule Enlistment’ page in Figure 67 allows the admin to enlist or remove tutees from a tutorial schedule and to create a new schedule for ‘Waiting Enlistees’. The value of the ‘maximum priority slots’ was intentionally set to three in Figure 67. Figure 68 demonstrates the ability to create a new schedule with a different tutor for accommodating the ‘wait listed.’ This feature allows the LRC office to distribute the tutees among the available tutors. This results to smaller class sizes which increase interaction between the students and the tutor. In worst case scenarios, where the LRC can not create a backup tutorial schedule, the ‘wait listed’ may still attend, but without guaranteed seats.


ADMIN Module - Microsoft Internet Explorer
help | log out |
T O E S
ADMIN
admin
Tutorial | Exam | User Accounts | My Account
Tutorial Schedule | Tutorial Schedule Enlistment | Tutorial Request | Peer Schedule | Faculty Schedule
enlist
create new tutorial schedule
Local intranet

Tutorial Schedule Details	
Subject	Math 17
Topic	Algebraic Expressions Sets and Real Numbers
Date	Friday October 13, 2006
Time	3:30 PM-5:00 PM
Peer Tutor	Rico Mayro Tanyag change
Peer Course	BS Biology

Enlist Student	
Student Number	-

Priority Enlistees

	Priority Number	Student Number	Name	Mobile Phone	Land Phone	Email	Course
remove	1	2006-00001	Christian Ronquillo	09197894521	1324567	ronquillo@email.com	BS Computer
remove	2	2006-00002	Aristotle Delos Santos	09991324578	12345658	delossantos@email.com	BS Computer
remove	3	2006-00005	James Cecilio Tuano	09123251478	9876545	tuano@email.com	BS Computer

Waiting Enlistees

	Priority Number	Student Number	Name	Mobile Phone	Land Phone	Email	
remove	4	2006-03394	Mark Anthony Pelaez Manalang	09197894512	7507039	m33kmark@yahoo.com	BS Co
remove	5	2006-00004	Marcus Alianza	09201245789	1479635	alianza@email.com	BS Co

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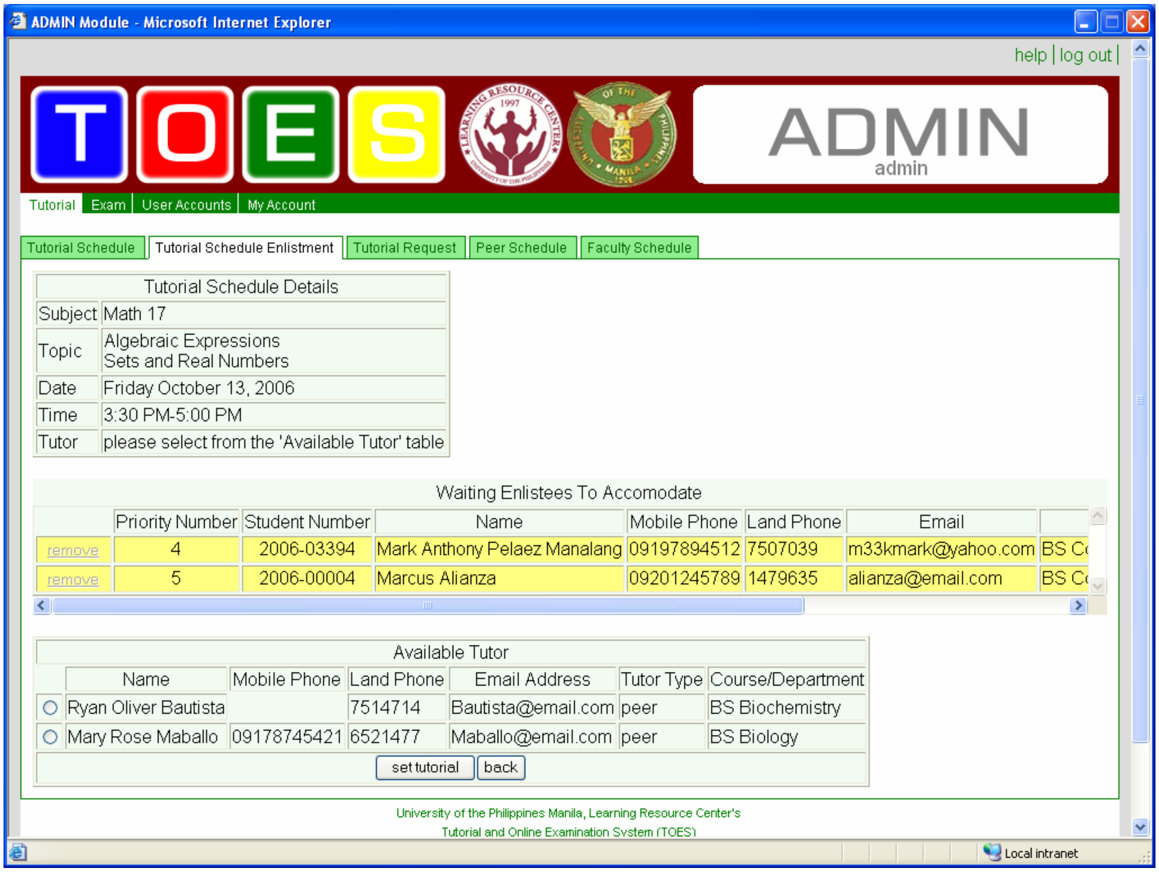
Figure 67: Admin – Tutorial Schedule Enlistment, UPM LRC TOES


ADMIN Module - Microsoft Internet Explorer
help | log out |
TOES
ADMIN
admin
Tutorial | Exam | User Accounts | My Account
Tutorial Schedule | Tutorial Schedule Enlistment | Tutorial Request | Peer Schedule | Faculty Schedule
set tutorial
back
Local intranet

Tutorial Schedule Details	
Subject	Math 17
Topic	Algebraic Expressions Sets and Real Numbers
Date	Friday October 13, 2006
Time	3:30 PM-5:00 PM
Tutor	please select from the 'Available Tutor' table

Waiting Enlistees To Accomodate

	Priority Number	Student Number	Name	Mobile Phone	Land Phone	Email	
remove	4	2006-03394	Mark Anthony Pelaez Manalang	09197894512	7507039	m33kmark@yahoo.com	BS Co
remove	5	2006-00004	Marcus Alianza	09201245789	1479635	alianza@email.com	BS Co

Available Tutor

	Name	Mobile Phone	Land Phone	Email Address	Tutor Type	Course/Department
○	Ryan Oliver Bautista		7514714	Bautista@email.com	peer	BS Biochemistry
○	Mary Rose Maballo	09178745421	6521477	Maballo@email.com	peer	BS Biology

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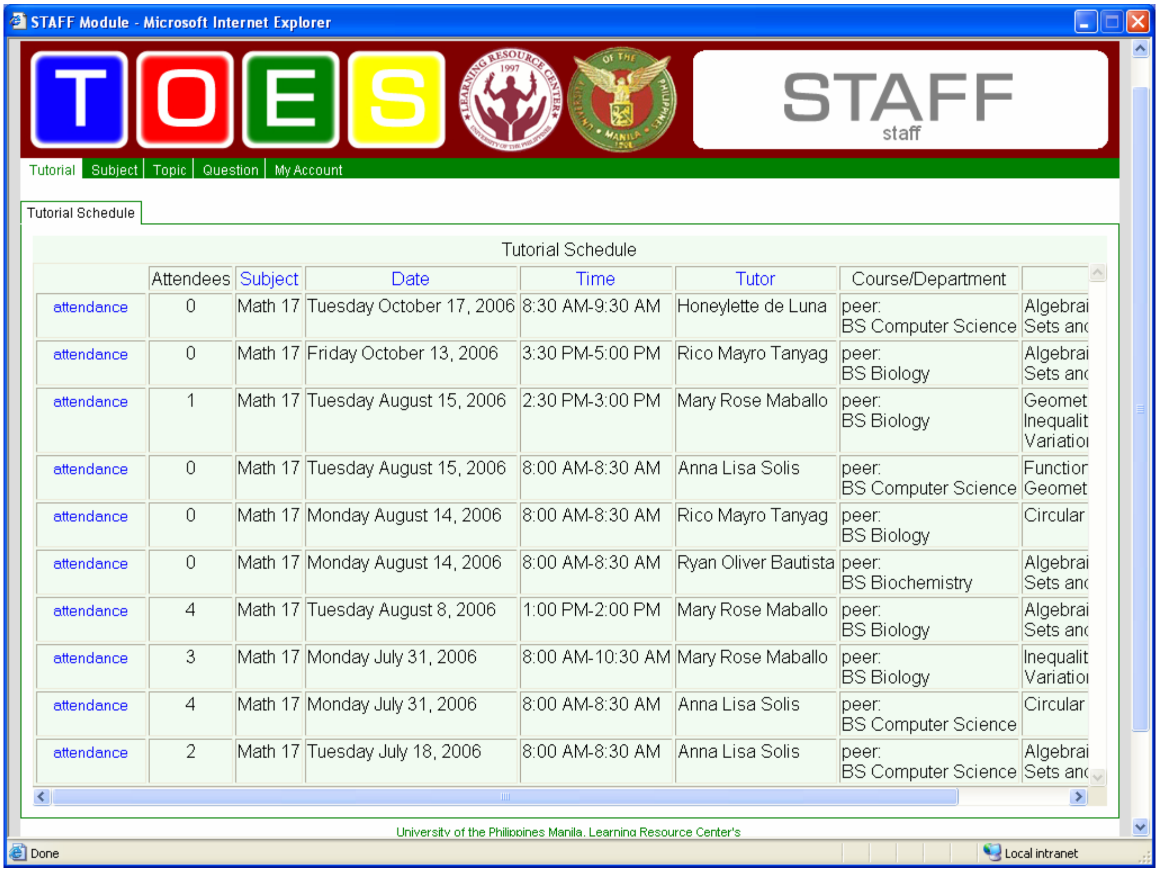
Figure 68: Admin – Tutorial Schedule Enlistment, UPM LRC TOES

The staff records all ‘Tutorial Attendance’ for each ‘Tutorial Schedule’ (see Figure 69). Figures 70.1 to 70.3 show the ‘Tutorial Attendance’ management page. Right before the tutorial starts, the staff records the present enlisted students (see Figure 70.1). The form in Figure 70.2 appears after checking the attendance of the enlisted students. This form can be used to add walk-in students.



Tutorial Schedule

	Attendees	Subject	Date	Time	Tutor	Course/Department	
attendance	0	Math 17	Tuesday October 17, 2006	8:30 AM-9:30 AM	Honeylette de Luna	peer: BS Computer Science	Algebrai Sets an
attendance	0	Math 17	Friday October 13, 2006	3:30 PM-5:00 PM	Rico Mayro Tanyag	peer: BS Biology	Algebrai Sets an
attendance	1	Math 17	Tuesday August 15, 2006	2:30 PM-3:00 PM	Mary Rose Maballo	peer: BS Biology	Geomet Inequalit Variatio
attendance	0	Math 17	Tuesday August 15, 2006	8:00 AM-8:30 AM	Anna Lisa Solis	peer: BS Computer Science	Functior Geomet
attendance	0	Math 17	Monday August 14, 2006	8:00 AM-8:30 AM	Rico Mayro Tanyag	peer: BS Biology	Circular
attendance	0	Math 17	Monday August 14, 2006	8:00 AM-8:30 AM	Ryan Oliver Bautista	peer: BS Biochemistry	Algebrai Sets an
attendance	4	Math 17	Tuesday August 8, 2006	1:00 PM-2:00 PM	Mary Rose Maballo	peer: BS Biology	Algebrai Sets an
attendance	3	Math 17	Monday July 31, 2006	8:00 AM-10:30 AM	Mary Rose Maballo	peer: BS Biology	Inequalit Variatio
attendance	4	Math 17	Monday July 31, 2006	8:00 AM-8:30 AM	Anna Lisa Solis	peer: BS Computer Science	Circular
attendance	2	Math 17	Tuesday July 18, 2006	8:00 AM-8:30 AM	Anna Lisa Solis	peer: BS Computer Science	Algebrai Sets an

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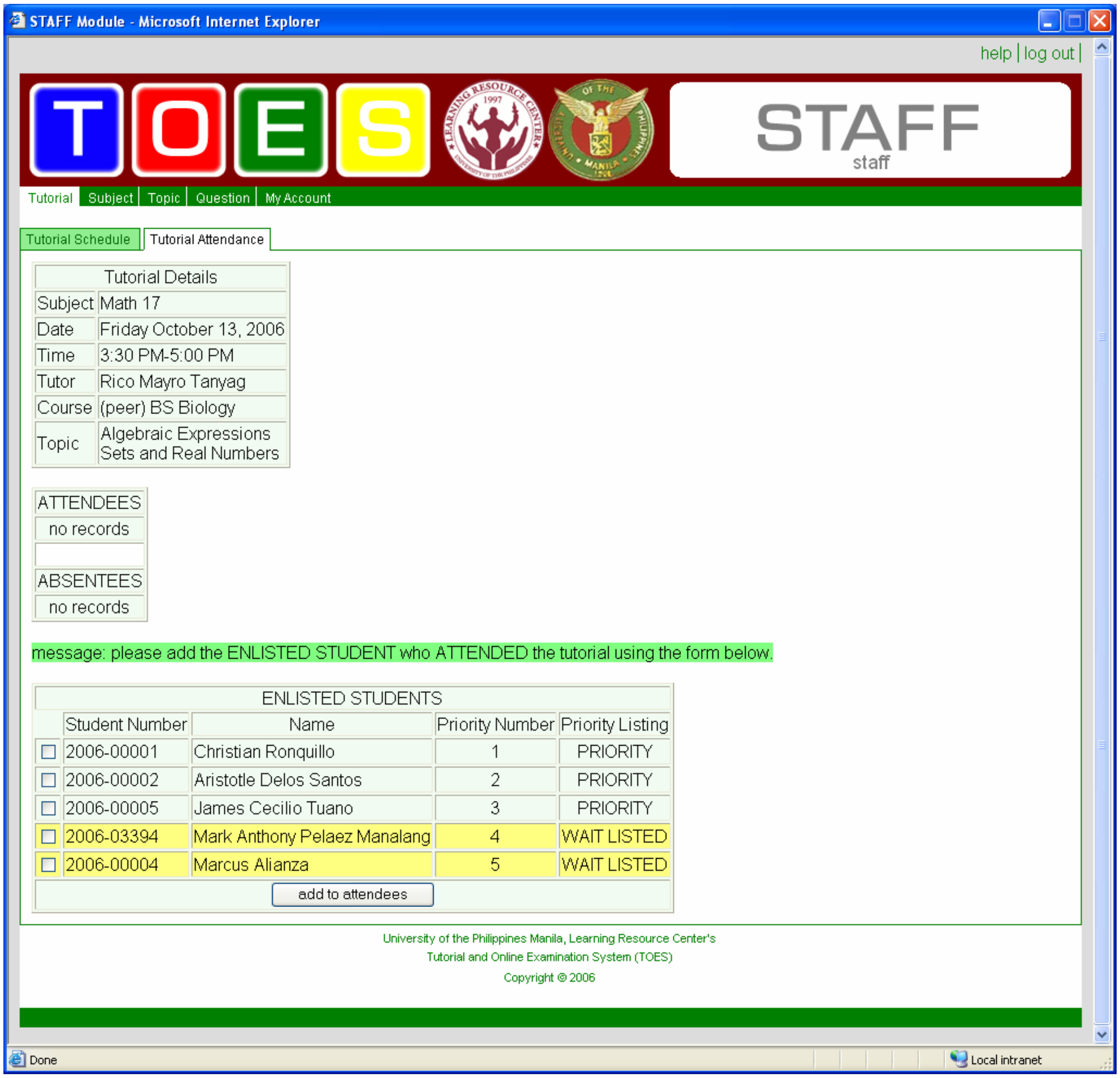
Figure 69: Staff – Tutorial Schedule, UPM LRC TOES


STAFF Module - Microsoft Internet Explorer
help | log out |
T O E S
STAFF
staff
Tutorial | Subject | Topic | Question | My Account
Tutorial Schedule
Tutorial Attendance
Done
Local intranet

Tutorial Details	
Subject	Math 17
Date	Friday October 13, 2006
Time	3:30 PM-5:00 PM
Tutor	Rico Mayro Tanyag
Course	(peer) BS Biology
Topic	Algebraic Expressions Sets and Real Numbers

ATTENDEES
no records
ABSENTEES
no records

message: please add the ENLISTED STUDENT who ATTENDED the tutorial using the form below.

ENLISTED STUDENTS				
	Student Number	Name	Priority Number	Priority Listing
□	2006-00001	Christian Ronquillo	1	PRIORITY
□	2006-00002	Aristotle Delos Santos	2	PRIORITY
□	2006-00005	James Cecilio Tuano	3	PRIORITY
□	2006-03394	Mark Anthony Pelaez Manalang	4	WAIT LISTED
□	2006-00004	Marcus Alianza	5	WAIT LISTED
		add to attendees		

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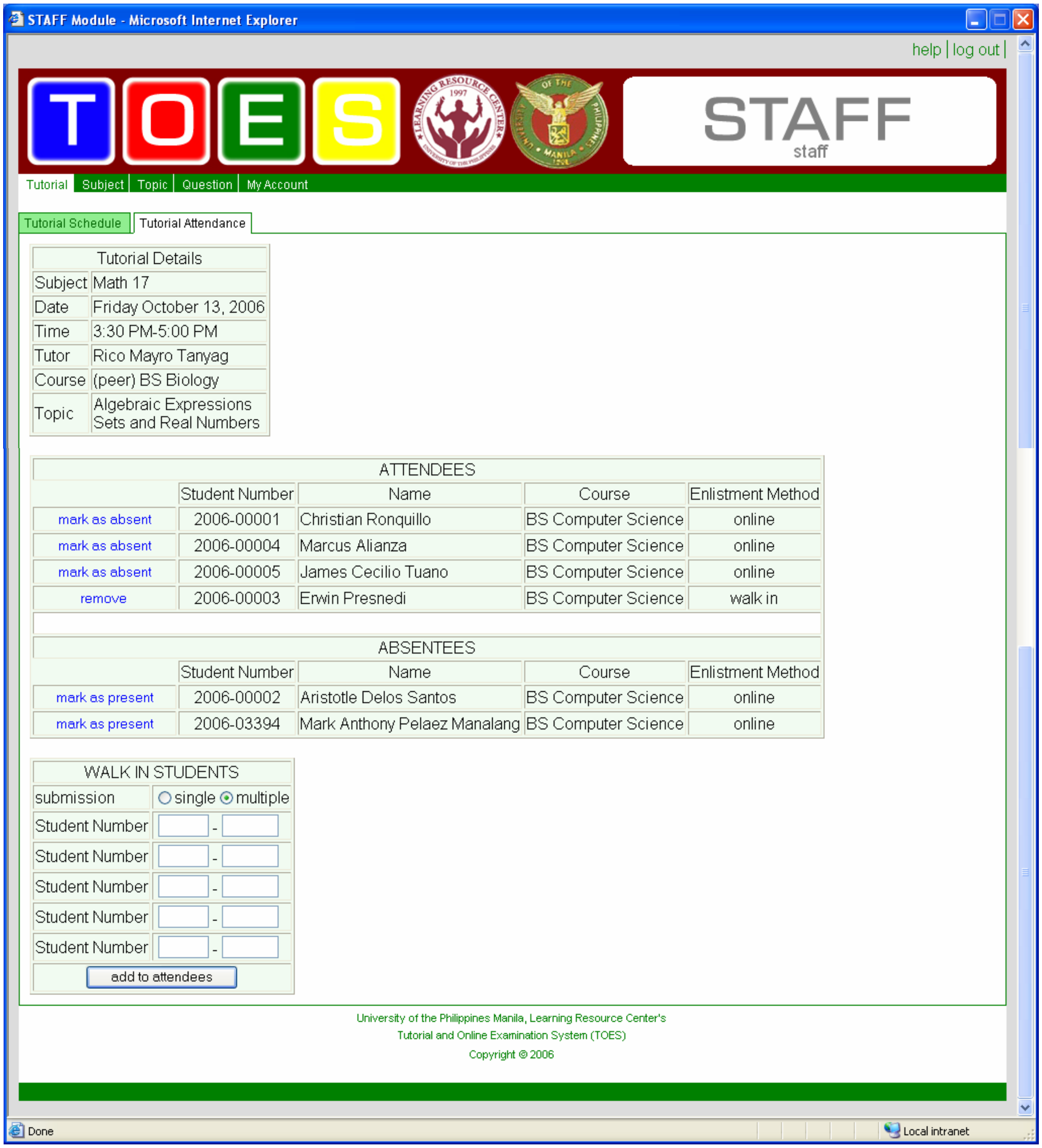
Figure 70.1: Staff – Tutorial Attendance, UPM LRC TOES


STAFF Module - Microsoft Internet Explorer
help | log out |
T O E S
STAFF
staff
Tutorial | Subject | Topic | Question | My Account
Tutorial Schedule
Tutorial Attendance
Done
Local intranet

Tutorial Details	
Subject	Math 17
Date	Friday October 13, 2006
Time	3:30 PM-5:00 PM
Tutor	Rico Mayro Tanyag
Course	(peer) BS Biology
Topic	Algebraic Expressions Sets and Real Numbers

ATTENDEES				
	Student Number	Name	Course	Enlistment Method
mark as absent	2006-00001	Christian Ronquillo	BS Computer Science	online
mark as absent	2006-00004	Marcus Alianza	BS Computer Science	online
mark as absent	2006-00005	James Cecilio Tuano	BS Computer Science	online
remove	2006-00003	Erwin Presnedi	BS Computer Science	walk in

ABSENTEES				
	Student Number	Name	Course	Enlistment Method
mark as present	2006-00002	Aristotle Delos Santos	BS Computer Science	online
mark as present	2006-03394	Mark Anthony Pelaez Manalang	BS Computer Science	online

WALK IN STUDENTS	
submission	○ single ● multiple
Student Number	□ - □
Student Number	□ - □
Student Number	□ - □
Student Number	□ - □
Student Number	□ - □
add to attendees	

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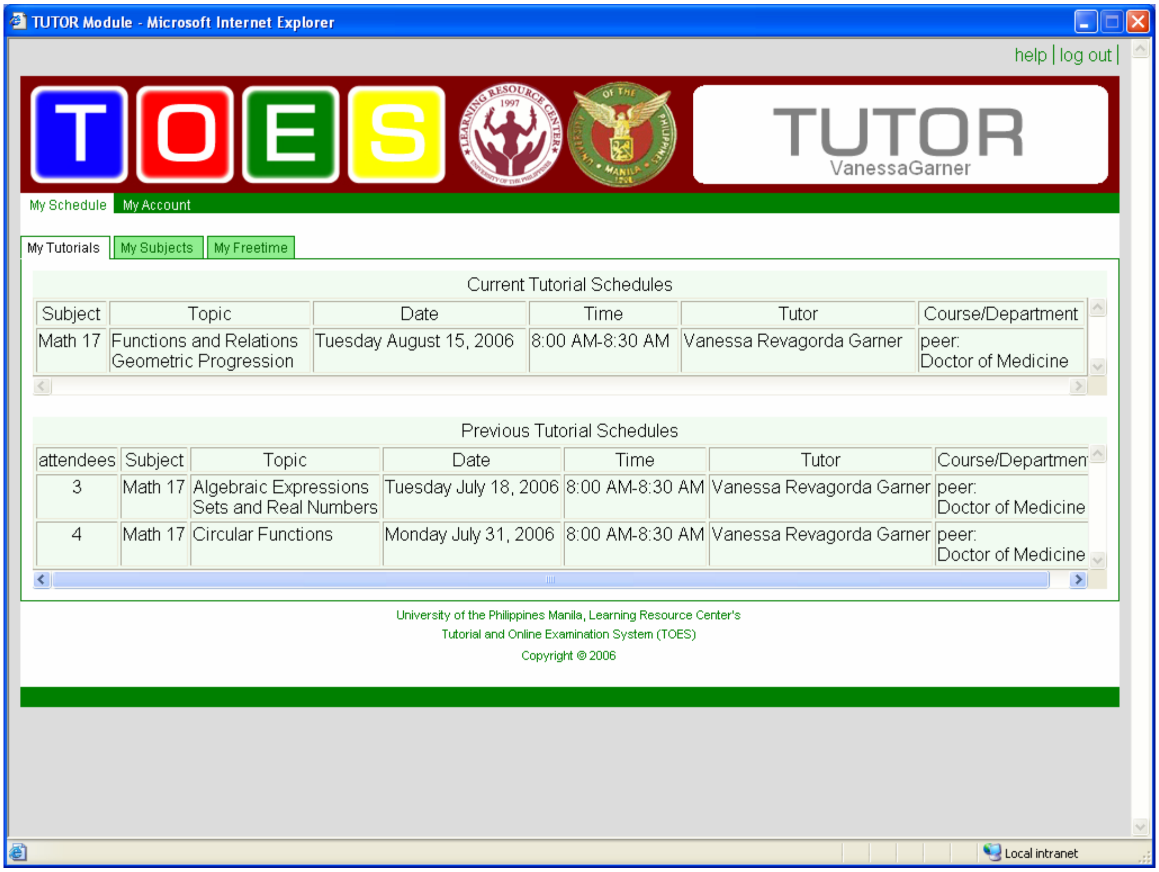
Figure 70.2: Staff – Tutorial Attendance, UPM LRC TOES

The "Previous Tutorial Schedules" table in Figure 71 lists all previously handled tutorials by a tutor. The same page also displays the tutor's "Current Tutorial Schedules." The tutor manages his/her tutorial subjects using the form in Figure 72. The form shown in Figure 73 allows the tutor to manage his/her available free time.



Current Tutorial Schedules

Subject	Topic	Date	Time	Tutor	Course/Department
Math 17	Functions and Relations Geometric Progression	Tuesday August 15, 2006	8:00 AM-8:30 AM	Vanessa Revagorda Garner	peer: Doctor of Medicine

Previous Tutorial Schedules

attendees	Subject	Topic	Date	Time	Tutor	Course/Departmen
3	Math 17	Algebraic Expressions Sets and Real Numbers	Tuesday July 18, 2006	8:00 AM-8:30 AM	Vanessa Revagorda Garner	peer: Doctor of Medicine
4	Math 17	Circular Functions	Monday July 31, 2006	8:00 AM-8:30 AM	Vanessa Revagorda Garner	peer: Doctor of Medicine

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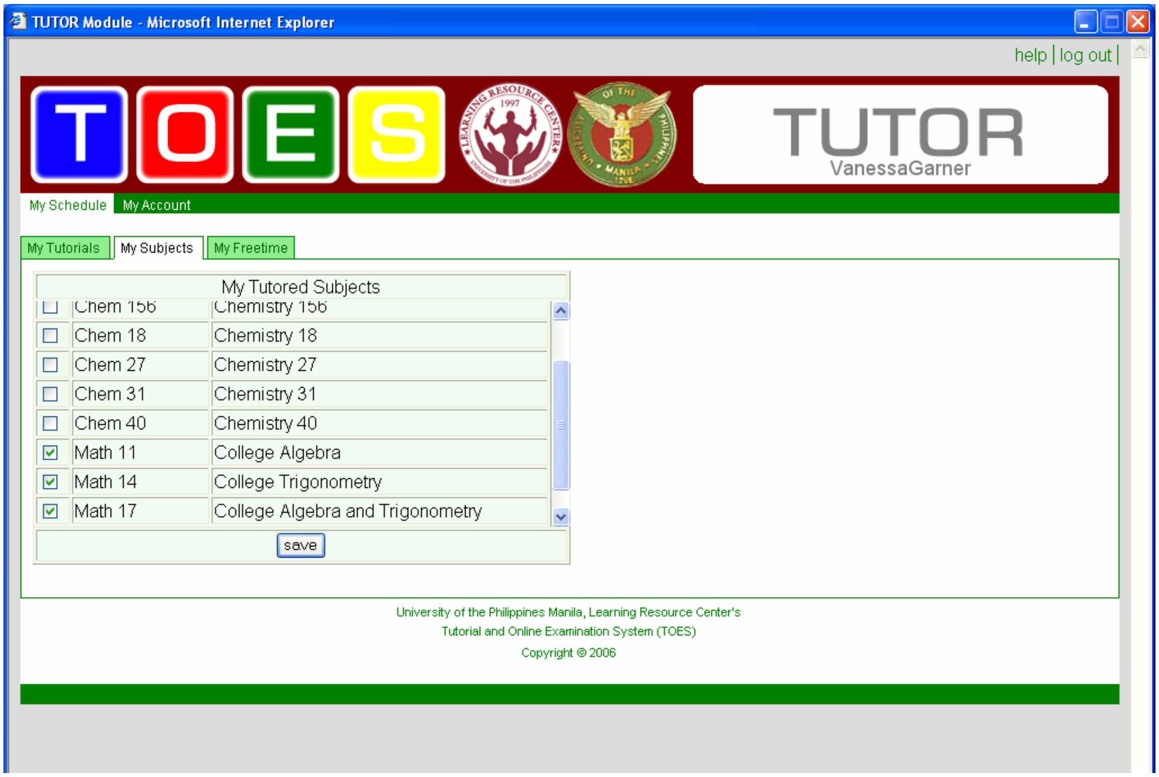
Figure 71: Tutor's Tutorials, UPM LRC TOES



My Tutored Subjects		
□	Chem 156	Chemistry 156
□	Chem 18	Chemistry 18
□	Chem 27	Chemistry 27
□	Chem 31	Chemistry 31
□	Chem 40	Chemistry 40
☑	Math 11	College Algebra
☑	Math 14	College Trigonometry
☑	Math 17	College Algebra and Trigonometry

University of the Philippines Manila, Learning Resource Center's
Tutorial and Online Examination System (TOES)
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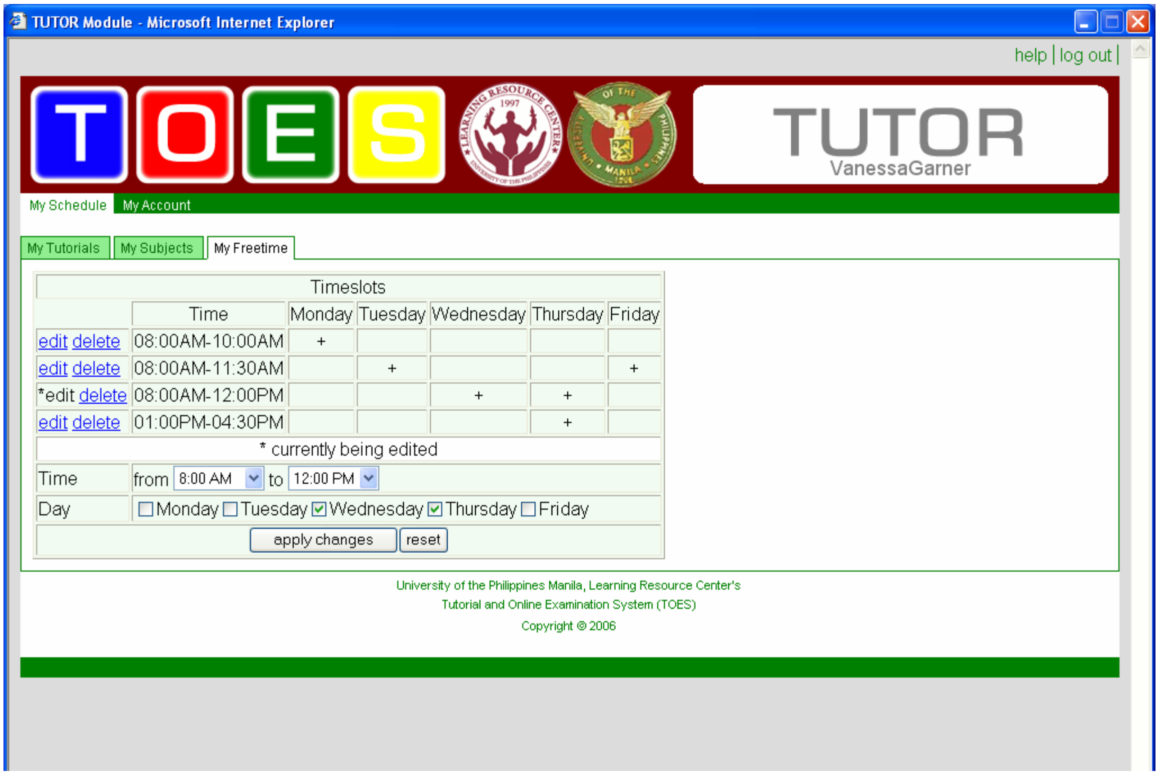
Figure 72: Tutor's Subjects, UPM LRC TOES



Timeslots

	Time	Monday	Tuesday	Wednesday	Thursday	Friday
edit delete	08:00AM-10:00AM	+				
edit delete	08:00AM-11:30AM		+			+
*edit delete	08:00AM-12:00PM			+	+	
edit delete	01:00PM-04:30PM				+	

* currently being edited

Time from 8:00 AM to 12:00 PM

Day □ Monday □ Tuesday ☑ Wednesday ☑ Thursday □ Friday

University of the Philippines Manila, Learning Resource Center's
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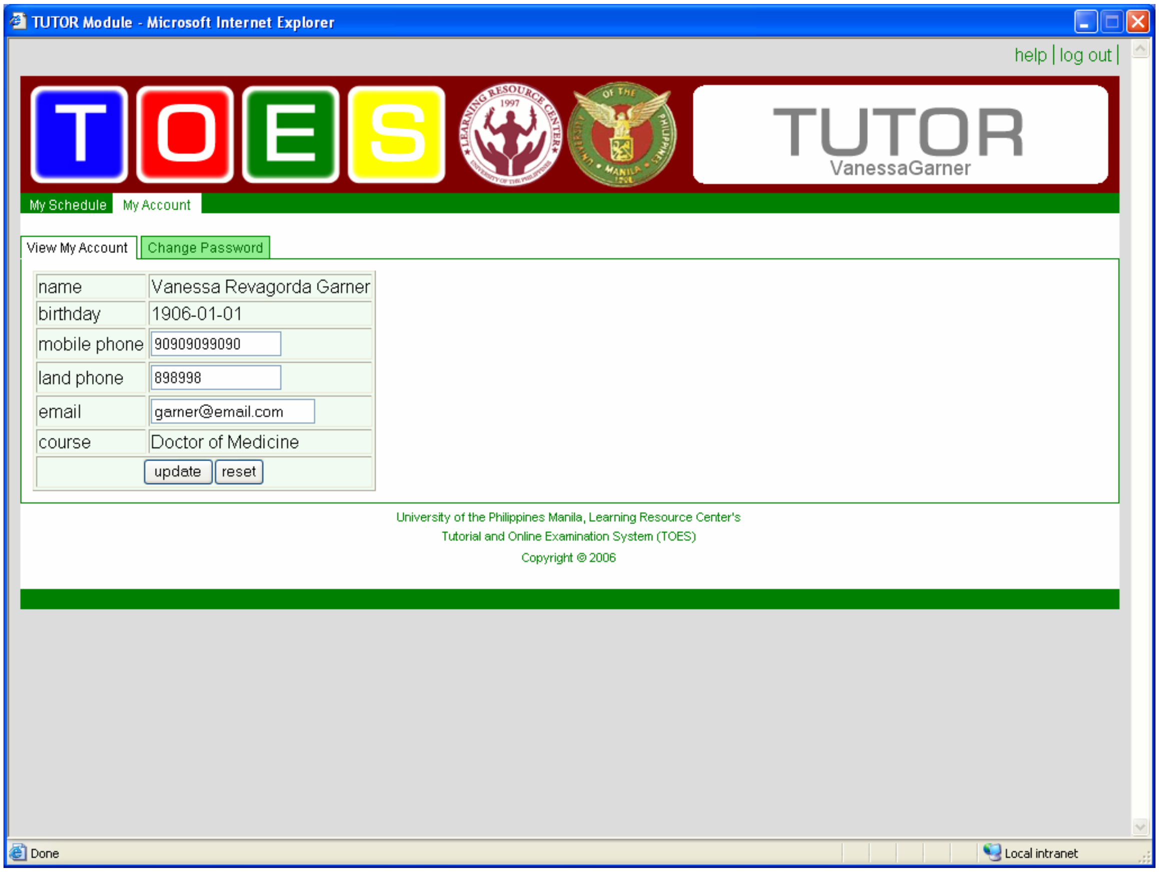
Figure 73: Tutor's Free Time, UPM LRC TOES

The 'User Account Management' page allows users to update their contact information and account information (see Figure 74).



name	Vanessa Revagorda Garner
birthday	1906-01-01
mobile phone	90909099090
land phone	898998
email	garner@email.com
course	Doctor of Medicine
	update reset

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Figure 74: User Account Management, UPM LRC TOES

VI. DISCUSSION

The UP Manila Learning Resource Center's Tutorial and Online Examination System (TOES) is a web-based 'Examination System' and a 'Tutorial Scheduling System.' The 'Examination System' allows the LRC to create questions for the exam data bank, generate comprehensive exams, administer exams online, and analyze exam results. The 'Tutorial Scheduling System' allows the LRC to post tutorial schedules and to create new schedules based on student requests.

TOES utilized the Microsoft Word software in question construction because it is the most popular word processor among the LRC personnel. All existing hard copies of mock exams are created using the software. [2] To standardize the format for each question type, TOES resorted to creating 'question templates' which are actually 'Microsoft Word Templates.' These templates contain 'Macro Buttons' which guide the staff in constructing the question. The 'Toes Question Editor Form' is also included in these templates. This form presents the necessary tools that the staff might need. One of these tools is the 'Microsoft Word Equation Editor' which is very helpful in assembling mathematical and chemical formulas. Also, the save function in the form saves the question into .doc and .htm files. To sum it all, Microsoft Word helps the users develop web contents for TOES without requiring them to study HTML. The inclusion of this software, however, presents some disadvantages. First, the software is expensive. Second, the addition of the external application adds to the complexity of question construction. Lastly, the additional requirement might discourage potential non LRC-based personnel like UP Manila faculties from contributing questions using their own personal computer.

The TOES Exam Data Bank consists of the Question Bank, Exam Bank, and the Statistics Bank. The Question Bank is a collection of true or false, multiple choice and matching type questions in Chemistry, Mathematics, and Physics. Exams in the Exam Bank are created randomly or manually. Random exam generation in TOES, unlike most examination systems, requires descriptive Exam Coverage Filters. The exam items are drawn from the Question Bank using these filters, thus, creating a comprehensive and balanced exam. The Statistics Bank stores the obtained statistical measurement values from 'exam analysis' and 'exam item analysis.' The Exam Data Bank not only offers a safer way of storage but it also provides a faster extraction of exam materials.

As a consequence of the ascent of the internet, more people get accustomed to the different available web technologies, particularly the use of the web browser. To take advantage of this trend, TOES was designed as a web-based system. All TOES user interface is therefore viewed using a web browser, thus eliminating the need for developing a dedicated program for displaying interface and minimizing if not totally removing additional installations on the client's computer. This means that TOES can easily run on computers with compatible browser requirements. The only exception to the web-based interface is the Microsoft Word interface for the staff.

With high speed data networks, TOES can promise fast delivery of online examinations. These examinations can be deployed to a large number of students and provide instant feedback. To provide security each exam batch schedule requires a proctor. The proctor authorizes examinees to access the exams. To deter collaboration between students, the exam items are randomly displayed in the TOES Examination Window (TEW). This window has built-in security features that enforce certain rules on students when taking the TOES exam. A student who violates any of these rules is automatically reported to the proctor. The system also offers improved reliability because machine marking is much more reliable than human marking. The Manual Exam on the other hand provides some advantages. The printing cost of questionnaires is cheaper compared to the cost of maintaining the TOES system. Also, Manual Exams are not affected by power failures. However, it is worth mentioning that in an ongoing TOES examinations any disconnections or power interruptions do not result into examiner data loss.

One of the most significant advantages in using TOES over the Manual Exam is the capability to provide instant examination results. Examinee scores and performance reports are immediately available right after the examination. These valuable information help tutors prepare detailed and relevant post-exam discussions. These reports also include the Exam Analysis and Exam Item Analysis results which are both stored in the Statistics Bank. These results provide powerful insights when revising exams and exam items. This is a tremendous achievement compared to the Manual Exam which takes more or less a week before releasing results. [1]

The online implementation enables students to register for an Exam Batch Schedule and to request or enlist in a tutorial schedule without going to school. Similarly, online posting of Exam Batch Schedules and Tutorial Schedules grants LRC the opportunity to reach a wider audience.

VII. CONCLUSION

The UP Manila Learning Resource Center's Tutorial and Online Examination System (TOES) is a web-based 'Examination System' and a 'Tutorial Scheduling System.' The system's architecture allows fast and simultaneous access for the following users: student, tutor, staff, admin, and director. TOES allows each user to manage their personal account. The following paragraphs discuss the other capacities given to each user.

TOES allows students to enlist in the existing Tutorial Schedules. However, if none of the available schedules favor the student, he/she may request for a tutorial schedule that suits him/her. The request consists of the subject, topic, tutor, the preferred day, and the preferred time. The student may also take mock examinations in Chemistry, Mathematics, and Physics. The latter however requires the student to register in an Exam Batch Schedule.

TOES allows tutors to manage their Tutorial Schedule by specifying their free time and their tutored subjects. The tutor may also view his/her 'Current Tutorial Schedules' and 'Previous Tutorial Schedules.'

The management of the Question Bank is assigned to the staff. The role involves maintaining the Subject, Topic, and Question records. The delicate work involved in question construction requires staffs to develop keen attention to detail. Moreover, staffs are also tasked to record the attendance of both enlisted and walk-in students in tutorials.

The admin is responsible for maintaining the Exam Bank. This responsibility encompasses the whole TOES examination process. First, he/she is responsible for the creation of exams. Second, he/she schedules exam batches. Lastly, he/she administers exams. The exam administration entails serving as a proctor for the exam and authorizing examinees who take the exam. The admin also sets tutorials based on availability or based on online requests. The administrative role also consists of managing student accounts, tutor accounts, and LRC personnel accounts.

The director account call for users with strong statistics background. The director can access the results of the Exam Analysis and the Exam Batch Analysis. These results are statistical data valuable in monitoring and evaluating the Learning Assistance Programs.

VIII. RECOMMENDATION

TOES as a tool for Licensure Reviews

One of the major requirements for attaining a professional title in a government regulated profession is the Licensure Examination. In order to become licensed, one has to pass the exam. To pass the exam, one has to review. One of the key aspects of reviewing is to practice test taking. Most students resort to Review Centers however the services offered by these centers are expensive. As an alternative, a University could, at the request of the students, develop its own so-called free review center. Colleges can take advantage of the TOES Exam Data Bank to provide a good amount of test problems and to develop more exams. It is important that the reviewer is given multiple attempts in taking the review. This means that the reviewer can get a different exam in each attemp. To accomplish this, a mechanism which generates random questions for the reviewer should be added to the TOES Examination System. This mechanism should also allow the reviewer to review previous exams using the TOES Exam Window (TEW). The question provider may include the explanation for the answer in each TOES question. This useful element is actually supported by TOES questions, however the system was not able to take full advantage of it because the LRC Examination does not allow examinees to review previous exams.

Support for other Question Types

Currently TOES supports true or false, multiple choice, and matching type questions. Including Essay, Ordering, Fill in the Blank and Multiple Answer question types could help question builders develop more creative and effective questions.

Dedicated web-based Question Editor and support for other Word Processors

The current TOES specification employs the Microsoft Office Word 2002 software to construct questions. The reason behind the strict accordance to the software version is that Microsoft VisualBasic Macro Scripts do not function well with other versions. The solution is to create individual TOES Question Templates for each Microsoft Office Word version. TOES was designed with interoperability in mind so that support for other Word Processors is possible. OpenOffice Writer, a word processor similar in look and feel to Microsoft Office Word and offers its own Macro Script support, is a worthy alternative. To counter the challenges presented by future versions of these Word Processors a dedicated web-based Question Editor should be made.

TOES as a tool for conducting Surveys

Surveys are indispensable tools for gathering sample of data or opinions considered to be representative of a whole. [19] Survey questionnaires could be easily deployed using TOES. The LRC or any UP Manila unit could benefit from it because it would allow them to gather required data quickly and securely.

Improved Student Account Registration and Activation

The registration and reactivation of student accounts for TOES is frustrating because it involves encoding over a thousand student information records. It would be best if the system could tap an existing UP Manila database and extract the required records. One of the prospective sources is the UP Manila Computerized Registration System (CRS).

IX. BIBLIOGRAPHY

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http://www.phpfreaks.com/javascript_manual/page/intro.htm#1009369

[19] Definition of Surveys URL: http://www.thefreedictionary.com/surveys

X. APPENDIX

A. SQL

toes.sql

```
# phpMyAdmin MySQL-Dump
# version 2.2.3
# http://phpwizard.net/phpMyAdmin/
# http://phpmyadmin.sourceforge.net/ (download page)
#
# Host: localhost
# Generation Time: Apr 02, 2007 at 09:25 AM
# Server version: 3.23.47
# PHP Version: 4.1.1
# Database : `toes`
# --------------------------------------------------------

#
# Table structure for table `answer`
#

CREATE TABLE answer (
  batch_id smallint(6) NOT NULL default '0',
  student_number varchar(10) NOT NULL default '',
  answerString text NOT NULL,
  randomItem text NOT NULL,
  lastViewedItem smallint(6) NOT NULL default '0',
  score smallint(6) NOT NULL default '0'
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `attendance`
#

CREATE TABLE attendance (
  student_number varchar(10) NOT NULL default '',
  tutorial_id smallint(6) NOT NULL default '0',
  status enum('present','absent') NOT NULL default 'present',
  enlistmentMethod enum('online','walk in') NOT NULL default 'online'
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `batch`
#

CREATE TABLE batch (
  batch_id smallint(6) NOT NULL default '0',
  exam_id smallint(6) NOT NULL default '0',
  date date NOT NULL default '0000-00-00',
  examTime tinytext NOT NULL,
  discussionTime tinytext NOT NULL,
  availableSlots int(3) NOT NULL default '0',
  accessibility enum('open','closed') NOT NULL default 'open',
  term enum('first','second','summer') NOT NULL default 'first',
  sy varchar(9) NOT NULL default '0000-0000',
  PRIMARY KEY  (batch_id),
  UNIQUE KEY batch_id (batch_id)
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `degree_programs`
#

CREATE TABLE degree_programs (
  degreeProgram_id smallint(6) NOT NULL auto_increment,
  college_id smallint(6) NOT NULL default '0',
  degreeProgramName tinytext NOT NULL,
  PRIMARY KEY  (degreeProgram_id)
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `enlistment`
#

CREATE TABLE enlistment (
  student_number varchar(10) NOT NULL default '0',
  tutorial_id smallint(6) NOT NULL default '0',
  priorityNumber smallint(3) NOT NULL default '0'
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `exam`
#

CREATE TABLE exam (
  exam_id smallint(6) NOT NULL default '0',
  subject_id smallint(6) NOT NULL default '0',
  description tinytext NOT NULL,
  author tinytext NOT NULL,
  allottedTime time NOT NULL default '00:00:00',
  dateCreated datetime NOT NULL default '0000-00-00 00:00:00',
  deptNum text NOT NULL,
  PRIMARY KEY  (exam_id),
  UNIQUE KEY exam_id (exam_id)
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `exam_item`
#

CREATE TABLE exam_item (
  exam_id smallint(6) NOT NULL default '0',
  question_id smallint(6) NOT NULL default '0',
  questionNum smallint(6) NOT NULL default '0',
  pointAssigned tinyint(4) NOT NULL default '1',
  itemStatistic mediumtext NOT NULL,
  segment tinyint(4) NOT NULL default '0'
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `file`
```

```
#

CREATE TABLE file (
  file_id smallint(6) NOT NULL auto_increment,
  question_id smallint(6) NOT NULL default '0',
  type tinytext NOT NULL,
  origFilename tinytext NOT NULL,
  src tinytext NOT NULL,
  PRIMARY KEY  (file_id)
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `lrc_personnel`
#

CREATE TABLE lrc_personnel (
  personnel_id smallint(4) NOT NULL default '0',
  personnelType enum('administration officer','lrc director','staff') NOT NULL default 'staff',
  firstName tinytext NOT NULL,
  middleName tinytext NOT NULL,
  lastName tinytext NOT NULL,
  username varchar(16) NOT NULL default '',
  password varchar(16) NOT NULL default '',
  PRIMARY KEY  (personnel_id)
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `performance`
#

CREATE TABLE performance (
  performance_id smallint(6) NOT NULL default '0',
  exam_id smallint(6) NOT NULL default '0',
  rawData mediumtext NOT NULL,
  summary mediumtext NOT NULL,
  PRIMARY KEY  (performance_id),
  UNIQUE KEY performance_id (performance_id)
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `question`
#

CREATE TABLE question (
  question_id smallint(6) NOT NULL default '0',
  topic_id smallint(6) NOT NULL default '0',
  questionType enum('matching type','multiple choice','true or false','essay','problem solving') NOT NULL default 'multiple choice',
  objects mediumtext NOT NULL,
  answer text NOT NULL,
  answerExp mediumtext NOT NULL,
  author tinytext NOT NULL,
  difficulty enum('very easy','easy','medium','hard','very hard') NOT NULL default 'very easy',
  PRIMARY KEY  (question_id)
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `registration`
#

CREATE TABLE registration (
  batch_id smallint(6) NOT NULL default '0',
  student_number varchar(10) NOT NULL default '',
  registrationDate datetime NOT NULL default '0000-00-00 00:00:00',
  remainingTime time NOT NULL default '00:00:00',
  registrationType enum('online','submitted') NOT NULL default 'online',
  status enum('waiting','answering','blocked','finished') NOT NULL default 'waiting',
  authorization enum('no','yes') NOT NULL default 'no',
  offense tinytext NOT NULL,
  previousTimeStamp datetime default NULL
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `request`
#

CREATE TABLE request (
  request_id smallint(6) NOT NULL default '0',
  student_number varchar(10) NOT NULL default '',
  subject smallint(6) NOT NULL default '0',
  topic text NOT NULL,
  preferredTutor smallint(6) NOT NULL default '0',
  preferredDay date NOT NULL default '0000-00-00',
  preferredTime tinytext NOT NULL,
  requestDate datetime NOT NULL default '0000-00-00 00:00:00'
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `statistics_exam`
#

CREATE TABLE statistics_exam (
  exam_id smallint(6) NOT NULL default '0',
  nIncItems float NOT NULL default '0',
  nOmitItems float NOT NULL default '0',
  nIncExaminees float NOT NULL default '0',
  nOmitExaminees float NOT NULL default '0',
  mean float NOT NULL default '0',
  variance float NOT NULL default '0',
  standardDeviation float NOT NULL default '0',
  skew float NOT NULL default '0',
  kurtosis float NOT NULL default '0',
  minimum float NOT NULL default '0',
  maximum float NOT NULL default '0',
  median float NOT NULL default '0',
  KR20 float NOT NULL default '0',
  KR21 float NOT NULL default '0',
  SB float NOT NULL default '0',
  generation enum('system','user') NOT NULL default 'system'
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `statistics_item`
#

CREATE TABLE statistics_item (
  exam_id smallint(6) NOT NULL default '0',
  question_id smallint(6) NOT NULL default '0',
  itemDifficulty float default NULL,
  DI float default NULL,
  PBC float default NULL,
  generation enum('system','user') NOT NULL default 'system'
) TYPE=MyISAM;
```

```
# --------------------------------------------------------

#
# Table structure for table `student`
#

CREATE TABLE student (
  student_number varchar(10) NOT NULL default '',
  firstName tinytext NOT NULL,
  middleName tinytext NOT NULL,
  lastName tinytext NOT NULL,
  course tinytext NOT NULL,
  college tinytext NOT NULL,
  mobilePhone varchar(15) NOT NULL default '',
  landPhone varchar(15) NOT NULL default '',
  email tinytext NOT NULL,
  password varchar(16) NOT NULL default '',
  status enum('inactive','suspended','active') NOT NULL default 'inactive',
  PRIMARY KEY  (student_number)
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `subject`
#

CREATE TABLE subject (
  subject_id smallint(6) NOT NULL auto_increment,
  subjectName tinytext NOT NULL,
  subjDescription text NOT NULL,
  PRIMARY KEY  (subject_id)
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `topic`
#

CREATE TABLE topic (
  topic_id smallint(6) NOT NULL auto_increment,
  subject_id smallint(6) NOT NULL default '0',
  topicName tinytext NOT NULL,
  deptNum text NOT NULL,
  PRIMARY KEY  (topic_id)
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `tutor`
#

CREATE TABLE tutor (
  tutor_id int(11) NOT NULL default '0',
  firstName tinytext NOT NULL,
  middleName tinytext NOT NULL,
  lastName tinytext NOT NULL,
  birthday date NOT NULL default '0000-00-00',
  username varchar(16) NOT NULL default '',
  password varchar(16) NOT NULL default '',
  mobilePhone varchar(15) NOT NULL default '',
  landPhone varchar(15) NOT NULL default '',
  email tinytext NOT NULL,
  tutorType enum('f','p') NOT NULL default 'p',
  deptCourse smallint(6) NOT NULL default '0',
  tutoredSubject tinytext NOT NULL,
  PRIMARY KEY  (tutor_id)
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `tutor_schedule`
#

CREATE TABLE tutor_schedule (
  tutorSchedule_id smallint(6) NOT NULL default '0',
  tutor_id smallint(6) NOT NULL default '0',
  prefDay tinytext NOT NULL,
  prefTime tinytext NOT NULL,
  PRIMARY KEY  (tutorSchedule_id)
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `tutorial`
#

CREATE TABLE tutorial (
  tutorial_id smallint(6) NOT NULL default '0',
  tutor_id smallint(6) NOT NULL default '0',
  subject smallint(6) NOT NULL default '0',
  topic text NOT NULL,
  time tinytext NOT NULL,
  date date NOT NULL default '0000-00-00',
  PRIMARY KEY  (tutorial_id)
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `upm_colleges`
#

CREATE TABLE upm_colleges (
  college_id smallint(6) NOT NULL auto_increment,
  collegeName tinytext NOT NULL,
  PRIMARY KEY  (college_id)
) TYPE=MyISAM;
# --------------------------------------------------------

#
# Table structure for table `upm_departments`
#

CREATE TABLE upm_departments (
  department_id smallint(6) NOT NULL auto_increment,
  departmentName tinytext NOT NULL,
  PRIMARY KEY  (department_id)
) TYPE=MyISAM;
```

B. FRONT CONTROLLERS

index.js

```
var animateUsingToesColorsIndex = 0;
var animateUsingToesColorsInterval = 0;
var animateUsingToesColorsElement = "";
function animateUsingToesColors(elementId){
  if(animateUsingToesColorsElement == ""){
    animateUsingToesColorsElement = elementId
  }
  var secs = 0;
  var color = "white";
  if(animateUsingToesColorsInterval){
    clearInterval(animateUsingToesColorsInterval);
  }
  animateUsingToesColorsIndex++;
  animateUsingToesColorsIndex = animateUsingToesColorsIndex % 9;
  switch(animateUsingToesColorsIndex){
    case 1:
      color = "blue";
      secs = 1000;
      break;
    case 2:
      color = "red";
      secs = 1000;
      break;
    case 3:
      color = "green";
      secs = 1000;
      break;
    case 4:
      color = "yellow";
      secs = 1000;
      break;
    case 5:
      color = "blue";
      secs = 500;
      break;
    case 6:
      color = "red";
      secs = 500;
      break;
    case 7:
      color = "green";
      secs = 500;
      break;
    case 8:
      color = "yellow";
      secs = 500;
      break;
    default:
      color = "white";
      secs = 1;
      break;
  }
  document.getElementById(animateUsingToesColorsElement).style.color = color;
  animateUsingToesColorsInterval = setInterval(animateUsingToesColors, secs);
}
function window_Onload(){
  //avoid being framed...
  if( top != self){
    top. location = location
  }
  animateUsingToesColors("toesExpandedName");
}
function changeSrc(user, m){
  var picLocation = '/toes/files/pics/';
  if(m == "over"){
    eval("document." + user + ".src = '" + picLocation + user + "_o_50.gif';");
    switch(user){
      case 'student':
        document.body.style.backgroundColor = "#0000FF";
        break;
      case 'tutor':
        document.body.style.backgroundColor = "#FF0000";
        break;
      case 'staff':
        document.body.style.backgroundColor = "#008000";
        break;
      case 'admin':
        document.body.style.backgroundColor = "#FFFF00";
        break;
      case 'director':
        document.body.style.backgroundColor = "#000000";
        break;
      default:
        break;
    }
  }
  else{
    eval("document." + user + ".src = '" + picLocation + user + "_50.gif';");
    document.body.style.backgroundColor = "#800000";
  }

}
```

index.php

```
<?php
require_once('./toes.inc.php');
echo "<html>";
echo "<head>";
echo "<title>TOES Home Page</title>";
echo "<SCRIPT LANGUAGE='JavaScript' SRC='index.js'></SCRIPT>";
printNoscript();
print("<link rel='stylesheet' type='text/css' href='index.css'/>");
echo "</head>";
echo "<body bgcolor='#800000' onLoad='window_Onload()'>";
//echo "<marquee>TUTORIAL AND EXAMINATION SYSTEM <img src='/toes/files/pics/toes.gif'/></marquee>";
echo "<table width='100%' height='100%' border='0' cellpadding='0' cellspacing='0' align='center'>";
echo "<tr>";
echo "<td valign='middle' align='center'>";

echo "<table align='center' border='3' bgcolor='#800000' bordercolor='#FFFFFF' style='border-style:double;' cellpadding='0' cellspacing='0'>";
//echo "<table align='center' border='3' bordercolor='#FFFFFF' style='border-style:double;' cellpadding='0' cellspacing='0'>";
echo "<tr><td colspan='3' align='center' style='border:0;' bgcolor='#FFFFFF'><span id='toesExpandedName' style='font-size:32px;'>&nbsp;TUTORIAL
and ONLINE EXAMINATION SYSTEM&nbsp;</span></td></tr>";
echo "<tr><td colspan='3' id='leaveBottomBorder' align='center' bgcolor='#800000'><img src='/toes/files/pics/toes.gif'/></td></tr>";
//echo "<tr><td colspan='3' align='center' valign='center' style='background-color:transparent;border:0;'>&nbsp;</td></tr>";
echo "<tr><td rowspan='5' align='center' valign='center' style='border:0;'><img src='/toes/files/pics/main_page_upm_logo.gif'/></td>";
$userTypeArray = array('student', 'tutor', 'staff', 'admin', 'director');
//foreach($userTypeArray AS $userTypeArrayElem){
for($i = 0;$i < count($userTypeArray);$i++){
  $userTypeArrayElem = $userTypeArray[$i];
  if($i != 0){
    echo "<tr>";
  }
  echo       "<td       align='center'       style='border:0;'><a       href='/toes/$userTypeArrayElem/$userTypeArrayElem.php?firstVisit=true'
onmouseover='changeSrc(\"$userTypeArrayElem\",         \"over\")'         onmouseout='changeSrc(\"$userTypeArrayElem\",         \"out\")'><img
name='$userTypeArrayElem' src='/toes/files/pics/$userTypeArrayElem"."_50.gif'/></a></td>";

  if($i == 0){
    echo "<td rowspan='5' align='center' valign='center' style='border:0;'><img src='/toes/files/pics/main_page_lrc_logo.gif'/></td></tr>";
  }

  echo "</tr>";
}
//echo "<tr><td colspan='3' align='center' valign='center' style='background-color:transparent;border:0;'>&nbsp;</td></tr>";
//echo "<tr><td colspan='3' align='center' valign='center' bgcolor='#800000' style='border:0;'>&nbsp;</td></tr>";
echo "</table>";
echo "</td>";
echo "</tr></table>";
echo "</body>";
echo "</html>";


?>
```

toes.inc.php

```
<?php


//////////////////////////////////////////////////////////////////////////
/*
if (! isset($HTTP_COOKIE_VARS["PHPSESSID"]) && ! isset($_GET["PHPSESSID"])){
  session_start();
  $sess_id = substr(SID,(strrpos(SID,"=")+1));
  if($GLOBALS["QUERY_STRING"] == ""){
    $redirect_url = $GLOBALS["userScript"]."?PHPSESSID=" . $sess_id;
  }
  else{
    $redirect_url = $GLOBALS["userScript"].$GLOBALS["REQUEST_URI"]."&PHPSESSID=" . $sess_id;
  }
  // initialize cookies...
  $ck_c = 0;
  $ck_j = 0;
  setcookie("PHPSESSID", $sess_id);
  setcookie("ck_c", $ck_c);
  setcookie("ck_j", $ck_j);
  header("Location: " . $redirect_url);
  exit;
}
elseif (! isset($HTTP_COOKIE_VARS["PHPSESSID"]) && isset($_GET["PHPSESSID"])){
  //cookies are disabled
  printNoscript(1);
  exit;
}
else{
  //cookies are enabled
  //check if javascript is enabled...
  $ck_c = $HTTP_COOKIE_VARS["ck_c"];
  $ck_j = $HTTP_COOKIE_VARS["ck_j"];

  if(($ck_c == $ck_j)&&($ck_j != "0")){
    printNoscript(1);
    exit;
  }
  else{
    $ck_c = $ck_j;
    setcookie("ck_c", $ck_c);
    setcookie("ck_j", $ck_j);
  }
}
*/
  //check for browser cookie support...
/*
  if (! isset($_COOKIE["PHPSESSID"]) && ! isset($_GET["PHPSESSID"])) {
    $sess_id = substr(SID,(strrpos(SID,"=")+1));
    $_COOKIE["PHPSESSID"] = $sess_id;
    $redirect_url = 'http://' . $_SERVER["HTTP_HOST"] . $_SERVER["PHP_SELF"] . "?PHPSESSID=" . $sess_id;
    header("Location: $redirect_url");
    exit;
  }
  else if (! isset($_COOKIE["PHPSESSID"]) && isset($_GET["PHPSESSID"])) {
    //cookies are disabled
    $sess_id = substr(SID,(strrpos(SID,"=")+1));
    $_SESSION["PHPSESSID"] = $sess_id;
    $_COOKIE["PHPSESSID"] = $sess_id;
    javascript_cookie_error(1);
    exit;
  }
*/
//////////////////////////////////////////////////////////////////////////
//handle browser javascript and cookie issues...
function printNoscript($displayMode = 0){
  if($displayMode == 1){
    echo "<html><head></head><body>";
  }
  if($displayMode == 0){
    echo "<NOSCRIPT>";
  }
  echo "<div id='printNoscriptDiv' style='background-color:black;position:float;width:100%;height:100%;text-align:center;'>";
  //echo     "<div     id='printNoscriptDiv'     style='background-color:black;position:absolute;top:0pt;left:0pt;width:100%;height:100%;text-
align:center;'>";
  echo "<table width='100%' height='100%'>";
  echo "<tr>";
  echo "<td td valign='middle' align='center'>";
  echo "<img src='/toes/files/pics/cookiesJavascriptError.jpg'/>";
  echo "<br><br>";
  echo "<a href='$GLOBALS[PHP_SELF]'><font style='color:white;font-size:110%;'>click here reload this page</font></a>";
  echo "</td>";
  echo "</tr>";
  echo "</table>";
  echo "</div>";
  if($displayMode == 0){
    echo "</NOSCRIPT>";
  }
  if($displayMode == 1){
    echo "</body></html>";
  }
}
//////////////////////////////////////////////////////////////////////////
//variables used for formatting...
$tabS = "&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;"; //used by majority of modules...
//////////////////////////////////////////////////////////////////////////
//vars for 'TUTORIAL SYSTEM'
$maxTutorialEnlistees = 3; //this var is shared by STUDENT, STAFF, ADMIN...
//////////////////////////////////////////////////////////////////////////
//vars for 'EXAMINATION SYSTEM'
$rebsWaitingPeriod = 10; //waiting time for REBS (REGISTERED EXAM BATCH SCHEDULE)
//////////////////////////////////////////////////////////////////////////
```

```
//vars for the optWindow (priority table)
$numOfHappyPics = 23;
$numOfSadPics = 23;
?>
```

C. ADMIN

admin.php

```
<?php
session_start();
require_once('../toes.inc.php');
require_once('admin_Fcns.php');
if($firstVisit == "true"){
  $errorMessage = "";
}
$username;
$password;
if($Logout == '1'){
  session_unregister("username");
  session_unregister("password");
  session_unregister("hasLoggedIn");
  session_unregister("errorMessage");
  session_unregister("userScript");
  session_unset();
  session_destroy();
  $Logout = 0;
  $hasLoggedIn = 0;
  $errorMessage = "";
  $returnToHomepage = true;
}
if(($Login)&&($Logout != '1')){
  authorized_User();
  session_register("hasLoggedIn");
  header("Location: " . 'http://' . $_SERVER["HTTP_HOST"] . $_SERVER["PHP_SELF"]);
}
if(($_SESSION["hasLoggedIn"] == '1')&&($_SESSION["userScript"] == 'admin.php')){
  if($activeNav == ""){
    $activeNav = "Tutorial";
  }
  print_Top_Nav();
  print_Banner();
  print_Nav();
  print_Tab();
  print_Body();
  print_Footer();

}
else{
  if($hasLoggedIn == '2'){
    //echo "$errorMessage";
    //echo "<br>";
  }
  display_Login_Form();
}
//////////////////////////////////////////////////////////
function print_Top_Nav(){
  global $activeNav;
  global $activeTab;
  global $returnToHomepage;

  //add the 'administer exam' tab
  global $batchScheduleIdToAdministerH;
  if((isset($batchScheduleIdToAdministerH))&&($batchScheduleIdToAdministerH != "")){
    $activeTab = "Administer Exam";
  }

  print("<html>");
  print("<head>");
  print("<title>ADMIN Module</title>");
  echo "<SCRIPT LANGUAGE='JavaScript' SRC='admin_JavaScript.js'></SCRIPT>";
  printNoscript();
  print("<link rel='stylesheet' type='text/css' href='admin_Style.css'/>");
  print("</head>");
  print("<body onLoad=\"window_Onload('$activeNav', '$activeTab')\" onUnload=\"window_OnUnload()\">");
  print("<div>");
  print("<ul class='topnav'>");
  print("<li><a href='/custhelp.php?statpos=topnav'>Help</a></li>");
  print("<li class='lastli'><a href='?Logout=1'>Log Out</a></li>");
  print("</ul>");
  print("</div>");
  print("<br>");
}
//////////////////////////////////////////////////////////
function print_Banner(){
  global $username;
  echo "<div class='banner'>";
  echo "<table>";
  echo "<tr><td height='100px' width='382px' background='/toes/files/pics/toes_logo.jpg'></td>";
  echo "<td height='100px' width='200px' background='/toes/files/pics/main-page_logos_upm_lrc.gif'></td>";
  echo   "<td   height='100px'   width='382px'   background='/toes/files/pics/admin.gif'   align='center'   valign='bottom'   style='padding-
bottom:10px;'><font style='vertical-align:text-bottom;' size='4px' color='#808080'>$username</font></td>";
  echo "</tr></table>";
  echo "</div>";
}
//////////////////////////////////////////////////////////
function print_Nav(){
  global $activeNav;
  global $activeTab;
  print("<div id='nav'><div><ul>");
  if($activeNav == 'Tutorial')
    print("<li class='navselected'>");
  else
    print("<li>");
  print("<a href='?activeNav=Tutorial&activeTab='>Tutorial</a></li>");
  if($activeNav == 'Exam')
    print("<li class='navselected'>");
  else
    print("<li>");
  print("<a href='?activeNav=Exam&activeTab='>Exam</a></li>");
  if($activeNav == 'User Accounts')
    print("<li class='navselected'>");
  else
    print("<li>");
  print("<a href='?activeNav=User Accounts&activeTab='>User Accounts</a></li>");
  if($activeNav == 'My Account')
    print("<li class='navselected'>");
  else
    print("<li class='lastli'>");
  print("<a href='?activeNav=My Account&activeTab='>My Account</a></li>");
  print("&nbsp");
  print("</ul>");
  print("</div></div>");
  //print("<br>");
  echo "<div style='background-color:FFFFFF;font-size:75%;'>&nbsp;</div>";
  //print("<table width='100%' bgcolor='white' border='1'><tr><td>&nbsp</td></tr></table>");
}
//////////////////////////////////////////////////////////
function print_Tab(){
  global $activeNav;
  global $activeTab;

  //jump to 'Edit exam' if user selected manual creation of exam
  global $action;
  global $mode;
  global $deptCurrent;
  global $examDeptCurrent;
  if(($action == 'create exam')&&($mode == 'manual')&&($deptCurrent != '')){
    $activeTab = 'Edit Exam';
    $examDeptCurrent = $deptCurrent;
  }
  //add the 'administer exam' tab
  global $batchScheduleIdToAdministerH;
  if((isset($batchScheduleIdToAdministerH))&&($batchScheduleIdToAdministerH != "")){
    $activeTab = "Administer Exam";
  }
  //display active tab elements...
  print("<div id='content'>");
  print("<ul class='tabs'>");
  //include 'Tutorial Schedule Enlistment' tab when tutorialIdToManageH != ""
  global $tutorialIdToManageH;
  if($tutorialIdToManageH != ""){
    $activeTab = 'Tutorial Schedule Enlistment';
  }

  switch($activeNav){
    case 'Tutorial':
      if($activeTab == ''){
        $activeTab = 'Tutorial Schedule';
      }
      if($activeTab == 'Tutorial Schedule')
        print("<li class='tabselected'>Tutorial Schedule</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Tutorial Schedule'>Tutorial Schedule</a></li>");
      if($activeTab == 'Tutorial Schedule Enlistment'){
        print("<li class='tabselected'>Tutorial Schedule Enlistment</li>");
      }
      if($activeTab == 'Tutorial Request')
        print("<li class='tabselected'>Tutorial Request</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Tutorial Request'>Tutorial Request</a></li>");
      if($activeTab == 'Peer Schedule')
        print("<li class='tabselected'>Peer Schedule</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Peer Schedule'>Peer Schedule</a></li>");
      if($activeTab == 'Faculty Schedule')
        print("<li class='tabselected'>Faculty Schedule</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Faculty Schedule'>Faculty Schedule</a></li>");
      break;
    case 'Exam':
      if($activeTab == ''){
        $activeTab = 'Create Exam';
      }
      if($activeTab == 'Create Exam')
        print("<li class='tabselected'>Create Exam</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Create Exam'>Create Exam</a></li>");
      if($activeTab == 'Edit Exam')
        print("<li class='tabselected'>Edit Exam</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Search Exam&redirectedFromEdit=yes'>Edit Exam</a></li>");
      if($activeTab == 'Search Exam')
        print("<li class='tabselected'>Search Exam</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Search Exam&examDescriptionMatchingFirstClick=yes'>Search Exam</a></li>");
      if($activeTab == 'Exam Schedule')
        print("<li class='tabselected'>Exam Schedule</li>");
      else
        //print("<li><a href='?activeNav=$activeNav&activeTab=Search Exam&redirectedFromExamSchedule=yes'>Exam Schedule</a></li>");
        print("<li><a href='?activeNav=$activeNav&activeTab=Exam Schedule'>Exam Schedule</a></li>");
      if($activeTab == 'Administer Exam')
        print("<li class='tabselected'>Administer Exam</li>");
      break;
    case 'User Accounts':
      if($activeTab == ''){
        $activeTab = 'Student Account';
      }
      if($activeTab == 'Student Account')
        print("<li class='tabselected'>Student Account</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Student Account'>Student Account</a></li>");
      if($activeTab == 'Add Student List')
        print("<li class='tabselected'>Add Student List</li>");
      if($activeTab == 'Tutor Account')
        print("<li class='tabselected'>Tutor Account</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Tutor Account'>Tutor Account</a></li>");
      if($activeTab == 'LRC Account')
        print("<li class='tabselected'>LRC Account</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=LRC Account'>LRC Account</a></li>");
      break;
    case 'My Account':
      if($activeTab == ''){
        $activeTab = 'Change Password';
      }
      if($activeTab == 'Change Password')
        print("<li class='tabselected'>Change Password</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Change Password'>Change Password</a></li>");
      break;
    default:
      break;
  }
  print("</ul>");

}
//////////////////////////////////////////////////////////
function print_Body(){
  print("<div class='content'>");
  print("<div class='inside'>");
  //print("<div class='insidebody'>");

  print_Function();

  //print("</div>");
  print("</div>");
  print("</div>");
}
//////////////////////////////////////////////////////////
```

```
function print_Function(){
  global $activeNav;
  global $activeTab;
  global $examEditFromBrowse;
  global $action;
  global $examCurrent;
  global $questionIdToDelete;
  global $removeExamItem;
  global $usingStatisticsFrequencySubmit;
  global $examCoverageFormSubmit;
  global $examToSaveAsFromBrowse;

  switch($activeNav){
    case 'Tutorial':
      switch($activeTab){
        case 'Tutorial Schedule':
          manage_Tutorial_Schedule();
          break;
        case 'Tutorial Schedule Enlistment':
          manage_Tutorial_Schedule_Enlistment();
          break;
        case 'Tutorial Request':
          manage_Tutorial_Request();
          break;
        case 'Peer Schedule':
          display_Tutor_Schedule();
          break;
        case 'Faculty Schedule':
          display_Tutor_Schedule();
          break;
        default:
          print("Please select from the tabbed-menu!");
          break;
      }
      break;
    case 'Exam':
      switch($activeTab){
        case 'Create Exam':
          generate_Exam();
          break;
        case 'Edit Exam':
          if($action == 'generate exam'){
            add_Generated_Exam();
            //echo "[A]";
            $action = '';
          }
          if($usingStatisticsFrequencySubmit == 'generate exam'){
            add_Generated_Exam_Statistics();
            //echo "[A.1]";
            $usingStatisticsFrequencySubmit = '';
          }
          if($examCoverageFormSubmit == "generate exam"){
            add_Generated_Exam_Automated();
            $examCoverageFormSubmit = "";
          }
          if(($questionIdToDelete != '')&&($removeExamItem == ' X ')){
            $examEditFromBrowse = $examCurrent;
            //echo "[C]";
          }
          if($examToSaveAsFromBrowse != ''){
            connect_Db();
            //copy the properties of the original...
            $examEditFromBrowse = get_Next_Id('exam_id','exam');
            $examDateCreated = date("Y-m-d H:i:s", time());
            $query = "SELECT * FROM exam WHERE exam_id='$examToSaveAsFromBrowse' ";
            $result = mysql_query($query);
            $myrow = mysql_fetch_row($result);
            $query = "INSERT INTO exam VALUES ('$examEditFromBrowse', '$myrow[1]', '$myrow[2]', '$myrow[3]', '$myrow[4]', '$examDateCreated',
'$myrow[6]') ";
            $result = mysql_query($query);
            //copy the exam items of the original...
            $query = "SELECT * FROM exam_item WHERE exam_id='$examToSaveAsFromBrowse' ";
            $result = mysql_query($query);
            while($myrow = mysql_fetch_row($result)){
              $queryA = "INSERT INTO exam_item VALUES ('$examEditFromBrowse', '$myrow[1]', '$myrow[2]', '$myrow[3]', '$myrow[4]', '$myrow[5]')
";

              $resultA = mysql_query($queryA);
            }
            $examToSaveAsFromBrowse = "";
          }
          if((isset($examEditFromBrowse))&&($examEditFromBrowse != '')){
            //echo "[B]";
            get_Exam_Info();
            $examEditFromBrowse = '';
          }
          edit_Exam();
          break;
        case 'Search Exam':
          exam_Query();
          break;
        case 'Exam Schedule':
          manage_Exam_Schedule();
          break;
        case 'Administer Exam':
          administer_Exam();
          break;
        default:
          print("Please select from the tabbed-menu!");
          break;
      }
      break;
    case 'User Accounts':
      switch($activeTab){
        case 'Student Account':
          manage_Student_Accounts();
          break;
        case 'Add Student List':
          add_Student_List();
          break;
        case 'Tutor Account':
          manage_Tutor_Accounts();
          break;
        case 'LRC Account':
          manage_LRC_Accounts();
          break;
        default:
          print("Please select from the tabbed-menu!");
          break;
      }
      break;
    case 'My Account':
      switch($activeTab){
        case 'Change Password':
          manage_Password();
          break;
        default:
          print("Please select from the tabbed-menu!");
          break;
      }
      break;
    default:
      print("Please select from the menu!");
      break;
  }
}
//////////////////////////////////////////////////////////
function print_Footer(){
  print("<div>");
  print("<div id='footer' >");
  print(" <div>University of the Philippines Manila, Learning Resource Center's</div>");
  print(" <div>Tutorial and Online Examination System (TOES)</div>");
  print(" <div>Copyright © 2006</div>");
  print("</div>");
  print("<div style='width:780px'>&nbsp;</div>");
  print("</div>");
  print("</div>");
  echo "<div style='background-color:#008000'>&nbsp;</div>";
  print("</body>");
  print("</html>");
}
//////////////////////////////////////////////////////////
function toHtml($htmlLine){
  return (str_replace("\"","\\\"",$htmlLine));
}
//////////////////////////////////////////////////////////
function authorized_User(){
  global $username;
  global $password;
  global $errorMessage;
  global $hasLoggedIn;
  global $userScript;

  connect_Db();
  $query = "SELECT * FROM lrc_personnel where username='$username' and password='$password' and personnelType='administration officer' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_array($result);

  if(($username != NULL)&&($password != NULL)&&($myrow[username] == $username)&&($myrow[password] == $password)){
    $hasLoggedIn=1;
    session_register("hasLoggedIn");
    session_register("username");
    session_register("password");
    $userScript= 'admin.php';
    session_register("userScript");
  }
  else{
    if(($username == NULL)||($password == NULL)){
      $errorMessage = "error: Please enter your username and password!";
    }
    else{
      $errorMessage = "error: Invalid username or password!";
    }
    session_register("errorMessage");
    $hasLoggedIn=2;
    session_register("hasLoggedIn");
  }
}
//////////////////////////////////////////////////////////
function display_Login_Form(){
  global $username;
  global $password;
  global $hasLoggedIn;
  global $Logout;
  global $errorMessage;
  global $returnToHomepage;

  echo "<html style='background-image:url(\"/toes/files/pics/toes_logo_userLogin.jpg\");'>";
  echo "<head>";
  echo "<title>ADMIN Login Page</title>";
  echo "<SCRIPT LANGUAGE='JavaScript' SRC='admin_JavaScript.js'></SCRIPT>";
  printNoscript();
  echo "</head>";
  if($returnToHomepage){
    echo "<body onLoad='window.location=\"/toes/\"'>";
  }
  else{
    echo "<body onLoad='animateUsingToesColors(\"toesHomeLink\")'>";
  }
  echo "<table width='100%' height='100%' border='0' cellpadding='0' cellspacing='0'>";
  echo "<tr><td valign='middle' align='center'>";
  echo "<table align='center' border='0' cellpadding='0' cellspacing='0'>";
  echo "<tr><td align='right'  bgcolor='#FFFF00'><b><a id='toesHomeLink' href='/toes/' style='color:white;text-decoration:none;'>back to TOES
home page</a></b></td></tr>";
  echo "<tr><td><a href='/toes/index.php' title='home'><img src='/toes/files/pics/toes.gif' style='border: 0 none;'/></a></td></tr>";
  echo "<tr><td  bgcolor='#FFFF00'><img src='/toes/files/pics/admin_o.gif'/></td></tr>";
  echo "<tr><td  bgcolor='#FFFF00'>&nbsp;</td></tr>";
  echo "<tr><td align='center'  bgcolor='#FFFF00'>";
  //echo "[username=$username][password=$password][hasLoggedIn=$hasLoggedIn][Logout=$Logout][userScript=$userScript]";
  print("<table bgcolor='#c0c0c0'>");
  print("<form name='loginForm' method='post' action='$PHP_SELF' onSubmit='return loginFormCheck(this)'>");
  if($errorMessage != ""){
    echo "<tr><td colspan='2'>$errorMessage</td></tr>";
  }
  print("<tr><td>Username:</td><td><input type='text' name='username'></td></tr>");
  print("<tr><td>Password:</td><td><input type='password' name='password'></td></tr>");
  print("<tr><td colspan='2' align='center'><input type='submit' name='Login' value='Login'></td></tr>");
  print("</form>");
  print("</table>");
  echo "</td></tr>";
  echo "<tr><td  bgcolor='#FFFF00'>&nbsp;</td></tr>";
  echo "</td></tr></table>";
  echo "</body>";
  echo "</html>";
}
//////////////////////////////////////////////////////////
function refresh_Page($location){
  header("Location: $location");
}
//////////////////////////////////////////////////////////
function connect_Db() {
    //$dbuser = '';
    //$dbpword = '';
    //$dbhost = 'localhost';
    //$dbname = 'eav';
    //$db_connection = mysql_connect ($dbhost, $dbuser, $dbpword);
  //mysql_select_db ($dbname);
  $db = mysql_connect("localhost", "") or die(err_msg());
  mysql_select_db("toes",$db);
}
//////////////////////////////////////////////////////////
function err_msg(){
  echo "An error occured:";
  echo mysql_error();
  echo "Try reloading this page<br>";
  echo "Sorry for the inconvenience, for more information please contact the administrator";
}
//////////////////////////////////////////////////////////
?>
```

admin_Fcns.php

```
<?php
//////////////////////////////////////////////////////////
function generate_Exam(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  if($action == 'create exam'){
    if(($mode == 'auto generate')||($mode == 'manual')){
      connect_Db();
      $query = "SELECT subjectName FROM subject WHERE subject_id='$examSubject' ";
      $result = mysql_query($query);
      $myrow = mysql_fetch_row($result);
      echo "Exam Subject: $myrow[0]<br>";
      //display select departmental form...
      echo "Choose departmental coverage:";
      $deptNumString = array ("first departmental", "second departmental", "third departmental", "fourth departmental", "fifth departmental",
"sixth departmental", "seventh departmental");
      echo "<form name='chooseDept' method='post' action='?activeNav=$activeNav&activeTab=$activeTab&action=create
exam&examSubject=$examSubject'>";
      echo "<input type='hidden' name='mode' value='$mode' />";
      echo "<select name='deptCurrent'>";
      if($deptCurrent == ''){
        echo "<option selected='selected' value=''>please select the departmental coverage</option>";
      }
      for($i = 0; $i < count($deptNumString);$i++){
        if($deptNumString[$i] == $deptCurrent){
          echo "<option selected='selected' value='$deptNumString[$i]'>$deptNumString[$i]</option>";
        }
        else{
          echo "<option value='$deptNumString[$i]'>$deptNumString[$i]</option>";
        }
      }
      echo "</select><input type='submit' name='submitDept' value='go'>";
      echo "</form>";
      //insert filters here!!!
      //output frequency table of available subjects...
      if($deptCurrent != ''){
        //start counting the records for $qty[]
        $query = "SELECT * FROM question, subject, topic WHERE question.topic_id=topic.topic_id AND subject.subject_id=topic.subject_id AND
subject.subject_id='$examSubject'";
        $query = $query." AND topic.deptNum='$deptCurrent'";
        //echo "[$query]";
        $diffArray = array ("very easy", "easy", "medium", "hard", "very hard");
        //TRUE OR FALSE
        $queryQuestionType = $query." AND question.questionType='true or false' ";
        for($i = 0;$i < count($diffArray);$i++){
          $result = mysql_query($queryQuestionType. " AND question.difficulty='$diffArray[$i]' ");
          $qty[] = mysql_num_rows($result);
        }
        //MULTIPLE CHOICE
        $queryQuestionType = $query." AND question.questionType='multiple choice' ";
        for($i = 0;$i < count($diffArray);$i++){
          $result = mysql_query($queryQuestionType. " AND question.difficulty='$diffArray[$i]' ");
          $qty[] = mysql_num_rows($result);
        }
        //MATCHING TYPE
        $queryQuestionType = $query." AND question.questionType='matching type' ";
        for($i = 0;$i < count($diffArray);$i++){
          $result = mysql_query($queryQuestionType. " AND question.difficulty='$diffArray[$i]' ");
          $qty[] = mysql_num_rows($result);
        }
        echo "<table border='1' >";
        echo "<form name='examSpecs' method='post' action='?activeNav=Exam&activeTab=Edit Exam' onSubmit='return
verifyExamSpecsFormSubmit(this)'>";
        echo "<tr><td align='center'>TRUE OR FALSE</td><td align='center'>MULTIPLE CHOICE</td><td align='center'>MATCHING TYPE</td></tr>";

        echo "<tr><td align='right'>";
        echo "<table class='examSpecs'>";
        echo "<tr><td></td><td></td><td>qty</td></tr>";
        echo "<tr><td>very easy</td><td><input type='text' name='qtyTf' size='2' onChange='return compute_Total(0)' value='0'
/></td><td>/<input type='text' size='2' readonly='readonly' value='$qty[0]'/></td></tr>";
        echo "<tr><td>easy</td><td><input type='text' name='qtyTf' size='2' onChange='return compute_Total(2)' value='0' /></td><td>/<input
type='text' size='2' readonly='readonly' value='$qty[1]'/></td></tr>";
        echo "<tr><td>medium</td><td><input type='text' name='qtyTf' size='2' onChange='return compute_Total(4)' value='0' /></td><td>/<input
type='text' size='2' readonly='readonly' value='$qty[2]'/></td></tr>";
        echo "<tr><td>hard</td><td><input type='text' name='qtyTf' size='2' onChange='return compute_Total(6)' value='0' /></td><td>/<input
type='text' size='2' readonly='readonly' value='$qty[3]'/></td></tr>";
        echo "<tr><td>very hard</td><td><input type='text' name='qtyTf' size='2' onChange='return compute_Total(8)' value='0'
/></td><td>/<input type='text' size='2' readonly='readonly' value='$qty[4]'/></td></tr>";
        echo "</table>";
        echo "</td><td align='right'>";
        echo "<table class='examSpecs'>";
        echo "<tr><td></td><td></td><td>qty</td></tr>";
        echo "<tr><td>very easy</td><td><input type='text' name='qtyMc' size='2' onChange='return compute_Total(10)' value='0'
/></td><td>/<input type='text' size='2' readonly='readonly' value='$qty[5]'/></td></tr>";
        echo "<tr><td>easy</td><td><input type='text' name='qtyMc' size='2' onChange='return compute_Total(12)' value='0' /></td><td>/<input
type='text' size='2' readonly='readonly' value='$qty[6]'/></td></tr>";
        echo "<tr><td>medium</td><td><input type='text' name='qtyMc' size='2' onChange='return compute_Total(14)' value='0' /></td><td>/<input
type='text' size='2' readonly='readonly' value='$qty[7]'/></td></tr>";
        echo "<tr><td>hard</td><td><input type='text' name='qtyMc' size='2' onChange='return compute_Total(16)' value='0' /></td><td>/<input
type='text' size='2' readonly='readonly' value='$qty[8]'/></td></tr>";
        echo "<tr><td>very hard</td><td><input type='text' name='qtyMc' size='2' onChange='return compute_Total(18)' value='0'
/></td><td>/<input type='text' size='2' readonly='readonly' value='$qty[9]'/></td></tr>";
        echo "</table>";
        echo "</td><td align='right'>";
        echo "<table class='examSpecs'>";
        echo "<tr><td></td><td></td><td>qty</td></tr>";
        echo "<tr><td>very easy</td><td><input type='text' name='qtyMt' size='2' size='2' onChange='return compute_Total(20)' value='0'
/></td><td>/<input type='text' size='2' readonly='readonly' value='$qty[10]'/></td></tr>";
        echo "<tr><td>easy</td><td><input type='text' name='qtyMt' size='2' size='2' onChange='return compute_Total(22)' value='0'
/></td><td>/<input type='text' size='2' readonly='readonly' value='$qty[11]'/></td></tr>";
        echo "<tr><td>medium</td><td><input type='text' name='qtyMt' size='2' size='2' onChange='return compute_Total(24)' value='0'
/></td><td>/<input type='text' size='2' readonly='readonly' value='$qty[12]'/></td></tr>";
        echo "<tr><td>hard</td><td><input type='text' name='qtyMt' size='2' size='2' onChange='return compute_Total(26)' value='0'
/></td><td>/<input type='text' size='2' readonly='readonly' value='$qty[13]'/></td></tr>";
        echo "<tr><td>very hard</td><td><input type='text' name='qtyMt' size='2' size='2' onChange='return compute_Total(28)' value='0'
/></td><td>/<input type='text' size='2' readonly='readonly' value='$qty[14]'/></td></tr>";
        echo "</table>";
        echo "</td></tr><tr><td align='right'>";
        echo "<table class='examSpecs'>";
        echo "<tr><td></td><td></td><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;</td></tr>";
        echo "<tr><td>total</td><td><input type='text' size='2' readonly='readonly'/></td><td></td></tr>";
        echo "</table>";
        echo "</td><td align='right'>";
        echo "<table class='examSpecs'>";
        echo "<tr><td></td><td></td><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;</td></tr>";
        echo "<tr><td>total</td><td><input type='text' size='2'readonly='readonly'/></td><td></td></tr>";
        echo "</table>";
        echo "</td><td align='right'>";
        echo "<table class='examSpecs'>";
        echo "<tr><td></td><td></td><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;</td></tr>";
        echo "<tr><td>total</td><td><input type='text' size='2'readonly='readonly'/></td><td></td></tr>";
        echo "</table>";
        echo "</td></tr>";
        echo "<tr><td align='center' colspan='3'><input type='submit' name='action' value='generate exam' /><button type='reset' name='reset'
value='reset'>reset</button></td></tr>";
        echo "<input type='hidden' name='examSubject' value='$examSubject'>";
        echo "<input type='hidden' name='examDeptCurrent' value='$deptCurrent'>";
        echo "<input type='hidden' name='qtyTfStr' value=''>";
        echo "<input type='hidden' name='qtyMcStr' value=''>";
        echo "<input type='hidden' name='qtyMtStr' value=''>";
        echo "</form>";
        echo "</table>";
      }
    }
    if($mode == "using statistics"){
      echo "<table border='1'>";
      echo "<form name='usingStatisticsForm' method='post'>";
      echo "<tr><td colspan='2' align='center'>EXAM ITEM FILTER</td></tr>";
      echo "<tr><td>Subject</td><td>";
      echo "<select name='examSubject'>";
      connect_Db();
      $query = "SELECT subject_id, subjectName FROM subject ORDER BY subjectName ASC";
      $result = mysql_query($query);
      while($myrow = mysql_fetch_row($result)){
        echo "<option";
        if($myrow[0] == $examSubject){
          echo " selected='selected'";
        }
        echo " value='$myrow[0]' label='$myrow[1]'>$myrow[1]</option>";
      }
      echo "</select>";
      echo "</td></tr>";
      echo "<tr><td>Departmental</td><td>";
      $deptNumArray = array ("first departmental", "second departmental", "third departmental", "fourth departmental", "fifth departmental",
"sixth departmental", "seventh departmental");
      if(!isset($deptNum)){
        $deptNum = "first departmental";
      }
      echo "<select name='deptNum'>";
      foreach($deptNumArray AS $deptNumArrayElem){
        if($deptNum == $deptNumArrayElem){
          echo "<option value='$deptNumArrayElem' selected='selected'>$deptNumArrayElem</option>";
        }
        else{
          echo "<option value='$deptNumArrayElem'>$deptNumArrayElem</option>";
        }
      }
      echo "</select>";
      echo "</td></tr>";
      echo "<tr><td colspan='2' align='center'>Item Statistics Filters</td></tr>";
      echo "<tr><td>&nbsp;";
      if($itemDifficultyC == "on"){
        echo "<input type='checkbox' name='itemDifficultyC' onClick='return usingStatisticsSelectDisplay(this, \"itemDifficultyS\")'
checked='checked'/>";
        echo "&nbsp;Item Difficulty</td><td>";
        echo "<select id='itemDifficultyS' name='itemDifficultyS'>";
      }
      else{
        echo "<input type='checkbox' name='itemDifficultyC' onClick='return usingStatisticsSelectDisplay(this, \"itemDifficultyS\")'/>";
        echo "&nbsp;Item Difficulty</td><td>";
        echo "<select id='itemDifficultyS' name='itemDifficultyS' style='display:none;'>";
      }
      $itemDifficultySOptionDisplayArray = array('(val > 90) very easy', '(25 <= val <= 90) acceptable difficulty', '(val < 25) very hard');
      $itemDifficultySQ = array('($g.itemDifficulty > 90)', '($g.itemDifficulty >= 25 && $g.itemDifficulty <= 90)', '($g.itemDifficulty <
25)');
      for($i = 0;$i < count($itemDifficultySOptionDisplayArray);$i++){
        if($itemDifficultyS == $i){
          echo "<option value='$i' selected='selected'>$itemDifficultySOptionDisplayArray[$i]</option>";
        }
        else{
          echo "<option value='$i'>$itemDifficultySOptionDisplayArray[$i]</option>";
        }
      }
      echo "</select>";
      echo "</td></tr>";
      echo "<tr><td>&nbsp;";
      if($diC == "on"){
        echo "<input type='checkbox' name='diC' onClick='return usingStatisticsSelectDisplay(this, \"diS\")' checked='checked'/>";
        echo "&nbsp;Discrimination Index</td><td>";
        echo "<select id='diS' name='diS'>";
      }
      else{
        echo "<input type='checkbox' name='diC' onClick='return usingStatisticsSelectDisplay(this, \"diS\")'/>";
        echo "&nbsp;Discrimination Index</td><td>";
        echo "<select id='diS' name='diS' style='display:none;'>";
      }
      $diSOptionDisplayArray = array('(val > 0) positive discrimination', '(val == 0) zero discrimination', '(val < 0) negative
discrimination');
      $diSQ = array('($g.DI > 0)', '($g.DI = 0)', '($g.DI < 0)');
      for($i = 0;$i < count($diSOptionDisplayArray);$i++){
        if($diS == $i){
          echo "<option value='$i' selected='selected'>$diSOptionDisplayArray[$i]</option>";
        }
        else{
          echo "<option value='$i'>$diSOptionDisplayArray[$i]</option>";
        }
      }
      echo "</select>";
      echo "</td></tr>";
      echo "<tr><td>&nbsp;";
      if($pbcC == "on"){
        echo "<input type='checkbox' name='pbcC' onClick='return usingStatisticsSelectDisplay(this, \"pbcS\")' checked='checked'/>";
        echo "&nbsp;Point Biserial</td><td>";
        echo "<select id='pbcS' name='pbcS'>";
      }
      else{
        echo "<input type='checkbox' name='pbcC' onClick='return usingStatisticsSelectDisplay(this, \"pbcS\")'/>";
        echo "&nbsp;Point Biserial</td><td>";
        echo "<select id='pbcS' name='pbcS' style='display:none;'>";
      }
      $pbcSOptionDisplayArray = array('(val > .40) very good item', '(.30 <= val <=.39) good item', '(.20 <= val <=.29) fairly good item',
'(.10 <= val <=.19) marginal item', '(val < .10) poor item');
      $pbcSQ = array('($g.PBC > .40)', '($g.PBC >= .30 && $g.PBC <= .39)', '($g.PBC >= .20 && $g.PBC <= .29)', '($g.PBC >= .10 && $g.PBC <=
.19)','($g.PBC < .10)');
      for($i = 0;$i < count($pbcSOptionDisplayArray);$i++){
        if($pbcS == $i){
          echo "<option value='$i' selected='selected'>$pbcSOptionDisplayArray[$i]</option>";
        }
        else{
          echo "<option value='$i'>$pbcSOptionDisplayArray[$i]</option>";
        }
      }
      echo "</select>";
      echo "</td></tr>";
      echo "<tr><td>Priority</td><td>";
      if(($itemDifficultyC == "on")||($diC == "on")||($pbcC== "on")){
        echo "<select id='statPriority' name='statPriority'>";
      }
      else{
        echo "<select id='statPriority' name='statPriority' style='display:none;'>";
      }
      $statPriorityOptionValuesArray = array('system', 'user', 'bothSystem', 'bothUser');
      $statPriorityOptionDisplayArray = array('SYSTEM statistics only', 'USER statistics only', 'both but prioritize SYSTEM', 'both but
prioritize USER');
      for($i = 0;$i < count($statPriorityOptionValuesArray);$i++){
        if($statPriority == $statPriorityOptionValuesArray[$i]){
          echo "<option value='$statPriorityOptionValuesArray[$i]' selected='selected'>$statPriorityOptionDisplayArray[$i]</option>";
        }
        else{
          echo "<option value='$statPriorityOptionValuesArray[$i]'>$statPriorityOptionDisplayArray[$i]</option>";
        }
      }
      echo "</select>";
      echo "</td></tr>";
      echo "<input type='hidden' name='action' value='$action'/>";
      echo "<input type='hidden' name='mode' value='$mode'/>";
      echo "<tr><td colspan='2' align='center'><input type='submit' name='usingStatisticsSubmit' value='initialize'/></td></tr>";
      echo "</form>";
      echo "</table>";

      if($usingStatisticsSubmit == "initialize"){
        if(($itemDifficultyC == "")&&($diC == "")&&($pbcC == "")){
          $statPriority = "";
        }
        $query = "SELECT q.question_id, q.questionType";
        if(($statPriority == "system")||($statPriority == "user")){
          $query .= ", si.itemDifficulty, si.DI, si.PBC ";
        }
        if($statPriority == "bothSystem"){
          $query .= ", IFNULL(sis.itemDifficulty, siu.itemDifficulty), ";
          $query .= "IFNULL(sis.DI, siu.DI), ";
          $query .= "IFNULL(sis.PBC, siu.PBC) ";
        }
        if($statPriority == "bothUser"){
          $query .= ", IFNULL(siu.itemDifficulty, sis.itemDifficulty), ";
          $query .= "IFNULL(siu.DI, sis.DI), ";
          $query .= "IFNULL(siu.PBC, sis.PBC) ";
        }
        $query .= " FROM subject AS s, topic AS t, question AS q";
        if(($statPriority == "system")||($statPriority == "user")){
          $query .= ", statistics_item AS si ";
        }
        if(($statPriority == "bothSystem")||($statPriority == "bothUser")){
          $query .= " LEFT JOIN statistics_item AS sis ON ";
          $query .= "(q.question_id=sis.question_id AND sis.exam_id='0' AND sis.generation='system') ";
          $query .= "LEFT JOIN statistics_item AS siu ON ";
          $query .= "(q.question_id=siu.question_id AND siu.exam_id='0' AND siu.generation='user') ";
        }
        $query .= " WHERE q.topic_id=t.topic_id AND s.subject_id=t.subject_id AND s.subject_id='$examSubject' AND t.deptNum='$deptNum' ";
        if(($statPriority == "system")||($statPriority == "user")){
          $query .= "AND si.question_id=q.question_id AND si.exam_id='0' AND si.generation='$statPriority' ";
        }
        if(($statPriority == "bothSystem")||($statPriority == "bothUser")){
          $query .= "AND (NOT (sis.generation='null' AND siu.generation='null')) ";
        }
        if($itemDifficultyC == "on"){
          if(($statPriority == "system")||($statPriority == "user")){
            $query .= "AND (si.itemDifficulty >= 0 && si.itemDifficulty <= 100) ";
            $g = "si";
            eval('$query .= "AND '.$itemDifficultySQ[$itemDifficultyS].' ";');
          }
          if($statPriority == "bothSystem"){
            $query .= "AND IF(sis.itemDifficulty IS NOT NULL,";
            $g = "sis";
            eval('$query .= "('.$itemDifficultySQ[$itemDifficultyS].'&&('.$g.'.itemDifficulty >= 0 && '.$g.'.itemDifficulty <= 100)),";');
            $g = "siu";
            eval('$query .= "('.$itemDifficultySQ[$itemDifficultyS].'&&('.$g.'.itemDifficulty >= 0 && '.$g.'.itemDifficulty <= 100)))";');
          }
          if($statPriority == "bothUser"){
            $query .= "AND IF(siu.itemDifficulty IS NOT NULL,";
            $g = "siu";
            eval('$query .= "('.$itemDifficultySQ[$itemDifficultyS].'&&('.$g.'.itemDifficulty >= 0 && '.$g.'.itemDifficulty <= 100)),";');
            $g = "sis";
            eval('$query .= "('.$itemDifficultySQ[$itemDifficultyS].'&&('.$g.'.itemDifficulty >= 0 && '.$g.'.itemDifficulty <= 100)))";');
          }
          $query .= " ";
        }
        if($diC == "on"){
          if(($statPriority == "system")||($statPriority == "user")){
            $query .= "AND (si.DI >= -1 && si.DI <= 1) ";
            $g = "si";
            eval('$query .= "AND '.$diSQ[$diS].' ";');
          }
          if($statPriority == "bothSystem"){
            $query .= "AND IF(sis.DI IS NOT NULL,";
            $g = "sis";
            eval('$query .= "('.$diSQ[$diS].'&&('.$g.'.DI >= -1 && '.$g.'.DI <= 1)),";');
            $g = "siu";
            eval('$query .= "('.$diSQ[$diS].'&&('.$g.'.DI >= -1 && '.$g.'.DI <= 1)))";');
          }
          if($statPriority == "bothUser"){
            $query .= "AND IF(siu.DI IS NOT NULL,";
            $g = "siu";
            eval('$query .= "('.$diSQ[$diS].'&&('.$g.'.DI >= -1 && '.$g.'.DI <= 1)),";');
            $g = "sis";
            eval('$query .= "('.$diSQ[$diS].'&&('.$g.'.DI >= -1 && '.$g.'.DI <= 1)))";');
          }
          $query .= " ";
        }
        if($pbcC == "on"){
          if(($statPriority == "system")||($statPriority == "user")){
            $query .= "AND (si.PBC >= -1 && si.PBC <= 1) ";
            $g = "si";
            eval('$query .= "AND '.$pbcSQ[$pbcS].' ";');
          }
          if($statPriority == "bothSystem"){
            $query .= "AND IF(sis.PBC IS NOT NULL,";
            $g = "sis";
            eval('$query .= "('.$pbcSQ[$pbcS].'&&('.$g.'.pbc >= -1 && '.$g.'.pbc <= 1)),";');
            $g = "siu";
            eval('$query .= "('.$pbcSQ[$pbcS].'&&('.$g.'.pbc >= -1 && '.$g.'.pbc <= 1)))";');
          }
          if($statPriority == "bothUser"){
            $query .= "AND IF(siu.PBC IS NOT NULL,";
            $g = "siu";
            eval('$query .= "('.$pbcSQ[$pbcS].'&&('.$g.'.pbc >= -1 && '.$g.'.pbc <= 1)),";');
            $g = "sis";
            eval('$query .= "('.$pbcSQ[$pbcS].'&&('.$g.'.pbc >= -1 && '.$g.'.pbc <= 1)))";');
          }
          $query .= " ";
        }
        $query .= "ORDER BY q.question_id ASC ";
        echo "<br>[$query]<br>";
      }
      $result = mysql_query($query);
      $tfCount = 0;
      $mcCount = 0;
      $mtCount = 0;
      while($myrow = mysql_fetch_row($result)){
        switch($myrow[1]){
          case 'true or false':
            $tfCount++;
            break;
          case 'multiple choice':
            $mcCount++;
            break;
          case 'matching type':
            $mtCount++;
            break;
          default:
            break;
        }
      }
      echo "<br><table border='1'>";
      echo "<form name='usingStatisticsFrequencyForm' method='post' action='?activeNav=Exam&activeTab=Edit Exam' onSubmit='return
usingStatisticsFrequencyCheck(this);'>";
      echo "<tr><td colspan='2' align='center'>GENERATOR</td></tr>";
      echo "<tr><td align='center'>question type</td><td align='center'>frequency</td></tr>";
      echo "<tr><td>true or false</td><td>";
      echo "<select name='tfF'>";
      for($i = 0;$i <= $tfCount;$i++){
        echo "<option value='$i'>$i</option>";
      }
      echo "</select> of $tfCount";
      echo "</td></tr>";
      echo "<tr><td>multiple choice</td><td>";
      echo "<select name='mcF'>";
      for($i = 0;$i <= $mcCount;$i++){
        echo "<option value='$i'>$i</option>";
      }
      echo "</select> of $mcCount";
      echo "</td></tr>";
      echo "<tr><td>matching type</td><td>";
      echo "<select name='mtF'>";
      for($i = 0;$i <= $mtCount;$i++){
        echo "<option value='$i'>$i</option>";
      }
      echo "</select> of $mtCount";
      echo "</td></tr>";
      echo "<tr><td colspan='2' align='center'>";
      echo "<input type='hidden' name='examSubject' value='$examSubject'/>";
      echo "<input type='hidden' name='deptNum' value='$deptNum'/>";
      echo "<input type='hidden' name='queryFromStat' value=\"".str_replace("q.question_id ASC", "RAND()", $query)."\"/>";
      echo "<input type='submit' name='usingStatisticsFrequencySubmit' value='generate exam'/></td></tr>";
      echo "</form>";
      echo "</table>";
    }
    if($mode == "automated"){
      exam_Coverage();
    }
  }
  else{
    //echo "<br>";
    echo "<table border='1'>";
    echo "<form name='subjectAndMode' method='post' action='?activeNav=$activeNav&activeTab=$activeTab' onSubmit='return
subjectAndModeSubmit(this)'>";
    echo "<tr><td>Select Subject</td><td>";
    echo "<select name='examSubject'>";
    echo "<option selected='selected' value='Select'>Please Select</option>";
    connect_Db();
    $query = "SELECT subject_id, subjectName FROM subject ORDER BY subjectName ASC ";
    $result = mysql_query($query);
    while($myrow = mysql_fetch_row($result)){
      echo "<option";
      if($myrow[0] == $subjCurrent){
        echo " selected='selected'";
      }
      echo " value='$myrow[0]' label='$myrow[1]'>$myrow[1]</option>";
    }
    echo "</select>";
    echo "</td></tr>";
    echo "<tr><td>Mode of Creation</td><td>";
    //echo "<input type='radio' name='mode' value='auto generate' />auto generate<br>";
    echo "<input type='radio' name='mode' value='automated' checked='checked'/>automated<br>";
    echo "<input type='radio' name='mode' value='manual' checked='checked'/>manual<br>";
    //echo "<input type='radio' name='mode' value='using statistics' />using statistics<br>";
    echo "</td></tr>";
    echo "<tr><td colspan='2' align='center'><input type='submit' name='action' value='create exam' /></td></tr>";
    echo "</form>";
    echo "</table>";
  }
}
//////////////////////////////////////////////////////////
function exam_Coverage(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  connect_Db();
  $query = "SELECT subjectName FROM subject WHERE subject_id='$examSubject' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  echo "Exam Subject: $myrow[0]<br>";
  //display select departmental form...
  echo "Choose departmental coverage:";
  $deptNumString = array ("first departmental", "second departmental", "third departmental", "fourth departmental", "fifth departmental",
"sixth departmental", "seventh departmental");
  echo "<form name='chooseDept' method='post' action='?activeNav=$activeNav&activeTab=$activeTab&action=create
exam&examSubject=$examSubject'>";
  echo "<input type='hidden' name='mode' value='$mode' />";
  echo "<input type='hidden' name='examSubject' value='$examSubject' />";
  echo "<select name='deptCurrent'>";
  if($deptCurrent == ''){
    echo "<option selected='selected' value=''>please select the departmental coverage</option>";
  }
  for($i = 0; $i < count($deptNumString);$i++){
    if($deptNumString[$i] == $deptCurrent){
      echo "<option selected='selected' value='$deptNumString[$i]'>$deptNumString[$i]</option>";
    }
    else{
      echo "<option value='$deptNumString[$i]'>$deptNumString[$i]</option>";
    }
  }
  echo "</select><input type='submit' name='submitDept' value='go'>";
  echo "</form>";
  if($deptCurrent == ""){
    return false;
  }
  //display filters...
  $definedDifficultyArray = array('very easy', 'easy', 'medium', 'hard', 'very hard');
  $questionTypeArray = array('true or false', 'multiple choice', 'matching type', 'essay', 'problem solving');
  echo "<table width='100%'>";
  echo "<form name='examCoverageForm' method='POST' action='?activeNav=Exam'>";
  echo "<tr><td align='center'>Exam Coverage</td></tr>";
  echo "</table>";
  echo "<div id='automatedFiltersDiv' style='height:auto; width:100%; overflow:scroll;'>";
  echo "<table id='automatedFiltersTable' border='1' width='100%'>";
  echo "<tr><td colspan='2' align='center'>topic</td>";
  echo "<td colspan='2' align='center'>controls</td>";
  echo "<td colspan='5' align='center'>filters</td></tr>";
  echo "<tr><td align='center'>topic id</td><td align='center'>topic name</td>";
  echo "<td align='center'>action</td>";
  echo "<td align='center'>frequency</td>";
  //echo "<td align='center'>go to</td>";
  echo "<td align='center'>question type</td>";
  echo "<td align='center'>difficulty(defined)</td>";
  echo "<td align='center'>item difficulty</td>";
  echo "<td align='center'>discrimination index</td>";
  echo "<td align='center'>point biserial</td></tr>";
  $query = "SELECT topic_id, topicName FROM topic WHERE subject_id='$examSubject' AND deptNum='$deptCurrent' ";
  $result = mysql_query($query);
  $isi = array('id', 'di', 'pb');
  $idOptionArray = array('(val > 90) very easy', '(25 <= val <= 90) acceptable difficulty', '(val < 25) very hard');
  $diOptionArray = array('(val > 0) positive discrimination', '(val == 0) zero discrimination', '(val < 0) negative discrimination');
  $pbOptionArray = array('(val > .40) very good item', '(.30 <= val <=.39) good item', '(.20 <= val <=.29) fairly good item', '(.10 <= val
<=.19) marginal item', '(val < .10) poor item');
  $examCoverageCodeArray = explode(",", $examCoverageCode);
  if($examCoverageCodeFromSubwindow != ""){
    $tempArray = explode("=", $examCoverageCodeFromSubwindow);
    $$tempArray[0] = $tempArray[1];
    $examCoverageCodeFromSubwindow = "";
  }
  if($examCoverageCodeFromSubwindowDelete != ""){
    unset($$examCoverageCodeFromSubwindowDelete);
  }
  while($myrow = mysql_fetch_row($result)){
    //get the codes for the current topicId
    for($i = 0;$i < count($examCoverageCodeArray);$i++){
      $examCoverageCodeTemp = explode("_", $examCoverageCodeArray[$i]);
      if($examCoverageCodeTemp[1] == $myrow[0]){
        $currentFilterCodeArray[] = $examCoverageCodeArray[$i];
      }
      unset($examCoverageCodeTemp);
    }
    if(count($currentFilterCodeArray) > 0){
      echo "<tr><td align='center' rowspan='".count($currentFilterCodeArray)."'>$myrow[0]</td>";
      echo "<td rowspan='".count($currentFilterCodeArray)."' width='150px'>$myrow[1]</td>";
      for($i = 0;$i < count($currentFilterCodeArray);$i++){
        $eccArray = explode("_", $currentFilterCodeArray[$i]);
        if($i != 0){
          echo "<tr>";
        }
        echo "<td align='center'>";
        echo "<a href='javascript:void manageCoverageFilter(\"$currentFilterCodeArray[$i]\", \"delete\")' style='color:blue;text-
decoration:none;'>delete</a>";
        echo "</td>";

        if(($eccArray[4] != "x")||($eccArray[5] != "x")||($eccArray[6] != "x")){
          $queryA = "SELECT COUNT(DISTINCT(q.question_id)) FROM question AS q, statistics_item AS s WHERE
q.questionType='".$questionTypeArray[$eccArray[2]]."' AND q.topic_id='$eccArray[1]' AND q.question_id=s.question_id AND s.generation='system'
";
          if($eccArray[4] != "x"){
            $queryA .= "AND ".$idSQ[$eccArray[4]]." ";
          }
          if($eccArray[5] != "x"){
            $queryA .= "AND ".$diSQ[$eccArray[5]]." ";
          }
          if($eccArray[6] != "x"){
            $queryA .= "AND ".$pbSQ[$eccArray[6]]." ";
          }
        }
        else{
          $queryA = "SELECT COUNT(DISTINCT(q.question_id)) FROM question AS q WHERE q.questionType='".$questionTypeArray[$eccArray[2]]."' AND
q.topic_id='$eccArray[1]' ";
        }
        if($eccArray[3] != "x"){
          $queryA .= "AND q.difficulty='".$definedDifficultyArray[$eccArray[3]]."' ";
        }

        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        $textBoxName = "t_$myrow[0]"."_$j"."_$i";
        echo "<td align='center'>";
        //echo "<input type='text' name='".$currentFilterCodeArray[$i]."' value='".$$currentFilterCodeArray[$i]."' size='2' style='text-
align:right;border:0px;' onChange='return checkAgainsFrequency(this)'/>";
        echo "<select name='".$currentFilterCodeArray[$i]."' onChange='return totalFrequencyForTopic(\"t_$myrow[0]"."_total\")'>";
        for($j = 1;$j <= $myrowA[0];$j++){
          if($j == $$currentFilterCodeArray[$i]){
            echo "<option value='$j' selected='selected'>$j</option>";
          }
          else{
            echo "<option value='$j'>$j</option>";
          }
        }
        echo "</select>";
        echo "&nbsp;of&nbsp; $myrowA[0]</td>";

        echo "<td align='center'>".$questionTypeArray[$eccArray[2]]."</td>";
        echo "<td align='center'>";
        if($eccArray[3] == "x"){
          echo "any";
        }
        else{
          echo $definedDifficultyArray[$eccArray[3]];
        }
        echo "</td>";
        for($j = 4;$j < 7;$j++){
          echo "<td align='center'>";
          if($eccArray[$j] == "x"){
            echo "n/a";
          }
          else{
            switch($j){
              case 4:
                echo $idOptionArray[$eccArray[$j]];
                break;
              case 5:
                echo $diOptionArray[$eccArray[$j]];
                break;
              case 6:
                echo $pbOptionArray[$eccArray[$j]];
                break;
              default:
                break;
            }
          }
          echo "</td>";
        }
        echo "</tr>";
        unset($eccArray);
      }
    }
    else{
      echo "<tr><td align='center' rowspan='".count($currentFilterCodeArray)."'>$myrow[0]</td>";
      echo "<td rowspan='".count($currentFilterCodeArray)."' width='150px'>$myrow[1]</td>";
      echo "<td colspan='7' align='center'>no records</td></tr>";
    }
    echo "<tr><td colspan='2' align='right'>&nbsp;</td>";
    echo "<td align='right'>total</td>";
    echo "<td align='center'><input type='text' name='t_$myrow[0]"."_total' size='4' style='border:0px;background-color:transparent;'
readonly='readonly'/></td>";
    echo "<td colspan='5' align='center'>";
    echo "<a href='javascript:void manageCoverageFilter(\"t_$myrow[0]"."_x_x_x_x_x\", \"add\")' style='color:blue;text-decoration:none;'>add
filter</a>";
    echo "</td></tr>";
    echo "<tr><td colspan='10'>&nbsp;</td></tr>";
    unset($currentFilterCodeArray);
  }
  echo "<input type='hidden' name='examSubject' value='$examSubject' />";
  echo "<input type='hidden' name='deptCurrent' value='$deptCurrent' />";
  echo "<input type='hidden' name='examCoverageCodeFromSubwindow' value='' />";
  echo "<input type='hidden' name='examCoverageCodeFromSubwindowDelete' value='' />";
  echo "<input type='hidden' name='examCoverageCode' value='".implode(",", $examCoverageCodeArray)."' />";
  echo "<input type='hidden' name='action' value='create exam' />";
  echo "<input type='hidden' name='mode' value='$mode' />";
  echo "<input type='hidden' name='activeTab' value='$activeTab' />";
  echo "<input type='hidden' name='examCoverageFormSubmit' value='generate exam'/>";
  echo "<tr><td colspan='10' align='center'><input type='button' name='examCoverageFormButton' value='generate exam' onClick='return
examCoverageFormSubmitJs(this.form)'/></td></tr>";
  echo "</form>";
  echo "</table>";
  echo "</div>";
}
//////////////////////////////////////////////////////////
function exam_Coverage_Details(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  connect_Db();
  echo "<table width='100%'>";
  echo "<tr><td align='center'>Exam Coverage Details";
  echo "&nbsp;<input type=\"button\" id=\"examCoverageDisplayButton\"
onClick=\"toggleExamCoverageDisplay('automatedFiltersDiv','examCoverageDisplayButton')\" value=\"show\">";
  echo "</td></tr>";
  echo "</table>";
  echo "<div id='automatedFiltersDiv' style='height:auto; width:100%; overflow:scroll; display:none;'>";
  echo "<table id='examCoverageTable' border='1' width='100%'>";
  $examCoverageTableColumnName = array('question id', 'topic', 'question type', 'difficulty', 'item difficulty', 'discrimination index', 'point
biserial');
  echo "<tr>";
  foreach($examCoverageTableColumnName AS $examCoverageTableColumnNameElem){
    echo "<td align='center'>$examCoverageTableColumnNameElem</td>";
  }
  echo "</tr>";
  $query = "SELECT q.question_id, t.topicName, q.questionType, q.difficulty, si.itemDifficulty, si.DI, si.PBC FROM topic AS t, question AS q,
exam_item AS ei, exam AS e LEFT JOIN statistics_item AS si ON (si.exam_id='0' AND si.question_id=q.question_id) WHERE e.exam_id='$examCurrent'
AND q.topic_id=t.topic_id AND ei.exam_id=e.exam_id AND ei.question_id=q.question_id ORDER BY t.topic_id ASC, q.questionType ASC, q.difficulty
ASC ";
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    while($myrow = mysql_fetch_row($result)){
      echo "<tr>";
      echo "<td align='center'><a href='javascript:void goToAnchor(\"$myrow[0]\")' style='color:blue;text-
decoration:none;'>$myrow[0]</a></td>";
      echo "<td>$myrow[1]</td>";
      echo "<td>$myrow[2]</td>";
      echo "<td>$myrow[3]</td>";
      if($myrow[4] == ""){
        echo "<td>&nbsp;</td>";
      }
      else{
        echo "<td>$myrow[4]</td>";
      }
      if($myrow[5] == ""){
        echo "<td>&nbsp;</td>";
      }
      else{
        echo "<td>$myrow[5]</td>";
      }
      if($myrow[6] == ""){
        echo "<td>&nbsp;</td>";
      }
      else{
        echo "<td>$myrow[6]</td>";
      }
      echo "</tr>";
    }
  }
  else{
    echo "<tr><td colspan='".count($examCoverageTableColumnName)."' align='center'>no records</td></tr>";
  }

  echo "</table>";
  echo "</div>";
}
//////////////////////////////////////////////////////////
function strToPic($textToPic){
  $textToPicArray = split('<br>', $textToPic);
  foreach($textToPicArray AS $textToPicArrayElem){
    $textToPicFinal .= "<img src='/toes/director/strToPic.php?textToPic=$textToPicArrayElem&font_size=2'/>";
  }
  return $textToPicFinal;
}
//////////////////////////////////////////////////////////
function add_Generated_Exam(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  $examCurrent = get_Next_Id('exam_id','exam');
  $examDateCreated = date("Y-m-d H:i:s", time());
  $query = "SELECT subjectName FROM subject WHERE subject_id='$examSubject' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  $subjName = $myrow[0];
  $examDescription = "$examDeptCurrent exam for $subjName";
  connect_Db();
  $query = "INSERT INTO exam (exam_id, subject_id, dateCreated, deptNum, description) VALUES ('$examCurrent', '$examSubject',
'$examDateCreated', '$examDeptCurrent', '$examDescription') ";
  $result = mysql_query($query);
  $qtyTfArray = explode(",", $qtyTfStr);
  $qtyMcArray = explode(",", $qtyMcStr);
  $qtyMtArray = explode(",", $qtyMtStr);
  $questionDifficultyArray = array('very easy', 'easy', 'medium', 'hard', 'very hard');
  //autoadd 'true of false' questions
  for($i = 0;$i < count($questionDifficultyArray);$i++){
    if($qtyTfArray[$i] > 0){
      $query = "SELECT question.question_id FROM question, subject, topic WHERE question.topic_id=topic.topic_id AND
subject.subject_id=topic.subject_id AND subject.subject_id='$examSubject' AND topic.deptNum='$examDeptCurrent' AND question.questionType='true
or false' AND question.difficulty='$questionDifficultyArray[$i]' LIMIT $qtyTfArray[$i] ";
```

```
      $result = mysql_query($query);
      if(mysql_num_rows($result) > 0){
        while($myrow = mysql_fetch_row($result)){
          $queryA = "INSERT INTO exam_item (exam_id, question_id) VALUES ('$examCurrent', '$myrow[0]') ";
          $resultA = mysql_query($queryA);
        }
      }
    }
  }
  //autoadd 'multiple choice' questions
  for($i = 0;$i < count($questionDifficultyArray);$i++){
    if($qtyMcArray[$i] > 0){
      $query = "SELECT question.question_id FROM question, subject, topic WHERE question.topic_id=topic.topic_id AND
subject.subject_id=topic.subject_id AND subject.subject_id='$examSubject' AND topic.deptNum='$examDeptCurrent' AND
question.questionType='multiple choice' AND question.difficulty='$questionDifficultyArray[$i]' LIMIT $qtyMcArray[$i] ";
      $result = mysql_query($query);
      if(mysql_num_rows($result) > 0){
        while($myrow = mysql_fetch_row($result)){
          $queryA = "INSERT INTO exam_item (exam_id, question_id) VALUES ('$examCurrent', '$myrow[0]') ";
          $resultA = mysql_query($queryA);
        }
      }
    }
  }
  //autoadd 'matching type' questions
  for($i = 0;$i < count($questionDifficultyArray);$i++){
    if($qtyMtArray[$i] > 0){
      $query = "SELECT question.question_id FROM question, subject, topic WHERE question.topic_id=topic.topic_id AND
subject.subject_id=topic.subject_id AND subject.subject_id='$examSubject' AND topic.deptNum='$examDeptCurrent' AND
question.questionType='matching type' AND question.difficulty='$questionDifficultyArray[$i]' LIMIT $qtyMtArray[$i] ";
      $result = mysql_query($query);
      if(mysql_num_rows($result) > 0){
        while($myrow = mysql_fetch_row($result)){
          $queryA = "INSERT INTO exam_item (exam_id, question_id) VALUES ('$examCurrent', '$myrow[0]') ";
          $resultA = mysql_query($queryA);
        }
      }
    }
  }

  $addExamItem = "switch to add by question id";
  $examEditFromBrowse = $examCurrent;
  echo "message: now displaying the auto generated exam.<br><br>";

}
/////////////////////////////////////////////////////////
function add_Generated_Exam_Statistics(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  $examCurrent = get_Next_Id('exam_id','exam');
  $examDateCreated = date("Y-m-d H:i:s", time());
  $query = "SELECT subjectName FROM subject WHERE subject_id='$examSubject' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  $subjName = $myrow[0];
  $examDescription = "$deptNum exam for $subjName";
  connect_Db();
  $query = "INSERT INTO exam (exam_id, subject_id, dateCreated, deptNum, description) VALUES ('$examCurrent', '$examSubject',
'$examDateCreated', '$deptNum', '$examDescription') ";
  $result = mysql_query($query);
  //use the $query then add the exam items...
  $queryFromStat = str_replace("\\", "", $queryFromStat);
  $result = mysql_query($queryFromStat);
  while($myrow = mysql_fetch_row($result)){
    switch($myrow[1]){
      case 'true or false':
        if($tfF > 0){
          $queryA = "INSERT INTO exam_item (exam_id, question_id) VALUES ('$examCurrent', '$myrow[0]') ";
          $resultA = mysql_query($queryA);
          $tfF--;
        }
        break;
      case 'multiple choice':
        if($mcF > 0){
          $queryA = "INSERT INTO exam_item (exam_id, question_id) VALUES ('$examCurrent', '$myrow[0]') ";
          $resultA = mysql_query($queryA);
          $mcF--;
        }
        break;
      case 'matching type':
        if($mtF > 0){
          $queryA = "INSERT INTO exam_item (exam_id, question_id) VALUES ('$examCurrent', '$myrow[0]') ";
          $resultA = mysql_query($queryA);
          $mtF--;
        }
        break;
      default:
        break;
    }
  }
  $addExamItem = "switch to add by question id";
  $examEditFromBrowse = $examCurrent;
  echo "message: now displaying the auto generated exam using statistics.<br><br>";
}
/////////////////////////////////////////////////////////
function add_Generated_Exam_Automated(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  $deptNum = $deptCurrent;
  $examCurrent = get_Next_Id('exam_id','exam');
  $examDateCreated = date("Y-m-d H:i:s", time());
  $query = "SELECT subjectName FROM subject WHERE subject_id='$examSubject' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  $subjName = $myrow[0];
  $examDescription = "$deptNum exam for $subjName";
  connect_Db();
  $query = "INSERT INTO exam (exam_id, subject_id, dateCreated, deptNum, description) VALUES ('$examCurrent', '$examSubject',
'$examDateCreated', '$deptNum', '$examDescription') ";
  $result = mysql_query($query);
  //use the t_'s for adding exam items...
  $questionTypeArray = array('true or false', 'multiple choice', 'matching type', 'essay', 'problem solving');
  $definedDifficultyArray = array('very easy', 'easy', 'medium', 'hard', 'very hard');
  $idSQ = array('(s.itemDifficulty > 90)', '(s.itemDifficulty >= 25 && s.itemDifficulty <= 90)', '(s.itemDifficulty < 25)');
  $diSQ = array('(s.DI > 0)', '(s.DI = 0)', '(s.DI < 0)');
  $pbSQ = array('(s.PBC > .40)', '(s.PBC >= .30 && s.PBC <= .39)', '(s.PBC >= .20 && s.PBC <= .29)', '(s.PBC >= .10 && s.PBC <= .19)','(s.PBC <
.10)');
  foreach($GLOBALS as $key=>$value){
    if((substr($key, 0, 2) == "t_")&&(strpos($key, "_total") === false)){
      //print "\$GLOBALS[\"$key\"] == $value ";
      $tempArray = explode("_", $key);
      if(($tempArray[4] != "x")||($tempArray[5] != "x")||($tempArray[6] != "x")){
        $queryA = "SELECT q.question_id, q.questionType, q.answer FROM question AS q, statistics_item AS s WHERE
q.questionType='".$questionTypeArray[$tempArray[2]]."' AND q.topic_id='$tempArray[1]' AND q.question_id=s.question_id AND s.generation='system'
";
        if($tempArray[4] != "x"){
          $queryA .= "AND ".$idSQ[$tempArray[4]]." ";
        }
        if($tempArray[5] != "x"){
          $queryA .= "AND ".$diSQ[$tempArray[5]]." ";
        }
        if($tempArray[6] != "x"){
          $queryA .= "AND ".$pbSQ[$tempArray[6]]." ";
        }
      }
      else{
        $queryA = "SELECT q.question_id, q.questionType, q.answer FROM question AS q WHERE
q.questionType='".$questionTypeArray[$tempArray[2]]."' AND q.topic_id='$tempArray[1]' ";
      }
      if($tempArray[3] != "x"){
        $queryA .= "AND q.difficulty='".$definedDifficultyArray[$tempArray[3]]."' ";
      }
      $queryA .= "ORDER BY RAND() ";
      $queryA .= "LIMIT $value ";
      //echo "<br>[$queryA]<br>";
      $resultA = mysql_query($queryA);
      while($myrowA = mysql_fetch_row($resultA)){
        if($myrowA[1] == "matching type"){
          $tempAnswerArray = explode(",", $myrowA[2]);
          $queryB = "INSERT INTO exam_item (exam_id, question_id, itemStatistic, pointAssigned) VALUES ('$examCurrent', '$myrowA[0]', '$key',
'".count($tempAnswerArray)."') ";
        }
        else{
          $queryB = "INSERT INTO exam_item (exam_id, question_id, itemStatistic) VALUES ('$examCurrent', '$myrowA[0]', '$key') ";
        }
        $resultB = mysql_query($queryB);
      }
    }
  }
  $addExamItem = "switch to add by question id";
  $examEditFromBrowse = $examCurrent;
  echo "message: now displaying the auto generated exam.<br><br>";
}
//////////////////////////////////////////////////////////
function edit_Exam(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  //if user selects manual creation of the exam
  if(($action == 'create exam')&&($mode == 'manual')){
    connect_Db();
    $nextId = get_Next_Id('exam_id','exam');
    $examCurrent = $nextId;
    $examDateCreated = date("Y-m-d H:i:s", time());
    $query = "INSERT INTO exam (exam_id, subject_id, dateCreated, deptNum) VALUES ('$nextId', '$examSubject', '$examDateCreated',
'$examDeptCurrent') ";
    $result = mysql_query($query);
    //get the subject name...
    $query = "SELECT subjectName FROM subject WHERE subject_id='$examSubject' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $subjName = $myrow[0];
  }
  //if update the exam details...
  if($examDetails == 'update'){
    connect_Db();
    $query = "UPDATE exam SET description='$examDescription', author='$examAuthor', allottedTime='$examAllottedTime' WHERE exam_id =
'$examCurrent' ";
    $result = mysql_query($query);
    $message = "message: Exam details was updated successfully!<br><br>";
  }
  //if add question...
  if(($addExamItem == 'add')||($actionAddRemoveExamItem == 'add this question')){
    if($actionAddRemoveExamItem == 'add this question'){
      $questionIdToAdd = $examItemToAddOrRemove;
    }
    //check if question id is from the same subject...
    connect_Db();
    $query = "SELECT subject_id FROM exam WHERE exam_id='$examCurrent' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $subjectOfExam = $myrow[0];
    $query = "SELECT topic.subject_id FROM question, topic WHERE question.question_id='$questionIdToAdd' AND question.topic_id=topic.topic_id
";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $subjectOfQuestion = $myrow[0];
    $query = "SELECT * FROM exam_item WHERE exam_id='$examCurrent' AND question_id='$questionIdToAdd' ";
    $result = mysql_query($query);
    $questionIdToAddExists = mysql_num_rows($result);
    if(($subjectOfExam == $subjectOfQuestion)&&($questionIdToAddExists == 0)){
      $query = "INSERT INTO exam_item (exam_id, question_id) VALUES ('$examCurrent', '$questionIdToAdd') ";
      $result = mysql_query($query);
      $message = "message: question [$questionIdToAdd] has been added successfully!<br><br>";
      //assign pointAssigned of 'matching type' questions to count($answerArray)
      $query = "SELECT questionType, answer FROM question WHERE question_id='$questionIdToAdd' ";
      $result= mysql_query($query);
      $myrow = mysql_fetch_row($result);
      if($myrow[0] == "matching type"){
        $tempArray = explode(",", $myrow[1]);
        $query = "UPDATE exam_item SET pointAssigned='".count($tempArray)."' WHERE exam_id='$examCurrent' AND question_id='$questionIdToAdd' ";
        $result= mysql_query($query);
      }
    }
    else{
      if($questionIdToAddExists != 0){
        $message = "error: question [$questionIdToAdd] is already in the list!<br><br>";
      }
      else{
        $message = "error: question [$questionIdToAdd] belongs to a different subject or possibly does not exists!<br><br>";
      }
    }
  }
  //if remove question item...
  if(($removeExamItem == 'remove')||($actionAddRemoveExamItem == 'remove this question')){
    if($actionAddRemoveExamItem == 'remove this question'){
      $questionIdToDelete = $examItemToAddOrRemove;
    }
    connect_Db();
    $query = "DELETE FROM exam_item WHERE exam_id='$examCurrent' AND question_id='$questionIdToDelete'";
    $result = mysql_query($query);
    $message = "message: Question [$questionIdToDelete] has been successfully removed from this exam.<br><br>";
  }
  //display any message here...
  if(isset($message)){
    echo "$message<br><br>";
    unset($message);
  }

  //display exam details form...
  echo "<table border='1'>";
  echo "<form name='examDetailsForm' method='post' action='?activeNav=$activeNav&activeTab=$activeTab' >";
  echo "<input type='hidden' name='examCurrent' value='$examCurrent' />";
  echo "<input type='hidden' name='subjName' value='$subjName' />";
  echo "<input type='hidden' name='examDateCreated' value='$examDateCreated' />";
  echo "<input type='hidden' name='addExamItem' value='$addExamItem' />";
  echo "<input type='hidden' name='examDeptCurrent' value='$examDeptCurrent' />";
  echo "<tr><td colspan='2' align='center'>EXAM DETAILS&nbsp;";
  connect_Db();
  $query = "SELECT COUNT(question_id) FROM exam_item WHERE exam_id='$examCurrent' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  if($myrow[0] > 0){
    echo "<a href='javascript:void open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
exam&examIdToPreview=$examCurrent\",\"\",\"fullscreen,scrollbars\");' style='font-size:75%;color:blue;text-decoration:none;'>PREVIEW</a>";
  }
  else{
    echo "<a href='javascript:void alert(\"error: please add questions for this exam first.\");' style='font-size:75%;color:blue;text-
decoration:none;' >PREVIEW</a>";
  }
  echo "</td></tr>";
  echo "<tr><td>Exam Id</td><td>$examCurrent</td></tr>";
  echo "<tr><td>Subject</td><td>$subjName</td></tr>";
  echo "<tr><td>Departmental Number</td><td>$examDeptCurrent</td></tr>";
  echo "<tr><td>Description</td><td>";
  echo "<textarea name='examDescription' rows='3' cols='36' >$examDescription</textarea>";
  echo "</td></tr>";
  echo "<tr><td>Author</td><td><input type='text' name='examAuthor' value='$examAuthor' /></td></tr>";
  echo "<tr><td>Alloted Time</td><td><input type='text' name='examAllottedTime' value='$examAllottedTime' /> mins</td></tr>";
  echo "<tr><td>Date Created</td><td>$examDateCreated</td></tr>";
  echo "<tr><td colspan='2' align='center'><input type='submit' name='examDetails' value='update'>";
  echo "<button type='reset' name='reset' value='reset'>reset</button></td></tr>";
  echo "</form>";
  echo "</table>";

  //display exam coverage details...
  echo "<br>";
  exam_Coverage_Details();

  //display add question_id form
  $postString = '';
  $postString = '?';
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      if(!(($key == 'action')||($key == 'mode')||($key == 'removeExamItem')||($key == 'examEditFromBrowse')||($key == 'questionIdToAdd'))){
        $postString = $postString."$key=$value"."&";
      }
    }
  }
  echo "<form name='addExamQuestionForm' method='post' action='$postString' >";
  echo "<input type='hidden' name='examCurrent' value='$examCurrent' />";
  echo "<input type='hidden' name='subjName' value='$subjName' />";
  echo "<input type='hidden' name='examDescription' value='$examDescription' />";
  echo "<input type='hidden' name='examAuthor' value='$examAuthor' />";
  echo "<input type='hidden' name='examAllottedTime' value='$examAllottedTime' />";
  echo "<input type='hidden' name='examDateCreated' value='$examDateCreated' />";
  echo "<input type='hidden' name='addExamItem' value='$addExamItem' />";
  echo "<input type='hidden' name='examDeptCurrent' value='$examDeptCurrent' />";

  echo "<table border='1'>";
  if($addExamItem == 'switch to question query'){
    echo "<tr><td colspan='2' align='center'><input type='submit' name='addExamItem' value='switch to add by question id'></td></tr>";
  }
  else{
    echo "<tr><td colspan='2' align='center'><input type='submit' name='addExamItem' value='switch to question query'></td></tr>";
    echo "<tr><td colspan='2' align='center'>ADD QUESTION</td></tr>";
    echo "<tr><td>Question Id</td><td><input type='text' name='questionIdToAdd' /></td></tr>";
    echo "<tr><td colspan='2' align='center'><input type='submit' name='addExamItem' value='add'></td></tr>";
  }
  echo "</table>";
  echo "</form>";

  if($addExamItem == 'switch to question query'){
    question_Query_Admin();
  }
  else{
    exam_Add_Question_Method_A();
  }
}
/////////////////////////////////////////////////////////
function exam_Add_Question_Method_A(){
  global $examCurrent;
  global $subjName;
  //table of true or false questions
  connect_Db();
  $queryString = "SELECT question.question_id, subject.subjectName, topic.topicName, question.questionType, question.objects, question.author,
question.difficulty, exam_item.pointAssigned FROM exam_item, question, subject, topic WHERE question.topic_id=topic.topic_id AND
subject.subject_id=topic.subject_id AND exam_item.question_id=question.question_id AND question.questionType='true or false' AND
exam_item.exam_id='$examCurrent' ORDER BY question.question_id ASC";
  $resultQuery = mysql_query($queryString);
  echo "<table id='questionTypeTab' width='100%'><tr><td align='left'>TRUE OR FALSE</td>";
  echo "<td align='right'>";
  if(mysql_num_rows($resultQuery) > 0){
    echo "<input type='button' id='buttonTrueOrFalseA' value='minimize all' onClick='return maximizeMinimize(\"buttonTrueOrFalseA\",
\"removeExamQuestionForm_TF\")'/>";
    echo "<input type=\"button\" id=\"buttonTrueOrFalse\" onClick=\"show_Hide('spanTrueOrFalse','buttonTrueOrFalse', 'buttonTrueOrFalseA')\"
value=\"hide\">";
  }
  echo "</td></tr></table>";
  echo "<span id=\"spanTrueOrFalse\" style=\"display:\">";
  echo "<table class='questionTypeTable' border='0' bgcolor='#F1FBF1' width='100%' cellpadding='10px' align='center'>";
  echo "<tr><td align='center'>";
  if(mysql_num_rows($resultQuery) == 0){
    echo "0 records";
  }
  while($records = mysql_fetch_row($resultQuery)){
    $spanQuestion = "q".$records[0];
    $buttonQuestion = "b".$records[0];
    $postString = '';
    $postString = '?';
    foreach($GLOBALS as $key=>$value){
      if ( ereg("[a-z]", $key[0],$array ) ){
        if(!(($key == 'action')||($key == 'mode')||($key == 'addExamItem')||($key == 'examEditFromBrowse'))){
          $postString = $postString."$key=$value"."&";
        }
      }
    }
    echo "<form id='removeExamQuestionForm_TF' name='removeExamQuestionForm' method='post' action='$postString' >";
    echo "<div class='greenBarWithMinMaxDel'>";
    echo "<a href='javascript:void open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
question&questionIdToDisplay=$records[0]\",\"\",\"fullscreen,scrollbars\");'><font color='blue'>PREVIEW</font></a>&nbsp;";
    echo "<input type=\"button\" id=\"$buttonQuestion\" onClick=\"show_Hide('$spanQuestion','$buttonQuestion')\" value=\" _ \">";
    echo "<input type='hidden' name='examCurrent' value='$examCurrent' />";
    echo "<input type='hidden' name='subjName' value='$subjName' />";
    echo "<input type='hidden' name='questionIdToDelete' value='$records[0]' />";
    echo "<input type='submit' name='removeExamItem' value='remove'>";
    echo "</div>";
    echo "<span id=\"$spanQuestion\" style=\"display:\">";
    echo "<table border='1' class='questionTableResult' >";
    echo "<tr><td>";
    echo "<a id='a_$records[0]'>";
    echo "<table class='questionInfo'>";
    echo "<tr><td>Question Id:</td><td>$records[0]<br></td></tr>";
    echo "<tr><td>Subject Name:</td><td>$records[1]<br></td></tr>";
    echo "<tr><td>Topic Name:</td><td>$records[2]<br></td></tr>";
    echo "<tr><td>Question Type:</td><td>$records[3]<br></td></tr>";
    echo "<tr><td>Author:</td><td>$records[5]<br></td></tr>";
    echo "<tr><td>Difficulty:</td><td>$records[6]<br></td></tr>";
    echo "<tr><td>Weight:</td><td>";
    echo "<input type='hidden' name='wOld' value='$records[7]'/>";
    echo "<input type='text' name='wNew' value='$records[7]' maxLength='2' size='1' onChange='return saveExamItemWeight(this.form)'/>";
    echo"</td></tr>";
    echo "</table>";
    echo "</a>";
    echo "</td></tr>";
    echo "<tr><td class='questionTd' align='center'>";
    include("$records[4].htm");
    echo "</td></tr>";
    echo "</table></span>";
    echo "</form>";
  }
  echo"</td></tr>";
  echo "</table>";
  echo "</span>";
  //table of multiple choice
  $queryString = "SELECT question.question_id, subject.subjectName, topic.topicName, question.questionType, question.objects, question.author,
question.difficulty, exam_item.pointAssigned FROM exam_item, question, subject, topic WHERE question.topic_id=topic.topic_id AND
subject.subject_id=topic.subject_id AND exam_item.question_id=question.question_id AND question.questionType='multiple choice' AND
exam_item.exam_id='$examCurrent' ORDER BY question.question_id ASC";
  $resultQuery = mysql_query($queryString);
  echo "<br><table id='questionTypeTab' width='100%'><tr><td align='left'>MULTIPLE CHOICE</td>";
  echo "<td align='right'>";
  if(mysql_num_rows($resultQuery) > 0){
    echo "<input type='button' id='buttonMultipleChoiceA' value='minimize all' onClick='return maximizeMinimize(\"buttonMultipleChoiceA\",
\"removeExamQuestionForm_MC\")'/>";
    echo "<input type=\"button\" id=\"buttonMultipleChoice\" onClick=\"show_Hide('spanMultipleChoice','buttonMultipleChoice',
'buttonMultipleChoiceA')\" value=\"hide\"></td>";
  }
  echo "</tr></table>";
  echo "<span id=\"spanMultipleChoice\" style=\"display:\">";
  echo "<table class='questionTypeTable' border='0' bgcolor='#F1FBF1' width='100%' cellpadding='10px' align='center'>";
  echo "<tr><td align='center'>";
  if(mysql_num_rows($resultQuery) == 0){
    echo "0 records";
  }
  while($records = mysql_fetch_row($resultQuery)){
    $spanQuestion = "q".$records[0];
    $buttonQuestion = "b".$records[0];
    $postString = '';
    $postString = '?';
    foreach($GLOBALS as $key=>$value){
      if ( ereg("[a-z]", $key[0],$array ) ){
        if(!(($key == 'action')||($key == 'mode')||($key == 'addExamItem')||($key == 'examEditFromBrowse'))){
          $postString = $postString."$key=$value"."&";
        }
      }
    }
    echo "<form id='removeExamQuestionForm_MC' name='removeExamQuestionForm' method='post' action='$postString' >";
    echo "<div class='greenBarWithMinMaxDel'>";
    echo "<a href='javascript:void open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
question&questionIdToDisplay=$records[0]\",\"\",\"fullscreen,scrollbars\");'><font color='blue'>PREVIEW</font></a>&nbsp;";
    echo "<input type=\"button\" id=\"$buttonQuestion\" onClick=\"show_Hide('$spanQuestion','$buttonQuestion')\" value=\" _ \">";
    echo "<input type='hidden' name='examCurrent' value='$examCurrent' />";
    echo "<input type='hidden' name='subjName' value='$subjName' />";
    echo "<input type='hidden' name='questionIdToDelete' value='$records[0]' />";
    echo "<input type='submit' name='removeExamItem' value='remove'>";
    echo "</div>";
    echo "<span id=\"$spanQuestion\" style=\"display:\">";
    echo "<table border='1' class='questionTableResult' >";
    echo "<tr><td>";
    echo "<a id='a_$records[0]'>";
    echo "<table class='questionInfo'>";
    echo "<tr><td>Question Id:</td><td>$records[0]<br></td></tr>";
    echo "<tr><td>Subject Name:</td><td>$records[1]<br></td></tr>";
    echo "<tr><td>Topic Name:</td><td>$records[2]<br></td></tr>";
    echo "<tr><td>Question Type:</td><td>$records[3]<br></td></tr>";
    echo "<tr><td>Author:</td><td>$records[5]<br></td></tr>";
    echo "<tr><td>Difficulty:</td><td>$records[6]<br></td></tr>";
    echo "<tr><td>Weight:</td><td>";
    echo "<input type='hidden' name='wOld' value='$records[7]'/>";
    echo "<input type='text' name='wNew' value='$records[7]' maxLength='2' size='1' onChange='return saveExamItemWeight(this.form)'/>";
    echo"</td></tr>";
    echo "</table>";
    echo "</a>";
    echo "</td></tr>";
    echo "<tr><td class='questionTd' align='center'>";
    include("$records[4].htm");
    echo "</td></tr>";
    echo "</table></span>";
    echo "</form>";
  }
  echo "</td></tr>";
  echo "</table>";
  echo "</span>";
  //table of matching type questions
  $queryString = "SELECT question.question_id, subject.subjectName, topic.topicName, question.questionType, question.objects, question.author,
question.difficulty, exam_item.pointAssigned FROM exam_item, question, subject, topic WHERE question.topic_id=topic.topic_id AND
subject.subject_id=topic.subject_id AND exam_item.question_id=question.question_id AND question.questionType='matching type' AND
exam_item.exam_id='$examCurrent' ORDER BY question.question_id ASC";
  $resultQuery = mysql_query($queryString);
  echo "<br><table id='questionTypeTab' width='100%'><tr><td align='left'>MATCHING TYPE</td>";
  echo "<td align='right'>";
  if(mysql_num_rows($resultQuery) > 0){
    echo "<input type='button' id='buttonMatchingTypeA' value='minimize all' onClick='return maximizeMinimize(\"buttonMatchingTypeA\",
\"removeExamQuestionForm_MT\")'/>";
    echo "<input type=\"button\" id=\"buttonMatchingType\" onClick=\"show_Hide('spanMatchingType','buttonMatchingType','buttonMatchingTypeA')\"
value=\"hide\">";
  }
  echo "</td></tr></table>";
  echo "<span id=\"spanMatchingType\" style=\"display:\">";
  echo "<table class='questionTypeTable' border='0' bgcolor='#F1FBF1' width='100%' cellpadding='10px' align='center'>";
  echo "<tr><td align='center'>";
  if(mysql_num_rows($resultQuery) == 0){
    echo "0 records";
  }
  while($records = mysql_fetch_row($resultQuery)){
    $spanQuestion = "q".$records[0];
    $buttonQuestion = "b".$records[0];
    $postString = '';
    $postString = '?';
    foreach($GLOBALS as $key=>$value){
      if ( ereg("[a-z]", $key[0],$array ) ){
        if(!(($key == 'action')||($key == 'mode')||($key == 'addExamItem')||($key == 'examEditFromBrowse'))){
          $postString = $postString."$key=$value"."&";
        }
      }
    }
    echo "<form id='removeExamQuestionForm_MT' name='removeExamQuestionForm' method='post' action='$postString' >";
    echo "<div class='greenBarWithMinMaxDel'>";
    echo            "<a            href='javascript:void            open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
question&questionIdToDisplay=$records[0]\",\"\",\"fullscreen,scrollbars\");'><font color='blue'>PREVIEW</font></a>&nbsp;";
    echo "<input type=\"button\" id=\"$buttonQuestion\" onClick=\"show_Hide('$spanQuestion','$buttonQuestion')\" value=\" _ \">";
    echo "<input type='hidden' name='examCurrent' value='$examCurrent' />";
    echo "<input type='hidden' name='subjName' value='$subjName' />";
    echo "<input type='hidden' name='questionIdToDelete' value='$records[0]' />";
    echo "<input type='submit' name='removeExamItem' value='remove'>";
    echo "</div>";
    echo "<span id=\"$spanQuestion\" style=\"display:\">";
    echo "<table border='1' class='questionTableResult' >";
    echo "<tr><td>";
    echo "<a id='a_$records[0]'>";
    echo "<table class='questionInfo'>";
    echo "<tr><td>Question Id:</td><td>$records[0]<br></td></tr>";
    echo "<tr><td>Subject Name:</td><td>$records[1]<br></td></tr>";
    echo "<tr><td>Topic Name:</td><td>$records[2]<br></td></tr>";
    echo "<tr><td>Question Type:</td><td>$records[3]<br></td></tr>";
    echo "<tr><td>Author:</td><td>$records[5]<br></td></tr>";
    echo "<tr><td>Difficulty:</td><td>$records[6]<br></td></tr>";
    echo "<tr><td>Weight:</td><td>";
    echo "<input type='hidden' name='wOld' value='$records[7]'/>";
    echo "<input type='text' name='wNew' value='$records[7]' maxLength='2' size='1' onChange='return saveExamItemWeight(this.form)'/>";
    echo"</td></tr>";
    echo "</table>";
    echo "</a>";
    echo "</td></tr>";
    echo "<tr><td class='questionTd' align='center'>";
    include("$records[4].htm");
    echo "</td></tr>";
    echo "</table></span>";
    echo "</form>";
  }
  echo "</td></tr>";
  echo "</table>";
  echo "</span>";
  echo "<br>";
  //echo "<br><hr width='100%' size='1' align='left' color='#000000'/>";
}
//////////////////////////////////////////////////////////
function question_Query_Admin(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      //print "\$GLOBALS[\"$key\"] == $value<br>";
      global $$key;
    }
    else{
    }
  }
  if($redirectedFromEdit == 'yes'){
    echo "Please choose the question to be edited<br>";
  }
  if($questionToDelete != ''){
    connect_Db();
    $query = "SELECT objects FROM question WHERE question_id='$questionToDelete' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $fileLink = $myrow[0];
    unlink($fileLink.".doc");
    unlink($fileLink.".htm");
    $fileLink = $fileLink."_files";
    if(is_dir($fileLink)){
      $dh = opendir($fileLink);
      while(gettype($file = readdir($dh)) != boolean){
        if(is_file($fileLink.'\\'.$file)){
          //echo "($file)";
          unlink($fileLink.'\\'.$file);
        }
      }
      closedir($dh);
      rmdir($fileLink);
    }
    //delete the linked multimedia files...
    $query = "SELECT src FROM file WHERE question_id='$questionToDelete' ";
    $result = mysql_query($query);
    while($myrow = mysql_fetch_row($result)){
      unlink($myrow[0]);
    }
    $query = "DELETE FROM file WHERE question_id='$questionToDelete' ";
    $result = mysql_query($query);
    $query = "DELETE FROM question WHERE question_id='$questionToDelete' ";
    $result = mysql_query($query);
    echo "Question id: $questionToDelete has been deleted!<br>";
  }
  //display the query filters...
  //echo "Please use the following filters:";
  echo "<table border='1' >";
  echo "<form name='questionQuery' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";

  echo "<input type='hidden' name='examCurrent' value='$examCurrent' />";
  echo "<input type='hidden' name='subjName' value='$subjName' />";
  echo "<input type='hidden' name='examDescription' value='$examDescription' />";
  echo "<input type='hidden' name='examAuthor' value='$examAuthor' />";
  echo "<input type='hidden' name='examAllottedTime' value='$examAllottedTime' />";
  echo "<input type='hidden' name='examDateCreated' value='$examDateCreated' />";
  echo "<input type='hidden' name='addExamItem' value='$addExamItem' />";
  echo "<input type='hidden' name='examDeptCurrent' value='$examDeptCurrent' />";

  echo "<tr><td colspan='2' align='center'>Question Search Filters</td></tr>";
  echo "<tr><td>Subject</td><td>";
  connect_Db();
  $query = "SELECT subject_id FROM exam WHERE exam_id='$examCurrent'";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  $qSubject = $myrow[0];
  echo "<input type='hidden' name='qSubject' value='$qSubject'>";
  echo "$subjName";
  echo "</td></tr>";
  echo "<tr><td>Topic</td><td>";
  echo "<input type='hidden' name='hTopic' value='$qTopic'>";
  $query  =  "SELECT  topic_id,  topicName,  CASE  deptNum  WHEN  'first  departmental'  THEN  1  WHEN  'second  departmental'  THEN  2  WHEN  'third
departmental'  THEN  3  WHEN  'fourth  departmental'  THEN  4  WHEN  'fifth  departmental'  THEN  5  WHEN  'sixth  departmental'  THEN  6  WHEN  'seventh
departmental' THEN 7 END AS deptNumInt FROM topic WHERE subject_id='$qSubject' ORDER BY deptNumInt ASC, topicName ASC";
  //$query = "SELECT topic_id, topicName FROM topic WHERE subject_id='$qSubject' ";
  $result = mysql_query($query);
  echo "<select name='qTopic'>";
  if($qSubject == 'any'){
    $qTopic = 'any';
    echo "<option value='any'>any</option>";
  }
  elseif(mysql_num_rows($result) == 0){
    $filter = 'subject chosen has no topics';
    echo "<option value='subject chosen has no topics'>subject chosen has no topics</option>";
  }
  else{
    if($qTopic == 'subject chosen has no topics'){
      $qTopic = 'any';
    }
    echo "<option value='any'>any</option>";
    while($myrow = mysql_fetch_row($result)){
      echo "<option value='$myrow[0]'>[$myrow[2]] $myrow[1]</option>";
    }
  }
  echo "</select>";
  echo "</td></tr>";
  echo "<tr><td>Question Type</td><td>";
  echo "<input type='hidden' name='hQuestionType' value='$qQuestionType'>";
  echo "<select name='qQuestionType'>";
  echo "<option value='any'>any</option>";
  echo "<option value='multiple choice'>multiple choice</option>";
  echo "<option value='true or false'>true or false</option>";
  echo "<option value='matching type'>matching type</option>";
  echo "</select>";
  echo "</td></tr>";
  echo "<tr><td>Difficulty</td><td>";
  echo "<input type='hidden' name='hDifficulty' value='$qDifficulty'>";
  echo "<select name='qDifficulty'>";
  echo "<option value='any'>any</option>";
  echo "<option value='very easy'>very easy</option>";
  echo "<option value='easy'>easy</option>";
  echo "<option value='medium'>medium</option>";
  echo "<option value='hard'>hard</option>";
  echo "<option value='very hard'>very hard</option>";
  echo "</select>";
  echo "</td></tr>";
  echo "<tr><td>Sorted By</td><td>";
  echo "<input type='hidden' name='hSortedBy' value='$qSortedBy'>";
  echo "<select name='qSortedBy'>";
  echo "<option value='Question Id'>Question Id</option>";
  echo "<option value='Topic Name'>Topic Name</option>";
  echo "<option value='Question Type'>Question Type</option>";
  echo "<option value='Author'>Author</option>";
  echo "<option value='Difficulty'>Difficulty</option>";
  echo "</select>";
  echo "</td></tr>";
  echo "<tr><td colspan='2'>";
  echo "<input type='hidden' name='hDirection' value='$qDirection'>";
  echo "ascending<input type='radio' name='qDirection' value='ascending' checked='checked'>";
  echo "descending<input type='radio' name='qDirection' value='descending' >";
  echo "</td></tr>";
  echo "<tr><td>Display</td><td>";
  echo "<input type='hidden' name='hNumResults' value='$qNumResults'>";
  echo "<select name='qNumResults'>";
  echo "<option value='10'>10</option>";
  echo "<option value='20'>20</option>";
  echo "<option value='30'>30</option>";
  echo "<option value='40'>40</option>";
  echo "<option value='50'>50</option>";
  echo "</select> per page";
  echo "</td></tr>";
  echo "<tr><td colspan='2' align='center'><input type='submit' name='filter' value='search'><button type='reset' name='reset'
value='reset'>reset</button></td></tr>";
  echo "</form>";
  echo "</table>";

  if($filter == 'search'){
    if(($qTopic == 'any')&&($qQuestionType == 'any')&&($qDifficulty == 'any')){
      $queryString = "SELECT question.question_id, subject.subjectName, topic.topicName, question.questionType, question.objects,
question.author, question.difficulty FROM question, subject, topic WHERE question.topic_id=topic.topic_id AND
subject.subject_id=topic.subject_id AND subject.subject_id='$qSubject'";
    }
    else{
      $queryString = "SELECT question.question_id, subject.subjectName, topic.topicName, question.questionType, question.objects,
question.author, question.difficulty FROM question, subject, topic WHERE question.topic_id=topic.topic_id AND
subject.subject_id=topic.subject_id AND subject.subject_id='$qSubject'";
      if(($qTopic != 'any')&&($qTopic != "")){
        $wherePart[] = "question.topic_id='$qTopic'";
      }
      if(($qQuestionType != 'any')&&($qQuestionType != "")){
        $wherePart[] = "question.questionType='$qQuestionType'";
      }
      if(($qDifficulty != 'any')&&($qDifficulty != "")){
        $wherePart[] = "question.difficulty='$qDifficulty'";
      }
      for($i = 0;$i < count($wherePart);$i++){
        $queryString = $queryString." AND $wherePart[$i]";
      }
    }
    switch($qSortedBy){
      case 'Question Id':
        $queryString = $queryString." ORDER BY question.question_id";
        break;
      case 'Topic Name':
        $queryString = $queryString." ORDER BY topic.topicName";
        break;
      case 'Question Type':
        $queryString = $queryString." ORDER BY question.questionType";
        break;
      case 'Author':
        $queryString = $queryString." ORDER BY question.author";
        break;
      case 'Difficulty':
        $queryString = $queryString." ORDER BY question.difficulty";
        break;
      default:
        break;
    }
    if($qDirection == 'ascending'){
      $queryString = $queryString." ASC";
    }
    else{
      $queryString = $queryString." DESC";
    }
    if($qTopic == 'subject chosen has no topics'){
      $filter = 'subject chosen has no topics';
    }
  }

  //echo "[$queryString]<br>";
  echo "<br><hr width='100%' size='1' align='left' color='#008000'/>";
  //query the query string
  if($filter == 'subject chosen has no topics'){
    echo "subject chosen has no topics";
  }
  elseif($filter == 'search'){
    //determine how many records...
    $resultQuery = mysql_query($queryString);
    $num_records = mysql_num_rows ($resultQuery);
    $display_number = $qNumResults;
    if ($num_records > $display_number) {
      $num_pages = ceil ($num_records/$display_number);
    } else {
      $num_pages = 1;
    }
    //Determine where in the database to start returning results...
    if (isset($_GET['s'])) {
      $start = $_GET['s'];
    } else {
      $start = 0;
    }
    //retrieve the records applying LIMIT...
    $queryString = $queryString. ' LIMIT '.$start.', '.$display_number;
    $resultQuery = mysql_query($queryString);

    if(mysql_num_rows($resultQuery) == 0){
      echo "<center>0 results returned</center>";
    }
    else{
      /*#008B8B #F0FFF0*/
      echo "<table border='0' bgcolor='#F1FBF1' width='100%' cellpadding='10px' align='center'>";
      if($num_records < ((($start/$display_number) + 1) * $display_number)){
        echo "<tr><td align='right'>Result ".($start + 1)." - ".$num_records." of about $num_records</td></tr>";
      }
      else{
        echo "<tr><td align='right'>Result ".($start + 1)." - ".((($start/$display_number) + 1) * $display_number)." of about
$num_records</td></tr>";
      }
      echo "<tr><td align='center'>";

      while($records = mysql_fetch_row($resultQuery)){
        //display the greenbar plus the 'add this question' OR 'remove this question' plus other notifications...
        $queryForQuestionStatus = "SELECT * FROM exam_item WHERE exam_id='$examCurrent' AND question_id='$records[0]'";
        $resultQuestionStatus = mysql_query($queryForQuestionStatus);
        $questionIsInTheExam = mysql_num_rows($resultQuestionStatus);
        echo "<div class='greenBar'>";
        $postString = '';
        $postString = '?';
        foreach($GLOBALS as $key=>$value){
          if ( ereg("[a-z]", $key[0],$array ) ){
            if(!(($key == 'action')||($key == 'mode')||($key == 'removeExamItem')||($key == 'examEditFromBrowse')||($key == 'queryString'))){
              $postString = $postString."$key=$value"."&";
              //echo "<br>[$key=$value]";
            }
          }
        }
        $postString = $postString."examItemToAddOrRemove=$records[0]";
        echo "<form name='addRemoveExamItem' action='$postString' method='POST' >";
        if($questionIsInTheExam == 0){
          echo "<input type='submit' name='actionAddRemoveExamItem' value='add this question'>";
        }
        else{
          echo "<input type='submit' name='actionAddRemoveExamItem' value='remove this question'>";
        }

        $queryForQuestionStatus = "SELECT * FROM exam, question, topic WHERE question.topic_id=topic.topic_id AND exam.deptNum=topic.deptNum
AND question.question_id='$records[0]' AND exam.exam_id='$examCurrent'";
        $resultQuestionStatus = mysql_query($queryForQuestionStatus);
        $questionTopicNotMatched = mysql_num_rows($resultQuestionStatus);
        if($questionTopicNotMatched == 0){
          echo " Note: This question's topic is not covered in the $examDeptCurrent";
        }
        echo "</div>";

        echo "<table border='1' class='questionTableResult' >";
        echo "<tr><td>";
        echo "<table class='questionInfo'>";
        echo "<tr><td>Question Id:</td><td>$records[0]<br></td></tr>";
        echo "<tr><td>Subject Name:</td><td>$records[1]<br></td></tr>";
        echo "<tr><td>Topic Name:</td><td>$records[2]<br></td></tr>";
        echo "<tr><td>Question Type:</td><td>$records[3]<br></td></tr>";
        echo "<tr><td>Author:</td><td>$records[5]<br></td></tr>";
        echo "<tr><td>Difficulty:</td><td>$records[6]<br></td></tr>";
        echo "</table>";
        echo "</td></tr>";
        echo "<tr><td class='questionTd' align='center'>";
        include("$records[4].htm");
        echo "</td></tr>";
        echo "</table>";
        echo "</form>";
        echo "<hr width='100%' size='1' align='left' color='#008000'/>";
      }//end of while
      echo "</td></tr></table>";

      //make the links to other query pages...

      if ($num_pages > 1){
        echo "<center>Result Page:";
        // Determine what page the script is on.
        $current_page = ($start/$display_number) + 1;
        // If it's not the first page, make a Previous button.
        if ($current_page != 1){
          $postString = '';
          $postString = '?';
          foreach($GLOBALS as $key=>$value){
            if ( ereg("[a-z]", $key[0],$array ) ){
              $postString = $postString."$key=$value"."&";
            }
          }
          $sLink = $start - $display_number;
          $postString = $postString."s=$sLink"."&np=$num_pages";
          echo "<a href='$postString'>Previous</a> ";
        }
        // Make all the numbered pages.
        for ($i = 1; $i <= $num_pages; $i++){
          if ($i != $current_page){
            $postString = '';
            $postString = '?';
            foreach($GLOBALS as $key=>$value){
              if ( ereg("[a-z]", $key[0],$array ) ){
                $postString = $postString."$key=$value"."&";
              }
            }
            $sLink = $display_number * ($i - 1);
            $postString = $postString."s=$sLink"."&np=$num_pages";
            echo "<a href='$postString'>$i</a> ";
          } else {
            echo $i . ' ';
          }
        }
        // If it's not the last page, make a Next button.
        if ($current_page != $num_pages){
          $postString = '';
          $postString = '?';
          foreach($GLOBALS as $key=>$value){
            if ( ereg("[a-z]", $key[0],$array ) ){
              $postString = $postString."$key=$value"."&";
            }
          }
          $sLink = $start + $display_number;
          $postString = $postString."s=$sLink"."&np=$num_pages";
          echo "<a href='$postString'>Next</a> ";
        }
      }
      echo "</center>";
    }//else part

  }
  echo "<br><hr width='100%' size='1' align='left' color='#008000'/>";
}
//////////////////////////////////////////////////////////
function get_Exam_Info(){
  global $examEditFromBrowse;
  global $subjName;
  global $examCurrent;
  global $examDescription;
  global $examAuthor;
  global $examAllottedTime;
  global $examDateCreated;
  global $examDeptCurrent;
  $examCurrent = $examEditFromBrowse;

  connect_Db();
  $query = "SELECT * FROM exam, subject WHERE exam.subject_id=subject.subject_id AND exam.exam_id=$examCurrent";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  $subjName = $myrow[8];
  $examDescription = $myrow[2];
  $examAuthor = $myrow[3];
  $examAllottedTime = $myrow[4];
  $examDateCreated = $myrow[5];
  $examDeptCurrent = $myrow[6];
}
//////////////////////////////////////////////////////////
function exam_Query(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      //print "\$GLOBALS[\"$key\"] == $value<br>";
      global $$key;
    }
    else{
    }
  }
  if($redirectedFromEdit == 'yes'){
    echo "Please choose the exam to be edited<br><br>";
  }
  if($redirectedFromExamSchedule == 'yes'){
    echo "Please choose the exam to be scheduled<br><br>";
  }
  //if examToDelete
  if(isset($questionToDelete)){
    //make sure no batch is created for this exam
    connect_Db();
    $query = "SELECT batch_id FROM batch WHERE exam_id='$questionToDelete' ";
    $result = mysql_query($query);
    if(mysql_Num_rows($result) > 0){
      echo "error: the exam identified by the exam_id '$questionToDelete' can't be deleted because a batch was already assigned for
it.<br><br>";
    }
    else{
      //delete exam_items
      $query = "DELETE FROM exam_item WHERE exam_id='$questionToDelete'";
      $result = mysql_query($query);
      //delete exam
      $query = "DELETE FROM exam WHERE exam_id='$questionToDelete'";
      $result = mysql_query($query);
      echo "message: the exam with exam_id '$questionToDelete' was successfully deleted.<br><br>";
    }
  }

  //display the query filters...
  echo "";
  echo "Please use the following filters:";
  echo "<form name='examQuery' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' style='display:inline;'>";
  echo "<table border='1' >";

  echo "<tr><td colspan='2' align='center'>Exam Search Filters</td></tr>";

  echo "<tr><td>Subject</td><td>";
  connect_Db();
  $query = "SELECT subject_id, subjectName FROM subject";
  $result = mysql_query($query);
  echo "<input type='hidden' name='examSubjectHidden' value='$examSubject'>";
  echo "<select name='examSubject'>";
  echo "<option value='any'>any</option>";
  while($myrow = mysql_fetch_row($result)){
    echo "<option value='$myrow[0]'>$myrow[1]</option>";
  }
  echo "</select>";
  echo "</td></tr>";

  echo "<tr><td rowspan='2'>Description</td><td>";
  echo "records ";
  if($examDescriptionMatchingFirstClick == 'yes'){
    echo "<input type='hidden' name='examDescriptionMatchingHidden' value='any'>";
  }
  else{
    echo "<input type='hidden' name='examDescriptionMatchingHidden' value='$examDescriptionMatching'>";
  }
  echo "<select name='examDescriptionMatching' onChange='return unhide_examDescriptionMatchingString()'>";
  echo "<option value='any'>any</option>";
  echo "<option value='with at least one of the words'>with at least one of the words</option>";
  echo "<option value='with the exact phrase'>with the exact phrase</option>";
  echo "<option value='with all of the words'>with all of the words</option>";
  echo "<option value='without the words'>without the words</option>";
  echo "</select>";
  echo "</td></tr><tr>";
  echo "<input type='hidden' name='examDescriptionStringHidden' value='$examDescriptionString'>";
  if(($redirectedFromEdit == 'yes')||($redirectedFromExamSchedule == 'yes')){
    echo "<td><input type='text' name='examDescriptionString' size='38' style='display:none'/></td>";
  }
  else{
    echo "<td><input type='text' name='examDescriptionString' size='38' /></td>";
  }
  echo "</tr>";

  echo "<tr><td>Author</td><td>";
  $query = "SELECT DISTINCT(author) FROM exam";
  $result = mysql_query($query);
  echo "<input type='hidden' name='examAuthorHidden' value='$examAuthor'>";
  echo "<select name='examAuthor'>";
  echo "<option value='any'>any</option>";
  while($myrow = mysql_fetch_row($result)){
    echo "<option value='$myrow[0]'>$myrow[0]</option>";
  }
  echo "</select>";
  echo "</td></tr>";

  echo "<tr><td>Alloted Time</td><td>";
  $query = "SELECT DISTINCT(allottedTime) FROM exam";
  $result = mysql_query($query);
  echo "<input type='hidden' name='examAllottedTimeHidden' value='$examAllottedTime'>";
  echo "<select name='examAllottedTime'>";
  echo "<option value='any'>any</option>";
  while($myrow = mysql_fetch_row($result)){
    echo "<option value='$myrow[0]'>$myrow[0]</option>";
  }
  echo "</select>";
  echo "</td></tr>";

  echo "<tr><td>Departmental Number</td><td>";
  $query = "SELECT DISTINCT(allottedTime) FROM exam";
  $result = mysql_query($query);
  echo "<input type='hidden' name='examDepartmentalNumberHidden' value='$examDepartmentalNumber'>";
  echo "<select name='examDepartmentalNumber'>";
  echo "<option value='any'>any</option>";
  $deptNumString = array ("first departmental", "second departmental", "third departmental", "fourth departmental", "fifth departmental",
"sixth departmental", "seventh departmental");
  for($i = 0; $i < count($deptNumString);$i++){
    echo "<option value='$deptNumString[$i]'>$deptNumString[$i]</option>";
  }
  echo "</select>";
  echo "</td></tr>";

  echo "<tr><td rowspan='2'>";
  echo "<input type='hidden' name='examDateWhichHidden' value='$examDateWhich'>";
  echo "<input type='radio' name='examDateWhich' value='Date Created' onClick='return examDateResetYear(this.form)' checked='checked'>Date
Created<br>";
  echo "<input type='radio' name='examDateWhich' value='Batch Schedule' onClick='return examDateResetYear(this.form)' >Batch Schedule";
  echo "</td><td rowspan='2'>";
  echo "Year ";
  echo "<input type='hidden' name='examDateYearHidden' value='$examDateYear'>";
  echo "<select name='examDateYear'>";
  echo "<option value='____'>any</option>";
  if($examDateWhich == 'Date Created'){
    $query = "SELECT dateCreated FROM exam ORDER BY dateCreated ASC";
  }
  if($examDateWhich == 'Batch Schedule'){
    $query = "SELECT batch.date FROM exam, batch WHERE exam.exam_id=batch.exam_id ORDER BY dateCreated ASC";
  }
  $result = mysql_query($query);
  //$examDateYearArray;
  while($myrow = mysql_fetch_row($result)){
    $tempIsInTheArray = 0;
    foreach($examDateYearArray as $temp){
      if($temp == substr($myrow[0],0,4)){
        $tempIsInTheArray = 1;
        continue;
      }
    }
    if($tempIsInTheArray == 0){
      $examDateYearArray[] = substr($myrow[0],0,4);
    }
  }
  foreach($examDateYearArray as $temp){
    echo "<option value='$temp'>$temp</option>";
  }
  echo "</select>";
  echo " Month ";
  echo "<input type='hidden' name='examDateMonthHidden' value='$examDateMonth'>";
  echo "<select name='examDateMonth'>";
  echo "<option value='__'>any</option>";
  echo "<option value='01'>January</option>";
  echo "<option value='02'>February</option>";
  echo "<option value='03'>March</option>";
  echo "<option value='04'>April</option>";
  echo "<option value='05'>May</option>";
  echo "<option value='06'>June</option>";
  echo "<option value='07'>July</option>";
  echo "<option value='08'>August</option>";
  echo "<option value='09'>September</option>";
  echo "<option value='10'>October</option>";
  echo "<option value='11'>November</option>";
  echo "<option value='12'>December</option>";
  echo "</select>";
  echo "</td></tr>";
  echo "<tr></tr>";

  echo "<tr><td>Sorted By</td><td>";
  echo "<input type='hidden' name='examSortedByHidden' value='$examSortedBy'>";
  echo "<select name='examSortedBy'>";
  echo "<option value='Exam Id'>Exam Id</option>";
  echo "<option value='Subject Name'>Subject Name</option>";
  echo "<option value='Description'>Description</option>";
  echo "<option value='Author'>Author</option>";
  echo "<option value='Allotted Time'>Allotted Time</option>";
  echo "<option value='Date Created'>Date Created</option>";
  echo "</select>";
  echo "</td></tr>";

  echo "<tr><td rowspan='2'>Direction</td><td>";
  echo "<input type='hidden' name='examDirectionHidden' value='$examDirection'>";
  echo "<input type='radio' name='examDirection' value='ascending' checked='checked'>ascending";
  echo "</td></tr>";
  echo "<td><input type='radio' name='examDirection' value='descending' >descending</td></tr>";

  echo "<tr><td>Display</td><td>";
  echo "<input type='hidden' name='examNumResultsHidden' value='$examNumResults'>";
  echo "<select name='examNumResults'>";
  echo "<option value='10'>10</option>";
  echo "<option value='20'>20</option>";
  echo "<option value='30'>30</option>";
  echo "<option value='40'>40</option>";
  echo "<option value='50'>50</option>";
  echo "</select> per page";
  echo "</td></tr>";
  echo "<tr><td colspan='2' align='center'><input type='submit' name='filter' value='search'><button type='reset' name='reset'
value='reset'>reset</button></td></tr>";
  echo "</form>";
  echo "</table>";

  //display the exam records...
  if($filter == 'search'){
    if(($examSubject == 'any')&&($examDescriptionMatching == 'any')&&($examAuthor == 'any')&&($examAllottedTime == 'any')&&($examDateYear ==
'any')&&($examDateMonth == 'any')){
      $queryString = "SELECT * FROM exam, subject, batch WHERE exam.subject_id=subject.subject_id";
    }
    else{
      if($examDateWhich == 'Batch Schedule'){
        $queryString = "SELECT * FROM exam, subject, batch WHERE";
      }
      else{
        $queryString = "SELECT * FROM exam, subject WHERE";
      }
      $wherePart[] = "exam.subject_id=subject.subject_id";
      if(($examSubject != 'any')&&($examSubject != '')){
        $wherePart[] = "exam.subject_id='$examSubject'";
      }
      if(($examDescriptionMatching != 'any')&&($examDescriptionMatching != '')){
        $examDescriptionStringArray = explode(" ", $examDescriptionString);
        switch($examDescriptionMatching){
          case 'with at least one of the words':
            $finalString = "(";
            for($i = 0;$i < count($examDescriptionStringArray);$i++){
              if($i == count($examDescriptionStringArray) - 1){
                $finalString = $finalString."exam.description LIKE '%".trim($examDescriptionStringArray[$i])."%'";
              }
              else{
                $finalString = $finalString."exam.description LIKE '%".trim($examDescriptionStringArray[$i])."%' OR ";
              }
            }
            $finalString = $finalString.")";
            break;
          case 'with the exact phrase':
            $finalString = "exam.description LIKE '%".trim($examDescriptionString)."%'";
            break;
          case 'with all of the words':
            $finalString = "(";
            for($i = 0;$i < count($examDescriptionStringArray);$i++){
              if($i == count($examDescriptionStringArray) - 1){
                $finalString = $finalString."exam.description LIKE '%".trim($examDescriptionStringArray[$i])."%'";
              }
              else{
                $finalString = $finalString."exam.description LIKE '%".trim($examDescriptionStringArray[$i])."%' AND ";
              }
            }
            $finalString = $finalString.")";
            break;
          case 'without the words':
            $finalString = "(";
            for($i = 0;$i < count($examDescriptionStringArray);$i++){
              if($i == count($examDescriptionStringArray) - 1){
                $finalString = $finalString."exam.description NOT LIKE '%".trim($examDescriptionStringArray[$i])."%'";
              }
              else{
                $finalString = $finalString."exam.description NOT LIKE '%".trim($examDescriptionStringArray[$i])."%' OR ";
              }
            }
            $finalString = $finalString.")";
            break;
          default:
            break;
        }
        $wherePart[] = $finalString;
      }
      if(($examAuthor != 'any')&&($examAuthor != '')){
        $wherePart[] = "exam.author='$examAuthor'";
      }
      if(($examAllottedTime != 'any')&&($examAllottedTime != '')){
        $wherePart[] = "exam.allottedTime='$examAllottedTime'";
      }
      if(($examDepartmentalNumber != 'any')&&($examDepartmentalNumber != '')){
        $wherePart[] = "exam.deptNum='$examDepartmentalNumber'";
      }
      if((($examDateWhich == 'Date Created')||($examDateWhich == 'Batch Schedule'))&&(!(($examDateYear == '____')&&($examDateMonth == '__')))){
        if($examDateWhich == 'Date Created'){
          $wherePart[] = "(exam.dateCreated LIKE '$examDateYear-$examDateMonth%')";
        }
        else{
          $wherePart[] = "exam.exam_id=batch.exam_id";
          $wherePart[] = "(batch.date LIKE '$examDateYear-$examDateMonth%')";
        }
      }
      for($i = 0;$i < count($wherePart);$i++){
        if($i == count($wherePart) - 1){
          $queryString = $queryString." $wherePart[$i]";
        }
        else{
          $queryString = $queryString." $wherePart[$i] AND";
        }
      }
    }
    if(($examDateWhich == 'Date Created')||($examDateWhich == 'Batch Schedule')){
      $queryString = $queryString." GROUP BY exam.exam_id";
    }
    switch($examSortedBy){
      case 'Exam Id':
        $queryString = $queryString." ORDER BY exam.exam_id";
        break;
      case 'Subject Name':
        $queryString = $queryString." ORDER BY subject.subjectName";
        break;
      case 'Description':
        $queryString = $queryString." ORDER BY exam.description";
        break;
      case 'Author':
        $queryString = $queryString." ORDER BY exam.author";
        break;
      case 'Allotted Time':
        $queryString = $queryString." ORDER BY exam.allottedTime";
        break;
      case 'Date Created':
        $queryString = $queryString." ORDER BY exam.dateCreated";
        break;
      default:
        break;
    }
    if($examDirection == 'ascending'){
      $queryString = $queryString." ASC";
    }
    else{
      $queryString = $queryString." DESC";
    }
  }
//  $date = date("M d, Y h:i:s A", time());
  //echo "[$queryString][$date]<br>";
  echo "<br><hr width='100%' size='1' align='left' color='#008000'/>";
  //query the query string
  if($filter == 'search'){
    //determine how many records...
    $resultQuery = mysql_query($queryString);
    $num_records = mysql_num_rows ($resultQuery);
    $display_number = $examNumResults;
    if ($num_records > $display_number) {
      $num_pages = ceil ($num_records/$display_number);
    } else {
      $num_pages = 1;
    }
    //Determine where in the database to start returning results...
    if (isset($_GET['s'])) {
      $start = $_GET['s'];
    } else {
      $start = 0;
    }
    //retrieve the records applying LIMIT...
    $queryString = $queryString. ' LIMIT '.$start.', '.$display_number;
    $resultQuery = mysql_query($queryString);

    if(mysql_num_rows($resultQuery) == 0){
      echo "<center>0 results returned</center>";
    }
    else{
      /*#008B8B #F0FFF0*/
      echo "<table border='0' bgcolor='#F1FBF1' width='100%' cellpadding='10px' align='center'>";
      if($num_records < ((($start/$display_number) + 1) * $display_number)){
        echo "<tr><td align='right'>Result ".($start + 1)." - ".$num_records." of about $num_records</td></tr>";
      }
      else{
        echo "<tr><td align='right'>Result ".($start + 1)." - ".((($start/$display_number) + 1) * $display_number)." of about
$num_records</td></tr>";
      }
      echo "<tr><td align='center'>";

      while($records = mysql_fetch_row($resultQuery)){
        echo "<div class='greenBar'>";
        $query_records = "SELECT COUNT(batch_id) FROM batch WHERE exam_id='$records[0]' ";
        $result_records = mysql_query($query_records);
        $myrow_records = mysql_fetch_row($result_records);
        if($myrow_records[0] == 0){
          echo "&nbsp;&nbsp;&nbsp;";
          echo "<a href='?examEditFromBrowse=$records[0]&activeNav=Exam&activeTab=Edit Exam'>EDIT</a>&nbsp;&nbsp;|&nbsp;&nbsp;";
          $deleteQuestionPost = "questionToDelete=$records[0]";
          foreach($GLOBALS as $key=>$value){
            if ( ereg("[a-z]", $key[0],$array ) ){
              if($key != 'questionToDelete'){
                $deleteQuestionPost = $deleteQuestionPost."&$key=$value";
              }
            }
          }
          echo "<a href='?$deleteQuestionPost'>DELETE</a>&nbsp;&nbsp;|&nbsp;&nbsp;";
        }
        else{
          echo "<font style='font-size:75%;'>&nbsp;&nbsp;&nbsp;EDIT&nbsp;&nbsp;|&nbsp;&nbsp;DELETE&nbsp;&nbsp;|&nbsp;&nbsp;</font>";
        }
        //echo "<a href='?questionEditFromBrowse=$records[0]&activeNav=Question&activeTab=Edit Question'>SAVE AS</a>&nbsp;&nbsp;|&nbsp;&nbsp;";
        $query_records = "SELECT COUNT(question_id) FROM exam_item WHERE exam_id='$records[0]' ";
        $result_records = mysql_query($query_records);
        $myrow_records = mysql_fetch_row($result_records);
        if($myrow_records[0] > 0){
          echo "<a href='javascript:void open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
exam&examIdToPreview=$records[0]\",\"\",\"fullscreen,scrollbars\");'>PREVIEW</a>&nbsp;&nbsp;|&nbsp;&nbsp;";
          echo "<a href='javascript:void open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
exam&style=printStyle&examIdToPreview=$records[0]\",\"\",\"\");'>PRINT</a>&nbsp;&nbsp;|&nbsp;&nbsp;";
          echo "<a href='?examToScheduleFromBrowse=$records[0]&activeNav=Exam&activeTab=Exam Schedule'>SCHEDULE</a>&nbsp;&nbsp;|&nbsp;&nbsp;";
          echo "<a href='?examToSaveAsFromBrowse=$records[0]&activeNav=Exam&activeTab=Edit Exam'>SAVE AS</a>";
        }
        else{
          echo "<font style='font-size:75%;'>PREVIEW&nbsp;&nbsp;|&nbsp;&nbsp;SCHEDULE</font>";
        }
        echo "</div>";
        echo "<table border='1' class='questionTableResult' >";
        echo "<tr><td>";
        echo "<table class='questionInfo'>";
        echo "<tr><td>Exam Id:</td><td>$records[0]<br></td></tr>";
        echo "<tr><td>Subject Name:</td><td>$records[8]<br></td></tr>";
        echo "<tr><td>Description:</td><td>$records[2]<br></td></tr>";
        echo "<tr><td>Author:</td><td>$records[3]<br></td></tr>";
        echo "<tr><td>Allotted Time:</td><td>$records[4]<br></td></tr>";
        echo "<tr><td>Date Created</td><td>$records[5]<br></td></tr>";
        echo "<tr><td>Departmental Number</td><td>$records[6]<br></td></tr>";
        echo "</table>";
        echo "</td></tr>";
        echo "</table>";
        echo "<br><hr width='100%' size='1' align='left' color='#008000'/>";
      }//end of while
      echo "</td></tr></table>";
      //make the links to other query pages...
      if ($num_pages > 1){
        echo "<center>Result Page:";
        // Determine what page the script is on.
        $current_page = ($start/$display_number) + 1;
        // If it's not the first page, make a Previous button.
        if ($current_page != 1){
          $postString = '';
          $postString = '?';
          foreach($GLOBALS as $key=>$value){
            if ( ereg("[a-z]", $key[0],$array ) ){
              $postString = $postString."$key=$value"."&";
            }
          }
          $sLink = $start - $display_number;
          $postString = $postString."s=$sLink"."&np=$num_pages";
          echo "<a href='$postString'>Previous</a> ";
        }
        // Make all the numbered pages.
        for ($i = 1; $i <= $num_pages; $i++){
          if ($i != $current_page){
            $postString = '';
            $postString = '?';
            foreach($GLOBALS as $key=>$value){
              if ( ereg("[a-z]", $key[0],$array ) ){
                $postString = $postString."$key=$value"."&";
              }
            }
            $sLink = $display_number * ($i - 1);
            $postString = $postString."s=$sLink"."&np=$num_pages";
            echo "<a href='$postString'>$i</a> ";
          } else {
            echo $i . ' ';
          }
        }
        // If it's not the last page, make a Next button.
        if ($current_page != $num_pages){
          $postString = '';
          $postString = '?';
          foreach($GLOBALS as $key=>$value){
            if ( ereg("[a-z]", $key[0],$array ) ){
              $postString = $postString."$key=$value"."&";
            }
          }
          $sLink = $start + $display_number;
          $postString = $postString."s=$sLink"."&np=$num_pages";
          echo "<a href='$postString'>Next</a> ";
        }
      }
      echo "</center>";
    }//else part
  }
  echo "<br><hr width='100%' size='1' align='left' color='#008000'/>";
}
/////////////////////////////////////////////////////////
function manage_Student_Accounts(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      //print "\$GLOBALS[\"$key\"] == $value<br>";
      global $$key;
    }
    else{
    }
  }
  if($deactivateStudentAccount == "deactivate student accounts"){
    connect_Db();
    $query = "UPDATE student SET status='inactive' ";
    $result = mysql_query($query);
    echo "message: all student accounts were successfully deactivated.<br><br>";
  }
  if($addNewStudentAccount == 'save'){
    connect_Db();
    $varNames = array('studentNumber', 'studentNumberYear', 'studentNumberNumber', 'firstName', 'middleName', 'lastName', 'course', 'college',
'mobilePhone', 'landPhone', 'email', 'studAccountPassword');
    $studentNumber = $studentNumberYear.'-'.$studentNumberNumber;
    $query = "SELECT * FROM student WHERE student_number='$studentNumber'";
    $result = mysql_query($query);
    if(mysql_num_rows($result) == 0){
      $query = "INSERT INTO student VALUES ('$studentNumber', '$firstName', '$middleName', '$lastName', '$course', '$college', '$mobilePhone',
'$landPhone', '$email', '$studAccountPassword', 'active')";
      $result = mysql_query($query);
      echo "new student ($studentNumber) saved!";

    }
    else{
      echo "error: student($studentNumber) already exists in the database!<br><br>";
    }
    foreach($varNames as $variableName){
      $$variableName = "";
    }
  }
  if($editStudentAccount == 'apply changes'){
    connect_Db();
    $varNames = array('studentNumber', 'studentNumberYear', 'studentNumberNumber', 'firstName', 'middleName', 'lastName', 'course', 'college',
'mobilePhone', 'landPhone', 'email', 'studAccountPassword');
    $studentNumber = $studentNumberYear.'-'.$studentNumberNumber;
    $query  =  "UPDATE  student  SET  student_number='$studentNumber',  firstName='$firstName',  middleName='$middleName',  lastName='$lastName',
course='$course', college='$college', mobilePhone='$mobilePhone', landPhone='$landPhone', email='$email', password='$studAccountPassword' WHERE
student_number='$studentNumber'";
    $result = mysql_query($query);
    echo "message: student ($studentNumber) account was updated successfully!<br><br>";
    foreach($varNames as $variableName){
      $$variableName = "";
    }
  }
  if($editStudentAccountStatusSubmit == "activate account"){
    connect_Db();
    $query = "UPDATE student SET status='active' WHERE student_number='$studentNumber' ";
    $result = mysql_query($query);
    echo "message: the account was successfully ACTIVATED.<br><br>";
    unset($editStudentAccountStatusSubmit);
  }
  if($editStudentAccountStatusSubmit == "resume account"){
    connect_Db();
    $query = "UPDATE student SET status='active' WHERE student_number='$studentNumber' ";
    $result = mysql_query($query);
    echo "message: the account was successfully RESUMED.<br><br>";
    unset($editStudentAccountStatusSubmit);
  }
  if($editStudentAccount == 'edit'){
    connect_Db();
    $studentNumber = $studentNumberYear.'-'.$studentNumberNumber;
    $query = "SELECT * FROM student WHERE student_number='$studentNumber'";
    $result = mysql_query($query);
    if(mysql_num_rows($result) == 0){
      echo "Sorry student ($studentNumber) does not exist!";
      $editStudentAccount = "";
    }
    else{
      $myrow = mysql_fetch_row($result);
      $firstName = $myrow[1];
      $middleName = $myrow[2];
      $lastName = $myrow[3];
      $course = $myrow[4];
      $college = $myrow[5];
      $mobilePhone = $myrow[6];
      $landPhone = $myrow[7];
      $email = $myrow[8];
      $studAccountPassword = $myrow[9];
      $status = $myrow[10];
    }
  }
  if($confirmDeleteStudentAccount == 'delete'){
    connect_Db();
    $studentNumber = $studentNumberYear.'-'.$studentNumberNumber;
    $query = "DELETE FROM student WHERE student_number='$studentNumber'";
    $result = mysql_query($query);
    echo "success: student ($studentNumber) deleted!";
    $varNames  =  array('cancelDeleteStudentAccount',  'deleteStudentAccount',  'studentNumber',  'studentNumberYear',  'studentNumberNumber',
'firstName', 'middleName', 'lastName', 'course', 'college', 'mobilePhone', 'landPhone', 'email', 'studAccountPassword');
    foreach($varNames as $variableName){
      $$variableName = "";
    }
  }
  if($deleteStudentAccount == 'delete'){
    connect_Db();
    $studentNumber = $studentNumberYear.'-'.$studentNumberNumber;
    $query = "SELECT * FROM student WHERE student_number='$studentNumber'";
    $result = mysql_query($query);
    if(mysql_num_rows($result) == 0){
      echo "Sorry student ($studentNumber) does not exist!";
      $deleteStudentAccount = "";
    }
    else{
      $myrow = mysql_fetch_row($result);
      $firstName = $myrow[1];
      $middleName = $myrow[2];
      $lastName = $myrow[3];
      $course = $myrow[4];
      $college = $myrow[5];
      $mobilePhone = $myrow[6];
      $landPhone = $myrow[7];
      $email = $myrow[8];
      $studAccountPassword = $myrow[9];
    }
  }
  if($cancelDeleteStudentAccount == 'back'){
    $varNames  =  array('cancelDeleteStudentAccount',  'deleteStudentAccount',  'studentNumber',  'studentNumberYear',  'studentNumberNumber',
'firstName', 'middleName', 'lastName', 'course', 'college', 'mobilePhone', 'landPhone', 'email', 'studAccountPassword');
    foreach($varNames as $variableName){
      $$variableName = "";
    }
  }
  if(($addNewStudentAccount == 'add new student account')||($isPrematureSubmit == 1)||($editStudentAccount == 'edit')||($deleteStudentAccount
== 'delete')){
    if($deleteStudentAccount == 'delete'){
      echo "<form name='deleteStudentAccountDetails' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST'>";
      echo "<table border='1'>";
      echo "<tr><td colspan='2' align='center'>Delete Student Account</td></tr>";
      echo "<tr><td>Student number</td><td>$studentNumber</td></tr>";
      echo "<tr><td>First name</td><td>$firstName</td></tr>";
      echo "<tr><td>Middle name</td><td>$middleName</td></tr>";
      echo "<tr><td>Last name</td><td>$lastName</td></tr>";
      echo "<tr><td>College</td><td>$college</td></tr>";
      echo "<tr><td>Course</td><td>$course</td></tr>";
      echo "<tr><td>Mobile phone</td><td>$mobilePhone</td></tr>";
      echo "<tr><td>Land phone</td><td>$landPhone</td></tr>";
      echo "<tr><td>Email</td><td>$email</td></tr>";
      echo "<tr><td>Password</td><td>$studAccountPassword</td></tr>";
      echo "<tr><td colspan='2' align='center'><input type='submit' name='confirmDeleteStudentAccount' value='delete' onClick='return
confirmDeleteStudent(this.form)'>";
      echo "</td></tr>";
      echo "<input type='hidden' name='studentNumberYear' value='$studentNumberYear'/>";
      echo "<input type='hidden' name='studentNumberNumber' value='$studentNumberNumber'/>";
      echo "</table>";
      echo "</form>";
      echo "<form name='cancelDeleteStudentAccountDetails' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST'>";
      echo "<input type='submit' name='cancelDeleteStudentAccount' value='back'>";
      echo "</form>";
    }
    else{
      echo "Please fill in the following information:";
      echo "<br>";
      echo "<form name='editStudentAccountStatus' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' style='display:inline;'>";
      echo "<table border='1'>";
      if($editStudentAccount == 'edit'){
        echo "<tr><td colspan='2' align='center'>Edit Student Account</td></tr>";
      }
      else{
        echo "<tr><td colspan='2' align='center'>";
        /*
        echo "<a href='javascript:void classListManager()'>";
        echo "<font style='color:blue;font-size:75%;text-decoration:none;'>ADD CLASS LIST</font></a>";
        */
        echo "<a href='?activeNav=$activeNav&activeTab=Add Student List'>";
        echo "<font style='color:blue;font-size:75%;text-decoration:none;'>ADD STUDENT LIST</font></a>";
        echo "</td></tr>";
        echo "<tr><td colspan='2' align='center'>Add Student Account</td></tr>";
      }
      echo "<tr><td>Account Status</td><td align='center'>";
      if($status == "inactive"){
        echo "<input type='submit' name='editStudentAccountStatusSubmit' value='activate account'/>";
      }
      elseif($status == "suspended"){
        echo "<input type='submit' name='editStudentAccountStatusSubmit' value='resume account'/>";
      }
      else{
        echo "$status";
      }
      echo "<input type='hidden' name='studentNumber' value='$studentNumber'/>";
      echo "<input type='hidden' name='editStudentAccount' value='edit'/>";
      echo "<input type='hidden' name='studentNumberYear' value='$studentNumberYear'/>";
      echo "<input type='hidden' name='studentNumberNumber' value='$studentNumberNumber'/>";
      echo "</td></tr>";
      echo "</form>";
      echo "<form name='newStudentAccountDetails' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' onSubmit='return
checkStudentAccountDetails(this)' onReset='return resetStudentAccountDetails(this)'>";
      echo "<tr><td>Student number</td><td>";
      echo "<input type='text' maxLength='4' size='4' name='studentNumberYear' value='$studentNumberYear'> - ";
      echo "<input type='text' maxLength='5' size='5' name='studentNumberNumber' value='$studentNumberNumber'>";
      echo"</td></tr>";
      echo "<tr><td>First name</td><td><input type='text' maxLength='30' size='30' name='firstName' value='$firstName'></td></tr>";
      echo "<tr><td>Middle name</td><td><input type='text' maxLength='30' size='30' name='middleName' value='$middleName'></td></tr>";
      echo "<tr><td>Last Name</td><td><input type='text' maxLength='30' size='30' name='lastName' value='$lastName'></td></tr>";

      echo "<tr><td>College</td><td>";
      echo "<select name='college' onChange='displayCollegeCourses(this.form)'>";
      echo "<option>please select college</option>";
      connect_Db();
      $query = "SELECT * FROM upm_colleges ORDER BY collegeName";
      $result = mysql_query($query);
      while($myrow = mysql_fetch_row($result)){
        $queryA = "SELECT degree_programs.degreeProgramName FROM upm_colleges, degree_programs WHERE
upm_colleges.college_id=degree_programs.college_id AND upm_colleges.collegeName='$myrow[1]'  ORDER BY collegeName";
        $resultA = mysql_query($queryA);
        if(mysql_num_rows($resultA) > 0){
          while($myrowA = mysql_fetch_row($resultA)){
            $degreeProgramString[] = $myrowA[0];
          }
          $collegeDegreeProgram[] = join(",", $degreeProgramString);
          $degreeProgramString = NULL;
          if($college == $myrow[1]){
            echo "<option value='$myrow[1]' selected='selected'>$myrow[1]</option>";
          }
          else{
            echo "<option value='$myrow[1]'>$myrow[1]</option>";
          }
        }
      }
      echo "</select>";
      echo "</td></tr>";
      echo "<tr><td>Course</td><td>";
      echo "<select name='course'>";
      if(!(isset($course))){
        echo "<option>please select a college first</option>";
      }
      else{
        echo "<option value='$course'>$course [current value]</option>";
      }
      echo "</select>";
      echo "</td></tr>";
      echo "<tr><td>Mobile phone</td><td><input type='text' maxLength='15' size='15' name='mobilePhone' value='$mobilePhone'></td></tr>";
      echo "<tr><td>Land phone</td><td><input type='text' maxLength='15' size='15' name='landPhone' value='$landPhone'></td></tr>";
      echo "<tr><td>Email address</td><td><input type='text' maxLength='30' size='30' name='email' value='$email'></td></tr>";
      echo "<tr><td>Password</td><td><input type='password' maxLength='16' size='16' name='studAccountPassword'
value='$studAccountPassword'></td></tr>";
      echo "<input type='hidden' name='studAccountPasswordJ' value='$studAccountPassword'>";
      if($editStudentAccount == 'edit'){
        echo "<tr><td colspan='2' align='center'><input type='submit' name='editStudentAccount' value='apply changes'>";
        echo "<input type='reset' name='reset' value='reset'></td></tr>";
      }
      else{
        echo "<tr><td colspan='2' align='center'><input type='submit' name='addNewStudentAccount' value='save'></td></tr>";
      }
      //array of courses goes here...
      echo "<input type='hidden' name='courseH' value='$course [current value]'>";
      echo "<input type='hidden' name='isPrematureSubmit' value='0'>";
      foreach($collegeDegreeProgram as $collegeDegreeProgramValue){
        echo "<input type='hidden' name='collegeDegreeProgram[]' value='$collegeDegreeProgramValue'>";
      }
      echo "</table>";
      echo "</form>";
    }
  }
  else{
    echo "<form name='addNewStudentAccountForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
    echo "<input type='submit' name='addNewStudentAccount' value='add new student account'>";
    echo "</form>";

    //place search table here...
    echo "<form name='editStudentAccountDetails' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' onSubmit='return
checkStudentNumber(this)'>";
    echo "<table border='1'>";
    echo "<tr><td colspan='2' align='center'>Edit Student Account</td></tr>";
    echo "<tr><td>Student number</td><td>";
    echo "<input type='text' maxLength='4' size='4' name='studentNumberYear' value='$studentNumberYear'> - ";
    echo "<input type='text' maxLength='5' size='5' name='studentNumberNumber' value='$studentNumberNumber'>";
    echo "</td></tr>";
    echo "<tr><td colspan='2' align='center'><input type='submit' name='editStudentAccount' value='edit'>";
    echo "<input type='submit' name='deleteStudentAccount' value='delete'>";
    echo "</td></tr>";
    echo "</table>";
    echo "</form>";

    //display student accounts deactivation form...
    echo "<form name='deactivateStudentAccountForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' onSubmit='return
deactivateStudentAccountConfirm(this.form)'>";
    echo "<input type='submit' name='deactivateStudentAccount' value='deactivate student accounts'>";
    echo "</form>";
  }
}
/////////////////////////////////////////////////////////
function manage_Tutor_Accounts(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      //print "\$GLOBALS[\"$key\"] == $value<br>";
      global $$key;
    }
    else{
    }
  }

  if(($addNewTutorAccount == 'save')||($addNewTutorAccount == 'apply changes')){
    connect_Db();
    $birthday = $bdayYear."-".$bdayMonth."-".$bdayDay;
    if($addNewTutorAccount == 'save'){
      $nextId = get_Next_Max_Id('tutor_id','tutor');
      $query = "SELECT * FROM tutor WHERE username='$usernameTutor'";
      $result = mysql_query($query);
      if(mysql_num_rows($result) == 0){
        $query = "INSERT INTO tutor VALUES ('$nextId', '$firstName', '$middleName', '$lastName', '$birthday', '$usernameTutor',
'$passwordTutor', '$mobilePhone', '$landPhone', '$email', '$tutorType', '$deptCourse', '')";
        $result = mysql_query($query);
        echo "message: new tutor ($firstName $middleName $lastName) saved.<br><br>";
        $tutor_id = $nextId;
        $deptCourseH = $deptCourse;
        $editTutorSchedule = 'edit tutor schedule';
      }
      else{
        echo "error: the username '$usernameTutor' is already taken please use a different one.<br><br>";
        $addNewTutorAccount = "add new tutor account";
      }
    }
    else{
      $query = "SELECT * FROM tutor WHERE username='$usernameTutor' AND tutor_id!='$tutor_id' ";
      $result = mysql_query($query);
      if(mysql_num_rows($result) == 0){
        if(isset($tutoredSubj)){
          $query = "UPDATE tutor SET firstName='$firstName', middleName='$middleName', lastName='$lastName', birthday='$birthday',
username='$usernameTutor', mobilePhone='$mobilePhone', landPhone='$landPhone', email='$email', tutorType='$tutorType',
deptCourse='$deptCourse', tutoredSubj='".implode(",", $tutoredSubj)."' WHERE tutor_id='$tutor_id'";
        }
        else{
          $query = "UPDATE tutor SET firstName='$firstName', middleName='$middleName', lastName='$lastName', birthday='$birthday',
username='$usernameTutor', mobilePhone='$mobilePhone', landPhone='$landPhone', email='$email', tutorType='$tutorType', deptCourse='$deptCourse'
WHERE tutor_id='$tutor_id'";
          $editTutorTutoredSubjects = 'save';
        }
        $result = mysql_query($query);
        echo "message: the tutor account details of ($firstName $middleName $lastName) was successfully modified.<br><br>";
        $deptCourseH = $deptCourse;
        $editTutorSchedule = 'edit tutor schedule';
      }
      else{
        echo "error: the username '$usernameTutor' is already taken please use a different one.<br><br>";
        $query = "SELECT username FROM tutor WHERE tutor_id='$tutor_id' ";
        $result = mysql_query($query);
        $myrow = mysql_fetch_row($result);
        $usernameTutor = $myrow[0];
        $editTutorSchedule = 'edit tutor schedule';
      }
    }
  }
  if($editTutorTimeSchedule == 'edit'){
    connect_Db();
    $query = "SELECT * FROM tutor_schedule WHERE tutorSchedule_id='$tutorSchedule_id'";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $tutorSchedule_id = $myrow[0];
    $prefTimeArray = explode("-", $myrow[3]);
    $prefTimeFrom = $prefTimeArray[0];
    $prefTimeTo = $prefTimeArray[1];
    $day = explode(",", $myrow[2]);
    $tutoredSubjStr = $tutoredSubj;
    unset($tutoredSubj);
    $tutoredSubj = explode(",", $tutoredSubjStr);
    $editTutorSchedule = 'edit tutor schedule';
  }
  if($editTutorTimeSchedule == 'delete'){
    connect_Db();
    $query = "DELETE from tutor_schedule WHERE tutorSchedule_id='$tutorSchedule_id'";
    $result = mysql_query($query);
    $tutoredSubjStr = $tutoredSubj;
    unset($tutoredSubj);
    unset($day);
    unset($tutorSchedule_id);
    unset($prefTimeFrom);
    unset($prefTimeTo);
    $tutoredSubj = explode(",", $tutoredSubjStr);
    $editTutorSchedule = 'edit tutor schedule';
    echo "message: the old timeslot was successfully deleted!<br><br>";
  }
  if(($editTutorTimeSchedule == 'add')||($editTutorTimeSchedule == 'apply changes')){
    //check if new OR edited time conflicts with existing ones
    connect_Db();
    $noConflictFound = true;
    $a = str_replace(":", "", $prefTimeFrom);
    $b = str_replace(":", "", $prefTimeTo);
    if($a >= $b){
      echo "error: invalid time interval [$prefTimeFrom-$prefTimeTo].<br><br>";
      $noConflictFound = false;
    }
    else{
      for($i = 0;$i < count($day);$i++){
        if(isset($tutorSchedule_id)){
          $query = "SELECT prefTime FROM tutor_schedule WHERE prefDay LIKE '%$day[$i]%' AND tutor_id='$tutor_id' AND
tutorSchedule_id!='$tutorSchedule_id' ";
        }
        else{
          $query = "SELECT prefTime FROM tutor_schedule WHERE prefDay LIKE '%$day[$i]%' AND tutor_id='$tutor_id' ";
        }
        $result = mysql_query($query);
        while($myrow = mysql_fetch_row($result)){
          $tempArray = explode("-", $myrow[0]);
          $c = str_replace(":", "", $tempArray[0]);
          $d = str_replace(":", "", $tempArray[1]);
          unset($tempArray);
          if((($c < $a)&&($a < $d))||(($c < $b)&&($b < $d))||(($a < $c)&&($c < $b))||(($a < $d)&&($d < $b))||(($a == $c)&&($b == $d))){
            echo "error: the timeslot [$prefTimeFrom-$prefTimeTo $day[$i]] conflicts with an existing one.<br><br>";
            $noConflictFound = false;
            break;
          }
        }
        if(!$noConflictFound){
          break;
        }
      }
    }
    if($noConflictFound){
      if(count($day) == 0){
        echo "message: the day attribute in the submitted timeslot was missing.<br><br>";
      }
      else{
        $prefDay = implode(",", $day);
        $prefTime = $prefTimeFrom.'-'.$prefTimeTo;
        if(isset($tutorSchedule_id)){
          $query = "UPDATE tutor_schedule SET tutor_id='$tutor_id', prefDay='$prefDay', prefTime='$prefTime' WHERE
tutorSchedule_id='$tutorSchedule_id'";
          $result = mysql_query($query);
          echo "message: the old timeslot was successfully edited!<br><br>";
        }
        else{
          $nextId = get_Next_Id('tutorSchedule_id','tutor_schedule');
          $query = "INSERT INTO tutor_schedule VALUES ('$nextId', '$tutor_id', '$prefDay', '$prefTime')";
          $result = mysql_query($query);
          echo "message: the new timeslot was successfully added!<br><br>";
        }
      }
    }
    $prefTimeFrom = "";
    $prefTimeTo = "";
    unset($day);
    unset($tutorSchedule_id);
    $editTutorSchedule = 'edit tutor schedule';
  }
  if($editTutorTutoredSubjects == 'save'){
    connect_Db();
    if(isset($tutoredSubj)){
      $tutoredSubjStr = implode(',',$tutoredSubj);
      $query = "UPDATE tutor SET tutoredSubject='$tutoredSubjStr' WHERE tutor_id='$tutor_id'";
      $result = mysql_query($query);
      echo "message: the 'tutorial subjects' was successfully updated.<br><br>";
    }
    else{
      $query = "SELECT tutoredSubject FROM tutor WHERE tutor_id='$tutor_id'";
      $result = mysql_query($query);
      $myrow = mysql_fetch_row($result);
      $tutoredSubj = explode(",", $myrow[0]);
    }
    $editTutorSchedule = 'edit tutor schedule';
  }
  if($searchTutorAccount == "edit"){
    connect_Db();
    $query = "SELECT * FROM tutor WHERE tutor_id='$tutorIdToEdit'";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $tutor_id = $myrow[0];
    $firstName = $myrow[1];
    $middleName = $myrow[2];
    $lastName = $myrow[3];
    $bdayMonth = substr($myrow[4],5,2);
    $bdayDay = substr($myrow[4],8,2);
    $bdayYear = substr($myrow[4],0,4);
    $usernameTutor = $myrow[5];
    $passwordTutor = $myrow[6];
    $mobilePhone = $myrow[7];
    $landPhone = $myrow[8];
    $email = $myrow[9];
    $tutorType = $myrow[10];
    $deptCourseH = $myrow[11];
    $tutoredSubj = explode(",", $myrow[12]);
    $editTutorSchedule = "edit tutor schedule";
  }
  if($searchTutorAccount == "delete"){
    connect_Db();
    $query = "SELECT firstName, middleName, lastName FROM tutor WHERE tutor_id='$tutorIdToDelete'";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $firstName = $myrow[0];
    $middleName = $myrow[1];
    $lastName = $myrow[2];
    $query = "DELETE FROM tutor WHERE tutor_id='$tutorIdToDelete'";
    $result = mysql_query($query);
    //delete tutor_id entries from tutor_schedule...
    $query = "DELETE FROM tutor_schedule WHERE tutor_id='$tutorIdToDelete'";
    $result = mysql_query($query);
    //set tutor_id to 0 for all tutorials handled by this tutor_id
    $query = "UPDATE tutorial SET tutor_id='0' WHERE tutor_id='$tutorIdToDelete' ";
    $result = mysql_query($query);
    echo "message: the tutor account ($firstName $middleName $lastName) was successfully deleted!<br><br>";
    $firstName = '';
    $middleName = '';
    $lastName = '';
  }
  if(($addNewTutorAccount == "add new tutor account")||($editTutorSchedule == "edit tutor schedule")){
    echo "Please fill in the information needed in the following:";
    echo "<form name='newTutorAccountDetails' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' onSubmit='return
checkTutorAccountDetails(this)' onReset='return resetEditStudentAccountDetails(this)' style='display:inline;'>";
    echo "<table border='1'>";
    if($editTutorSchedule == "edit tutor schedule"){
      echo "<tr><td colspan='2' align='center'>Tutor Account Details</td></tr>";
    }
    else{
      echo "<tr><td colspan='2' align='center'>Add Tutor Account</td></tr>";
    }
    echo "<tr><td>First name</td><td><input type='text' maxLength='30' size='30' name='firstName' value='$firstName'></td></tr>";
    echo "<tr><td>Middle name</td><td><input type='text' maxLength='30' size='30' name='middleName' value='$middleName'></td></tr>";
    echo "<tr><td>Last Name</td><td><input type='text' maxLength='30' size='30' name='lastName' value='$lastName'></td></tr>";
    echo "<tr><td>Birthday</td><td>";
    $currentYear = date("Y");
    $currentMonth = date("F");
    echo "<select name='bdayMonth' onChange='displayMonthDays(this.form)'>";
    $monthName = array('January', 'February', 'March', 'April', 'May', 'June', 'July', 'August', 'September', 'October', 'November',
'December');
    for($i = 1;$i < 13;$i++){
      $monthNameIndex = $i-1;
      if($i == $bdayMonth){
        echo "<option value='$i' selected='selected'>$monthName[$monthNameIndex]</option>";
      }
      else{
        echo "<option value='$i'>$monthName[$monthNameIndex]</option>";
      }
    }
    echo "</select>";
    echo " <select name='bdayDay'>";
    for($i = 1;$i < 32;$i++){
      if($bdayDay == $i){
        echo "<option value='$i' selected='selected'>$i</option>";
      }
      else{
        echo "<option value='$i'>$i</option>";
      }
    }
    echo "</select>";
    echo " <select name='bdayYear'>";
    for($i = $currentYear - 100;$i <= $currentYear + 100;$i++){
      if($i == $bdayYear){
        echo "<option value='$i' selected='selected'>$i</option>";
      }
      else{
        echo "<option value='$i'>$i</option>";
      }
    }
    echo "</select>";
    echo "<tr><td>Mobile phone</td><td><input type='text' maxLength='15' size='15' name='mobilePhone' value='$mobilePhone'></td></tr>";
    echo "<tr><td>Land phone</td><td><input type='text' maxLength='15' size='15' name='landPhone' value='$landPhone'></td></tr>";
    echo "<tr><td>Email address</td><td><input type='text' maxLength='30' size='30' name='email' value='$email'></td></tr>";
    echo "<tr><td>Tutor type</td><td>";
    if($tutorType == 'p'){
      echo "<input type='radio' name='tutorType' value='p' checked='checked' onClick='return displayCoursesOrDepartments(this.form)'/>peer";
    }
    else{
      echo "<input type='radio' name='tutorType' value='p' onClick='return displayCoursesOrDepartments(this.form)'/>peer";
    }
    if($tutorType == 'f'){
      echo "<input type='radio' name='tutorType' value='f' checked='checked' onClick='return displayCoursesOrDepartments(this.form)'/>faculty";
    }
    else{
      echo "<input type='radio' name='tutorType' value='f' onClick='return displayCoursesOrDepartments(this.form)'/>faculty";
    }
    echo "</td></tr>";
    echo "<tr><td>Course/Department</td><td>";
    connect_Db();
    $query = "SELECT degreeProgram_id, degreeProgramName FROM degree_programs ORDER BY degreeProgramName";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      while($myrow = mysql_fetch_row($result)){
        $degreeProgramIdArray[] = $myrow[0];
        $degreeProgramNameArray[] = $myrow[1];
      }
      $degreeProgramIdString = join(",", $degreeProgramIdArray);
      $degreeProgramNameString = join(",", $degreeProgramNameArray);
    }
    $query = "SELECT department_id, departmentName FROM upm_departments ORDER BY departmentName";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      while($myrow = mysql_fetch_row($result)){
        $departmentIdArray[] = $myrow[0];
        $departmentNameArray[] = $myrow[1];
      }
      $departmentIdString = join(",", $departmentIdArray);
      $departmentNameString = join(",", $departmentNameArray);
    }
    echo " <select name='deptCourse'>";
    if($tutorType == 'f'){
      for($i = 0;$i < count($departmentIdArray);$i++){
        if($deptCourse == $departmentIdArray[$i]){
          echo "<option value='$departmentIdArray[$i]' selected='selected'>$departmentNameArray[$i]</option>";
        }
        else{
          echo "<option value='$departmentIdArray[$i]'>$departmentNameArray[$i]</option>";
        }
      }
    }
    else{
      for($i = 0;$i < count($degreeProgramIdArray);$i++){
        if($deptCourse == $degreeProgramIdArray[$i]){
          echo "<option value='$degreeProgramIdArray[$i]' selected='selected'>$degreeProgramNameArray[$i]</option>";
        }
        else{
          echo "<option value='$degreeProgramIdArray[$i]'>$degreeProgramNameArray[$i]</option>";
        }
      }
    }

    echo "</select>";
    echo "</td></tr>";
    echo "<tr><td>Username</td><td><input type='text' maxLength='16' size='16' name='usernameTutor' value='$usernameTutor'></td></tr>";
    echo "<tr><td>Password</td><td>";
    echo "<input type='password' maxLength='16' size='16' name='passwordTutor' value='$passwordTutor'>";
    echo "</td></tr>";
    if($editTutorSchedule == "edit tutor schedule"){
      echo  "<tr><td  colspan='2'  align='center'><input  type='submit'  name='addNewTutorAccount'  value='apply  changes'><button  type='reset'
name='reset' value='reset'>reset</button></td></tr>";
    }
    else{
      echo "<tr><td colspan='2' align='center'><input type='submit' name='addNewTutorAccount' value='save'></td></tr>";
    }
    echo "<input type='hidden' name='degreeProgramIdStringH' value='$degreeProgramIdString'/>";
    echo "<input type='hidden' name='degreeProgramNameStringH' value='$degreeProgramNameString'/>";
    echo "<input type='hidden' name='departmentIdStringH' value='$departmentIdString'/>";
    echo "<input type='hidden' name='departmentNameStringH' value='$departmentNameString'/>";
    echo "<input type='hidden' name='deptCourseH' value='$deptCourseH'/>";
    echo "<input type='hidden' name='tutor_id' value='$tutor_id'/>";
    //echo "<input type='hidden' name='passwordTutorJ' value='$passwordTutor'>";
    echo "</table>";
    echo "</form>";
    if($editTutorSchedule == "edit tutor schedule"){
      echo "<form name='editTutorScheduleSubjects' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
      $tutorDetailArray  =  array('tutor_id',  'firstName',  'middleName',  'lastName',  'bdayMonth',  'bdayDay',  'bdayYear',  'usernameTutor',
'passwordTutor', 'mobilePhone', 'landPhone', 'email', 'tutorType', 'deptCourse', 'deptCourseH');
      foreach($tutorDetailArray as $tutorDetailVar){
        echo "<input type='hidden' name='$tutorDetailVar' value='${$tutorDetailVar}'/>";
      }
      echo "<table style='border-bottom:0px;' border='1' width='50%'><tr><td colspan='2' align='center'>Tutorial Subjects</td></tr></table>";
      echo "<div style='height:100px; width:50%; overflow:auto;'>";
      echo "<table style='border-top:0px; border-bottom:0px;' border='1' width='100%'>";
      connect_Db();
      $query = "SELECT * FROM subject ORDER BY subjectName";
      $result = mysql_query($query);
      echo "<tr><td></td><td align='center'>Subject name</td><td align='center'>Subject description</td></tr>";
      while($myrow = mysql_fetch_row($result)){
        $isCheckedPreviously = 0;
        if(isset($tutoredSubj)){
          foreach($tutoredSubj as $tutoredSubjVal){
            if($tutoredSubjVal == $myrow[0]){
              $isCheckedPreviously = 1;
              break;
            }
          }
        }
        if($isCheckedPreviously == 1){
          echo "<tr><td><input type='checkbox' name='tutoredSubj[]' value='$myrow[0]'
checked='checked'/></td><td>$myrow[1]</td><td>$myrow[2]</td></tr>";
        }
        else{
          echo "<tr><td><input type='checkbox' name='tutoredSubj[]' value='$myrow[0]'/></td><td>$myrow[1]</td><td>$myrow[2]</td></tr>";
        }
      }
      echo "</table>";
      echo "</div>";
      echo "<table border='1' width='50%'><tr><td align='center'><input type='submit' name='editTutorTutoredSubjects'
value='save'></tr></table>";
      echo "</form>";
      echo "<form name='editTutorScheduleSubjects' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
      foreach($tutorDetailArray as $tutorDetailVar){
        echo "<input type='hidden' name='$tutorDetailVar' value='${$tutorDetailVar}'/>";
      }
      if(isset($tutoredSubj)){
        foreach($tutoredSubj as $tutoredSubjVal){
          echo "<input type='hidden' name='tutoredSubj[]' value='$tutoredSubjVal'>";
        }
      }
      $dayNameArray = array('Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday');
      echo "<table border='1' >";
      echo "<tr><td align='center' colspan='".(3 + count($dayNameArray))."'>Timeslots</td></tr>";
      echo "<tr><td></td><td align='center'>Time</td>";
      foreach($dayNameArray AS $dayNameArrayElem){
        echo "<td align='center'>$dayNameArrayElem</td>";
      }
      echo "</tr>";
      $query = "SELECT * FROM tutor_schedule WHERE tutor_id='$tutor_id' ORDER BY prefTime ";
      $result = mysql_query($query);
      $linkStr = 'http://localhost/toes/admin/admin.php?';
      foreach($GLOBALS as $key=>$value){
        if ( ereg("[a-z]", $key[0],$array ) ){
          switch($key){
            case 'tutoredSubj':
              $linkStr = $linkStr.$key.'='.implode(",", $tutoredSubj).'&';
              break;
            default:
              $linkStr = $linkStr.$key.'='.$value.'&';
              break;
          }
        }
      }
      if(mysql_num_rows($result) > 0){
        while($myrow = mysql_fetch_row($result)){
          $linkStr = $linkStr.'tutorSchedule_id='.$myrow[0].'&';
          echo "<tr><td>";
          if($tutorSchedule_id == $myrow[0]){
            echo "*edit";
          }
          else{
            $linkStrHref = $linkStr.'editTutorTimeSchedule=edit';
            echo "<a href='$linkStrHref'>edit</a>";
          }
          echo "&nbsp;";
          $linkStrHref = $linkStr.'editTutorTimeSchedule=delete';
          echo "<a href='$linkStrHref'>delete</a>";
          echo "</td>";
          $tempTimeStr = getTimeslotDisplay($myrow[3]);
          echo "<td>$tempTimeStr</td>";
          $tempArray = explode(",", $myrow[2]);
          foreach($dayNameArray AS $dayNameArrayElem){
            if(in_array($dayNameArrayElem, $tempArray)){
              echo "<td align='center'>+</td>";
            }
            else{
              echo "<td align='center'>&nbsp;</td>";
            }
          }
        }
      }
      else{
        echo "<tr><td colspan='".(3 + count($dayNameArray))."' align='center'>no records</td></tr>";
      }
      if(isset($tutorSchedule_id)){
        echo "<tr><td colspan='".(3 + count($dayNameArray))."' id='tdWhiteBg' align='center'>* currently being edited</td></tr>";
      }
      else{
        echo "<tr><td colspan='".(3 + count($dayNameArray))."' id='tdWhiteBg' align='center'>&nbsp;</td></tr>";
      }
      echo "<tr><td>Time</td><td colspan='".(2 + count($dayNameArray))."'>from&nbsp;";
      echo "<select name='prefTimeFrom'>";
      $timeDisplayMod = 'AM';
      for($i = 8;$i < 18;$i++){
        if($i > 11){
          $timeDisplayMod = 'PM';
        }
        if($i > 12){
          $timeDisplayFixed = $i - 12;
        }
        else{
          $timeDisplayFixed = $i;
        }
        $timeVal = $i.':00';
        if(strlen($timeVal) == 4){
          $timeVal = '0'.$timeVal;
        }
        $timeDisplay = $timeDisplayFixed.':00';
        if($prefTimeFrom == $timeVal){
          echo "<option value='$timeVal' selected='selected'>$timeDisplay $timeDisplayMod</option>";
        }
        else{
          echo "<option value='$timeVal'>$timeDisplay $timeDisplayMod</option>";
        }
        $timeVal = $i.':30';
        if(strlen($timeVal) == 4){
          $timeVal = '0'.$timeVal;
        }
        $timeDisplay = $timeDisplayFixed.':30';
        if($prefTimeFrom == $timeVal){
          echo "<option value='$timeVal' selected='selected'>$timeDisplay $timeDisplayMod</option>";
        }
        else{
          echo "<option value='$timeVal'>$timeDisplay $timeDisplayMod</option>";
        }
      }
      echo "</select>";

      echo "&nbsp;to&nbsp;";
      echo "<select name='prefTimeTo'>";
      $timeDisplayMod = 'AM';
      for($i = 8;$i < 18;$i++){
        if($i > 11){
          $timeDisplayMod = 'PM';
        }
        if($i > 12){
          $timeDisplayFixed = $i - 12;
        }
        else{
          $timeDisplayFixed = $i;
        }
        $timeVal = $i.':00';
        if(strlen($timeVal) == 4){
          $timeVal = '0'.$timeVal;
        }
        $timeDisplay = $timeDisplayFixed.':00';
        if($prefTimeTo == $timeVal){
          echo "<option value='$timeVal' selected='selected'>$timeDisplay $timeDisplayMod</option>";
        }
        else{
          echo "<option value='$timeVal'>$timeDisplay $timeDisplayMod</option>";
        }
        $timeVal = $i.':30';
        if(strlen($timeVal) == 4){
          $timeVal = '0'.$timeVal;
        }
        $timeDisplay = $timeDisplayFixed.':30';
        if($prefTimeTo == $timeVal){
          echo "<option value='$timeVal' selected='selected'>$timeDisplay $timeDisplayMod</option>";
        }
        else{
          echo "<option value='$timeVal'>$timeDisplay $timeDisplayMod</option>";
        }
      }
      echo "</select>";
      echo "</td></tr>";
      echo "<tr><td>Day</td><td colspan='".(2 + count($dayNameArray))."'>";
      $dayNameArray = array('Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday');
      foreach($dayNameArray as $dayNameElem){
        $isCheckedPreviously = 0;
        if(isset($day)){
          foreach($day as $dayElem){
            if($dayNameElem == $dayElem){
              $isCheckedPreviously = 1;
              break;
            }
          }
        }
        if($isCheckedPreviously == 1){
          echo "<input type='checkbox' name='day[]' value='$dayNameElem' checked='checked'/>$dayNameElem";
        }
        else{
          echo "<input type='checkbox' name='day[]' value='$dayNameElem'/>$dayNameElem";
        }
      }
      echo "</td></tr>";
      if($editTutorTimeSchedule == 'edit'){
        echo "<input type='hidden' name='tutorSchedule_id' value='$tutorSchedule_id'/>";
        echo "<tr><td colspan='".(3 + count($dayNameArray))."' align='center'><input type='submit' name='editTutorTimeSchedule' value='apply
changes'>";
        echo "<button type='reset' name='reset' value='reset'>reset</button></td></tr>";
      }
      else{
        echo "<tr><td colspan='".(3 + count($dayNameArray))."' align='center'><input type='submit' name='editTutorTimeSchedule'
value='add'></td></tr>";
      }
      echo "</form>";
      echo "</table>";

      echo "<form name='editTutor' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
      echo "<input type='submit' name='editTutor' value='back to main'>";
      echo "</form>";
    }
  }
  else{
    echo "<form name='addNewTutorAccountForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
    echo "<input type='submit' name='addNewTutorAccount' value='add new tutor account'>";
    echo "</form>";

    //display search filters here
    $searchTutorFrequency++;
    echo "<form name='searchTutorAccount' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST'>";
    echo "<table border='1'>";
    echo "<tr><td colspan='2' align='center'>Tutor Account Search Filter</td></tr>";
    $monthName = array('January', 'February', 'March', 'April', 'May', 'June', 'July', 'August', 'September', 'October', 'November',
'December');
    echo "<tr><td>Birthday</td><td>";
    echo "<select name='bdayMonth'>";
    echo "<option value='any'>any</option>";
    for($i = 1;$i <= count($monthName);$i++){
      $monthNameIndex = $i-1;
      if($bdayMonth == "$i"){
        echo "<option value='$i' selected='selected'>$monthName[$monthNameIndex]</option>";
      }
      else{
        echo "<option value='$i'>$monthName[$monthNameIndex]</option>";
      }
    }
    echo "</select>";
    echo "</td></tr>";
    echo "<tr><td>Tutor type:<br>";
    echo "&nbsp;&nbsp;&nbsp;&nbsp;";
    if(($peerInSearch == 'on')||($searchTutorFrequency == 1)){
      echo "<input type='checkbox' name='peerInSearch' checked='checked' onClick='return displayDegreeProgramsInSearch(this.form)'/>peer<br>";
    }
    else{
      echo "<input type='checkbox' name='peerInSearch' onClick='return displayDegreeProgramsInSearch(this.form)'/>peer<br>";
    }
    echo "&nbsp;&nbsp;&nbsp;&nbsp;";
    if(($facultyInSearch == 'on')||($searchTutorFrequency == 1)){
      echo "<input type='checkbox' name='facultyInSearch' checked='checked' onClick='return displayDepartmentsInSearch(this.form)'/>faculty";
    }
    else{
      echo "<input type='checkbox' name='facultyInSearch' onClick='return displayDepartmentsInSearch(this.form)'/>faculty";
    }
    echo "</td><td>";
    echo "<br><select name='degreeProgram'>";
    echo "<option value='any'>any</option>";
    connect_Db();
    $query = "SELECT degreeProgram_id, degreeProgramName FROM degree_programs ORDER BY degreeProgramName";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      while($myrow = mysql_fetch_row($result)){
        if($degreeProgram == $myrow[0]){
          echo "<option value='$myrow[0]' selected='selected'>$myrow[1]</option>";
        }
        else{
          echo "<option value='$myrow[0]'>$myrow[1]</option>";
        }
      }
    }
    echo "</select>";
    echo "<br><select name='department'>";
    echo "<option value='any'>any</option>";
    $query = "SELECT department_id, departmentName FROM upm_departments ORDER BY departmentName";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      while($myrow = mysql_fetch_row($result)){
        if($department == $myrow[0]){
          echo "<option value='$myrow[0]' selected='selected'>$myrow[1]</option>";
        }
        else{
          echo "<option value='$myrow[0]'>$myrow[1]</option>";
        }
      }
    }
    echo "</select><br>";
    echo "</td></tr>";
    echo "<tr><td>Schedule</td><td>";
    echo "<select name='scheduleCriteria' onChange='return displayHideSchedule(this.form)'>";
    if($scheduleCriteria == 'any'){
      echo "<option value='any' checked='checked'>any</option>";
    }
    else{
      echo "<option value='any'>any</option>";
    }
    if($scheduleCriteria == 'at least one of the following'){
      echo "<option value='at least one of the following' selected='selected'>at least one of the following</option>";
    }
    else{
      echo "<option value='at least one of the following'>at least one of the following</option>";
    }
    if($scheduleCriteria == 'exactly all of the following'){
      echo "<option value='exactly all of the following' selected='selected'>exactly all of the following</option>";
    }
    else{
      echo "<option value='exactly all of the following'>exactly all of the following</option>";
    }
    echo "</select>";
    echo "<br>";
    echo "<span id='spanTutorSearchSchedule' style='display:none'>";
    $dayNameArray = array('Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday');
    for($i = 0;$i < count($dayNameArray);$i++){
      $was_selected_before=0;
      for($j = 0;$j < count($schedule);$j++){
        if($schedule[$j] == $dayNameArray[$i]){
          $was_selected_before=1;
          break;
        }
      }
      if(($was_selected_before == 1)||($searchTutorFrequency == 1)){
        echo "<input type='checkbox' name='schedule[]' value='$dayNameArray[$i]' checked='checked'/>$dayNameArray[$i]";
      }
      else{
        echo "<input type='checkbox' name='schedule[]' value='$dayNameArray[$i]' />$dayNameArray[$i]";
      }
    }
    echo "</span>";
    echo "</td></tr>";
    echo "<tr><td>Subject</td><td>";
    echo "<select name='subject'>";
    echo "<option value='any'>any</option>";
    $query = "SELECT subject_id, subjectName FROM subject ORDER BY subjectName";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      while($myrow = mysql_fetch_row($result)){
        if($subject == $myrow[0]){
          echo "<option value='$myrow[0]' selected='selected'>$myrow[1]</option>";
        }
        else{
          echo "<option value='$myrow[0]'>$myrow[1]</option>";
        }
      }
    }
    echo "</select>";
    echo "</td></tr>";
    echo "<tr><td>Sorted by</td><td>";
    $sortedByDisplayedArray = array('First name', 'Middle name', 'Last name', 'Birthday', 'Username', 'Tutor type', 'Course/Department');
    $sortedByArray = array('firstName', 'middleName', 'lastName', 'birthday', 'username', 'tutorType', 'deptCourse');
    //$sortedByDisplayedArray = array('First name'=>'firstName', 'Middle name'=>'middleName', 'Last name'=>'lastName', 'Birthday'=>'birthday',
'Username'=>'username', 'Tutor type'=>'tutorType', 'Course/Department'=>'deptCourse');

    echo "<select name='sortedBy'>";
    for($i = 0;$i < count($sortedByArray);$i++){
      if($sortedBy == $sortedByArray[$i]){
        echo "<option value='$sortedByArray[$i]' selected='selected'>$sortedByDisplayedArray[$i]</option>";
      }
      else{
        echo "<option value='$sortedByArray[$i]'>$sortedByDisplayedArray[$i]</option>";
      }
    }
    echo "</select>";
    echo "</td></tr>";
    echo "<tr><td>Direction</td><td>";
    if(($direction == 'ascending')||($searchTutorFrequency == 1)){
      echo "<input type='radio' name='direction' value='ascending' checked='checked'/>ascending";
    }
    else{
      echo "<input type='radio' name='direction' value='ascending'/>ascending";
    }
    if($direction == 'descending'){
      echo "<input type='radio' name='direction' value='descending' checked='checked'/>descending";
    }
    else{
      echo "<input type='radio' name='direction' value='descending'/>descending";
    }
    echo "</td></tr>";
    echo "<input type='hidden' name='searchTutorFrequency' value='$searchTutorFrequency'/>";
    echo "<tr><td colspan='2' align='center'>";
    echo "<input type='submit' name='searchTutorAccount' value='search'>";
    echo "<button type='reset' name='reset' value='reset' onClick='return resetTutorAccountSearch(this.form)'>reset</button>";
    echo "</td></tr>";
    echo "</table>";
    echo "</form>";
  }
  if($searchTutorAccount == "search"){
    if(($bdayMonth   ==   'any')&&(($peerInSearch   ==   'on')&&($degreeProgram   ==   'any'))&&(($facultyInSearch   ==   'on')&&($department   ==
'any'))&&(count($schedule) == 5)&&($subject == 'any')){
      $queryString = 'SELECT * FROM tutor';
    }
    else{
      if($bdayMonth != 'any'){
        $queryStringArray[] = "birthday LIKE '%-%$bdayMonth%-%'";
      }
      if($degreeProgram == 'any'){
        $deptCourseFilterArray[] = "deptCourse LIKE '%'";
      }
      else{
        $deptCourseFilterArray[] = "deptCourse='$degreeProgram'";
      }
      if($department == 'any'){
        $deptCourseFilterArray[] = "deptCourse LIKE '%'";
      }
      else{
        $deptCourseFilterArray[] = "deptCourse='$department'";
      }
      if(($peerInSearch == 'on')&&($facultyInSearch == 'on')){
        $queryStringArray[] = "(((tutorType='p') AND ($deptCourseFilterArray[0])) OR ((tutorType='f') AND ($deptCourseFilterArray[1])))";
      }
      else{
        if($peerInSearch == 'on'){
          $queryStringArray[] = "((tutorType='p') AND ($deptCourseFilterArray[0]))";
        }
        else{
          $queryStringArray[] = "((tutorType='f') AND ($deptCourseFilterArray[1]))";
        }
      }
      if($subject !='any'){
        //$queryStringArray[] = "tutoredSubject LIKE '%$subject%'";
        $queryStringArray[] = "(tutoredSubject LIKE '$subject' OR tutoredSubject LIKE '%,$subject,%' OR tutoredSubject LIKE '%,$subject' OR
tutoredSubject LIKE '$subject,%')";
      }
      if(count($queryStringArray) > 0){
        $queryString = 'SELECT * FROM tutor WHERE '.implode(" AND ", $queryStringArray);
      }
      else{
        $queryString = 'SELECT * FROM tutor';
      }
    }
    $queryString = $queryString." ORDER BY $sortedBy";
    if($direction == 'ascending'){
      $queryString = $queryString.' ASC';
    }
    else{
      $queryString = $queryString.' DESC';
    }
    $result = mysql_query($queryString);
    //echo "[$queryString]";
    echo "<hr width='100%' size='1' align='left' color='#008000'/>";

    if(mysql_num_rows($result) > 0){
      $searchResultsIteration = 0;
      while($myrow = mysql_fetch_row($result)){
        if($scheduleCriteria == 'any'){
          $queryA = "SELECT tutorSchedule_id FROM tutor_schedule WHERE tutor_id='$myrow[0]'";
        }
        else{
          if($scheduleCriteria == 'at least one of the following'){
            $orOrAnd = 'OR';
          }
          else{
            $orOrAnd = 'AND';
          }
          $prefDayLike = "((prefDay LIKE '%$schedule[0]%'";
          for($i = 1;$i < count($schedule);$i++){
            $prefDayLike = "$prefDayLike) $orOrAnd (prefDay LIKE '%$schedule[$i]%'";
          }
          $prefDayLike = $prefDayLike.'))';
          $queryA = "SELECT tutorSchedule_id FROM tutor_schedule WHERE tutor_id='$myrow[0]' AND ".$prefDayLike." ORDER BY prefTime";
        }
        $currentRowHasRightSchedule = false;
        $resultA = mysql_query($queryA);
        if((mysql_num_rows($resultA) > 0)||($scheduleCriteria == 'any')){
          $searchResultsIteration++;
          $currentRowHasRightSchedule = true;
        }
        if($searchResultsIteration == 1){
          echo "<div style='height:auto; width:100%; overflow:scroll;'>";
          echo "<table id='tutorSearchResultTable' border='1'>";
          $searchResultHeaderArray = array('', 'Name', 'Birthday<br>(yyyy-mm-dd)', 'Username', 'Mobile phone', 'Land phone', 'Email address',
'Tutor type', 'Course/Department', 'Tutored subject', 'Free Time');
          echo "<tr>";
          foreach($searchResultHeaderArray as $searchResultHeaderElem){
            echo "<td align='center' nowrap='nowrap'>$searchResultHeaderElem</td>";
          }
          echo "</tr>";
          $searchResultsIteration++;
        }
        if($currentRowHasRightSchedule){
          echo "<tr id='tutorAccountSearchResultTable'>";
          echo "<td><a href='?activeNav=$activeNav&activeTab=$activeTab&searchTutorAccount=edit&tutorIdToEdit=$myrow[0]'>edit</a>";
          echo                                                                                                                        "&nbsp;<a
href='?activeNav=$activeNav&activeTab=$activeTab&searchTutorAccount=delete&tutorIdToDelete=$myrow[0]'>delete</a></td>";
          echo "<td>$myrow[1] $myrow[2] $myrow[3]</td>";
          echo "<td>$myrow[4]</td>";
          echo "<td>$myrow[5]</td>";
          echo "<td>$myrow[7]</td>";
          echo "<td>$myrow[8]</td>";
          echo "<td>$myrow[9]</td>";
          if($myrow[10] == 'p'){
            echo "<td>peer</td>";
            $queryB = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrow[11]'";
            $resultB = mysql_query($queryB);
            $myrowB = mysql_fetch_row($resultB);
            echo "<td>$myrowB[0]</td>";
          }
          else{
            echo "<td>faculty</td>";
            $queryB = "SELECT departmentName FROM upm_departments WHERE department_id='$myrow[11]'";
            $resultB = mysql_query($queryB);
            $myrowB = mysql_fetch_row($resultB);
            echo "<td>$myrowB[0]</td>";
          }
          //echo "<td>$myrow[11]</td>";
          $tutoredSubjArray = explode(",", $myrow[12]);
          echo "<td>";
          if($myrow[12] == ''){
            echo "<font color='red'>please add a subject</font>";
          }
          else{
            foreach($tutoredSubjArray as $tutoredSubjElem){
              $queryA = "SELECT subjectName FROM subject WHERE subject_id='$tutoredSubjElem'";
              $queryA = $queryA.' ORDER BY subjectName';
              $resultA = mysql_query($queryA);
              while($myrowA = mysql_fetch_row($resultA)){
                echo "$myrowA[0]<br>";
              }
            }
          }
          echo "</td>";
          echo "<td>";
          $queryB = "SELECT prefTime, prefDay FROM tutor_schedule WHERE tutor_id='$myrow[0]' ORDER BY prefTime";
          $resultB = mysql_query($queryB);
          if(mysql_num_rows($resultB) > 0){
            while($myrowB = mysql_fetch_row($resultB)){
              $tempTimeStr = getTimeslotDisplay($myrowB[0]);
              echo "$tempTimeStr  $myrowB[1]<br>";
            }
          }
          else{
            echo "<font color='red'>please add a timeslot</font>";
          }
          echo "</td>";
          echo "</tr>";
        }
      }
      if($searchResultsIteration == 0){
        echo "<center>0 results returned</center>";
      }
      if($searchResultsIteration > 0){
        echo "</table>";
        echo "</div>";
      }
    }
    else{
      echo "<center>0 results returned</center>";
    }
    echo "<br><hr width='100%' size='1' align='left' color='#008000'/>";
  }
}
//////////////////////////////////////////////////////////
function getTimeslotDisplay($timeslot){
  $timeslotArray = explode("-", $timeslot);
  $timeslotArrayL = explode(":", $timeslotArray[0]);
  if($timeslotArrayL[0] > 11){
    $timeslotArrayL[1] = $timeslotArrayL[1].'PM';
  }
  else{
    $timeslotArrayL[1] = $timeslotArrayL[1].'AM';
  }
  if($timeslotArrayL[0] > 12){
    $timeslotArrayL[0] = $timeslotArrayL[0] - 12;
  }
  $timeslotArrayR = explode(":", $timeslotArray[1]);
  if($timeslotArrayR[0] > 11){
    $timeslotArrayR[1] = $timeslotArrayR[1].'PM';
  }
  else{
    $timeslotArrayR[1] = $timeslotArrayR[1].'AM';
  }
  if($timeslotArrayR[0] > 12){
    $timeslotArrayR[0] = $timeslotArrayR[0] - 12;
  }
  $timeslotArray[0] = implode(":", $timeslotArrayL);
  $timeslotArray[1] = implode(":", $timeslotArrayR);
  if(strlen($timeslotArray[0]) == 6){
    $timeslotArray[0] = '0'.$timeslotArray[0];
  }
  if(strlen($timeslotArray[1]) == 6){
    $timeslotArray[1] = '0'.$timeslotArray[1];
  }
  return implode("-", $timeslotArray);
}
//////////////////////////////////////////////////////////
function manage_LRC_Accounts(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      //print "\$GLOBALS[\"$key\"] == $value<br>";
      global $$key;
    }
    else{
    }
  }
  if($addNewTutorAccount == 'add'){
    connect_Db();
    $query = "SELECT personnel_id FROM lrc_personnel WHERE username='$lrcUsername' ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) == 0){
      $nextId = get_Next_Id('personnel_id','lrc_personnel');
      $valueArray = array('personnel_id', 'personnelType', 'firstName', 'middleName', 'lastName', 'lrcUsername', 'lrcPassword');
      $valueStr = "'$nextId', '$personnelType', '$firstName', '$middleName', '$lastName', '$lrcUsername', '$lrcPassword'";
      $query = "INSERT INTO lrc_personnel (personnel_id, personnelType, firstName, middleName, lastName, username, password) VALUES
($valueStr)";
      $result = mysql_query($query);
      foreach($valueArray as $valueElem){
        unset($$valueElem);
      }
    }
    else{
      echo "error: the specified username [$lrcUsername] is already taken please try a different one.<br><br>";
    }
  }
  if($addNewTutorAccount == 'apply changes'){
    connect_Db();
    $query = "SELECT personnel_id FROM lrc_personnel WHERE username='$lrcUsername' AND personnel_id!='$personnel_id' ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) == 0){
      $query = "UPDATE lrc_personnel SET personnel_id='$personnel_id', personnelType='$personnelType', firstName='$firstName',
middleName='$middleName', lastName='$lastName', username='$lrcUsername', password='$lrcPassword' WHERE personnel_id='$personnel_id'";
      $result = mysql_query($query);
      $valueArray = array('personnel_id', 'personnelType', 'firstName', 'middleName', 'lastName', 'lrcUsername', 'lrcPassword');
      foreach($valueArray as $valueElem){
        unset($$valueElem);
      }
    }
    else{
      echo "error: the specified username [$lrcUsername] is already taken please try a different one.<br><br>";
    }
  }
  if(isset($personnelIdToDelete)){
    connect_Db();
    $query = "DELETE FROM lrc_personnel WHERE personnel_id='$personnelIdToDelete'";
    $result = mysql_query($query);
    echo "message: the specified lrc personnel account was successfully deleted.<br><br>";
  }
  if(isset($personnelIdToEdit)){
    connect_Db();
    $query = "SELECT * FROM lrc_personnel WHERE personnel_id='$personnelIdToEdit'";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $personnel_id = $myrow[0];
    $personnelType = $myrow[1];
    $firstName = $myrow[2];
    $middleName = $myrow[3];
    $lastName = $myrow[4];
    $lrcUsername = $myrow[5];
    $lrcPassword = $myrow[6];
  }
  echo "<table border='1'>";
  echo "<tr><td colspan='5' align='center'>List of LRC Personnel Accounts</td></tr>";
  echo "<tr>";
  $headerDisplay = array('', 'First Name', 'Middle Name', 'Last Name', 'Personnel Type');
  $headerColumnName = array('', 'firstName', 'middleName', 'lastName', 'personnelType');
  for($i = 0;$i < count($headerDisplay);$i++){
    //if(($currentSortedBy != '')&&($currentSortedBy == $prevSortedBy)&&($currentSortedBy == $headerColumnName[$i])){
    if(($currentSortedBy != '')&&($currentSortedBy == $headerColumnName[$i])){
      if(($directionStr == '')||($currentSortedBy != $prevSortedBy)){
        $directionStr = 'ASC';
        $direction = ' &#8595';
      }
      else{
        if($directionStr == 'ASC'){
          $directionStr = 'DESC';
          $direction = ' &#8593';
        }
        else{
          $directionStr = 'ASC';
          $direction = ' &#8595';
        }
      }
    }
    else{
      $direction = '';
    }
    echo "<td align='center'><a style='text-decoration:none; color:blue;'
href='?activeNav=$activeNav&activeTab=$activeTab&currentSortedBy=$headerColumnName[$i]&prevSortedBy=$currentSortedBy&directionStr=$directionStr
'>$headerDisplay[$i]$direction</a></td>";
  }
  echo "</tr>";
  connect_Db();
  if($currentSortedBy == ''){
    $query = "SELECT personnel_id, firstName, middleName, lastName, personnelType FROM lrc_personnel $directionStr";
  }
  else{
    $query = "SELECT personnel_id, firstName, middleName, lastName, personnelType FROM lrc_personnel ORDER BY $currentSortedBy $directionStr";
  }

  $result = mysql_query($query);
  $linkIndex = 0;
  while($myrow = mysql_fetch_row($result)){
    echo "<tr><td align='center'>";
    if((isset($personnelIdToEdit))&&($personnelIdToEdit == $myrow[0])){
      echo "-editing-";
    }
    else{
      echo "<a href='?activeNav=$activeNav&activeTab=$activeTab&personnelIdToEdit=$myrow[0]'>edit</a>&nbsp;";
      echo "<a href='?activeNav=$activeNav&activeTab=$activeTab&personnelIdToDelete=$myrow[0]' onClick='return
confirmDeleteLrcAccount($linkIndex)'>delete</a>";
    }
    echo "</td>";
    echo "<td>$myrow[1]</td>";
    echo "<td>$myrow[2]</td>";
    echo "<td>$myrow[3]</td>";
    echo "<td>$myrow[4]</td>";
    echo "</tr>";
    $linkIndex++;
    $lrcAccountTableDataArray[] = implode(",", $myrow);
  }
  echo "</table>";
  echo "<form name='lrcAccountTableData' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST'>";
  foreach($lrcAccountTableDataArray as $lrcAccountTableDataElem){
    echo "<input type='hidden' name='lrcAccountTableDataArray[]' value='$lrcAccountTableDataElem'/>";
  }
  echo "</form>";
  echo "<form name='lrcPersonnelForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' onSubmit='return
lrcPersonnelCheck(this)' onReset='return toesAccountOnReset(\"lrc\", this)' >";
  echo "<table border='1'>";
  if(isset($personnelIdToEdit)){
    echo "<tr><td colspan='2' align='center'>Edit LRC personnel Account</td></tr>";
  }
  else{
    echo "<tr><td colspan='2' align='center'>Add New LRC personnel Account</td></tr>";
  }
  echo "<tr><td>First name</td><td><input type='text' maxLength='30' size='30' name='firstName' value='$firstName'></td></tr>";
  echo "<tr><td>Middle name</td><td><input type='text' maxLength='30' size='30' name='middleName' value='$middleName'></td></tr>";
  echo "<tr><td>Last Name</td><td><input type='text' maxLength='30' size='30' name='lastName' value='$lastName'></td></tr>";
  echo "<tr><td>Personnel Type</td><td>";
  echo "<select name='personnelType'>";
  $personnelTypeArray = array('staff', 'lrc director', 'administration officer');
  foreach($personnelTypeArray as $personnelTypeElem){
    if($personnelType == $personnelTypeElem){
      echo "<option value='$personnelTypeElem' selected='selected'>$personnelTypeElem</option>";
    }
    else{
      echo "<option value='$personnelTypeElem'>$personnelTypeElem</option>";
    }
  }
  echo "</select>";
  echo "</td></tr>";
  echo "<tr><td>Username</td><td><input type='text' maxLength='16' size='16' name='lrcUsername' value='$lrcUsername'></td></tr>";
  echo "<tr><td>Password</td><td><input type='password' name='lrcPassword' maxLength='16' size='16' value='$lrcPassword'></td></tr>";
  echo "<input type='hidden' name='lrcPasswordJ' value='$lrcPassword' outputPasswordValues='1'/>";
  echo "<input type='hidden' name='personnel_id' value='$personnel_id'/>";
  if(isset($personnelIdToEdit)){
    echo "<tr><td colspan='2' align='center'><input type='submit' name='addNewTutorAccount' value='apply changes'><button type='reset'
name='reset' value='reset'>reset</button></td></tr>";
  }
  else{
    echo "<tr><td colspan='2' align='center'><input type='submit' name='addNewTutorAccount' value='add'><button type='reset' name='reset'
value='reset'>reset</button></td></tr>";
  }
  echo "</table>";
  echo "</form>";
}
//////////////////////////////////////////////////////////
function manage_Tutorial_Request(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      //print "\$GLOBALS[\"$key\"] == $value<br>";
      global $$key;
    }
    else{
    }
  }
  if(isset($tutorForTheTutorial)){
    connect_Db();
    $query = "SELECT DISTINCT(t.tutorial_id), a.tutorial_id FROM tutorial AS t LEFT JOIN attendance AS a ON (t.tutorial_id=a.tutorial_id) WHERE
t.tutor_id='$tutorForTheTutorial' AND t.subject='$subject' AND t.topic='$topic' AND t.time='$time' AND t.date='$date' ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) == 0){
      //create the tutorial
      $tutorial_id = get_Next_Id('tutorial_id','tutorial');
      $query = "INSERT INTO tutorial VALUES ('$tutorial_id', '$tutorForTheTutorial', '$subject', '$topic', '$time', '$date')";
      $result = mysql_query($query) or die(err_msg());
      echo "messsage: a NEW 'TUTORIAL SCHEDULE' was created for the request.<br><br>";
    }
    else{
      $myrow = mysql_fetch_row($result);
      if($myrow[1] != ""){
        $queryA = "SELECT CONCAT(firstName, ' ', middleName, ' ', lastName) FROM tutor WHERE tutor_id='$tutorForTheTutorial' ";
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        $tutorForTheTutorialName = $myrowA[0];
        $queryA = "SELECT COUNT(student_number) FROM attendance WHERE tutorial_id='$myrow[0]' ";
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        echo "error: sorry but a similar tutorial was handled by $tutorForTheTutorialName. Our records also show that $myrowA[0] attended it.
You may verify this information from a STAFF.<br><br>";
      }
      else{
        $tutorial_id = $myrow[0];
        echo "messsage: an EXISTING 'TUTORIAL SCHEDULE' was found FIT for the request.<br>";
      }
    }
    if($tutorial_id != ""){
      //enlist the requestors...
      $query = "SELECT student_number FROM request WHERE subject='$subject' AND topic='$topic' AND preferredDay='$date' AND
preferredTime='$time' ORDER BY requestDate ASC";
      $result = mysql_query($query);
      $priorityNumber = 1;
      while($myrow = mysql_fetch_row($result)){
        $queryA = "INSERT INTO enlistment VALUES ('$myrow[0]','$tutorial_id', '$priorityNumber') ";
        mysql_query($queryA);
        $priorityNumber++;
      }
      //delete the request
      $query = "DELETE FROM request WHERE subject='$subject' AND topic='$topic' AND preferredDay='$date' AND preferredTime='$time' ";
      $result = mysql_query($query);
      echo "<br>message: the students involved in the 'TUTORIAL REQUEST' were automatically enlisted.<br><br>";
      unset($requestIdToApproveH);
    }
  }
  if($requestIdToDisapproveH != ""){
    connect_Db();
    $query = "SELECT subject, topic, preferredDay, preferredTime FROM request WHERE request_id='$requestIdToDisapproveH' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    //$queryA = "DELETE FROM request WHERE subject='$myrow[0]' AND topic='$myrow[1]' AND preferredDay='$myrow[2]' AND preferredTime='$myrow[3]'
";
    $queryA = "UPDATE request SET request_id='0' WHERE subject='$myrow[0]' AND topic='$myrow[1]' AND preferredDay='$myrow[2]' AND
preferredTime='$myrow[3]' ";
    $resultA = mysql_query($queryA);
    echo "message: the specified TUTORIAL REQUEST was DISAPPROVED.<br><br>";
  }
  if($requestIdToApproveH != ""){
    connect_Db();
    $query = "SELECT subject.subjectName, request.subject, request.topic, request.preferredDay, request.preferredTime, request.preferredTutor
FROM subject, request WHERE request.request_id='$requestIdToApproveH' AND request.subject=subject.subject_id";
    $result = mysql_query($query);
    if(mysql_num_rows($result) == 0){
      echo "error: the request that you were about to APPROVE is now missing. There are two possible scenarios that might have caused
this:<br>";
      echo $tabS."1. the original author of the request CANCELLED it.<br>";
      echo $tabS."2. another ONLINE administrator APPROVED the request. You can verify this in the 'Tutor Schedule' tab.<br><br>";
      return false;
    }
    $myrow = mysql_fetch_row($result);
    echo "<table border='1'>";
    echo "<tr><td colspan='2' align='center'>New Tutorial Details</td></tr>";
    echo "<tr><td>Subject</td><td>$myrow[0]</td></tr>";
    echo "<tr><td>Topic</td><td>";
    $topicArray = explode(",", $myrow[2]);
    foreach($topicArray AS $topicArrayElem){
      $queryA = "SELECT topicName FROM topic WHERE topic_id='$topicArrayElem' ";
      $resultA = mysql_query($queryA);
      $myrowA = mysql_fetch_row($resultA);
      echo "$myrowA[0]<br>";
    }
    echo "</td></tr>";
    $prefTutor = $myrow[5];
    $requestedDateForDisplay = reformatDateForDisplay($myrow[3]);
    $requestedDateForDisplayArray = explode(" ", $requestedDateForDisplay);
    echo "<tr><td>Date</td><td>$requestedDateForDisplay</td></tr>";
    echo "<tr><td>Time</td><td>".reformatTimeForDisplay($myrow[4])."</td></tr>";
    echo "</table>";

    //display available tutors...
    echo "<br><table border='1'>";
    echo "<form name='selectTutorForTutorial' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' onSubmit='return
verifySelectTutorForTutorial()' >";
    echo "<tr><td align='center' colspan='7'>Available Tutor</td></tr>";
    $availableTutorColumnName = array('', 'Name', 'Mobile Phone', 'Land Phone', 'Email Address', 'Tutor Type', 'Course/Department');
    echo "<tr>";
    foreach($availableTutorColumnName AS $availableTutorColumnNameElem){
      echo "<td align='center'>$availableTutorColumnNameElem</td>";
    }
    echo "</tr>";
    echo "<input type='hidden' name='requestIdToApproveH' value='$requestIdToApproveH' />";
    echo "<input type='hidden' name='subject' value='$myrow[1]' />";
    echo "<input type='hidden' name='topic' value='".implode(",", $topicArray)."' />";
    echo "<input type='hidden' name='time' value='$myrow[4]' />";
    echo "<input type='hidden' name='date' value='$myrow[3]' />";
    $queryA = "SELECT CONCAT(tutor.firstName, ' ', tutor.middleName, ' ', tutor.lastName) AS fullName, tutor.mobilePhone, tutor.landPhone,
tutor.email, tutor.tutorType, tutor.deptCourse, tutor_schedule.prefTime, tutor.tutor_id FROM tutor, tutor_schedule WHERE
tutor.tutor_id=tutor_schedule.tutor_id AND (tutor_schedule.prefDay LIKE '$requestedDateForDisplayArray[0]' OR tutor_schedule.prefDay LIKE
'$requestedDateForDisplayArray[0],%' OR tutor_schedule.prefDay LIKE '%,$requestedDateForDisplayArray[0],%' OR tutor_schedule.prefDay LIKE
'%,$requestedDateForDisplayArray[0]') AND (tutor.tutoredSubject LIKE '$myrow[1]' OR tutor.tutoredSubject LIKE '%,$myrow[1],%' OR
tutor.tutoredSubject LIKE '%,$myrow[1]' OR tutor.tutoredSubject LIKE '$myrow[1],%') ";
    $resultA = mysql_query($queryA);
    while($myrowA = mysql_fetch_row($resultA)){
      if(requestedTimeIsWithinInterval(explode("-", $myrowA[6]), explode("-", $myrow[4]))){
        //filter out tutor_id's with a SIMILAR tutorial_id...
        $queryB = "SELECT t.tutorial_id FROM tutorial AS t, request AS r WHERE r.request_id='$requestIdToApproveH' AND t.tutor_id='$myrowA[7]'
AND t.subject=r.subject AND t.topic=r.topic AND t.time=r.preferredTime AND t.date=r.preferredDay ";
        $resultB = mysql_query($queryB);
        if(mysql_num_rows($resultB) > 0){
          continue;
        }
        //avoid double posting of tutor_id...
        if((isset($displayedTutorId))&&(in_array($myrowA[7], $displayedTutorId))){
          continue;
        }
        $displayedTutorId[] = $myrowA[7];
        echo "<tr>";
        if($prefTutor == $myrowA[7]){
          echo "<td><input type='radio' name='tutorForTheTutorial' value='$myrowA[7]' checked='checked'/></td>";
        }
        else{
          echo "<td><input type='radio' name='tutorForTheTutorial' value='$myrowA[7]' /></td>";
        }
        echo "<td>$myrowA[0]</td>";
        echo "<td>$myrowA[1]</td>";
        echo "<td>$myrowA[2]</td>";
        echo "<td>$myrowA[3]</td>";
        echo "<td>";
        if($myrowA[4] == 'p'){
          echo "peer";
          $queryB = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrowA[5]' ";
        }
        else{
          echo "faculty";
          $queryB = "SELECT departmentName FROM upm_departments WHERE department_id='$myrowA[5]' ";
        }
        echo "</td>";
        $myrowB = mysql_fetch_row(mysql_query($queryB));
        echo "<td>$myrowB[0]</td>";
        echo "</tr>";
      }
    }
    echo "<tr><td colspan='7' align='center'><input type='submit' value='set tutorial' />";
    echo "<button name='approve' onClick='return sendRequestIdToDisapprove(\"$requestIdToApproveH\")'>disapprove</button>";
    echo "</td></tr>";
    echo "</form>";
    echo "</table>";
    echo "<form name='approveTutorialRequestForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' style='position:inline;'>";
    echo "<input type='hidden' name='requestIdToDisapproveH' value=''/>";
    echo "</form>";
  }
  else{
    //form for sorting the table...
    if(!isset($direction)){
      $direction = "DESC";
    }
    echo "<form name='availableTutorialRequestSortForm' method='POST' action='?activeNav=$activeNav&activeTab=$activeTab'
style='display:none;'>";
    echo "<input type='hidden' name='column' value='$column'/>";
    echo "<input type='hidden' name='direction' value='$direction'/>";
    echo "</form>";


    echo "<table width='100%'>";
    echo "<tr><td align='center' bgcolor='#D3F2D3'>Tutorial Requests</td></tr>";
    echo "</table>";
    connect_Db();
    //$query = "SELECT request.request_id, subject.subjectName, request.topic, request.preferredDay, request.preferredTime,
request.requestDate, count(*) FROM subject, request WHERE subject.subject_id=request.subject GROUP BY request.subject, request.topic,
request.preferredDay, request.preferredTime ORDER BY subject.subjectName";
    if($column != ""){
      //$query = "SELECT request.request_id, subject.subjectName, request.topic, request.preferredDay, request.preferredTime,
request.requestDate, count(*), IF(LOCATE('[', request.topic)=0, 'any', CONCAT(t.firstName, ' ', t.middleName, ' ', t.lastName)) FROM subject,
request LEFT JOIN tutor AS t ON (t.tutor_id=REPLACE(SUBSTRING(request.topic, LOCATE('[', request.topic) + 1),']','')) WHERE
subject.subject_id=request.subject GROUP BY request.subject, request.topic, request.preferredDay, request.preferredTime ORDER BY $column
$direction ";
      $query = "SELECT request.request_id, subject.subjectName, request.topic, request.preferredDay, request.preferredTime,
request.requestDate, count(*), CONCAT(t.firstName, ' ', t.middleName, ' ', t.lastName) AS tutorFullname FROM subject, request LEFT JOIN tutor
AS t ON (t.tutor_id=request.preferredTutor) WHERE subject.subject_id=request.subject AND request.request_id > 0 AND request.preferredDay >
CURDATE() GROUP BY request.subject, request.topic, request.preferredDay, request.preferredTime ORDER BY $column $direction ";
    }
    else{
      $query = "SELECT request.request_id, subject.subjectName, request.topic, request.preferredDay, request.preferredTime,
request.requestDate, count(*), CONCAT(t.firstName, ' ', t.middleName, ' ', t.lastName) AS tutorFullname FROM subject, request LEFT JOIN tutor
AS t ON (t.tutor_id=request.preferredTutor) WHERE subject.subject_id=request.subject AND request.request_id > 0 AND request.preferredDay >
CURDATE() GROUP BY request.subject, request.topic, request.preferredDay, request.preferredTime ORDER BY subject.subjectName";
    }
    //echo "[$query]";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      echo "<div style='height:auto; width:100%; overflow:scroll;'>";
      echo "<table id='tutorialRequestTable' border='1'>";
      echo "<form name='approveTutorialRequestForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
      //echo "<tr><td></td><td align='center'>Quantity<br>of requests</td><td align='center'>Subject</td><td align='center'>Topic</td><td
align='center'>Preferred Day</td><td align='center'>Preferred Time</td><td align='center'>Preferred Tutor</td><td align='center'>Date
Requested<br>year-mo-day hr-min-sec</td></tr>";
      $availableTutorialRequestColumnNames = array('&nbsp;', 'Quantity<br>of requests', 'Subject', 'Topic', 'Preferred Day', 'Preferred Time',
'Preferred Tutor', 'Date Requested<br>year-mo-day hr-min-sec');
      $availableTutorialRequestColumnNamesDb = array('', 'Quantity<br>of requests', 'subject.subjectName', 'Topic', 'request.preferredDay',
'request.preferredTime', 'tutorFullname', 'request.requestDate');
      echo "<tr>";
      for($z = 0;$z < count($availableTutorialRequestColumnNames);$z++){
        echo "<td align='center'>";
        if(($z == 2)||(($z >= 4)&&($z <= 7))){
          echo "<a href='javascript: void availableTutorialRequestSortJs(\"$availableTutorialRequestColumnNamesDb[$z]\")' style='text-
decoration:none;color:blue;'>";
          echo "$availableTutorialRequestColumnNames[$z]";
          if($availableTutorialRequestColumnNamesDb[$z] == $column){
            echo "&nbsp;";
            if($direction == "ASC"){
              echo "&#8593";
            }
            else{
              echo "&#8595";
            }
          }
          echo "</a>";
        }
        else{
          echo "$availableTutorialRequestColumnNames[$z]";
        }
        echo "</td>";
      }
      echo "</tr>";
      while($myrow = mysql_fetch_row($result)){
        $topicArray = explode(",", $myrow[2]);
        echo "<tr><td>";
        echo "<button id='buttonToLink' name='approve' onClick='return sendRequestIdToApprove($myrow[0])' onMouseOver='return
cursorForButtonToLink(this)'>approve</button>";
        echo "<button id='buttonToLink' name='approve' onClick='return sendRequestIdToDisapprove($myrow[0])' onMouseOver='return
cursorForButtonToLink(this)'>disapprove</button>";
        echo "</td>";
        echo "<td align='center'>$myrow[6]</td>";
        echo "<td>$myrow[1]</td>";
        echo "<td>";
        foreach($topicArray AS $topicArrayElem){
          if(strpos($topicArrayElem, "[") === false){
            $queryA = "SELECT topicName FROM topic WHERE topic_id='$topicArrayElem' ";
            $resultA = mysql_query($queryA);
            $myrowA = mysql_fetch_row($resultA);
            echo "$myrowA[0]<br>";
          }
        }
        echo "</td>";
        echo "<td>".reformatDateForDisplay($myrow[3])."</td><td>".reformatTimeForDisplay($myrow[4])."</td>";
        echo "<td>$myrow[7]</td>";
        echo "<td>$myrow[5]</td></tr>";
      }
      echo "<input type='hidden' name='requestIdToApproveH' value=''/>";
      echo "<input type='hidden' name='requestIdToDisapproveH' value=''/>";
      echo "</form>";
      echo "</table>";
      echo "</div>";
    }
    else{
      echo "<table width='100%'>";
      echo "<tr><td align='center'>no records</td></tr>";
      echo "</table>";
    }
  }
}
//////////////////////////////////////////////////////////
function requestedTimeIsWithinInterval($tutorTime, $requestTime){
  //echo "<br>[".$tutorTime[0]."-".$tutorTime[1]."][".$requestTime[0]."-".$requestTime[1]."]";
  $upperLess = false;
  $lowerMore = false;
  if(intVal(substr($requestTime[1], 0, strpos($requestTime[1], ":"))) < intVal(substr($tutorTime[1], 0, strpos($tutorTime[1], ":")))){
    $upperLess = true;
  }
  if((intVal(substr($requestTime[1], 0, strpos($requestTime[1], ":"))) == intVal(substr($tutorTime[1], 0, strpos($tutorTime[1],
":"))))&&(intVal(substr($requestTime[1], strpos($requestTime[1], ":")+1)) <= intVal(substr($tutorTime[1], strpos($tutorTime[1], ":")+1)))){
    $upperLess = true;
  }
  if(intVal(substr($requestTime[0], 0, strpos($requestTime[0], ":"))) > intVal(substr($tutorTime[0], 0, strpos($tutorTime[0], ":")))){
    $lowerMore = true;
  }
  if((intVal(substr($requestTime[0], 0, strpos($requestTime[0], ":"))) == intVal(substr($tutorTime[0], 0, strpos($tutorTime[0],
":"))))&&(intVal(substr($requestTime[0], strpos($requestTime[0], ":")+1)) >= intVal(substr($tutorTime[0], strpos($tutorTime[0], ":")+1)))){
    $lowerMore = true;
  }
  if(($upperLess)&&($lowerMore)){
    return true;
  }
  else{
    return false;
  }
}
//////////////////////////////////////////////////////////
function manage_Tutorial_Schedule(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      //print "\$GLOBALS[\"$key\"] == $value<br>";
      global $$key;
    }
    else{
    }
  }
  if(($newTutorialScheduleSubmit == 'submit')&&($submitMode == 'clickingSubmitButton')){
    connect_Db();
    $prefTime = $prefTimeFrom.'-'.$prefTimeTo;
    $query = "SELECT DISTINCT(t.tutorial_id), a.tutorial_id FROM tutorial AS t LEFT JOIN attendance AS a ON (t.tutorial_id=a.tutorial_id) WHERE
t.tutor_id='$tutor' AND t.subject='$subject' AND t.topic='".implode(",", $topic)."' AND t.time='$prefTime' AND t.date='$prefDate' ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) == 0){
      $tutorial_id = get_Next_Id('tutorial_id','tutorial');
      $queryA = "INSERT INTO tutorial VALUES ('$tutorial_id', '$tutor', '$subject', '".implode(",", $topic)."', '$prefTime', '$prefDate')";
      $resultA = mysql_query($queryA) or die(err_msg());
    }
    else{
      $myrow = mysql_fetch_row($result);
      if($myrow[1] != ""){
        $queryA = "SELECT COUNT(student_number) FROM attendance WHERE tutorial_id='$myrow[0]' ";
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        echo "error: sorry but a similar tutorial already exists. Our records also show that $myrowA[0] attended it. You may verify this
information from a STAFF.<br><br>";
      }
      else{
        echo "error: sorry but a similar tutorial already exists.<br><br>";
        $submitMode = 'eventListener';
      }
    }
  }
  if(($newTutorialScheduleSubmit == 'create new tutorial schedule')||($submitMode == 'eventListener')){
    echo "<form name='addTutorialScheduleForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
    echo "<table border='1'>";
    echo "<tr><td colspan='2' align='center'>New Tutorial Schedule</td></tr>";
    if(isset($subject)){
      if($strictTutorSchedule == 'on'){
        echo "<tr><td colspan='2'><input type='checkbox' name='strictTutorSchedule' checked='checked' onClick='return
relaxOrStrictTutorSchedule(this.form)' />strictly based on the tutor's schedule</td></tr>";
      }
      else{
        echo "<tr><td colspan='2'><input type='checkbox' name='strictTutorSchedule' onClick='return relaxOrStrictTutorSchedule(this.form)'
/>strictly based on the tutor's schedule</td></tr>";
      }
    }
    echo "<tr><td>Subject</td><td>";
    echo "<select name='subject' onChange='return newTutorialScheduleSubject(this.form)'>";
    if(!isset($subject)){
      echo "<option>Please select the subject</option>";
    }
    connect_Db();
    $query = "SELECT subject_id, subjectName FROM subject ORDER BY `subjectName` ASC";
    $result = mysql_query($query);
    while($myrow = mysql_fetch_row($result)){
      echo "<option";
      if((isset($subject))&&($myrow[0] == $subject)){
        echo " selected='selected'";
      }
      echo " value='$myrow[0]' label='$myrow[1]'>$myrow[1]</option>";
    }
    echo "</select>";
    echo "</td></tr>";
    echo "<tr><td>Topic</td><td>";
    $deptNumString = array ("first departmental", "second departmental", "third departmental", "fourth departmental", "fifth departmental",
"sixth departmental", "seventh departmental");
    $query = "SELECT topic_id, topicName, deptNum FROM topic WHERE subject_id='$subject' ORDER BY `topicName` ASC";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      echo "<table id='addTutorialScheduleFormTopicTable' border='0'>";
      foreach($deptNumString AS $deptNumStringElem){
        $query = "SELECT topic_id, topicName, deptNum FROM topic WHERE subject_id='$subject' AND deptNum='$deptNumStringElem' ORDER BY
`topicName` ASC";
        $result = mysql_query($query);
        if(mysql_num_rows($result) > 0){
          echo "<tr><td>$deptNumStringElem</td></tr>";
          while($myrow = mysql_fetch_row($result)){
            if(isset($topic)){
              if(in_array($myrow[0], $topic)){
                echo "<tr><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type='checkbox' name='topic[]' value='$myrow[0]' checked='checked'
/>$myrow[1]</td></tr>";
              }
              else{
                echo "<tr><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type='checkbox' name='topic[]' value='$myrow[0]' />$myrow[1]</td></tr>";
              }
            }
            else{
              echo "<tr><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type='checkbox' name='topic[]' value='$myrow[0]' />$myrow[1]</td></tr>";
            }
          }
        }
      }
      echo "</table>";
    }
    else{
      echo "No topics found!";
    }
    echo "</td></tr>";
    if(isset($subject)){
      $query = "SELECT DISTINCT(tutor.tutor_id), CONCAT(tutor.firstName, ' ', tutor.middleName, ' ', tutor.lastName) AS fullName FROM tutor,
tutor_schedule WHERE tutor.tutor_id=tutor_schedule.tutor_id AND tutor_schedule.prefDay LIKE '%$weekDaysArrayElem%' AND (tutor.tutoredSubject
LIKE '$subject' OR tutor.tutoredSubject LIKE '%,$subject,%' OR tutor.tutoredSubject LIKE '%,$subject' OR tutor.tutoredSubject LIKE
'$subject,%')";
```

```
      $result = mysql_query($query);
      if(mysql_num_rows($result) > 0){
        echo "<tr><td colspan='2'>Tutor<br>";
        echo "<table id='addTutorScheduleTutorDetailsTable'>";
        echo "<tr><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;Name</td><td>";
        echo "<select name='tutor' onChange='return newTutorialScheduleTutor(this.form)' >";
        while($myrow = mysql_fetch_row($result)){
          $tutorDisplayedInSelect[] = $myrow[0];
          echo "<option";
          if((isset($tutor))&&($myrow[0] == $tutor)){
            echo " selected='selected'";
          }
          echo " value='$myrow[0]' label='$myrow[1]'>$myrow[1]</option>";
        }
        echo "</select>";
        echo "</td></tr>";
        if(isset($tutor)){
          $query = "SELECT mobilePhone, landPhone, email, tutorType, deptCourse FROM tutor WHERE tutor_id='$tutor' ";
        }
        else{
          $query = "SELECT mobilePhone, landPhone, email, tutorType, deptCourse FROM tutor WHERE tutor_id='$tutorDisplayedInSelect[0]' ";
        }
        $result = mysql_query($query);
        $myrow = mysql_fetch_row($result);
        echo "<tr><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;Mobile Phone</td><td>:&nbsp;<input type='text' id='textBoxToPlainText'
name='tutorMobilePhoneDisp' value='$myrow[0]' readonly='readonly' size='".(strlen($myrow[0])+5)."' /></td></tr>";
        echo "<tr><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;Land Phone</td><td>:&nbsp;<input type='text' id='textBoxToPlainText'
name='tutorLandPhoneDisp' value='$myrow[1]' readonly='readonly' size='".(strlen($myrow[1])+5)."' /></td></tr>";
        echo "<tr><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;Email Address</td><td>:&nbsp;<input type='text' id='textBoxToPlainText'
name='tutorEmailAddressDisp' value='$myrow[2]' readonly='readonly' size='".(strlen($myrow[2])+5)."' /></td></tr>";
        if($myrow[3] == 'p'){
          echo "<tr><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;Tutor Type</td><td>:&nbsp;<input type='text' id='textBoxToPlainText' name='tutorTypeDisp'
value='peer' readonly='readonly' /></td></tr>";
          $queryA = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrow[4]' ";
        }
        else{
          echo "<tr><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;Tutor Type</td><td>:&nbsp;<input type='text' id='textBoxToPlainText' name='tutorTypeDisp'
value='faculty' readonly='readonly' /></td></tr>";
          $queryA = "SELECT departmentName FROM upm_departments WHERE department_id='$myrow[4]' ";
        }
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        echo "<tr><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;Course/Department</td><td>:&nbsp;<input type='text' id='textBoxToPlainText'
name='tutorCourseDeptDisp' value='$myrowA[0]' readonly='readonly' size='".(strlen($myrowA[0])+5)."' /></td></tr>";
        echo "</table>";
        echo "</td></tr>";
      }
      else{
        echo "<tr><td>Tutor</td><td>Sorry no available tutor</td></tr>";
      }
    }
    else{
      echo "<tr><td>Tutor</td><td>Sorry no available tutor</td></tr>";
    }
    if(isset($subject)){
      $weekDaysArray = array('Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday');
      if(isset($tutor)){
        foreach($weekDaysArray as $weekDaysArrayElem){
          $query = "SELECT DISTINCT(prefTime) FROM tutor_schedule WHERE tutor_id='$tutor' AND prefDay LIKE '%$weekDaysArrayElem%' ORDER BY
prefTime ASC";
          $result = mysql_query($query);
          while($myrow = mysql_fetch_row($result)){
            $availableTimeArray[] = $myrow[0];
          }
          if(count($availableTimeArray) > 0){
            echo "<input type='hidden' name='".$weekDaysArrayElem."H"."' value='".join(",", $availableTimeArray)."'>";
          }
          else{
            echo "<input type='hidden' name='".$weekDaysArrayElem."H"."' value=''>";
          }
          unset($availableTimeArray);
        }
      }
      else{
        foreach($weekDaysArray as $weekDaysArrayElem){
          echo "<input type='hidden' name='".$weekDaysArrayElem."H"."' value=''>";
        }
      }
      echo "<tr><td>Preferred Day</td><td>";
      echo "<select name='prefDay' onChange='return newTutorialSchedulePrefDay()'><option></option></select><br>";
      echo "<button name='prefDayPrev' onclick='displayDayInDateFormat(\"prev\")'>&#8592</button>";
      echo "<input name='prefDateDisplay' type='text' align='center' readonly='readonly' style='text-align:center;'/>";
      echo "<input type='hidden' name='prefDate' value=''>";
      echo "<input type='hidden' name='dateModifierCounter' value='0'>";
      echo "<button name='prefDayNext' onclick='displayDayInDateFormat(\"next\")'>&#8594</button>";
      echo "</td></tr>";
      echo "<tr><td>Preferred Time</td><td>";
      echo "<select name='prefTimeFrom' onChange='return verifyPrefTime()'><option></option></select>&nbsp;&nbsp;-&nbsp;&nbsp;";
      echo "<select name='prefTimeTo' onChange='return verifyPrefTime()'><option></option></select>";
      echo "</td></tr>";
    }
    else{
      echo "<tr><td>Preferred Day</td><td>sorry no available day</td></tr>";
      echo "<tr><td>Preferred Time</td><td>sorry no available time</td></tr>";
    }
    if(isset($subject)){
      $disablerStr = "";
    }
    else{
      $disablerStr = "DISABLED";
    }
    echo "<tr><td colspan='2' align='center'><button name='newTutorialScheduleSubmit' value='submit' onClick='return
checkNewTutorialScheduleDetails(this.form)' $disablerStr>submit</button></td></tr>";
    echo "</table>";
    echo "<input type='hidden' name='submitMode' value='clickingSubmitButton'>";
    echo "</form>";
  }
  else{
    if($tutorialIdToCancelH != ''){
      connect_Db();
      $query = "SELECT student_number FROM attendance WHERE tutorial_id='$tutorialIdToCancelH' LIMIT 1 ";
      $result = mysql_query($query);
      if(mysql_num_rows($result) == 0){
        //count the number of enlistments...
        $queryA = "SELECT COUNT(student_number) FROM enlistment WHERE tutorial_id='$tutorialIdToCancelH' ";
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        if($myrowA[0] == 0){
          //since ENLISTMENT is 0...delete the TUTORIAL SCHEDULE directly...
          $queryA = "DELETE FROM tutorial WHERE tutorial_id='$tutorialIdToCancelH' ";
          $resultA = mysql_query($queryA);
        }
        else{
          //set all the priorityNumber to 0...this will serve as a flag for informing the student that the Tutorial Schedule was cancelled...
          $queryA = "UPDATE enlistment SET priorityNumber='0' WHERE tutorial_id='$tutorialIdToCancelH' ";
          $resultA = mysql_query($queryA);
        }
        echo "message: the specified tutorial schedule was successully cancelled.<br><br>";
      }
      else{
        $queryA = "SELECT COUNT(student_number) FROM attendance WHERE tutorial_id='$myrow[0]' ";
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        echo "message: the specified tutorial schedule can not be cancelled because our records show that $myrowA[0] proving that the tutorial
actually took place. You may verify this information from a STAFF.<br><br>";
      }
    }
    echo "<form name='newTutorialScheduleForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
    echo "<input type='submit' name='newTutorialScheduleSubmit' value='create new tutorial schedule'>";
    echo "</form>";
    echo "<table width='100%'>";
    echo "<tr><td align='center' bgcolor='#D3F2D3'>Tutorial Schedules</td></tr>";
    echo "</table>";
    connect_Db();
    $query = "SELECT DISTINCT(tutorial.tutorial_id), subject.subjectName, tutorial.topic, tutorial.date, tutorial.time, CONCAT(tutor.firstName,
' ', tutor.middleName, ' ', tutor.lastName) AS tutorFullname, tutor.tutorType, tutor.deptCourse, a.student_number, COUNT(e.student_number) FROM
subject, tutor, tutorial LEFT JOIN attendance AS a ON (tutorial.tutorial_id=a.tutorial_id) LEFT JOIN enlistment AS e ON
(tutorial.tutorial_id=e.tutorial_id) WHERE tutorial.tutor_id=tutor.tutor_id AND tutorial.subject=subject.subject_id GROUP BY
tutorial.tutorial_id ORDER BY tutorial.date ASC ";
    //$query = "SELECT tutorial.tutorial_id, subject.subjectName, tutorial.topic, tutorial.date, tutorial.time, CONCAT(tutor.firstName, ' ',
tutor.middleName, ' ', tutor.lastName) AS tutorFullname, tutor.tutorType, tutor.deptCourse FROM subject, tutor, tutorial WHERE
tutorial.tutor_id=tutor.tutor_id AND tutorial.subject=subject.subject_id ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      $tutorialScheduleCount = 0;
      while($myrow = mysql_fetch_row($result)){
        //check if ATTENDANCE is already signed
        if($myrow[8] != ""){
          continue;
        }
        //check if TUTORIAL SCHEDULE is flagged as CANCELLED...
        if($myrow[9] > 0){
          $queryA = "SELECT student_number FROM enlistment WHERE priorityNumber='0' AND tutorial_id='$myrow[0]' LIMIT 0, 1 ";
          $resultA = mysql_query($queryA);
          if(mysql_num_rows($resultA) > 0){
            continue;
          }
        }
        $tutorialScheduleCount++;
        if($tutorialScheduleCount == 1){
          echo "<div style='height:auto; width:100%; overflow:scroll;'>";
          echo "<table id='tutorialScheduleTable' border='1' width='100%'>";
          echo "<form name='cancelTutorialScheduleForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
          echo "<tr>";
          $tutorialSchedulesTableColumnNames = array('', 'enlistment', 'Subject', 'Topic', 'Date', 'Time', 'Tutor', 'Course/Department');
          foreach($tutorialSchedulesTableColumnNames AS $tutorialSchedulesTableColumnNamesElem){
            echo "<td align='center'>$tutorialSchedulesTableColumnNamesElem</td>";
          }
          echo "</tr>";
        }
        if($myrow[9] >= $maxTutorialEnlistees){
          echo "<tr style='background-color=#FFFF80;'>";
        }
        else{
          echo "<tr>";
        }
        echo "<td>";
        echo "<button id='buttonToLink' onClick='return sendTutorialIdToCancel($myrow[0])' onMouseOver='return
cursorForButtonToLink(this)'>cancel</button>";
        echo "<button id='buttonToLink' onClick='return sendTutorialIdToManage($myrow[0])' onMouseOver='return
cursorForButtonToLink(this)'>manage</button>";
        echo "</td>";
        echo "<td align='center'>$myrow[9]";
        //show if the enlistment has wait listed students...
        if($myrow[9] > $maxTutorialEnlistees){
          echo "&nbsp;(".($myrow[9] - $maxTutorialEnlistees)." wait listed)";
        }
        echo "<td>$myrow[1]</td>";
        echo "<td>";
        foreach(explode(",", $myrow[2]) AS $topicArrayElem){
          $queryA = "SELECT topicName FROM topic WHERE topic_id='$topicArrayElem' ";
          $resultA = mysql_query($queryA);
          $myrowA = mysql_fetch_row($resultA);
          echo "$myrowA[0]<br>";
        }
        echo "</td>";
        echo "<td>".reformatDateForDisplay($myrow[3])."</td>";
        echo "<td>".reformatTimeForDisplay($myrow[4])."</td>";
        echo "<td>$myrow[5]</td>";
        echo "<td>";
        if($myrow[6] == 'p'){
          echo "(peer) &nbsp;";
          $queryA = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrow[7]' ";
        }
        else{
          echo "faculty:<br>";
          $queryA = "SELECT departmentName FROM upm_departments WHERE department_id='$myrow[7]' ";
        }
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        echo "$myrowA[0]";
        echo "</td></tr>";
      }
      if($tutorialScheduleCount != 0){
        echo "<input type='hidden' name='tutorialIdToCancelH' value='' />";
        echo "<input type='hidden' name='tutorialIdToManageH' value='' />";
        echo "</form>";
        echo "</table>";
        echo "</div>";
      }
      else{
        echo "<table width='100%'>";
        echo "<tr><td align='center'>no records</td></tr>";
        echo "</table>";
      }
    }
    else{
      echo "<table width='100%'>";
      echo "<tr><td align='center'>no records</td></tr>";
      echo "</table>";
    }
  }

}
/////////////////////////////////////////////////////////
function reformatTimeForDisplay($time){
  $timeArray = explode("-", $time);
  $index = 0;
  foreach($timeArray AS $timeArrayElem){
    //fileter seconds if it exists...
    if(strlen($timeArrayElem) == 8){
      $s = ":".substr($timeArrayElem, 6);
      $timeArrayElem = substr($timeArrayElem, 0, 5);
    }
    $timeExt = "AM";
    $timeArrayElemArray = explode(":", $timeArrayElem);
    if(substr($timeArrayElemArray[0], 0, 1) == "0"){
      $timeArrayElemArray[0] = substr($timeArrayElemArray[0], 1, 1);
    }
    if($timeArrayElemArray[0] > 11){
      $timeExt = 'PM';
    }
    if($timeArrayElemArray[0] > 12){
      $timeArrayElemArray[0] = $timeArrayElemArray[0] - 12;
    }
    $timeArray[$index] = implode(":", $timeArrayElemArray)."$s ".$timeExt;
    $index++;
  }
  return implode("-", $timeArray);
}
//////////////////////////////////////////////////////////
function reformatDateForDisplay($date){
  $dateArray = explode("-", $date);
  $dateUnix = mktime("", "", "", $dateArray[1], $dateArray[2], $dateArray[0]);
  return date("l F j, Y", $dateUnix);
}
//////////////////////////////////////////////////////////
function manage_Exam_Schedule(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      //print "\$GLOBALS[\"$key\"] == $value<br>";
      global $$key;
    }
  }
  if($newBatchScheduleSubmit == 'save'){
    connect_Db();
    if(strlen($month) == 1){
      $month = "0".$month;
    }
    if(strlen($day) == 1){
      $day = "0".$day;
    }
    $query   =   "INSERT   INTO   batch   VALUES   ('".get_next_id('batch_id',   'batch')."',   '$exam_id',   '$year-$month-$day',   '$examTime',
'$discussionTime', '$availableSlots', 'open', '$term', '$syFrom-$syTo') ";
    $result = mysql_query($query);
    echo "message: the new batch schedule was successfully recorded.<br><br>";
  }
  if($editBatchScheduleSubmit == 'apply changes'){
    connect_Db();
    $query = "UPDATE batch SET availableSlots='$availableSlots' WHERE batch_id = '$batch_idH' ";
    $result = mysql_query($query);
    echo "message: the available slots for the specified batch was updated successfully<br><br>";
  }
  //delete batch id to cancel
  if((isset($batchScheduleIdToCancelH))&&($batchScheduleIdToCancelH != "")){
    connect_Db();
    $query = "DELETE FROM registration WHERE batch_id='$batchScheduleIdToCancelH' ";
    $result = mysql_query($query);
    $query = "DELETE FROM batch WHERE batch_id='$batchScheduleIdToCancelH' ";
    $result = mysql_query($query);
    echo "message: the specified batch schedule was cancelled.<br><br>";
  }
  if(isset($examToScheduleFromBrowse)){
    displayExamDetailsAndBatch($examToScheduleFromBrowse, false, '');
  }
  else{
    echo "<form name='addNewExamSchedule' action='?activeNav=$activeNav&activeTab=Search Exam&redirectedFromExamSchedule=yes' method='POST' >";
    echo "<input type='submit' name='addNewExamScheduleSubmit' value='new exam schedule' />";
    echo "</form>";
    echo "<table width='100%'>";
    echo "<tr><td align='center'>LIST OF EXAM SCHEDULES</td></tr>";
    //display exams with batches...
    connect_Db();
    $query = "SELECT DISTINCT(exam.exam_id) FROM exam, batch WHERE exam.exam_id=batch.exam_id AND batch.accessibility='open' ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      echo "<tr><td></td></tr>";
      while($myrow = mysql_fetch_row($result)){
        echo "";
        displayExamDetailsAndBatch($myrow[0], true, '');
        echo "<br>";
      }
    }
    else{
      echo "<tr><td align='center'>no records</td></tr>";
    }
    echo "</table>";
  }
}
//////////////////////////////////////////////////////////
function displayExamDetailsAndBatch($examToDisplay, $addNewBatchButtonVisible, $batchScheduleToSingleOut){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      //print "\$GLOBALS[\"$key\"] == $value<br>";
      global $$key;
    }
  }
  //for 'administer exam'...
  connect_Db();
  if($activeTab == 'Administer Exam'){
    $query = "SELECT student_number FROM registration WHERE batch_id='$batchScheduleToSingleOut' AND authorization='yes' ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      $displayStopButton = true;
    }
    else{
      $displayStopButton = false;
    }
  }
  echo "<table id='examDetailAndBatchTable' width='100%' cellpadding='0' cellspacing='0'>";
  echo "<tr><td id='examScheduleDarkRow' align='center' style='border-bottom:1px solid #008000;'>Exam Details</td></tr>";
  //print exam details
  echo "<tr><td align='left'>";
  echo "<table id='examInfo' cellpadding='1' cellspacing='0'>";
  $examDetailsColumnNameDisplay[] = "Exam Id";
  $examDetailsColumnNameDisplay[] = "Subject Name";
  $examDetailsColumnNameDisplay[] = "Description";
  $examDetailsColumnNameDisplay[] = "Author";
  $examDetailsColumnNameDisplay[] = "Allotted Time";
  $examDetailsColumnNameDisplay[] = "Date Created";
  $examDetailsColumnNameDisplay[] = "Departmental Number";
  $query  =  "SELECT  exam.exam_id,  subject.subjectName,  exam.description,  exam.author,  exam.allottedTime,  exam.dateCreated,  exam.deptNum  FROM
exam, subject WHERE exam.exam_id='$examToDisplay' AND exam.subject_id=subject.subject_id ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  for($i = 0;$i < count($examDetailsColumnNameDisplay);$i++){
    if($i == count($examDetailsColumnNameDisplay) - 1){
      echo "<tr><td id='examInfoTdBottomFalse'>$examDetailsColumnNameDisplay[$i]</td><td id='examInfoTdBottomFalse'>$myrow[$i]</td></tr>";
    }
    else{
      echo "<tr><td id='examInfoTdBottomTrue'>$examDetailsColumnNameDisplay[$i]</td><td id='examInfoTdBottomTrue'>$myrow[$i]</td></tr>";
    }
  }
  $exam_id = $myrow[0];
  echo "</table>";
  echo "</td></tr>";
  echo "<tr><td id='examScheduleDarkRow' align='center' style='border-top:1px solid #008000;border-bottom:1px solid #008000;'>Batch
Schedule</td></tr>";
  //print batch records...
  if($batchScheduleToSingleOut != ''){
    $query = "SELECT *, CASE WHEN date > CURDATE() THEN 'GT' WHEN date < CURDATE() THEN 'LT' ELSE 'EQ' END FROM batch WHERE
exam_id='$examToDisplay' AND batch_id='$batchScheduleToSingleOut' ";
  }
  else{
    $query = "SELECT *, CASE WHEN date > CURDATE() THEN 'GT' WHEN date < CURDATE() THEN 'LT' ELSE 'EQ' END FROM batch WHERE
exam_id='$examToDisplay' AND accessibility='open' ";
  }
  $query .= "ORDER BY date ASC, examTime ASC ";
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    echo "<tr><td align='center'>";
    echo "<br><table id='batchScheduleRecordTable' cellpadding='1' cellspacing='1'>";
    $batchColumnName = array('&nbsp;', 'batch id', 'date', 'exam time', 'discussion time', 'available slots', 'term', 'sy');
    echo "<tr>";
    for($i = 0;$i < count($batchColumnName);$i++){
      if(($i == 0)&&($addNewBatchButtonVisible)){
        if(($activeTab == 'Administer Exam')&&($displayStopButton)){
          echo "<td align='center'>$batchColumnName[$i]</td>";
        }
      }
      else{
        echo "<td align='center'>$batchColumnName[$i]</td>";
        if($i == 2){
          echo "<td align='center'>date status</td>";
        }
      }
    }
    echo "</tr>";
    echo "<form name='editCancelBatchScheduleForm' action='?activeNav=$activeNav&activeTab=Exam
Schedule&examToScheduleFromBrowse=$examToDisplay' method='POST' >";
    while($myrow = mysql_fetch_row($result)){
      echo "<tr>";
      if(!$addNewBatchButtonVisible){
        if($batchScheduleIdToEditH == $myrow[0]){
          echo "<td align='center'>-editing-</td>";
        }
        else{
          //disable buttons...
          $queryA = "SELECT student_number FROM registration WHERE batch_id='$myrow[0]' AND authorization='yes' ";
          $resultA = mysql_query($queryA);
          if(mysql_num_rows($resultA) > 0){
            $disableButtonString = "disabled='disabled'";
          }
          else{
            $disableButtonString = "";
          }
          echo "<td>";
          echo "<button id='buttonToLink' onClick='return setBatchScheduleToAdminister($myrow[0])' onMouseOver='return
cursorForButtonToLink(this)'>administer</button>";
          echo "<button id='buttonToLink' onClick='return setBatchScheduleToEdit($myrow[0])' onMouseOver='return cursorForButtonToLink(this)'
$disableButtonString>edit</button>";
          echo "<button id='buttonToLink' onClick='return setBatchScheduleToCancel($myrow[0])' onMouseOver='return cursorForButtonToLink(this)'
$disableButtonString>cancel</button></td>";
        }
      }
      //display close button for 'Administer Exam'
      if(($activeTab == 'Administer Exam')&&($displayStopButton)){
        //echo "<td align='center'><button onClick='return setBatchScheduleToClose($myrow[0])'>CLOSE</button></td>";
        echo "<td align='center'><input type='button' name='directiveButton' onClick='return computeStatisticsFromAdmin(this.form)'
value='CLOSE'/></td>";
        echo "<input type='hidden' name='subWindowDirective'
value=\"/toes/director/statistics_System.php?examId=$exam_id&batchId=$myrow[0]&directive=closeBatchId\">";
      }
      echo "<td align='center'>$myrow[0]</td><td>".reformatDateForDisplay($myrow[2])."</td>";
      switch($myrow[9]){
        case 'LT':
          echo "<td align='center' style='background-color=#FF8080;border=0px;'>behind schedule</td>";
          break;
        case 'EQ':
          echo "<td align='center' style='background-color=#80FF80;border=0px;'>scheduled today</td>";
          break;
        case 'GT':
          echo "<td align='center' style='background-color=#FFFF80;border=0px;'>ahead of schedule</td>";
          break;
        default:
          break;
      }
      echo "<td>".reformatTimeForDisplay($myrow[3])."</td><td>".reformatTimeForDisplay($myrow[4])."</td><td align='center'>$myrow[5]</td><td
align='center'>$myrow[7]</td><td align='center'>$myrow[8]</td></tr>";
    }
    echo "<input type='hidden' name='batchScheduleIdToAdministerH' value=''/>";
    echo "<input type='hidden' name='batchScheduleIdToCancelH' value=''/>";
    echo "<input type='hidden' name='batchScheduleIdToEditH' value=''/>";
    echo "<input type='hidden' name='batchScheduleIdToCloseH' value=''/>";
    echo "</form>";
    echo "</table><br>";
    echo "</td></tr>";
  }
  else{
    echo "<tr><td align='center'>no records</td></tr>";
  }
  if(($addNewBatchButtonVisible)&&($batchScheduleToSingleOut == '')){
    echo "<tr><td align='center'>";
    echo "<form name='' action='?examToScheduleFromBrowse=$exam_id&activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
    echo "<input type='submit' name='' value='manage batch schedule' />";
    echo "</form>";
    echo "</td></tr>";
  }
  echo "</table>";
  if(!$addNewBatchButtonVisible){
    if((isset($batchScheduleIdToEditH))&&($batchScheduleIdToEditH != "")){
      connect_Db();
      $query = "SELECT * FROM batch WHERE batch_id='$batchScheduleIdToEditH' ";
      $result = mysql_query($query);
      $myrow = mysql_fetch_row($result);
      echo "<br><table border='1'>";
      echo "<form name='editBatchScheduleForm' action='?activeNav=$activeNav&activeTab=Exam Schedule&examToScheduleFromBrowse=$examToDisplay'
method='POST' onSubmit='return editBatchScheduleCheck(this)'>";
      echo "<tr><td colspan='2' align='center'>Edit Batch Schedule</td></tr>";
      echo "<tr><td>Date</td><td>".reformatDateForDisplay($myrow[2])."</td></tr>";
      echo "<tr><td>Exam Time</td><td>".reformatTimeForDisplay($myrow[3])."</td></tr>";
      echo "<tr><td>Discussion Time</td><td>".reformatTimeForDisplay($myrow[4])."</td></tr>";
      echo "<tr><td>Available Slots</td><td><input type='text' name='availableSlots' value='$myrow[5]' size='3' maxlength='3' onChange='return
checkAvailableSlotsInput(this)'/></td></tr>";
      echo "<input type='hidden' name='batch_idH' value='$batchScheduleIdToEditH'/>";
      $query = "SELECT COUNT(DISTINCT(student_number)) FROM registration WHERE batch_id='$batchScheduleIdToEditH' ";
      $result = mysql_query($query);
      $myrow = mysql_fetch_row($result);
      echo "<input type='hidden' name='takenSlotsH' value='$myrow[0]'/>";
      echo "<tr><td colspan='2' align='center'><input type='submit' name='editBatchScheduleSubmit' value='apply changes'/><button type='reset'
name='reset' value='reset'>reset</button></td></tr>";
      echo "</form>";
      echo "</table>";
    }
    else{
      echo "<br><table border='1'>";
      echo "<form name='newBatchScheduleForm' action='?activeNav=$activeNav&activeTab=Exam Schedule&examToScheduleFromBrowse=$examToDisplay'
method='POST' onSubmit='return newBatchScheduleCheck(this)'>";
      echo "<tr><td align='center' colspan='2'>New Batch Schedule</td></tr>";
      echo "<tr><td>Date</td><td>";
      $currentYear = date("Y");
      $currentMonth = date("m");
      //month
      $monthName = array('January', 'February', 'March', 'April', 'May', 'June', 'July', 'August', 'September', 'October', 'November',
'December');
      $currentMonthIndex = $currentMonth - 1;
      $currentMonthIndexMod = $currentMonthIndex;
      echo "<select name='month' onChange='displayDateElementsExamSchedule(this.form)'>";
      for($i = 0;$i < 5;$i++){
        $currentMonthIndexMod = $currentMonthIndexMod % 12;
        echo "<option value='".($currentMonthIndex + 1)."'>$monthName[$currentMonthIndexMod]</option>";
        $currentMonthIndex++;
        $currentMonthIndexMod++;
      }
      echo "</select>";
      //day
      echo " <select name='day'>";
      echo "</select>";
      //year
      echo " <input type='textbox' name='year' value='$currentYear' readonly='readonly' size='4' maxlength='4' style='border:0px;' />";
      echo "</td></tr>";
      echo "<tr><td>Exam Time</td><td>";
      echo "from <input type='text' name='examTimeFrom' value='hh:mmAM' size='7' maxlength='7' onChange='return checkTimeTextInput(this)'/> to
<input type='text' name='examTimeTo' value='hh:mmAM' size='7' maxlength='7' onChange='return checkTimeTextInput(this)'/>";
      echo "</td></tr>";
      echo "<tr><td>Discussion Time</td><td>";
      echo "from <input type='text' name='discussionTimeFrom' value='hh:mmAM' size='7' maxlength='7' onChange='return
checkTimeTextInput(this)'/> to <input type='text' name='discussionTimeTo' value='hh:mmAM' size='7' maxlength='7' onChange='return
checkTimeTextInput(this)'/>";
      echo "</td></tr>";
      echo "<tr><td>Term - School Year</td><td>";
      echo "<select name='term'></select>";
      echo "&nbsp;&nbsp;<input type='textbox' name='syFrom' size='3' maxlength='4' style='border:0px;' />";
      echo "&nbsp;-&nbsp;<input type='textbox' name='syTo' size='3' maxlength='4' style='border:0px;' />";
      echo "</td></tr>";
      echo "<tr><td>Available Slots</td><td><input type='text' name='availableSlots' value='' size='3' maxlength='3' onChange='return
checkAvailableSlotsInput(this)'/></td></tr>";
      echo "<input type='hidden' name='exam_id' value='$exam_id'>";
      echo "<input type='hidden' name='examTime' value=''>";
      echo "<input type='hidden' name='discussionTime' value=''>";
      echo "<tr><td colspan='2' align='center'><input type='submit' name='newBatchScheduleSubmit' value='save' /></td></tr>";
      echo "</form>";
      echo "</table>";
    }
    echo "<form name='backToMainExamScheduleForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
    echo "<input type='submit' name='editTutor' value='back to main'>";
    echo "</form>";
  }
}
//////////////////////////////////////////////////////////
function administer_Exam(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      //print "\$GLOBALS[\"$key\"] == $value<br>";
      global $$key;
    }
  }
  switch($action){
    case 'block':
      for($i = 0;$i < count($studentNumberArray);$i++){
        $studentNumberArray[$i] = "student_number='$studentNumberArray[$i]'";
      }
      connect_Db();
      $query = "UPDATE registration SET status='blocked', offense='the administrator blocked you from taking the exam' WHERE
batch_id='$batchScheduleIdToAdministerH' AND (".implode(" OR ", $studentNumberArray).") ";
      $result = mysql_query($query);
      echo "message: the specified students were successfully blocked from taking this exam.<br><br>";
      break;
    case 'unblock':
      for($i = 0;$i < count($studentNumberArray);$i++){
        $studentNumberArray[$i] = "student_number='$studentNumberArray[$i]'";
      }
      connect_Db();
      $query = "UPDATE registration SET status='answering', offense='none' WHERE batch_id='$batchScheduleIdToAdministerH' AND (".implode(" OR
", $studentNumberArray).") ";
      $result = mysql_query($query);
      echo "message: the specified students can resume the exam.<br><br>";
      break;
    case 'delete':
      for($i = 0;$i < count($studentNumberArray);$i++){
        $studentNumberArray[$i] = "student_number='$studentNumberArray[$i]'";
      }
      connect_Db();
      $query = "DELETE FROM registration WHERE batch_id='$batchScheduleIdToAdministerH' AND (".implode(" OR ", $studentNumberArray).") ";
      $result = mysql_query($query);
      echo "message: the specified students were successfully removed from this exam.<br><br>";
      break;
    case 'deleteL':
      for($i = 0;$i < count($studentNumberArray);$i++){
        $studentNumberArray[$i] = "student_number='$studentNumberArray[$i]'";
      }
      connect_Db();
      $query = "DELETE FROM registration WHERE batch_id='$batchScheduleIdToAdministerH' AND (".implode(" OR ", $studentNumberArray).") ";
      $result = mysql_query($query);
      echo "message: the specified LATE REGISTRANT(S) were successfully removed.<br><br>";
      //reduce slot size
      break;
    case 'authorize':
      for($i = 0;$i < count($studentNumberArray);$i++){
        $studentNumberArray[$i] = "student_number='$studentNumberArray[$i]'";
      }
      connect_Db();
      $query = "UPDATE registration SET authorization='yes', previousTimeStamp='".date("Y-m-d H:i:s", time())."' WHERE
batch_id='$batchScheduleIdToAdministerH' AND (".implode(" OR ", $studentNumberArray).") ";
      $result = mysql_query($query);
      echo "message: the registered students are now authorized to access the exam.<br><br>";
      break;
    case 'modTime':
      $operation = substr($timeModText, 0, 1);
      $timeModText = substr($timeModText, 1);
      for($i = 0;$i < count($studentNumberArray);$i++){
        $studentNumberArray[$i] = "student_number='$studentNumberArray[$i]'";
      }
      connect_Db();
      if($operation == "."){
        $query = "UPDATE registration SET remainingTime = SEC_TO_TIME($timeModText), previousTimeStamp='".date("Y-m-d H:i:s", time())."' WHERE
batch_id='$batchScheduleIdToAdministerH' AND (".implode(" OR ", $studentNumberArray).") ";
      }
      elseif($operation == "+"){
        $query = "UPDATE registration SET remainingTime = SEC_TO_TIME(TIME_TO_SEC(remainingTime) + $timeModText) WHERE
batch_id='$batchScheduleIdToAdministerH' AND (".implode(" OR ", $studentNumberArray).") ";
      }
      else{
        $query = "UPDATE registration SET remainingTime = SEC_TO_TIME(TIME_TO_SEC(remainingTime) - $timeModText) WHERE
batch_id='$batchScheduleIdToAdministerH' AND (".implode(" OR ", $studentNumberArray).") ";
      }
      //echo "[$query]";
      $result = mysql_query($query);
      //perform clipping operations...
      $query = "UPDATE registration SET remainingTime = '000000' WHERE batch_id='$batchScheduleIdToAdministerH' AND (".implode(" OR ",
$studentNumberArray).") AND TIME_TO_SEC(remainingTime) < 0 ";
      $result = mysql_query($query);
      $query = "UPDATE registration SET remainingTime = '245959' WHERE batch_id='$batchScheduleIdToAdministerH' AND (".implode(" OR ",
$studentNumberArray).") AND TIME_TO_SEC(remainingTime) > 89999 ";
      $result = mysql_query($query);
      echo "message: the time modifications were successfully applied.<br><br>";
      break;
    case 'resume':
      connect_Db();
      //get the MAX(remainingTime)
      //$query = "SELECT remainingTime FROM registration WHERE batch_id='$batchScheduleIdToAdministerH' ORDER BY remainingTime DESC ";
      $query = "SELECT MAX(remainingTime) FROM registration WHERE batch_id='$batchScheduleIdToAdministerH' ";
      $result = mysql_query($query);
      $myrow = mysql_fetch_row($result);
      $maxRemainingTime = $myrow[0];
      if($maxRemainingTime < "00:00:00"){
        $maxRemainingTime = "00:00:00";
      }
      //reset the registration of the students...
      $query = "UPDATE registration SET remainingTime='$maxRemainingTime', status='answering', offense='none', previousTimeStamp=NOW() WHERE
batch_id='$batchScheduleIdToAdministerH' ";
      $result = mysql_query($query);
      echo "message: the examination was successfully resumed.<br><br>";
      break;
    case 'close':
      echo "CLOSED";
      break;
    default:
      break;
  }
  //filter registrants who already took a similar exam...
  if(($registerStudentForBatchSubmit == "register")||($registerLateStudentForBatchSubmit == "register")){
    connect_Db();
    $queryA = "SELECT e.subject_id, e.deptNum, b.term, b.sy FROM batch AS b, exam AS e WHERE b.batch_id='$batchScheduleIdToAdministerH' AND
b.exam_id=e.exam_id";
    $resultA = mysql_query($queryA);
    $myrowA = mysql_fetch_row($resultA);
    $queryA = "SELECT r.batch_id, b.accessibility FROM registration AS r, batch AS b, exam AS e WHERE r.student_number='$studentNumberYear-
$studentNumberNumber' AND r.batch_id=b.batch_id AND b.exam_id=e.exam_id AND e.subject_id='$myrowA[0]' AND e.deptNum='$myrowA[1]' AND
b.term='$myrowA[2]' AND b.sy='$myrowA[3]' ";
    $resultA = mysql_query($queryA);
    if(mysql_num_rows($resultA) > 0){
      $myrowA = mysql_fetch_row($resultA);
      if($myrowA[1] == "closed"){
        echo "error: the registration for student $studentNumberYear-$studentNumberNumber is invalid because he/she already took a similar
exam.<br><br>";
      }
      else{
        if($myrowA[0] == $batchScheduleIdToAdministerH){
          echo "error: student $studentNumberYear-$studentNumberNumber is already registered for this Exam Batch Schedule.<br><br>";
        }
        else{
          echo "error: the registration for student $studentNumberYear-$studentNumberNumber is invalid because he/she is currently registered
in a similar exam.<br><br>";
        }
      }
      unset($registerStudentForBatchSubmit);
      unset($registerLateStudentForBatchSubmit);
    }
  }
  if($registerStudentForBatchSubmit == "register"){

    connect_Db();
    $query = "SELECT student_number FROM student WHERE student_number='$studentNumberYear-$studentNumberNumber' ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      //determine if student_number is already registered...
      $query = "SELECT batch_id FROM registration WHERE batch_id='$batchScheduleIdToAdministerH' AND student_number='$studentNumberYear-
$studentNumberNumber' ";
      $result = mysql_query($query);
      if(mysql_num_rows($result) == 0){
        //get the available time
        $query = "SELECT exam.allottedTime FROM exam, batch WHERE exam.exam_id=batch.exam_id AND batch.batch_id='$batchScheduleIdToAdministerH'
";
        $result = mysql_query($query);
        $myrow = mysql_fetch_row($result);
        $allottedTime = $myrow[0];
        $query = "INSERT INTO registration VALUES ('$batchScheduleIdToAdministerH', '$studentNumberYear-$studentNumberNumber', '".date("Y-m-d
H:i:s", time())."', '$allottedTime', 'submitted', 'waiting', 'no', 'none', '".date("Y-m-d H:i:s", time())."') ";
        $result = mysql_query($query);
        echo "message: student $studentNumberYear-$studentNumberNumber is now registered.<br><br>";
        //get remaining slots
        $query = "SELECT availableSlots FROM batch WHERE batch_id='$batchScheduleIdToAdministerH' ";
        $result = mysql_query($query);
        $myrow = mysql_fetch_row($result);
        $availableSlots= $myrow[0];
        $query = "SELECT COUNT(batch_id) FROM registration WHERE batch_id='$batchScheduleIdToAdministerH' ";
        $result = mysql_query($query);
        $myrow = mysql_fetch_row($result);
        $takenSlots= $myrow[0];
        //$result = mysql_query($query);
        //$myrow = mysql_fetch_row($result);
        if($availableSlots < $takenSlots){
          $query = "UPDATE batch SET availableSlots=availableSlots + 1 WHERE batch_id='$batchScheduleIdToAdministerH' ";
          $result = mysql_query($query);
          echo "message: an additional slot was added to the available slots.<br><br>";
        }
      }
      else{
        echo "error: student $studentNumberYear-$studentNumberNumber is already registered.<br><br>";
      }
    }
    else{
      echo "error: student $studentNumberYear-$studentNumberNumber does not exist.<br><br>";
    }
  }
  //allow late examinees to take the exam however late students shall start with reduced 'remaining time
  if($registerLateStudentForBatchSubmit == "register"){
    connect_Db();
    $query = "SELECT student_number FROM student WHERE student_number='$studentNumberYear-$studentNumberNumber' ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      //determine if student_nunmber is already registered...
      $query = "SELECT batch_id FROM registration WHERE batch_id='$batchScheduleIdToAdministerH' AND student_number='$studentNumberYear-
$studentNumberNumber' ";
      $result = mysql_query($query);
      if(mysql_num_rows($result) == 0){
        //get his/her remaining time
        $query = "SELECT MIN(remainingTime) FROM registration WHERE batch_id='$batchScheduleIdToAdministerH' ";
        $result = mysql_query($query);
        $myrow = mysql_fetch_row($result);
        $minRemaningTime = $myrow[0];
        if($minRemaningTime < "00:00:00"){
          $minRemaningTime = "00:00:00";
        }
        //give him/her an instant registration
        $query = "INSERT INTO registration VALUES ('$batchScheduleIdToAdministerH', '$studentNumberYear-$studentNumberNumber', '".date("Y-m-d
H:i:s", time())."', '$minRemaningTime', 'submitted', 'waiting', 'no', 'none', '".date("Y-m-d H:i:s", time())."') ";
        $result = mysql_query($query);
        echo "message: student $studentNumberYear-$studentNumberNumber is now registered.<br><br>";
        //get remaining slots
        $query = "SELECT availableSlots FROM batch WHERE batch_id='$batchScheduleIdToAdministerH' ";
        $result = mysql_query($query);
        $myrow = mysql_fetch_row($result);
        $availableSlots= $myrow[0];
        //get taken slots
        $query = "SELECT COUNT(batch_id) FROM registration WHERE batch_id='$batchScheduleIdToAdministerH' ";
        $result = mysql_query($query);
        $myrow = mysql_fetch_row($result);
        $takenSlots= $myrow[0];
        if($availableSlots < $takenSlots){
          $query = "UPDATE batch SET availableSlots=availableSlots + 1 WHERE batch_id='$batchScheduleIdToAdministerH' ";
          $result = mysql_query($query);
          echo "message: an additional slot was added to the available slots.<br><br>";
        }
        //authorize to access the 'answer sheet'
        /*
        $query     =     "UPDATE     registration     SET     authorization='yes'     WHERE     batch_id='$batchScheduleIdToAdministerH'     AND
student_number='$studentNumberYear-$studentNumberNumber' ";
        $result = mysql_query($query);
        echo "message: student [$studentNumberYear-$studentNumberNumber] is now authorized to access the exam.<br><br>";
        */
      }
      else{
        echo "error: student $studentNumberYear-$studentNumberNumber is already registered.<br><br>";
      }
    }
    else{
      echo "error: student $studentNumberYear-$studentNumberNumber does not exist.<br><br>";
    }
  }
  echo    "<form    name='administerBatchSchedule'    action='?activeNav=$activeNav&batchScheduleIdToAdministerH=$batchScheduleIdToAdministerH'
method='POST' >";
  if($pageRefreshActivation == ""){
    $pageRefreshActivation = "disabled";
  }
  if($pageRefreshActivation == "disabled"){
    echo  "<input  type='button'  name='activatePageRefresh'  onclick='  return  pageRefreshFunction(\"enabled\")'  value='enable  automatic  page
refresh'/>";
  }
  else{
    echo  "<input  type='button'  name='activatePageRefresh'  onclick='  return  pageRefreshFunction(\"disabled\")'  value='disable  automatic  page
refresh'/>";
  }
  echo "<input type='hidden' name='pageRefreshActivation' value='$pageRefreshActivation'/>";
  echo "</form>";

  connect_Db();
  $query = "SELECT exam_id FROM batch WHERE batch_id='$batchScheduleIdToAdministerH' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  $examIdToAdminister = $myrow[0];
  displayExamDetailsAndBatch($examIdToAdminister, true, $batchScheduleIdToAdministerH);
  echo "<br>";
  //determine if examinees are 'authorized'
  $query = "SELECT student_number FROM registration WHERE batch_id='$batchScheduleIdToAdministerH' AND authorization='yes' ";
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    $answerSheetsDistrtibuted = true;
  }
  else{
    $answerSheetsDistrtibuted = false;
  }
  echo "<form name='listOfExamineesForm' action='?activeNav=$activeNav' method='POST' style='display:inline;'>";
  echo "<table border='1' width='100%' style='border-bottom:0px'>";
  $query  =  "SELECT  registration.student_number,  CONCAT(student.firstName,  '  ',  student.middleName,  '  ',  student.lastName)  AS  studentName,
SEC_TO_TIME(TIME_TO_SEC(registration.remainingTime) - TIME_TO_SEC(CURTIME()) + TIME_TO_SEC(DATE_FORMAT(registration.previousTimeStamp, '%T'))),
registration.status,  registration.offense,  registration.registrationDate,  registration.registrationType  FROM  student,  registration  WHERE
registration.student_number=student.student_number AND registration.batch_id='$batchScheduleIdToAdministerH' ";
  if($answerSheetsDistrtibuted){
    $queryL = $query."AND registration.authorization='no' ORDER BY registration.student_number ASC ";
    $query .= "AND registration.authorization='yes' ";
  }
  switch($direction){
    case 'DESC':
      $direction = 'ASC';
      $directionIcon = ' &#8595';
      break;
    case 'ASC':
      $direction = 'DESC';
      $directionIcon = ' &#8593';
      break;
    default:
      $direction = 'ASC';
      $directionIcon = '';
      break;
  }
  if($orderBy != ""){
    $query .= "ORDER BY $orderBy $direction";
  }
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    //display control elements for the examinees
    if($answerSheetsDistrtibuted){
      echo "<tr><td align='center'>LIST OF EXAMINEES</td></tr>";
      echo "<tr><td align='left' style='border-bottom:0px'>";
      echo "[&nbsp;";
      echo "<button onClick='confirmExamineeBlockUnblock(this.form, 2);'>block</button>";
      echo "<button onClick='confirmExamineeBlockUnblock(this.form, 3);'>unblock</button>";
      echo "&nbsp;]";
      echo "&nbsp;&nbsp;&nbsp;&nbsp;";
      //display remainingTime modifier...
      echo "[&nbsp;";
      echo "<select id='timeModSelId' name='timeModSel' onChange='timeModSelJav(this);' >";
      echo "<option value=\"00:05:00\">&nbsp;5 mins</option>";
      echo "<option value='00:10:00'>10 mins</option>";
      echo "<option value='00:15:00'>15 mins</option>";
      echo "<option value='00:20:00'>20 mins</option>";
      echo "<option value='00:25:00'>25 mins</option>";
      echo "<option value='00:30:00'>30 mins</option>";
      echo "<option value=''>i'll type it</option>";
      echo "</select>";
      echo "<button id='timeModSelButtonId' onClick='hideMeDisplaySel();' style='display:none;'>^</button>";
      echo  "&nbsp;<input  id='timeModTextId'  type='text'  name='timeModText'  value='00:00:00'  style='display:none;'  size='8'  maxlength='8'
/>&nbsp;";
      echo "<button onClick=\"confirmIncDec(this.form, 'inc');\">+ time</button>";
      echo "<button onClick=\"confirmIncDec(this.form, 'dec');\">- time</button>";
      echo "<button onClick=\"confirmIncDec(this.form, 'force');\">force time</button>";
      echo "&nbsp;]";
      echo "&nbsp;&nbsp;&nbsp;&nbsp;";
      echo "[&nbsp;";
      echo "<button onClick=\"confirmExamResume(this.form);\">resume</button>";
      echo "&nbsp;]";
    }
    else{
      echo "<tr><td align='center'>REGISTRANTS</td></tr>";
      echo "<tr><td align='left' style='border-bottom:0px'>";
      echo "<button onClick='confirmExamineeAuthorize(this.form);'>START</button>";
      echo "<button onClick='confirmExamineeRemove(this.form);'>remove</button>";
    }
    echo "</td></tr>";
    echo "</table>";
    $checkUncheckButton = "<span id='checkAllButton'><button id='buttonToLink' onClick='checkUncheckAllExaminees(form, true);'
onMouseOver='return cursorForButtonToLink(this)'>check all</button></span>";
    $checkUncheckButton .= "<span id='uncheckAllButton' style='display:none;'><button id='buttonToLink' onClick='checkUncheckAllExaminees(form,
false);' onMouseOver='return cursorForButtonToLink(this)'>uncheck all</button></span>";
    $examineeTableColumnName = array($checkUncheckButton, 'Student Number', 'Student Name', 'Remaining Time hh:mm', 'Status', 'Offense',
'Registration Date', 'Registration Type');
    $columnNameOrderBy = array("", "registration.student_number", "studentName", "registration.remainingTime", "registration.status",
"registration.offense", "registration.registrationDate", "registration.registrationType");
    echo "<div style='height:auto; width:100%; overflow:scroll;'>";
    echo "<table border='1' width='100%'>";
    echo "<tr>";
    for($i = 0;$i < count($examineeTableColumnName);$i++){
      if($i == 0){
        echo "<td align='center'>$examineeTableColumnName[$i]</td>";
      }
      else{
        if($columnNameOrderBy[$i] == $orderBy){
          echo "<td align='center'><button id='buttonToLinkNoUnderline' onClick='orderListOfExaminees(this.form, \"$columnNameOrderBy[$i]\");'
onMouseOver='return cursorForButtonToLink(this)'>$examineeTableColumnName[$i]$directionIcon</button></td>";
        }
        else{
          echo "<td align='center'><button id='buttonToLinkNoUnderline' onClick='orderListOfExaminees(this.form, \"$columnNameOrderBy[$i]\");'
onMouseOver='return cursorForButtonToLink(this)'>$examineeTableColumnName[$i]</button></td>";
        }
      }
    }
    echo "</tr>";
    while($myrow = mysql_fetch_row($result)){
      echo "<tr onmouseover=\"setPointer(this)\" onmouseout=\"setPointer(this)\"><td align='center'><input type='checkbox'
name='studentNumberArray[]' value='$myrow[0]'/></td>";
      echo "<td align='center'><nobr>$myrow[0]</nobr></td>";
      echo "<td><nobr>$myrow[1]</nobr></td>";
      echo "<td align='center'><nobr>";
      if($myrow[2] > "00:00:00"){
        echo substr($myrow[2], 0, 5);
      }
      else{
        echo "00:00";
      }
      echo "</nobr></td>";
      switch($myrow[3]){
        case 'waiting':
          $examineeStatusArray[] = 1;
          $examineeStatusColorStyle = "style='background-color=yellow;'";
          $examineeStatusColorStyle = "style='background-color=#FFFF80;'";
          break;
        case 'answering':
          $examineeStatusArray[] = 2;
          $examineeStatusColorStyle = "style='background-color=green;'";
          $examineeStatusColorStyle = "style='background-color=#80FF80;'";
          break;
        case 'blocked':
          $examineeStatusArray[] = 3;
          $examineeStatusColorStyle = "style='background-color=red;'";
          $examineeStatusColorStyle = "style='background-color=#FF8080;'";
          break;
        case 'finished':
          $examineeStatusArray[] = 4;
          $examineeStatusColorStyle = "style='background-color=white;'";
          break;
        default:
          break;
      }
      echo "<td align='center' $examineeStatusColorStyle><nobr>$myrow[3]</nobr></td>";
      echo "<td><nobr>$myrow[4]</nobr></td>";
      $registrationDateArray = explode(" ", $myrow[5]);
      echo "<td><nobr>".reformatDateForDisplay($registrationDateArray[0])." at
".reformatTimeForDisplay($registrationDateArray[1])."</nobr></td>";
      echo "<td><nobr>$myrow[6]</nobr></td>";
      echo "</tr>";
    }
    echo "<input type='hidden' name='batchScheduleIdToAdministerH' value='$batchScheduleIdToAdministerH'/>";
    echo "<input type='hidden' name='orderBy' value='$orderBy'/>";
    echo "<input type='hidden' name='direction' value='$direction'/>";
    echo "<input type='hidden' name='examineeStatus' value='".implode(",", $examineeStatusArray)."'/>";
    echo "<input type='hidden' name='action' value=''/>";
    echo "</form>";
    echo "</table>";
    echo "</div>";
  }
  else{
    echo "<tr><td align='center'>REGISTRANTS</td></tr>";
    echo "<tr><td align='center'>no record</td></tr>";
    echo "</table>";
  }
  //display LATE REGISTRANTS...
  if($answerSheetsDistrtibuted){
    $resultL = mysql_query($queryL);
    if(mysql_num_rows($resultL) > 0){
      echo "<form name='listOfExamineesFormL' action='?activeNav=$activeNav' method='POST' style='display:inline;'>";
      echo "<br><table border='1' width='100%' style='border-bottom:0px'>";
      echo "<tr><td align='center'>LATE REGISTRANTS</td></tr>";
      echo "<tr><td align='left' style='border-bottom:0px'>";
      echo "<button onClick='confirmExamineeAuthorizeL(this.form);'>START</button>";
      echo "<button onClick='confirmExamineeRemoveL(this.form);'>remove</button>";
      echo "</td></tr>";
      echo "</table>";
      echo "<div style='height:auto; width:100%; overflow:scroll;'>";
      echo "<table border='1' width='100%'>";
      echo "<tr>";
      for($i = 0;$i < count($examineeTableColumnName);$i++){
        if($i == 0){
          echo "<td align='center'>";
          echo "<span id='checkAllButtonL'><button id='buttonToLink' onClick='checkUncheckAllExamineesL(form, true);' onMouseOver='return
cursorForButtonToLink(this)'>check all</button></span>";
          echo "<span id='uncheckAllButtonL' style='display:none;'><button id='buttonToLink' onClick='checkUncheckAllExamineesL(form, false);'
onMouseOver='return cursorForButtonToLink(this)'>uncheck all</button></span>";
          echo "</td>";
        }
        else{
          //echo "<td align='center'><font style='font-size:75%;'>$examineeTableColumnName[$i]</font></td>";
          echo "<td align='center'><button id='buttonToLinkNoUnderline' onClick='orderListOfExaminees(this.form, \"$columnNameOrderBy[$i]\");'
onMouseOver='return cursorForButtonToLink(this)' disabled='disabled'>$examineeTableColumnName[$i]</button></td>";
        }
      }
      echo "</tr>";
      while($myrow = mysql_fetch_row($resultL)){
        echo "<tr onmouseover=\"setPointer(this)\" onmouseout=\"setPointer(this)\"><td align='center'><input type='checkbox'
name='studentNumberArray[]' value='$myrow[0]'/></td>";
        echo "<td align='center'><nobr>$myrow[0]</nobr></td>";
        echo "<td><nobr>$myrow[1]</nobr></td>";
        echo "<td align='center'><nobr>";
        if($myrow[2] > "00:00:00"){
          echo substr($myrow[2], 0, 5);
        }
        else{
          echo "00:00";
        }
        echo "</nobr></td>";
        switch($myrow[3]){
          case 'waiting':
            $examineeStatusArray[] = 1;
            $examineeStatusColorStyle = "style='background-color=yellow;'";
            $examineeStatusColorStyle = "style='background-color=#FFFF80;'";
            break;
          case 'answering':
            $examineeStatusArray[] = 2;
            $examineeStatusColorStyle = "style='background-color=green;'";
            $examineeStatusColorStyle = "style='background-color=#80FF80;'";
            break;
          case 'blocked':
            $examineeStatusArray[] = 3;
            $examineeStatusColorStyle = "style='background-color=red;'";
            $examineeStatusColorStyle = "style='background-color=#FF8080;'";
            break;
          case 'finished':
            $examineeStatusArray[] = 4;
            $examineeStatusColorStyle = "style='background-color=white;'";
            break;
          default:
            break;
        }
        echo "<td align='center' $examineeStatusColorStyle><nobr>$myrow[3]</nobr></td>";
        echo "<td><nobr>$myrow[4]</nobr></td>";
        $registrationDateArray = explode(" ", $myrow[5]);
        echo "<td><nobr>".reformatDateForDisplay($registrationDateArray[0])." at
".reformatTimeForDisplay($registrationDateArray[1])."</nobr></td>";
        echo "<td><nobr>$myrow[6]</nobr></td>";
        echo "</tr>";
      }
      echo "<input type='hidden' name='batchScheduleIdToAdministerH' value='$batchScheduleIdToAdministerH'/>";
      echo "<input type='hidden' name='orderBy' value='$orderBy'/>";
      echo "<input type='hidden' name='direction' value='$direction'/>";
      echo "<input type='hidden' name='action' value=''/>";
      echo "</form>";
      echo "</table>";
      echo "</div>";
    }
  }
  //display register student for batch exam schedule
  if(!$answerSheetsDistrtibuted){
    echo "<br><table border='1'>";
    echo "<form name='registerStudentForBatchForm' action='?activeNav=$activeNav' method='POST'>";
    echo "<tr><td colspan='2' align='center'>Register Student</td></tr>";
    echo "<tr><td>Student Number</td><td>";
    echo "<input type='text' maxLength='4' size='4' name='studentNumberYear' value='' onChange='return ensureInputIsInt(this, 4)'> - ";
    echo "<input type='text' maxLength='5' size='5' name='studentNumberNumber' value='' onChange='return ensureInputIsInt(this, 5)'>";
    echo "<input type='hidden' name='batchScheduleIdToAdministerH' value='$batchScheduleIdToAdministerH'/>";
    echo "</td></tr>";
    echo "<tr><td colspan='2' align='center'><input type='submit' name='registerStudentForBatchSubmit' value='register'/></td></tr>";
    echo "</form>";
    echo "</table>";
  }
  else{
    echo "<br><table border='1'>";
    echo "<form name='registerLateStudentForBatchForm' action='?activeNav=$activeNav' method='POST'>";
    echo "<tr><td colspan='2' align='center'>Register Late Student</td></tr>";
    echo "<tr><td>Student Number</td><td>";
    echo "<input type='text' maxLength='4' size='4' name='studentNumberYear' value='' onChange='return ensureInputIsInt(this, 4)'> - ";
    echo "<input type='text' maxLength='5' size='5' name='studentNumberNumber' value='' onChange='return ensureInputIsInt(this, 5)'>";
    echo "<input type='hidden' name='batchScheduleIdToAdministerH' value='$batchScheduleIdToAdministerH'/>";
    echo "</td></tr>";
    echo "<tr><td colspan='2' align='center'><input type='submit' name='registerLateStudentForBatchSubmit' value='register'/></td></tr>";
    echo "</form>";
    echo "</table>";
  }
  echo "<form name='administerBatchSchedule' action='?activeNav=$activeNav&activeTab=Exam Schedule' method='POST' >";
  echo "<input type='submit' name='editTutor' value='back to main'>";
  echo "</form>";
}
/////////////////////////////////////////////////////////
function manage_Password(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  if($adminPasswordSubmit == "change"){
    connect_Db();
    if($password != $passwordOld){
      echo "error: the supplied 'old password' does not match the one stored in the database.<br><br>";
    }
    else{
      if($passwordNew != $passwordNewR){
        echo "error: the 'new password' and the 'retyped new password' does not match.<br><br>";
      }
      else{
        $query = "UPDATE lrc_personnel SET password='$passwordNew', username='$usernameNew' WHERE username='$username' AND password='$password'
";
        $result = mysql_query($query);
        if($username != $usernameNew){
          echo "message: the 'new username' was successfully stored.<br><br>";
        }
        echo "message: the 'new password' was successfully stored.<br><br>";
        $username = $usernameNew;
        $password = $passwordNew;
        session_register("username");
        session_register("password");
      }
    }
  }
  echo "<table border='1'>";
  echo "<form name='adminPasswordForm' method='POST' action='' onSubmit='return adminPasswordCheck(this)'>";
  echo "<tr><td>username</td><td><input type='text' name='usernameNew' maxLength='16' size='16' value='$username'/></td></tr>";
  echo "<tr><td>old password</td><td><input type='password' name='passwordOld' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td>new password</td><td><input type='password' name='passwordNew' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td>retype new password</td><td><input type='password' name='passwordNewR' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td colspan='2' align='center'><input type='submit' name='adminPasswordSubmit' value='change'/></td></tr>";
  echo "</form>";
  echo "</table>";
}
/////////////////////////////////////////////////////////
function display_Tutor_Schedule(){
  global $activeTab;
  echo "<span id='tutorScheduleSpan'>";
  echo "<table id='tutorScheduleViewTable' border='1' cellpadding='2' cellspacing='1'>";
  $tableColumnName = array('Subject', 'Tutor', 'MON', 'TUE', 'WED', 'THU', 'FRI');
  $dayIndexArray = array("Monday"=>0, "Tuesday"=>1, "Wednesday"=>2, "Thursday"=>3, "Friday"=>4);
  echo "<tr>";
  for($i = 0;$i < count($tableColumnName);$i++){
    echo "<td align='center'>$tableColumnName[$i]</td>";
  }
  echo "</tr>";
  connect_Db();
  $query = "SELECT subject_id, subjectName FROM subject ORDER BY subjectName ";
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    while($myrow = mysql_fetch_row($result)){
      echo "<tr>";
      if($activeTab == "Peer Schedule"){
        $queryA = "SELECT tutor_id, CONCAT(firstName, ' ', middleName, ' ', lastName) AS fullname FROM tutor WHERE tutorType='p' AND
(tutor.tutoredSubject LIKE '$myrow[0]' OR tutor.tutoredSubject LIKE '%,$myrow[0],%' OR tutor.tutoredSubject LIKE '%,$myrow[0]' OR
tutor.tutoredSubject LIKE '$myrow[0],%') ORDER BY fullname ASC ";
      }
      else{
        $queryA = "SELECT tutor_id, CONCAT(firstName, ' ', middleName, ' ', lastName) AS fullname FROM tutor WHERE tutorType='f' AND
(tutor.tutoredSubject LIKE '$myrow[0]' OR tutor.tutoredSubject LIKE '%,$myrow[0],%' OR tutor.tutoredSubject LIKE '%,$myrow[0]' OR
tutor.tutoredSubject LIKE '$myrow[0],%') ORDER BY fullname ASC ";
      }
      $resultA = mysql_query($queryA);
      if(mysql_num_rows($resultA) > 0){
        echo "<td align='center' rowspan='".mysql_num_rows($resultA)."'>$myrow[1]</td>";
        $availableTutorCount = 0;
        while($myrowA = mysql_fetch_row($resultA)){
          if($availableTutorCount != 0){
            echo "<tr>";
          }
          $availableTutorCount++;
          echo "<td align='center'>$myrowA[1]</td>";
          $queryB = "SELECT prefDay, prefTime FROM tutor_schedule WHERE tutor_id='$myrowA[0]' ORDER BY prefTime ASC ";
          $resultB = mysql_query($queryB);
          if(mysql_num_rows($resultB) > 0){
            $intervalCount = 0;
            while($myrowB = mysql_fetch_row($resultB)){
              $tempArray = explode(",", $myrowB[0]);
              foreach($tempArray AS $tempArrayElem){
                $tempArrayIndex[] = $dayIndexArray[$tempArrayElem];
              }
              for($i = 0;$i < count($dayIndexArray);$i++){
                if(in_array($i, $tempArrayIndex)){
                  $weekSched[$i][$intervalCount] = reformatTimeForDisplay($myrowB[1]);
                }
                else{
                  $weekSched[$i][$intervalCount] = "&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;";
                }
              }
              unset($tempArray);
              unset($tempArrayIndex);
              $intervalCount++;
            }
            for($i = 0;$i < count($dayIndexArray);$i++){
              echo "<td align='center'>".implode("<BR>", $weekSched[$i])."</td>";
            }
            unset($weekSched);
          }
          else{
            echo "<td colspan='".(count($tableColumnName) - 2)."' align='center'>no schedule</td>";
          }
          echo "</tr>";
        }
      }
      else{
        echo "<td align='center'>$myrow[1]</td>";
        echo "<td align='center'>none available</td>";
        echo "<td>&nbsp;</td><td>&nbsp;</td><td>&nbsp;</td><td>&nbsp;</td><td>&nbsp;</td>";
      }
      echo "</tr>";
    }
  }
  else{
    echo "<tr><td colspan='".count($tableColumnName)."' align='center'>no subject records</td></tr>";
  }
  echo "</table>";
  echo "</span>";
}
//////////////////////////////////////////////////////////
function manage_Tutorial_Schedule_Enlistment(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  connect_Db();
  if($setTutorialButton == "set tutorial"){
    $query = "UPDATE tutorial SET tutor_id='$newTutorForTheTutorial' WHERE tutorial_id='$tutorialIdToManageH' ";
    $result = mysql_query($query);
    $setTutorialButton = "";
  }
  if($setTutorialButton == "set tutorial"){
    //create a similar tutorial with a different tutor...
    $nextId = get_Next_Id('tutorial_id','tutorial');
    $query = "SELECT subject, topic, time, date FROM tutorial WHERE tutorial.tutorial_id='$tutorialIdToManageH' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $query = "INSERT INTO tutorial VALUES ('$nextId', '$tutorForTheTutorial', '$myrow[0]', '$myrow[1]', '$myrow[2]', '$myrow[3]') ";
    $result = mysql_query($query);
    //enlist the 'Waiting Enlistees' in this new created tutorial...
    $query = "SELECT e.priorityNumber, s.student_number, CONCAT_WS(' ', s.firstName, s.middleName, s.lastName), s.mobilePhone, s.landPhone,
s.email, s.course, s.college FROM student AS s, enlistment AS e WHERE s.student_number=e.student_number AND
e.tutorial_id='$tutorialIdToManageH'  ORDER BY e.priorityNumber ASC LIMIT 0, $maxTutorialEnlistees ";
    $result = mysql_query($query);
    $numOfPriorityEnlistees = 0;
    if(mysql_num_rows($result) > 0){
      while($myrow = mysql_fetch_row($result)){
        $numOfPriorityEnlistees++;
      }
    }
    $query = "SELECT COUNT(student_number) FROM enlistment WHERE tutorial_id='$tutorialIdToManageH' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $numOfEnlistees = $myrow[0];
    $query = "SELECT s.student_number FROM student AS s, enlistment AS e WHERE s.student_number=e.student_number AND
e.tutorial_id='$tutorialIdToManageH' ORDER BY e.priorityNumber ASC LIMIT $numOfPriorityEnlistees, ".($numOfEnlistees -
$numOfPriorityEnlistees)." ";
    $result = mysql_query($query);
    while($myrow = mysql_fetch_row($result)){
      $queryA = "UPDATE enlistment SET tutorial_id='$nextId' WHERE student_number='$myrow[0]' AND tutorial_id='$tutorialIdToManageH' ";
      $resultA = mysql_query($queryA);
    }
    $tutorialIdToManageH = $nextId;
    echo "message: a new 'Tutorial Schedule' with a different tutor was successfully created to accomodate the 'Waiting Enlistees'.<br><br>";
  }
  if($studentNumberToEnlistH != ""){
    //avoid duplication...
    $query = "SELECT student_number FROM enlistment WHERE student_number='$studentNumberToEnlistH' AND tutorial_id='$tutorialIdToManageH' ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) == 0){
      $query = "SELECT MAX(priorityNumber) FROM enlistment WHERE tutorial_id='$tutorialIdToManageH' ";
      $result = mysql_query($query);
      $myrow = mysql_fetch_row($result);
      $query = "INSERT INTO enlistment VALUES ('$studentNumberToEnlistH','$tutorialIdToManageH', '".($myrow[0] + 1)."') ";
      $result = mysql_query($query);
      echo "message: student ($studentNumberToEnlistH) is  now enlisted in the tutorial schedule.<br><br>";
    }
    else{
      echo "error: student ($studentNumberToEnlistH) is already enlisted in the specified tutorial schedule.<br><br>";
    }
  }
  if($studentNumberToDelistH != ""){
    $query = "DELETE FROM enlistment WHERE student_number='$studentNumberToDelistH' AND tutorial_id='$tutorialIdToManageH' ";
    $result = mysql_query($query);
    echo "message: student ($studentNumberToDelistH) was successfully removed from the tutorial schedule.<br><br>";
  }
  $query = "SELECT s.subjectName, t.topic, t.date, t.time, tt.tutorType, CONCAT_WS(' ', tt.firstName, tt.middleName, tt.lastName),
tt.deptCourse, s.subject_id, tt.tutor_id FROM subject AS s, tutorial AS t, tutor AS tt WHERE t.subject=s.subject_id AND
t.tutorial_id='$tutorialIdToManageH' AND t.tutor_id=tt.tutor_id ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  echo "<form name='tutorialScheduleTutor' method='POST' action='?activeNav=$activeNav&activeTab=$activeTab' style='display:inline;'>";
  echo "<table border='1'>";
  echo "<tr><td colspan='2' align='center'>Tutorial Schedule Details</td></tr>";
  echo "<tr><td>Subject</td><td>$myrow[0]</td></tr>";
  echo "<tr><td>Topic</td><td>";
  $tempArray = explode(",", $myrow[1]);
  for($i = 0;$i < count($tempArray);$i++){
    $queryA = "SELECT topicName FROM topic WHERE topic_id='$tempArray[$i]' ";
    $resultA = mysql_query($queryA);
    $myrowA = mysql_fetch_row($resultA);
    echo "$myrowA[0]<br>";
  }
  echo "</td></tr>";
  $tutorialScheduleTutor = $myrow[8];
  $tutorialScheduleSubject = $myrow[7];
  $tutorialSchedulePrefTime = $myrow[3];
  $requestedDateForDisplay = reformatDateForDisplay($myrow[2]);
  $requestedDateForDisplayArray = explode(" ", $requestedDateForDisplay);
  echo "<tr><td>Date</td><td>".reformatDateForDisplay($myrow[2])."</td></tr>";
  echo "<tr><td>Time</td><td>".reformatTimeForDisplay($myrow[3])."</td></tr>";
  if($accomodateWaitingEnlisteesSubmit == ""){
    echo "<tr><td>";
    if($changeTutor == "yes"){
      echo "Tutor";
    }
    elseif($myrow[4] == "f"){
      echo "Faculty Tutor";
    }
    else{
      echo "Peer Tutor";
    }
    echo "</td><td>";
    if($changeTutor == "yes"){
      echo "please select below";
      $changeTutorFormDisable = "disabled='disabled'";
      $changeTutorTableHide = "style='display:none;'";
    }
    else{
      echo "$myrow[5]&nbsp;";
      $tutorSubstitute = getTutorSubstitute($tutorialIdToManageH);
      if(count($tutorSubstitute) > 0){
        echo "<input type='button' id='buttonToLink' onCLick='return initiateChangeTutor(this.form)' onMouseOver='return
cursorForButtonToLink(this)' value='change'/>";
        echo "<input type='hidden' name='tutorSubstitute' value='".implode(",", $tutorSubstitute)."'/>";
      }
      else{
        echo "<input type='button' id='buttonToLink' onCLick='return initiateChangeTutor(this.form)' onMouseOver='return
cursorForButtonToLink(this)' value='change' disabled/>";
      }
    }
    echo "</td></tr>";
    echo "<tr><td>";
    if($myrow[4] == "f"){
      echo "Faculty Department";
    }
    else{
      echo "Peer Course";
    }
    if($myrow[4] == "f"){
      $queryA = "SELECT departmentName FROM upm_departments WHERE department_id='$myrow[6]' ";
    }
    else{
      $queryA = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrow[6]' ";
    }
    $resultA = mysql_query($queryA);
    $myrowA = mysql_fetch_row($resultA);
    echo "</td><td>$myrowA[0]</td></tr>";
  }
  else{
    echo "<tr><td>Tutor</td><td>please select from the 'Available Tutor' table</td></tr>";
  }
  echo "</table>";
  echo "<input type='hidden' name='changeTutor' value=''/>";
  echo "<input type='hidden' name='tutorialIdToManageH' value='$tutorialIdToManageH'/>";
  if($changeTutor == "yes"){
    echo "<br><table border='1'>";
    echo "<form name='selectTutorForTutorial' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' onSubmit='return
verifySelectTutorForTutorial()' >";
    echo "<tr><td align='center' colspan='7'>Available Tutor</td></tr>";
    $availableTutorColumnName = array('', 'Name', 'Mobile Phone', 'Land Phone', 'Email Address', 'Tutor Type', 'Course/Department');
    echo "<tr>";
    foreach($availableTutorColumnName AS $availableTutorColumnNameElem){
      echo "<td align='center'>$availableTutorColumnNameElem</td>";
    }
    echo "</tr>";
    $tutorSubstituteArray = explode(",", $tutorSubstitute);
    foreach($tutorSubstituteArray AS $tutorSubstituteArrayElem){
      $queryAvailableTutor = "SELECT CONCAT(tutor.firstName, ' ', tutor.middleName, ' ', tutor.lastName) AS fullName, tutor.mobilePhone,
tutor.landPhone, tutor.email, tutor.tutorType, tutor.deptCourse, tutor.tutor_id FROM tutor WHERE tutor.tutor_id='$tutorSubstituteArrayElem' ";
      $resultAvailableTutor = mysql_query($queryAvailableTutor);
      $myrowAvailableTutor = mysql_fetch_row($resultAvailableTutor);
      echo "<tr>";
      echo "<td><input type='radio' name='newTutorForTheTutorial' value='$myrowAvailableTutor[6]' /></td>";
      echo "<td>$myrowAvailableTutor[0]</td>";
      echo "<td>$myrowAvailableTutor[1]</td>";
      echo "<td>$myrowAvailableTutor[2]</td>";
      echo "<td>$myrowAvailableTutor[3]</td>";
      echo "<td>";
      if($myrowAvailableTutor[4] == 'p'){
        echo "peer";
        $queryATDC = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrowAvailableTutor[5]' ";
      }
      else{
        echo "faculty";
        $queryATDC = "SELECT departmentName FROM upm_departments WHERE department_id='$myrowAvailableTutor[5]' ";
      }
      echo "</td>";
      $resultATDC = mysql_query($queryATDC);
      $myrowATDC = mysql_fetch_row($resultATDC);
      echo "<td>$myrowATDC[0]</td>";
      echo "</tr>";
      $numOfAvailableTutor++;
    }
    echo "<tr><td colspan='7' align='center'>";
    if($numOfAvailableTutor > 0){
      echo "<input type='submit' name='setTutorialButton' value='set tutorial'/>";
      echo "<input type='button' name='backButton' value='back' onClick='this.form.submit()'/>";
    }
    else{
      echo "none available";
    }
    echo "</td></tr>";
    echo "</table>";
  }
  echo "</form>";
  echo "<br>";
  if($accomodateWaitingEnlisteesSubmit == ""){
    echo "<table border='1' $changeTutorTableHide>";
    echo "<form name='enlistStudentForm' method='POST' action='?activeNav=$activeNav&activeTab=$activeTab'>";
    echo "<tr><td colspan='2' align='center'>Enlist Student</td></tr>";
    echo "<tr><td>Student Number</td><td>";
    echo "<input type='text' maxLength='4' size='4' name='studentNumberYear' value='' $changeTutorFormDisable> - ";
    echo "<input type='text' maxLength='5' size='5' name='studentNumberNumber' value='' $changeTutorFormDisable>";
    echo "</td></tr>";
    echo "<tr><td colspan='2' align='center'><input type='button' name='enlistStudentButton' value='enlist'
onClick='checkStudentNumberToEnlist(this.form)' $changeTutorFormDisable/></td></tr>";
    echo "<input type='hidden' name='studentNumberToEnlistH' value=''/>";
    echo "<input type='hidden' name='tutorialIdToManageH' value='$tutorialIdToManageH'/>";
    echo "</form>";
    echo "</table>";
    echo "<br>";

    echo "<table width='100%' $changeTutorTableHide>";
    echo "<form name='delistStudentForm' method='POST' action='?activeNav=$activeNav&activeTab=$activeTab'>";
    echo "<tr><td align='center'>Priority Enlistees</td></tr>";
    echo "</table>";
    $query = "SELECT e.priorityNumber, s.student_number, CONCAT_WS(' ', s.firstName, s.middleName, s.lastName), s.mobilePhone, s.landPhone,
s.email, s.course, s.college FROM student AS s, enlistment AS e WHERE s.student_number=e.student_number AND
e.tutorial_id='$tutorialIdToManageH'  ORDER BY e.priorityNumber ASC LIMIT 0, $maxTutorialEnlistees ";
    $result = mysql_query($query);
    $numOfPriorityEnlistees = 0;
    if(mysql_num_rows($result) > 0){
      echo "<div style='height:auto; width:100%; overflow:scroll;' $changeTutorTableHide>";
      echo "<table id='priorityEnlisteeTable' border='1' width='100%'>";
      $priorityEnlisteeTableColumnNameArray = array('', 'Priority Number', 'Student Number', 'Name', 'Mobile Phone', 'Land Phone', 'Email',
'Course', 'College');
      echo "<tr>";
      foreach($priorityEnlisteeTableColumnNameArray AS $priorityEnlisteeTableColumnNameArrayElem){
        echo "<td align='center'>$priorityEnlisteeTableColumnNameArrayElem</td>";
      }
      echo "</tr>";
      $priorityNumberDisplay = 0;
      while($myrow = mysql_fetch_row($result)){
        $priorityNumberDisplay++;
        echo "<tr><td><input type='button' id='buttonToLink' onCLick='return sendStudentNumberToDelist(\"$myrow[1]\")' onMouseOver='return
cursorForButtonToLink(this)' value='remove' $changeTutorFormDisable/></td>";
        echo "<td align='center'>$priorityNumberDisplay</td>";
        echo "<td align='center'>$myrow[1]</td>";
        for($i = 2;$i < count($myrow);$i++){
          echo "<td>$myrow[$i]</td>";
        }
        echo "</tr>";
        $numOfPriorityEnlistees++;
      }
      echo "</table>";
      echo "</div>";
    }
    else{
      echo "<table width='100%'>";
      echo "<tr><td align='center'>no records</td></tr>";
      echo "</table>";
    }
    echo "<br>";
  }
  else{
    $query = "SELECT e.priorityNumber, s.student_number, CONCAT_WS(' ', s.firstName, s.middleName, s.lastName), s.mobilePhone, s.landPhone,
s.email, s.course, s.college FROM student AS s, enlistment AS e WHERE s.student_number=e.student_number AND
e.tutorial_id='$tutorialIdToManageH'  ORDER BY e.priorityNumber ASC LIMIT 0, $maxTutorialEnlistees ";
    $result = mysql_query($query);
    $numOfPriorityEnlistees = 0;
    if(mysql_num_rows($result) > 0){
      while($myrow = mysql_fetch_row($result)){
        $numOfPriorityEnlistees++;
      }
    }
  }
  echo "<table width='100%' $changeTutorTableHide>";
  echo "<tr><td align='center'>";
  if($accomodateWaitingEnlisteesSubmit == ""){
    echo "Waiting Enlistees";
    $disableButtonStr = "";
  }
  else{
    echo "Waiting Enlistees To Accomodate";
    $disableButtonStr = "disabled='disabled'";
  }
  echo "</td></tr>";
  echo "</table>";
  $query = "SELECT COUNT(student_number) FROM enlistment WHERE tutorial_id='$tutorialIdToManageH' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  $numOfEnlistees = $myrow[0];
  $query = "SELECT e.priorityNumber, s.student_number, CONCAT_WS(' ', s.firstName, s.middleName, s.lastName), s.mobilePhone, s.landPhone,
s.email, s.course, s.college FROM student AS s, enlistment AS e WHERE s.student_number=e.student_number AND
e.tutorial_id='$tutorialIdToManageH' ORDER BY e.priorityNumber ASC LIMIT $numOfPriorityEnlistees, ".($numOfEnlistees -
$numOfPriorityEnlistees)." ";
  $result = mysql_query($query);
  $numOfWaitingEnlistees = 0;
  if(mysql_num_rows($result) > 0){
    echo "<div style='height:auto; width:100%; overflow:scroll;' $changeTutorTableHide>";
    echo "<table id='priorityEnlisteeTable' border='1' width='100%'>";
    $priorityEnlisteeTableColumnNameArray = array('', 'Priority Number', 'Student Number', 'Name', 'Mobile Phone', 'Land Phone', 'Email',
'Course', 'College');
    echo "<tr>";
    foreach($priorityEnlisteeTableColumnNameArray AS $priorityEnlisteeTableColumnNameArrayElem){
      echo "<td align='center'>$priorityEnlisteeTableColumnNameArrayElem</td>";
    }
    echo "</tr>";
    while($myrow = mysql_fetch_row($result)){
      echo "<tr style='background-color=#FFFF80;'><td><input type='button' id='buttonToLink' onCLick='return
sendStudentNumberToDelist(\"$myrow[1]\")' onMouseOver='return cursorForButtonToLink(this)' value='remove' $disableButtonStr
$changeTutorFormDisable/></td>";
      echo "<td align='center'>$myrow[0]</td>";
      echo "<td align='center'>$myrow[1]</td>";
      for($i = 2;$i < count($myrow);$i++){
        echo "<td>$myrow[$i]</td>";
      }
      echo "</tr>";
      $numOfWaitingEnlistees++;
    }
    echo "<input type='hidden' name='studentNumberToDelistH' value=''/>";
    echo "<input type='hidden' name='tutorialIdToManageH' value='$tutorialIdToManageH'/>";
    echo "</form>";
    echo "</table>";
    echo "</div>";
  }
  else{
    echo "<table width='100%'>";
    echo "<tr><td align='center'>no records</td></tr>";
    echo "<input type='hidden' name='studentNumberToDelistH' value=''/>";
    echo "<input type='hidden' name='tutorialIdToManageH' value='$tutorialIdToManageH'/>";
    echo "</form>";
    echo "</table>";
  }

  if($numOfWaitingEnlistees > 0){
    if($accomodateWaitingEnlisteesSubmit == ""){
      echo "<table width='100%' $changeTutorTableHide>";
      echo "<form name='accomodateWaitingEnlisteesForm' method='POST' action='?activeNav=$activeNav&activeTab=$activeTab'>";
      echo "<tr><td align='center'>";
      $query = "SELECT CONCAT(tutor.firstName, ' ', tutor.middleName, ' ', tutor.lastName) AS fullName, tutor_schedule.prefTime, tutor.tutor_id
FROM tutor, tutor_schedule WHERE tutor.tutor_id!='$tutorialScheduleTutor' AND tutor.tutor_id=tutor_schedule.tutor_id AND
(tutor_schedule.prefDay LIKE '$requestedDateForDisplayArray[0]' OR tutor_schedule.prefDay LIKE '$requestedDateForDisplayArray[0],%' OR
tutor_schedule.prefDay LIKE '%,$requestedDateForDisplayArray[0],%' OR tutor_schedule.prefDay LIKE '%,$requestedDateForDisplayArray[0]') AND
(tutor.tutoredSubject LIKE '$tutorialScheduleSubject' OR tutor.tutoredSubject LIKE '%,$tutorialScheduleSubject,%' OR tutor.tutoredSubject LIKE
'%,$tutorialScheduleSubject' OR tutor.tutoredSubject LIKE '$tutorialScheduleSubject,%') ";
      $result = mysql_query($query);
      $availableTutorForAccomodation = false;
      while($myrow = mysql_fetch_row($result)){
        if(requestedTimeIsWithinInterval(explode("-", $myrow[1]), explode("-", $tutorialSchedulePrefTime))){
          $availableTutorForAccomodation = true;
          break;
        }
      }
      if($availableTutorForAccomodation){
        echo "<input type='submit' name='accomodateWaitingEnlisteesSubmit' value='create new tutorial schedule' $changeTutorFormDisable/>";
      }
      echo "</td></tr>";
      echo "<input type='hidden' name='tutorialIdToManageH' value='$tutorialIdToManageH'/>";
      echo "</form>";
      echo "</table>";
    }
  }
  if($accomodateWaitingEnlisteesSubmit == "create new tutorial schedule"){
    echo "<br><table border='1'>";
    echo "<form name='selectTutorForTutorial' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' onSubmit='return
verifySelectTutorForTutorial()' >";
    echo "<tr><td align='center' colspan='7'>Available Tutor</td></tr>";
    $availableTutorColumnName = array('', 'Name', 'Mobile Phone', 'Land Phone', 'Email Address', 'Tutor Type', 'Course/Department');
    echo "<tr>";
    foreach($availableTutorColumnName AS $availableTutorColumnNameElem){
      echo "<td align='center'>$availableTutorColumnNameElem</td>";
    }
    echo "</tr>";
    $query = "SELECT CONCAT(tutor.firstName, ' ', tutor.middleName, ' ', tutor.lastName) AS fullName, tutor.mobilePhone, tutor.landPhone,
tutor.email, tutor.tutorType, tutor.deptCourse, tutor_schedule.prefTime, tutor.tutor_id FROM tutor, tutor_schedule WHERE
tutor.tutor_id!='$tutorialScheduleTutor' AND tutor.tutor_id=tutor_schedule.tutor_id AND (tutor_schedule.prefDay LIKE
'$requestedDateForDisplayArray[0]' OR tutor_schedule.prefDay LIKE '$requestedDateForDisplayArray[0],%' OR tutor_schedule.prefDay LIKE
'%,$requestedDateForDisplayArray[0],%' OR tutor_schedule.prefDay LIKE '%,$requestedDateForDisplayArray[0]') AND (tutor.tutoredSubject LIKE
'$tutorialScheduleSubject' OR tutor.tutoredSubject LIKE '%,$tutorialScheduleSubject,%' OR tutor.tutoredSubject LIKE
'%,$tutorialScheduleSubject' OR tutor.tutoredSubject LIKE '$tutorialScheduleSubject,%') ";
    $resultA = mysql_query($query);
    $numOfAvailableTutor = 0;
    while($myrowA = mysql_fetch_row($resultA)){
      if(requestedTimeIsWithinInterval(explode("-", $myrowA[6]), explode("-", $tutorialSchedulePrefTime))){
        $queryB = "SELECT t.tutorial_id FROM tutorial AS t LEFT JOIN tutorial AS tt ON (tt.tutorial_id='$tutorialIdToManageH') WHERE
t.tutor_id='$myrowA[7]' AND t.subject=tt.subject AND t.topic=tt.topic AND t.time=tt.time AND t.date=tt.date ";
        $resultB = mysql_query($queryB);
        if(mysql_num_rows($resultB) == 0){
          echo "<tr>";
          echo "<td><input type='radio' name='tutorForTheTutorial' value='$myrowA[7]' /></td>";
          echo "<td>$myrowA[0]</td>";
          echo "<td>$myrowA[1]</td>";
          echo "<td>$myrowA[2]</td>";
          echo "<td>$myrowA[3]</td>";
          echo "<td>";
          if($myrowA[4] == 'p'){
            echo "peer";
            $queryB = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrowA[5]' ";
          }
          else{
            echo "faculty";
            $queryB = "SELECT departmentName FROM upm_departments WHERE department_id='$myrowA[5]' ";
          }
          echo "</td>";
          $myrowB = mysql_fetch_row(mysql_query($queryB));
          echo "<td>$myrowB[0]</td>";
          echo "</tr>";
          $numOfAvailableTutor++;
        }
      }
    }
    if($numOfAvailableTutor == 0){
      echo "<tr><td colspan='7' align='center'>none available</td></tr>";
    }
    echo "<tr><td colspan='7' align='center'>";
    if($numOfAvailableTutor > 0){
      echo "<input type='submit' name='setTutorialButton' value='set tutorial'/>";
    }
    echo "<input type='button' name='backButton' value='back' onClick='this.form.submit()'/>";
    echo "</td></tr>";
    echo "<input type='hidden' name='tutorialIdToManageH' value='$tutorialIdToManageH'/>";
    echo "</form>";
    echo "</table>";
  }
}
///////////////////////////////////////////////////////////
function getTutorSubstitute($tutorialIdToManageH){
  connect_Db();
  $query = "SELECT tutor_id, subject, time, date FROM tutorial WHERE tutorial_id='$tutorialIdToManageH' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  $tutorialScheduleTutor = $myrow[0];
  $tutorialScheduleSubject = $myrow[1];
  $tutorialSchedulePrefTime = $myrow[2];
  $requestedDateForDisplay = reformatDateForDisplay($myrow[3]);
  $requestedDateForDisplayArray = explode(" ", $requestedDateForDisplay);
  $query = "SELECT tutor.tutor_id, tutor_schedule.prefTime FROM tutor, tutor_schedule WHERE tutor.tutor_id!='$tutorialScheduleTutor' AND
tutor.tutor_id=tutor_schedule.tutor_id AND (tutor_schedule.prefDay LIKE '$requestedDateForDisplayArray[0]' OR tutor_schedule.prefDay LIKE
'$requestedDateForDisplayArray[0],%' OR tutor_schedule.prefDay LIKE '%,$requestedDateForDisplayArray[0],%' OR tutor_schedule.prefDay LIKE
'%,$requestedDateForDisplayArray[0]') AND (tutor.tutoredSubject LIKE '$tutorialScheduleSubject' OR tutor.tutoredSubject LIKE
'%,$tutorialScheduleSubject,%' OR tutor.tutoredSubject LIKE '%,$tutorialScheduleSubject' OR tutor.tutoredSubject LIKE
'$tutorialScheduleSubject,%') ";
  $resultA = mysql_query($query);
  while($myrowA = mysql_fetch_row($resultA)){
    if(requestedTimeIsWithinInterval(explode("-", $myrowA[1]), explode("-", $tutorialSchedulePrefTime))){
      $queryB = "SELECT t.tutorial_id FROM tutorial AS t LEFT JOIN tutorial AS tt ON (tt.tutorial_id='$tutorialIdToManageH') WHERE
t.tutor_id='$myrowA[0]' AND t.subject=tt.subject AND t.topic=tt.topic AND t.time=tt.time AND t.date=tt.date ";
      $resultB = mysql_query($queryB);
      if(mysql_num_rows($resultB) == 0){
        $tutorSubstitute[] = $myrowA[0];
      }
    }
  }
  return $tutorSubstitute;
}
//////////////////////////////////////////////////////////
function add_Student_List(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  connect_Db();
  if(!isset($studentCount)){
    $studentCount = 1;
  }
  if($process == "addNewRow"){
    $studentCount++;
    $process = "";
  }
  if($process == "saveStudentList"){
    //save the values to student database
    for($i = 0;$i < $studentCount;$i++){
      eval('$studentNumber_'.$i.' = "$studentNumberYear_'.$i.'-'.'$studentNumberNumber_'.$i.'";');
      $rowVars = array("studentNumber_$i", "firstName_$i", "middleName_$i", "lastName_$i", "course", "college", "mobilePhone_$i",
"landPhone_$i", "email_$i", "password_$i");
      $rowVarsStr = implode("', '$", $rowVars);
      $rowVarsStr = '\'$'.$rowVarsStr."', 'active'";
      //eval('$query = "INSERT INTO student (student_number, lastName, middleName, firstName, mobilePhone, landPhone, email, password) VALUES
('.$rowVarsStr.')";');
      eval('$query = "INSERT INTO student VALUES ('.$rowVarsStr.')";');
      $result = mysql_query($query);
      //unset the form elements...
      $rowVars = array("studentNumberYear_$i", "studentNumberNumber_$i", "lastName_$i", "middleName_$i", "firstName_$i", "mobilePhone_$i",
"landPhone_$i", "email_$i", "password_$i");
      $rowVarsStr = implode(", $", $rowVars);
      $rowVarsStr = '$'.$rowVarsStr;
      eval('unset('.$rowVarsStr.');');
      $rowVarsStr = "";
    }
    echo "message: The block student list were successfully registered.<br><br>";
    $process = "editStudentList";
  }
  else{
    //collect the values of the form elements
    for($i = 0;$i < $studentCount;$i++){
      $rowVars = array("studentNumberYear_$i", "studentNumberNumber_$i", "lastName_$i", "middleName_$i", "firstName_$i", "mobilePhone_$i",
"landPhone_$i", "email_$i");
      $rowVarsStr = implode(", $", $rowVars);
      $rowVarsStr = '$'.$rowVarsStr;
      eval('$studentDetails[] = array('.$rowVarsStr.');');
      eval('unset('.$rowVarsStr.');');
    }
  }
  //remove specified row
  if($rowToRemove != ""){
    $studentDetails = array_merge(array_slice($studentDetails, 0, $rowToRemove), array_slice($studentDetails, $rowToRemove + 1));
    $rowToRemove = "";
    $studentCount--;
  }
  if($studentCount == 0){
    $studentCount = 1;
  }
  //reinitialize the form elements...
  for($i = 0;$i < $studentCount;$i++){
    $rowVars = array("studentNumberYear_$i", "studentNumberNumber_$i", "lastName_$i", "middleName_$i", "firstName_$i", "mobilePhone_$i",
"landPhone_$i", "email_$i");
    for($j = 0;$j < count($rowVars); $j++){
      $$rowVars[$j] = $studentDetails[$i][$j];
    }
  }
  //generate the passwords...
  if($process == "generatePasswords"){
    //remove students with existing accounts...
    $numOfExistingStudents = 0;
    for($i = 0;$i < $studentCount;$i++){
      eval('$query = "SELECT firstName FROM student WHERE student_number=\'$studentNumberYear_'.$i.'-$studentNumberNumber_'.$i.'\' ";');
      $result = mysql_query($query);
      if(mysql_num_rows($result) != 0){
        eval('echo "error: student [$studentNumberYear_'.$i.'-$studentNumberNumber_'.$i.'] already exists and is dropped from the
list.<br><br>";');
        $studentDetails = array_merge(array_slice($studentDetails, 0, $i - $numOfExistingStudents), array_slice($studentDetails, $i + 1 -
$numOfExistingStudents));
        $numOfExistingStudents++;
      }
    }
    //reinitialize the form elements...
    for($i = 0;$i < $studentCount;$i++){
      $rowVars = array("studentNumberYear_$i", "studentNumberNumber_$i", "lastName_$i", "middleName_$i", "firstName_$i", "mobilePhone_$i",
"landPhone_$i", "email_$i");
      for($j = 0;$j < count($rowVars); $j++){
        $$rowVars[$j] = $studentDetails[$i][$j];
      }
    }
    //generate passwords...
    $passwordChars = "0123456789abcdefghijklmnopqrstuvwxyzABCDEFGHIJKLMNOPQRSTUVWXYZ_";
    for($i = 0;$i < strlen($passwordChars);$i++){
      $passwordCharsArray[] = substr($passwordChars, $i, 1);
    }
    for($i = 0;$i < $studentCount;$i++){
      $passwordAlreadyUsed = true;
      while($passwordAlreadyUsed){
        shuffle($passwordCharsArray);
        shuffle($passwordCharsArray);
        $currentPassword = implode("", array_slice($passwordCharsArray, 0, 8));
        $query = "SELECT student_number FROM student WHERE password='$currentPassword' ";
        $result = mysql_query($query);
        if(mysql_num_rows($result) == 0){
          $passwordAlreadyUsed = false;
          eval('$password_'.$i.' = $currentPassword;');
        }
      }
    }
  }
  $studentCount = count($studentDetails);
  if($studentCount == 0){
    $studentCount = 1;
  }
  echo "<form name='addStudentListForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' style='display:inline;'
onSubmit='return addStudentListFormCheck(this)'>";
  echo "<table border='1' width='100%'>";
  echo "<tr><td align='center' colspan='2'>Add Student List</td></tr>";
  echo "<tr><td>College</td><td>";
  echo "<select name='college' onChange='this.form.submit()'>";
  $query = "SELECT * FROM upm_colleges ORDER BY collegeName";
  $result = mysql_query($query);
  while($myrow = mysql_fetch_row($result)){
    if($college == ""){
      $college = $myrow[1];
    }
    if($college == $myrow[1]){
      echo "<option value='$myrow[1]' selected='selected'>$myrow[1]</option>";
    }
    else{
      echo "<option value='$myrow[1]'>$myrow[1]</option>";
    }
  }
  echo "</select>";
  echo "</td></tr>";
  echo "<tr><td>Course</td><td>";
  echo "<select name='course'>";
  $queryA = "SELECT degree_programs.degreeProgramName FROM upm_colleges, degree_programs WHERE
upm_colleges.college_id=degree_programs.college_id AND upm_colleges.collegeName='$college'  ORDER BY collegeName";
  $resultA = mysql_query($queryA);
  if(mysql_num_rows($resultA) > 0){
    while($myrowA = mysql_fetch_row($resultA)){
      if($course == $myrowA[0]){
        echo "<option value='$myrowA[0]' selected='selected'>$myrowA[0]</option>";
      }
      else{
        echo "<option value='$myrowA[0]'>$myrowA[0]</option>";
      }
    }
  }
  else{
    echo "<option value=''>error: missing records of degree programs please contact the administrator</option>";
  }
  echo "</select>";
  echo "</td></tr>";
  echo "</table>";
  echo "<table border='0' width='100%'>";
  echo "<tr><td align='left'>";
  echo "<input type='button' name='addNewRow' value='add new row' onClick='return addStudentListFormProcess(this.form, \"add new row\")'/>";
  echo "</td></tr>";
  echo "</table>";
  echo "<div style='height:auto; width:100%; overflow:scroll;'>";
  echo "<table id='addStudentListTable' border='1' width='100%'>";
  echo "<tr>";
  echo "<td align='center'>&nbsp;</td>";
  echo "<td align='center'>Student Number</td>";
  echo "<td align='center'>Lastname</td>";
  echo "<td align='center'>Firstname</td>";
  echo "<td align='center'>Middlename</td>";
  echo "<td align='center'>Mobile Phone</td>";
  echo "<td align='center'>Land Phone</td>";
  echo "<td align='center'>Email Address</td>";
  echo "</tr>";
  for($i = 0;$i < $studentCount;$i++){
    echo "<tr>";
    echo "<td align='center'>";
    echo "<input type='button' id='buttonToLink' onClick='return addStudentListFormRemoveRow(this.form, \"$i\")' onMouseOver='return
cursorForButtonToLink(this)' value='REMOVE' ";
    if($studentCount == 1){
      echo "disabled='disabled'";
    }
    echo "/>";
    echo "</td>";
    echo "<td align='center' style='display:block;'>";
    $tempVar = "studentNumberYear_$i";
    echo "<input type='text' maxLength='4' size='4' name='$tempVar' value='".$$tempVar."'> - ";
    $tempVar = "studentNumberNumber_$i";
    echo "<input type='text' maxLength='5' size='5' name='$tempVar' value='".$$tempVar."'>";
    echo "</td>";
    $tempVar = "lastName_$i";
    echo "<td align='center'><input type='text' maxLength='30' size='30' name='$tempVar' value='".$$tempVar."'></td>";
    $tempVar = "firstName_$i";
    echo "<td align='center'><input type='text' maxLength='30' size='30' name='$tempVar' value='".$$tempVar."'></td>";
    $tempVar = "middleName_$i";
    echo "<td align='center'><input type='text' maxLength='30' size='30' name='$tempVar' value='".$$tempVar."'></td>";
    $tempVar = "mobilePhone_$i";
    echo "<td align='center'><input type='text' maxLength='15' size='15' name='$tempVar' value='".$$tempVar."'></td>";
    $tempVar = "landPhone_$i";
    echo "<td align='center'><input type='text' maxLength='15' size='15' name='$tempVar' value='".$$tempVar."'></td>";
    $tempVar = "email_$i";
    echo "<td align='center'><input type='text' maxLength='30' size='30' name='$tempVar' value='".$$tempVar."'></td>";
    echo "</tr>";
    $tempVar = "password_$i";
    echo "<input type='hidden' maxLength='30' size='30' name='$tempVar' value='".$$tempVar."'>";
  }
  echo "</table>";
  echo "</div>";
  echo "<table border='0' width='100%'>";
  echo "<tr><td align='center'>";
  if($process == "generatePasswords"){
    echo "<input type='button' name='editStudentList' value='edit student list' onClick='return addStudentListFormProcess(this.form, \"edit
student list\");'/>";
    echo "<input type='button' name='printStudentList' value='print student list' onClick='return addStudentListFormProcess(this.form, \"print
student list\");'/>";
    echo "<input type='button' name='saveStudentList' value='save student list' onClick='return addStudentListFormProcess(this.form, \"save
student list\");'/>";
  }
  else{
    echo "<input type='button' name='generatePasswords' value='generate passwords' onClick='return addStudentListFormCheck(this.form)'/>";
  }
  echo "</td></tr>";
  echo "</table>";
  echo "<input type='hidden' name='studentCount' value='$studentCount'/>";
  echo "<input type='hidden' name='rowToRemove' value=''/>";
  echo "<input type='hidden' name='process' value=''/>";
  echo "</form>";
}
//////////////////////////////////////////////////////////
function get_Next_Max_Id($id, $table){
  connect_Db();
  $query = "SELECT MAX($id) FROM $table ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  $current = $myrow[0];
  return $current+1;
}
//////////////////////////////////////////////////////////
function get_next_id($id, $table){
  $previous = 0;
  $current = 0;
  connect_Db();
  $query = "SELECT $id FROM $table ORDER BY $id";
  $result = mysql_query($query);
  while($myrow = mysql_fetch_row($result)){
    $current = $myrow[0];
    if($current-$previous > 1){
      return $previous+1;
    }
    $previous = $current;
  }
  return $current+1;
}
//////////////////////////////////////////////////////////
?>
```

admin_Javascript.php

```
tabS = "        ";
NL = "\n";

var animateUsingToesColorsIndex = 0;
var animateUsingToesColorsInterval = 0;
var animateUsingToesColorsElement = "";
var administerExamRefreshIntervalId = 0;

function animateUsingToesColors(elementId){
  if(animateUsingToesColorsElement == ""){
    animateUsingToesColorsElement = elementId
  }
  var secs = 0;
  var color = "white";
  if(animateUsingToesColorsInterval){
    clearInterval(animateUsingToesColorsInterval);
  }
  animateUsingToesColorsIndex++;
  animateUsingToesColorsIndex = animateUsingToesColorsIndex % 9;
  switch(animateUsingToesColorsIndex){
    case 1:
      color = "blue";
      secs = 1000;
      break;
    case 2:
      color = "red";
      secs = 1000;
      break;
    case 3:
      color = "green";
      secs = 1000;
      break;
    case 4:
      color = "yellow";
      secs = 1000;
      break;
    case 5:
      color = "blue";
      secs = 500;
      break;
    case 6:
      color = "red";
      secs = 500;
      break;
    case 7:
      color = "green";
      secs = 500;
      break;
    case 8:
      color = "yellow";
      secs = 500;
      break;
    default:
      color = "white";
      secs = 1;
      break;
  }
  document.getElementById(animateUsingToesColorsElement).style.color = color;
  animateUsingToesColorsInterval = setInterval(animateUsingToesColors, secs);
}
function loginFormCheck(currentForm){
  if(currentForm.username.value == ""){
    alert("error: please include your username");
    return false;
  }
  if(currentForm.password.value == ""){
    alert("error: please include your password");
    return false;
  }
  return true;
}
function setPointer(theRow){
  if (typeof(document.getElementsByTagName) != 'undefined'){
    var theCells = theRow.getElementsByTagName('td');
  }
  else if (typeof(theRow.cells) != 'undefined'){
  var theCells = theRow.cells;
  }
  else{
    return false;
  }
  var rowCellsCnt  = theCells.length;
  var thePointerColor = '';
  if(theCells[0].style.backgroundColor == '#ccffcc'){
    thePointerColor = '#f1fbf1';
  }
  else{
    thePointerColor = '#ccffcc';
  }
  for (var c = 0; c < rowCellsCnt; c++){
    if((theCells[c].style.backgroundColor  ==  '')||(theCells[c].style.backgroundColor  ==  '#ccffcc')||(theCells[c].style.backgroundColor  ==
'#f1fbf1')){
      theCells[c].style.backgroundColor = thePointerColor;
    }
  }
  return true;
}
function highlightSystemMessages(){
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'error:', '<br><br>', '#000000', '#FF8080');
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'message:', '<br><br>', '#000000', '#80FF80');
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'warning:', '<br><br>', '#000000', '#FFFF80');
}
function highlightMessage(bodyText, searchTermA, searchTermB, textColor, bgColor){
  var highlightStartTag = "<font style='color:" + textColor + "; background-color:" + bgColor + ";line-height:1.1;'>";
  var highlightEndTag = "</font>";

  var newText = "";
  var i = -1;
  var j = -1;
  var lcBodyText = bodyText.toLowerCase();
  while(bodyText.length > 0){
    i = bodyText.indexOf(searchTermA, i+1);
    if(i < 0){
      newText += bodyText;
      bodyText = "";
    }
    else{
      // skip anything inside an HTML tag
      if(bodyText.lastIndexOf(">", i) >= bodyText.lastIndexOf("<", i)){
        // skip anything inside a <script> block
        if(lcBodyText.lastIndexOf("/script>", i) >= lcBodyText.lastIndexOf("<script", i)){
          // skip anything inside a <form> block
          if(lcBodyText.lastIndexOf("/form>", i) >= lcBodyText.lastIndexOf("<form", i)){
            //search for the closing term of the system message...
            j = lcBodyText.indexOf(searchTermB, i + searchTermA.length);
            if(j > 0){
              newText += bodyText.substring(0, i) + highlightStartTag + bodyText.substr(i, j - i) + highlightEndTag + bodyText.substr(j,
searchTermB.length);
              bodyText = bodyText.substr(j + searchTermB.length);
              j = -1;
            }
            else{
              newText += bodyText.substring(0, i) + bodyText.substr(i, searchTermA.length);
              bodyText = bodyText.substr(i + searchTermA.length);
            }
            lcBodyText = bodyText.toLowerCase();
            i = -1;
          }
        }
      }
    }
  }
  return newText;
}
function getCookieValue(cookieVar){
  var cookieArray = document.cookie.split("; ");
  for(var i = 0;i < cookieArray.length;i++){
    if(cookieArray[i].substr(0, cookieArray[i].indexOf("=")) == cookieVar){
      return cookieArray[i].substr(cookieArray[i].indexOf("=") + 1);
    }
  }
}
function window_OnUnload(){
  var ck_j = parseInt(getCookieValue("ck_j"), 10);
  eval('document.cookie = "ck_c=' + ck_j + '"');
  ck_j++;
  eval('document.cookie = "ck_j=' + ck_j + '"');
}
function window_Onload(activeNav, activeTab){
  if(activeNav == "User Accounts"){
    //to remove the adverse effects of using InnerHTML in highlightSystemMessages() on password form elements...
    //however in the 'Tutor Account' edit page the system messages are not highlighted...
    if(!((document.newStudentAccountDetails && document.newStudentAccountDetails.studAccountPassword)||(document.newTutorAccountDetails &&
document.newTutorAccountDetails.passwordTutor)||(document.lrcPersonnelForm && document.lrcPersonnelForm.lrcPassword))){
      highlightSystemMessages();
    }
  }
  else{
    highlightSystemMessages();
  }
  if( top != self){
    top.location = location;
  }
  switch(activeNav){
    case 'Tutorial':
      var addTutorialScheduleFormBool = new Boolean(0);
      var cancelTutorialScheduleFormBool = new Boolean(0);
      var dayTimeArrayBool = new Boolean(0);
      for(var i = 0;i < document.forms.length;i++){
        if(document.forms[i].name == "cancelTutorialScheduleForm"){
          cancelTutorialScheduleFormBool = Boolean(1);
          break;
        }
        if(document.forms[i].name == "addTutorialScheduleForm"){
          addTutorialScheduleFormBool = Boolean(1);
          break;
        }
      }
      if((addTutorialScheduleFormBool == true)&&(cancelTutorialScheduleFormBool == false)){
        for(var i = 0;i < document.addTutorialScheduleForm.elements.length;i++){
          if(document.addTutorialScheduleForm.elements[i].name == "MondayH"){
            dayTimeArrayBool = new Boolean(1);
            break;
          }
        }
      }

      if((activeTab == 'Tutorial Schedule')&&(cancelTutorialScheduleFormBool == false)&&(addTutorialScheduleFormBool ==
true)&&(dayTimeArrayBool == true)){
        var weekDayArray = new Array("Monday", "Tuesday", "Wednesday", "Thursday", "Friday");
        dayTimeArray = new Array(5);
        dayTimeArray[0] = document.addTutorialScheduleForm.MondayH.value;
        dayTimeArray[1] = document.addTutorialScheduleForm.TuesdayH.value;
        dayTimeArray[2] = document.addTutorialScheduleForm.WednesdayH.value;
        dayTimeArray[3] = document.addTutorialScheduleForm.ThursdayH.value;
        dayTimeArray[4] = document.addTutorialScheduleForm.FridayH.value;
        document.addTutorialScheduleForm.prefDay.options.length = 0;
        var optionIndex = 0;
        for(var i = 0;i < dayTimeArray.length;i++){
          if((dayTimeArray[i] != '')||(!document.addTutorialScheduleForm.strictTutorSchedule.checked)){
            document.addTutorialScheduleForm.prefDay.options[optionIndex] = new Option(weekDayArray[i], weekDayArray[i]);
            optionIndex++;
          }
        }
        newTutorialSchedulePrefDay();
      }
      //alert("["+document.addTutorialScheduleForm.subject.value+"]");
      break;
        case 'Exam':
      if(activeTab == 'Create Exam'){
        if(document.examCoverageForm != null){
          //totalQuantityFrequency();
          for(var i = 0;i < document.examCoverageForm.elements.length;i++){
            if((document.examCoverageForm.elements[i].type == "text")&&(document.examCoverageForm.elements[i].name.indexOf("_total") != -1)){
              totalFrequencyForTopic(document.examCoverageForm.elements[i].name);
            }
          }
        }
      }
      if(activeTab == 'Edit Exam'){
        if(document.examCoverageForm != null){
          //totalQuantityFrequency();
          for(var i = 0;i < document.examCoverageForm.elements.length;i++){
            if((document.examCoverageForm.elements[i].type == "text")&&(document.examCoverageForm.elements[i].name.indexOf("_total") != -1)){
              totalFrequencyForTopic(document.examCoverageForm.elements[i].name);
            }
          }
        }
      }
      if(activeTab == 'Search Exam'){
        for(i = 0;i < document.examQuery.examSubject.length;i++){
          if(document.examQuery.examSubject[i].value == document.examQuery.examSubjectHidden.value){
            document.examQuery.examSubject[i].selected = true;
          }
        }
        for(i = 0;i < document.examQuery.examDescriptionMatching.length;i++){
          if(document.examQuery.examDescriptionMatching[i].value == document.examQuery.examDescriptionMatchingHidden.value){
            document.examQuery.examDescriptionMatching[i].selected = true;
          }
        }
        if(document.examQuery.examDescriptionMatchingHidden.value == "any"){
          document.examQuery.examDescriptionString.style.display = 'none';
        }
        else{
          document.examQuery.examDescriptionString.value = document.examQuery.examDescriptionStringHidden.value;
        }
        for(i = 0;i < document.examQuery.examAuthor.length;i++){
          if(document.examQuery.examAuthor[i].value == document.examQuery.examAuthorHidden.value){
            document.examQuery.examAuthor[i].selected = true;
          }
        }
        for(i = 0;i < document.examQuery.examAllottedTime.length;i++){
          if(document.examQuery.examAllottedTime[i].value == document.examQuery.examAllottedTimeHidden.value){
            document.examQuery.examAllottedTime[i].selected = true;
          }
        }
        for(i = 0;i < document.examQuery.examDepartmentalNumber.length;i++){
          if(document.examQuery.examDepartmentalNumber[i].value == document.examQuery.examDepartmentalNumberHidden.value){
            document.examQuery.examDepartmentalNumber[i].selected = true;
          }
        }
        for(i = 0;i < document.examQuery.examDateWhich.length;i++){
          if(document.examQuery.examDateWhich[i].value == document.examQuery.examDateWhichHidden.value){
            document.examQuery.examDateWhich[i].checked = true;
          }
        }
        for(i = 0;i < document.examQuery.examDateYear.length;i++){
          if(document.examQuery.examDateYear[i].value == document.examQuery.examDateYearHidden.value){
            document.examQuery.examDateYear[i].selected = true;
          }
        }
        for(i = 0;i < document.examQuery.examDateMonth.length;i++){
          if(document.examQuery.examDateMonth[i].value == document.examQuery.examDateMonthHidden.value){
            document.examQuery.examDateMonth[i].selected = true;
          }
        }
        for(i = 0;i < document.examQuery.examSortedBy.length;i++){
          if(document.examQuery.examSortedBy[i].value == document.examQuery.examSortedByHidden.value){
            document.examQuery.examSortedBy[i].selected = true;
          }
        }
        for(i = 0;i < document.examQuery.examDirection.length;i++){
          if(document.examQuery.examDirection[i].value == document.examQuery.examDirectionHidden.value){
            document.examQuery.examDirection[i].checked = true;
          }
        }
        for(i = 0;i < document.examQuery.examNumResults.length;i++){
          if(document.examQuery.examNumResults[i].value == document.examQuery.examNumResultsHidden.value){
            document.examQuery.examNumResults[i].selected = true;
          }
        }
        }
      if((activeTab == 'Edit Exam')&&(document.addExamQuestionForm.elements[document.addExamQuestionForm.length-1].value == 'switch to add by
question id')){
        for(i = 0;i < document.questionQuery.qSubject.length;i++){
          if(document.questionQuery.qSubject[i].value == document.questionQuery.hSubject.value){
            document.questionQuery.qSubject[i].selected = true;
          }
        }
        for(i = 0;i < document.questionQuery.qTopic.length;i++){
          if(document.questionQuery.qTopic[i].value == document.questionQuery.hTopic.value){
            document.questionQuery.qTopic[i].selected = true;
          }
        }
        for(i = 0;i < document.questionQuery.qQuestionType.length;i++){
          if(document.questionQuery.qQuestionType[i].value == document.questionQuery.hQuestionType.value){
            document.questionQuery.qQuestionType[i].selected = true;
          }
        }
        for(i = 0;i < document.questionQuery.qDifficulty.length;i++){
          if(document.questionQuery.qDifficulty[i].value == document.questionQuery.hDifficulty.value){
            document.questionQuery.qDifficulty[i].selected = true;
          }
        }
        for(i = 0;i < document.questionQuery.qSortedBy.length;i++){
          if(document.questionQuery.qSortedBy[i].value == document.questionQuery.hSortedBy.value){
            document.questionQuery.qSortedBy[i].selected = true;
          }
        }
        for(i = 0;i < document.questionQuery.qDirection.length;i++){
          if(document.questionQuery.qDirection[i].value == document.questionQuery.hDirection.value){
            document.questionQuery.qDirection[i].checked = true;
          }
        }
        for(i = 0;i < document.questionQuery.qNumResults.length;i++){
          if(document.questionQuery.qNumResults[i].value == document.questionQuery.hNumResults.value){
            document.questionQuery.qNumResults[i].selected = true;
          }
        }
      }
      if((activeTab == 'Exam Schedule')&&(document.newBatchScheduleForm)){
        displayDateElementsExamSchedule(document.newBatchScheduleForm);
        displayDateElementsExamScheduleTermSy(document.newBatchScheduleForm);
      }
      if(activeTab == 'Administer Exam'){
        if(document.forms[0].elements[1].value == "enabled"){
          administerExamRefreshIntervalId = setInterval("administerExamRefresh()", 3000);
        }
      }
      break;
    case 'User Accounts':
      if((activeTab == 'Tutor Account')&&(document.searchTutorAccount)){
        if(!document.searchTutorAccount.peerInSearch.checked){
            document.searchTutorAccount.degreeProgram.style.display='none';
        }
        if(!document.searchTutorAccount.facultyInSearch.checked){
            document.searchTutorAccount.department.style.display='none';
        }
        var thisSpanTutorSearchSchedule = document.getElementById("spanTutorSearchSchedule");
        if(document.searchTutorAccount.scheduleCriteria.value == "any"){
          thisSpanTutorSearchSchedule.style.display ='none';
        }
        else{
          thisSpanTutorSearchSchedule.style.display ='';
        }
      }
      if((activeTab == 'Tutor Account')&&(document.newTutorAccountDetails)){
        if(!((document.newTutorAccountDetails.tutorType[0].checked)||(document.newTutorAccountDetails.tutorType[1].checked))){
            document.newTutorAccountDetails.tutorType[0].checked = true;
        }
        displayCoursesOrDepartments(document.newTutorAccountDetails);
      }
      if((activeTab == 'Add Student List')&&(document.addStudentListForm)){
        if(document.addStudentListForm.password_0.value != ""){
          for(var i = 0;i < document.addStudentListForm.elements.length; i++){
            document.addStudentListForm.elements[i].disabled = true;
          }
          document.addStudentListForm.editStudentList.disabled = false;
          document.addStudentListForm.printStudentList.disabled = false;
        }
      }
      break;
        default:
      break;
    }
}
function unhide_examDescriptionMatchingString(){
  //alert("Please enter the word(s) filter");
  if(document.examQuery.examDescriptionMatching.value == "any"){
    document.examQuery.examDescriptionString.style.display = 'none';
  }
  else{
    document.examQuery.examDescriptionString.style.display = '';
    document.examQuery.examDescriptionString.focus();
  }
}
function insert_To_Upload_Field(index){
  window.clipboardData.setData("Text",document.clientUpload.elements[index].value);
  index++;
  index++;
  document.clientUpload.elements[index].focus();

}
function check_File(index){

  for(i = index; i < document.clientUpload.length;i++){

    if(document.clientUpload.elements[i].value != document.clientUpload.elements[i+2].value){
      alert ("Please click ctrl-V again right after clicking OK");
      window.clipboardData.setData("Text",document.clientUpload.elements[i].value);
      with(document.clientUpload.elements[i+2]){
        focus(); select()
      }
      return false;
    }
    i = i+2;
  }
  alert ("Okey pede na yan!");
  return true;
}
function compute_Total(index){
  if(!isNum(document.examSpecs.elements[index].value)){
    document.examSpecs.elements[index].focus();
    document.examSpecs.elements[index].select();
    alert ("Invalid string! Use numbers!");
    return false;
  }
  if(parseInt(document.examSpecs.elements[index].value) > parseInt(document.examSpecs.elements[index+1].value)){
    document.examSpecs.elements[index].focus();
    document.examSpecs.elements[index].select();
    alert ("That value exceeds the available quantity.\nPlease type a value <= to the available quantity");
    return false;
  }
  else{
    //compute total freq for true or false...
    colSum = 0;
    for(i = 0;i < 5;i++){
      colSum = colSum + parseInt(document.examSpecs.elements[i*2].value);
    }
    document.examSpecs.elements[30].value = colSum;
    //compute total freq for true or false...
    colSum = 0;
    for(i = 5;i < 10;i++){
      colSum = colSum + parseInt(document.examSpecs.elements[i*2].value);
    }
    document.examSpecs.elements[31].value = colSum;
    colSum = 0;
    for(i = 10;i < 15;i++){
      colSum = colSum + parseInt(document.examSpecs.elements[i*2].value);
    }
    document.examSpecs.elements[32].value = colSum;
  }
}
function isNum(passedVal) {         // Is this a number?
  if (passedVal == "") {
    return false
  }
  for (i=0; i<passedVal.length; i++) {
    if (passedVal.charAt(i) < "0") {
      return false
    }
    if (passedVal.charAt(i) > "9") {
      return false
    }
  }
  return true
}
function show_Hide(spanId, buttonId, buttonIdA){
  var thisSpan = document.getElementById(spanId);
  var thisButton = document.getElementById(buttonId);
  var thisButtonA = document.getElementById(buttonIdA);
  switch(thisButton.value){
    case 'hide':
      thisSpan.style.display ='none';
      thisButtonA.style.display ='none';
      thisButton.value='show';
      break;
    case ' _ ':
      thisSpan.style.display ='none';
      thisButton.value='[  ]';
      break;
    case 'show':
      thisSpan.style.display ='';
      thisButtonA.style.display ='';
      thisButton.value='hide';
      break;
    case '[  ]':
      thisSpan.style.display ='';
      thisButton.value=' _ ';
      break;
    default:
      break;
  }
}
function maximizeMinimize(buttonId, formId){
  var thisButton = document.getElementById(buttonId);
  var thisForm = document.all[formId];
  if(thisButton.value == "maximize all"){
    thisButton.value='minimize all';
    var buttonValToFire = "[  ]";
  }
  else{
    thisButton.value='maximize all';
    var buttonValToFire = " _ ";
  }
  if(thisForm[0].name != formId.substr(0, formId.indexOf("_"))){
    if(thisForm[0].value == buttonValToFire){
      thisForm[0].click();
    }
  }else{
    for(var i = 0;i < thisForm.length;i++){
      for(var j = 0;j < thisForm[i].length;j++){
        if((thisForm[i].elements[j].type == "button")&&(thisForm[i].elements[j].value == buttonValToFire)){
          thisForm[i].elements[j].click();
        }
      }
    }
  }
}
function saveExamItemWeight(currentForm){
  var wNew = currentForm.wNew.value;
  var re = /\d|\d\d/g;
  if(!isNum(wNew)){
    currentForm.wNew.value = currentForm.wOld.value;
    alert("error: please use numeric values.");
    return false;
  }
  else{
    if(parseInt(wNew, 10) <= 0){
      currentForm.wNew.value = currentForm.wOld.value;
      alert("error: please use values GREATER than or EQUAL to '1'");
      return false;
    }
  }
  eval("var   subWindow   =   window.open('/toes/admin/exam_Item_Weight.php?exam_id="   +   currentForm.examCurrent.value   +   "&question_id="   +
currentForm.questionIdToDelete.value  +  "&pointAssigned="  +  currentForm.wNew.value  +  "','subWindow','WIDTH="  +  (screen.width  *  .30)   +
",HEIGHT=" + (screen.height * .30) + ",status');");
  currentForm.wOld.value = currentForm.wNew.value;
}
function examDateResetYear(currentForm){
  currentForm.submit();
}
function displayCollegeCourses(currentForm){
  var        courseArray        =        currentForm.elements[(currentForm.elements.length        -        currentForm.college.length)        +
currentForm.college.selectedIndex].value.split(",");
  currentForm.course.options.length = 0;
  for(var i = 0;i < courseArray.length;i++){
    currentForm.course.options[i] = new Option(courseArray[i], courseArray[i]);
  }
  if(currentForm.college.options[0].text == "please select college"){
    currentForm.college.options[0] = null;
  }
}
function checkStudentAccountDetails(currentForm){
  var fieldNames = new Array(9);
  fieldNames[0] = "Student number (first)";
  fieldNames[1] = "Student number (last)";
  fieldNames[2] = "First name";
  fieldNames[3] = "Middle name";
  fieldNames[4] = "Last name";
  fieldNames[5] = "College";
  fieldNames[6] = "Course";
  fieldNames[7] = "Mobile phone";
  fieldNames[8] = "Land phone";
  fieldNames[9] = "Email";
  fieldNames[10] = "Password";

  var errorText = " error(s) found:\n";
  var errorNumber = 0;
  for(var i = 0;i < 10;i++){
    if((currentForm.elements[i].value.length == 0)&&!((i > 6)&&(i < 10))){
      errorNumber++;
      errorText = errorText + errorNumber + ". " + fieldNames[i] + " is empty\n";
    }
  }
  var blankContactInfo = 0;
  for(var i = 7;i < 10;i++){
    if(currentForm.elements[i].value.length == 0){
      blankContactInfo++;
    }
  }
  if(blankContactInfo == 3){
    errorNumber++;
    errorText = errorText + errorNumber + ". " + "Please supply atleast one of the following:\n";
    errorText = errorText + "\tMobile phone\n";
    errorText = errorText + "\tLand phone\n";
    errorText = errorText + "\temail\n";
  }
  i = 10;
  if(currentForm.elements[i].value.length == 0){
    errorNumber++;
    errorText = errorText + errorNumber + ". " + fieldNames[i] + " is empty\n";
  }
  if(!isNum(currentForm.studentNumberYear.value)){
    currentForm.studentNumberYear.focus();
    currentForm.studentNumberYear.select();
    alert ("Invalid string! Use numbers!");
    return false;
  }
  if(!isNum(currentForm.studentNumberNumber.value)){
    currentForm.studentNumberNumber.focus();
    currentForm.studentNumberNumber.select();
    alert ("Invalid string! Use numbers!");
    return false;
  }
  if(errorNumber == 0){
    var confirmText = "Do you want to save the following details?";
    confirmText = confirmText + "\nStudent number: " + currentForm.studentNumberYear.value + "-" + currentForm.studentNumberNumber.value;
    for(var i = 2;i < 11;i++){
      confirmText = confirmText + "\n" + fieldNames[i] + ": " + currentForm.elements[i].value;
    }
    var studentConfirm= confirm(confirmText);
    if(studentConfirm){
      return true;
    }
    else{
      return false;
    }
  }
  else{
    alert(errorNumber + errorText);
    return false;
  }
}
function checkStudentNumber(currentForm){
  var re = /\d\d\d\d/;
  if(currentForm.studentNumberYear.value.search(re) == -1){
    currentForm.studentNumberYear.focus();
    currentForm.studentNumberYear.select();
    alert ("Invalid string! Use numbers!");
    return false;
  }
  var re = /\d\d\d\d\d/;
  if(currentForm.studentNumberNumber.value.search(re) == -1){
    currentForm.studentNumberNumber.focus();
    currentForm.studentNumberNumber.select();
    alert ("Invalid string! Use numbers!");
    return false;
  }
}
function confirmDeleteStudent(currentForm){
  var confirmDelete = confirm("Are you sure you want to delete this record?");
  if(confirmDelete){
    return true;
  }
  else{
    currentForm.confirmDeleteStudentAccount.value = "";
  }
}
function resetStudentAccountDetails(currentForm){
  currentForm.course.options.length = 0;
  currentForm.course.options[0] = new Option(currentForm.courseH.value, currentForm.courseH.value);
}
function displayMonthDays(currentForm){
  if((currentForm.bdayMonth.value       ==       "4")||(currentForm.bdayMonth.value       ==       "6")||(currentForm.bdayMonth.value       ==
"9")||(currentForm.bdayMonth.value == "11")){
    currentForm.bdayDay.options.length = 0;
    for(var i = 0;i < 30;i++){
      currentForm.bdayDay.options[i] = new Option(i+1, i+1);
    }
  }
  else{
    if(currentForm.bdayMonth.value == "2"){
      currentForm.bdayDay.options.length = 0;
      for(var i = 0;i < 28;i++){
        currentForm.bdayDay.options[i] = new Option(i+1, i+1);
      }
    }
    else{
      currentForm.bdayDay.options.length = 0;
      for(var i = 0;i < 31;i++){
        currentForm.bdayDay.options[i] = new Option(i+1, i+1);
      }
    }
  }
}
function checkTutorAccountDetails(currentForm){
  var fieldNames = new Array(11);
  fieldNames[0] = "First name";
  fieldNames[1] = "Middle name";
  fieldNames[2] = "Last name";
  fieldNames[3] = "Birthday month";
  fieldNames[4] = "Birthday day";
  fieldNames[5] = "Birthday year";
  fieldNames[6] = "Mobile phone";
  fieldNames[7] = "Land phone";
  fieldNames[8] = "Email address";
  fieldNames[9] = "Tutor type";
  fieldNames[10] = "Tutor typeB";
  fieldNames[11] = "Course/Department";
  fieldNames[12] = "Username";
  fieldNames[13] = "Password";

  var errorText = " error(s) found:\n";
  var errorNumber = 0;
  var blankContactInfo = 0;
  for(var i = 0;i < 14;i++){
    if((currentForm.elements[i].value.length == 0)&&!((i > 2)&&(i < 6))&&!((i > 8)&&(i < 12))){
      if((i > 5)&&(i < 9)){
        blankContactInfo++;
        if(blankContactInfo == 3){
          errorNumber++;
          errorText = errorText + errorNumber + ". " + "Please supply atleast one of the following:\n";
          errorText = errorText + "\tMobile phone\n";
          errorText = errorText + "\tLand phone\n";
          errorText = errorText + "\temail\n";
        }
      }
      else{
        errorNumber++;
        errorText = errorText + errorNumber + ". " + fieldNames[i] + " is empty\n";
      }
    }
  }
  if(errorNumber == 0){
    if(currentForm.passwordTutor.value.length < 8){
      alert("error: please use passwords of length 8 or more");
      currentForm.passwordTutor.select();
      return false;
    }
    var monthName = new Array('January', 'February', 'March', 'April', 'May', 'June', 'July', 'August', 'September', 'October', 'November',
'December');
    var confirmText = "Do you want to save the following details?";
    for(var i = 0;i < 14;i++){
      if((i == 10)){
        continue;
      }
      if((i > 2)&&(i < 6)){
        confirmText = confirmText + "\n" + "Birthday: " + monthName[currentForm.elements[3].value-1] + " " + currentForm.elements[4].value + ",
" + currentForm.elements[5].value;
        i = 5;
        continue;
      }
      if(i == 9){
        if(currentForm.tutorType[0].checked){
          confirmText = confirmText + "\n" + fieldNames[i] + ": peer";
        }
        else{
          confirmText = confirmText + "\n" + fieldNames[i] + ": faculty";
        }
        continue;
      }
      confirmText = confirmText + "\n" + fieldNames[i] + ": " + currentForm.elements[i].value;
    }
    var studentConfirm= confirm(confirmText);
    if(studentConfirm){
      return true;
    }
    else{
      return false;
    }
  }
  else{
    alert(errorNumber + errorText);
    return false;
  }
}
function displayCoursesOrDepartments(currentForm){
//  alert(currentForm.deptCourseH.value);
  var selectedI;
  if(currentForm.tutorType[0].checked){
    for(var i = 0;i < currentForm.length;i++){
      if(currentForm.elements[i].name == "degreeProgramIdStringH"){
        var hiddenFieldIndexA = i;
      }
      if(currentForm.elements[i].name == "degreeProgramNameStringH"){
        var hiddenFieldIndexB = i;
      }
    }
    var degreeProgramIdArray = currentForm.elements[hiddenFieldIndexA].value.split(",");
    var degreeProgramArray = currentForm.elements[hiddenFieldIndexB].value.split(",");
    currentForm.deptCourse.options.length = 0;
    for(var i = 0;i < degreeProgramArray.length;i++){
      currentForm.deptCourse.options[i] = new Option(degreeProgramArray[i], degreeProgramIdArray[i]);
      if(currentForm.deptCourse.options[i].value == currentForm.deptCourseH.value){
        currentForm.deptCourse.options[i].defaultSelected = true;
        currentForm.deptCourse.options[i].selected = true;
      }
    }
  }
  else{
    for(var i = 0;i < currentForm.length;i++){
      if(currentForm.elements[i].name == "departmentIdStringH"){
        var hiddenFieldIndexA = i;
      }
      if(currentForm.elements[i].name == "departmentNameStringH"){
        var hiddenFieldIndexB = i;
      }
    }
    var departmentIdArray = currentForm.elements[hiddenFieldIndexA].value.split(",");
    var departmentArray = currentForm.elements[hiddenFieldIndexB].value.split(",");
    currentForm.deptCourse.options.length = 0;
    for(var i = 0;i < departmentArray.length;i++){
      currentForm.deptCourse.options[i] = new Option(departmentArray[i], departmentIdArray[i]);
      if(currentForm.deptCourse.options[i].value == currentForm.deptCourseH.value){
        currentForm.deptCourse.options[i].defaultSelected = true;
        currentForm.deptCourse.options[i].selected = true;
      }
    }
  }
}

function resetEditStudentAccountDetails(currentForm){
  currentForm.tutorType[0].checked = true;
  displayCoursesOrDepartments(document.newTutorAccountDetails);
}

function displayDegreeProgramsInSearch(currentForm){
  if(currentForm.peerInSearch.checked){
    currentForm.degreeProgram.style.display='';
  }
  else{
    currentForm.degreeProgram.style.display='none';
  }
  if((!currentForm.peerInSearch.checked)&&(!currentForm.facultyInSearch.checked)){
    alert("error: The search filter must include at least one tutor type.");
    currentForm.degreeProgram.style.display='';
    currentForm.peerInSearch.checked = true;
  }
}
function displayDepartmentsInSearch(currentForm){
  if(currentForm.facultyInSearch.checked){
    currentForm.department.style.display='';
  }
  else{
    currentForm.department.style.display='none';
  }
  if((!currentForm.peerInSearch.checked)&&(!currentForm.facultyInSearch.checked)){
    alert("error: The search filter must include at least one tutor type.");
    currentForm.department.style.display='';
    currentForm.facultyInSearch.checked = true;
  }
}
function resetTutorAccountSearch(currentForm){
  currentForm.degreeProgram.style.display='';
  currentForm.department.style.display='';
}
function displayHideSchedule(currentForm){
  var thisSpan = document.getElementById("spanTutorSearchSchedule");
  if(currentForm.scheduleCriteria.value == "any"){
    thisSpan.style.display ='none';
  }
  else{
    thisSpan.style.display ='';
  }
}
function confirmDeleteLrcAccount(linkIndex){
  var lrcAccountTableDataArray = document.lrcAccountTableData.elements[linkIndex].value.split(",");
  var confirmationMessage = "Are you sure you want to delete the following:\n";
  confirmationMessage = confirmationMessage + "\nFirst Name: " + lrcAccountTableDataArray[1];
  confirmationMessage = confirmationMessage + "\nMiddle Name: " + lrcAccountTableDataArray[2];
  confirmationMessage = confirmationMessage + "\nLast Name: " + lrcAccountTableDataArray[3];
  confirmationMessage = confirmationMessage + "\nPersonnel Type: " + lrcAccountTableDataArray[4];
  var lrcConfirm= confirm(confirmationMessage);
  if(lrcConfirm){
    return true;
  }
  else{
    return false;
  }
}
function sendRequestIdToApprove(requestIdToApprove){
  document.approveTutorialRequestForm.requestIdToApproveH.value = requestIdToApprove;
  document.approveTutorialRequestForm.submit();
}
function sendRequestIdToDisapprove(requestIdToDisapprove){
  document.approveTutorialRequestForm.requestIdToDisapproveH.value = requestIdToDisapprove;
  document.approveTutorialRequestForm.submit();
}
function checkTimeslots(){
  //function for eliminating overlapping time in a tutor's requested timeslot...
}
function verifySelectTutorForTutorial(){
  for(var i = 0;i < document.selectTutorForTutorial.length;i++){
    if((document.selectTutorForTutorial.elements[i].name == 'tutorForTheTutorial')&&(document.selectTutorForTutorial.elements[i].checked)){
      return true;
    }
  }
  alert("error:\nPlease select a tutor for the tutorial!");
  return false;
}
function sendTutorialIdToCancel(tutorialIdToCancel){
  document.cancelTutorialScheduleForm.tutorialIdToCancelH.value = tutorialIdToCancel;
  if(confirm("Warning you are about to cancel a Tutorial Schedule.\nPlease click on OK to continue the cancellation otherwise click on
CANCEL")){
    document.cancelTutorialScheduleForm.submit();
  }
  else{
    return false;
  }
}
function sendTutorialIdToManage(tutorialIdToManage){
  document.cancelTutorialScheduleForm.tutorialIdToManageH.value = tutorialIdToManage;
  document.cancelTutorialScheduleForm.submit();
}
function newTutorialScheduleSubject(currentForm){
  currentForm.submitMode.value = "eventListener";
  //remove the checks on the tutor checkboxes
  for(var i = 0;i < currentForm.length;i++){
    if((currentForm.elements[i].name == 'tutor')&&(currentForm.elements[i].checked)){
      alert(currentForm.elements[i].label);
    }
  }
  currentForm.submit();
}
function newTutorialScheduleTutor(currentForm){
  currentForm.submitMode.value = "eventListener";
  currentForm.submit();
}
function newTutorialSchedulePrefDay(){
  document.addTutorialScheduleForm.prefTimeFrom.options.length = 0;
  document.addTutorialScheduleForm.prefTimeTo.options.length = 0;
  dayTimeArray = new Array();
  if(document.addTutorialScheduleForm.strictTutorSchedule.checked){
    dayTimeArray.Monday = document.addTutorialScheduleForm.MondayH.value;
    dayTimeArray.Tuesday = document.addTutorialScheduleForm.TuesdayH.value;
    dayTimeArray.Wednesday = document.addTutorialScheduleForm.WednesdayH.value;
    dayTimeArray.Thursday = document.addTutorialScheduleForm.ThursdayH.value;
    dayTimeArray.Friday = document.addTutorialScheduleForm.FridayH.value;
  }
  else{
    dayTimeArray.Monday = "08:00-17:30";
    dayTimeArray.Tuesday = "08:00-17:30";
    dayTimeArray.Wednesday = "08:00-17:30";
    dayTimeArray.Thursday = "08:00-17:30";
    dayTimeArray.Friday = "08:00-17:30";
  }

  var prefTimeArray =
dayTimeArray[document.addTutorialScheduleForm.prefDay.options[document.addTutorialScheduleForm.prefDay.selectedIndex].value].split(",");

  var lowest = "";
  var highest = "";
  for(var i = 0;i < prefTimeArray.length;i++){
    //alert(prefTimeArray[i]);
    var prefTimeArrayElem = prefTimeArray[i].split("-");
    if((lowest == "")&&(highest == "")){
      lowest = prefTimeArrayElem[0];
      highest = prefTimeArrayElem[1];
    }
    else{
      //get lowest
      var timeA = prefTimeArrayElem[0].split(":");
      if(parseInt(timeA[0], 10) < parseInt(lowest.substring(0, lowest.indexOf(":")), 10)){
        lowest = prefTimeArrayElem[0];
      }
      if((parseInt(timeA[0], 10) == parseInt(lowest.substring(0, lowest.indexOf(":")), 10))&&(parseInt(timeA[1], 10) <
parseInt(lowest.substring(lowest.indexOf(":")+1), 10))){
        lowest = prefTimeArrayElem[0];
      }
      //get highest
      var timeB = prefTimeArrayElem[1].split(":");
      if(parseInt(timeB[0], 10) > parseInt(highest.substring(0, highest.indexOf(":")), 10)){
        highest = prefTimeArrayElem[1];
      }
      if((parseInt(timeB[0], 10) == parseInt(highest.substring(0, highest.indexOf(":")), 10))&&(parseInt(timeB[1], 10) >
parseInt(highest.substring(highest.indexOf(":")+1), 10))){
        highest = prefTimeArrayElem[1];
      }
    }
  }
  //alert("["+lowest+"]["+highest+"]");

  timeValArray = new Array();
  var timeValCurrent = lowest;
  timeValArray[timeValArray.length] = lowest;
  while(timeValCurrent != highest){
    //add 30 mins
    if((parseInt(timeValCurrent.substring(timeValCurrent.indexOf(":")+1), 10) + 30) == 60){
      timeValCurrent = eval(parseInt(timeValCurrent.substring(0, timeValCurrent.indexOf(":")), 10) + 1) + ":00";
    }
    else{
      timeValCurrent = timeValCurrent.substring(0, timeValCurrent.indexOf(":")) + ":30";
    }
    timeValArray[timeValArray.length] = timeValCurrent;
    //alert(timeValCurrent);
  }
  for(var i = 0;i < timeValArray.length;i++){
    if(i != timeValArray.length - 1){
      document.addTutorialScheduleForm.prefTimeFrom.options[document.addTutorialScheduleForm.prefTimeFrom.options.length] = new
Option(timeConvertForDisplay(timeValArray[i]), timeValArray[i]);
    }
    if(i != 0){
      document.addTutorialScheduleForm.prefTimeTo.options[document.addTutorialScheduleForm.prefTimeTo.options.length] = new
Option(timeConvertForDisplay(timeValArray[i]), timeValArray[i]);
    }
  }
  displayDayInDateFormat();
}
function timeConvertForDisplay(time){
  var timeArray = time.split("-");
  for(var i = 0;i < timeArray.length;i++){
    timeExt = 'AM';
    var timeArrayTemp = timeArray[i].split(":");
    if(timeArrayTemp[0].substring(0,1) == "0"){
      timeArrayTemp[0] = timeArrayTemp[0].substring(1,2);
    }
    if(timeArrayTemp[0] > 11){
      timeExt = 'PM';
    }
    if(timeArrayTemp[0] > 12){
      timeArrayTemp[0] = timeArrayTemp[0] - 12;
    }
    timeArray[i] = timeArrayTemp.join(":") + " " + timeExt;
  }
  return timeArray.join("-");
}
function displayDayInDateFormat(dateModifier){
  dayNameToNum = new Array();
  dayNameToNum["Monday"] = 1;
  dayNameToNum["Tuesday"] = 2;
  dayNameToNum["Wednesday"] = 3;
  dayNameToNum["Thursday"] = 4;
  dayNameToNum["Friday"] = 5;
  dayNumToName = new Array();
  dayNumToName[1] = "Monday";
  dayNumToName[2] = "Tuesday";
  dayNumToName[3] = "Wednesday";
  dayNumToName[4] = "Thursday";
  dayNumToName[5] = "Friday";
  switch(dateModifier){
    case 'prev':
      var prefDate = new Date();
      var prefDateArray = document.addTutorialScheduleForm.prefDate.value.split("-");
      prefDate.setYear(parseInt(prefDateArray[0],10));
      prefDate.setMonth(parseInt(prefDateArray[1],10)-1);
      prefDate.setDate(parseInt(prefDateArray[2])-7);
      document.addTutorialScheduleForm.dateModifierCounter.value   =   (parseInt(document.addTutorialScheduleForm.dateModifierCounter.value)   -
1).toString();
      if(document.addTutorialScheduleForm.dateModifierCounter.value == "0"){
        document.addTutorialScheduleForm.prefDayPrev.style.display = 'none';
      }
      else{
        document.addTutorialScheduleForm.prefDayPrev.style.display = '';
      }
      break;
    case 'next':
      var prefDate = new Date();
      var prefDateArray = document.addTutorialScheduleForm.prefDate.value.split("-");
      prefDate.setYear(parseInt(prefDateArray[0],10));
      prefDate.setMonth(parseInt(prefDateArray[1],10)-1);
      prefDate.setDate(parseInt(prefDateArray[2])+7);
      document.addTutorialScheduleForm.dateModifierCounter.value   =   (parseInt(document.addTutorialScheduleForm.dateModifierCounter.value)   +
1).toString();
      if(document.addTutorialScheduleForm.dateModifierCounter.value == "0"){
        document.addTutorialScheduleForm.prefDayPrev.style.display = 'none';
      }
      else{
        document.addTutorialScheduleForm.prefDayPrev.style.display = '';
      }
      break;
    default:
      var prefDate = new Date();
      var dayToday = prefDate.getDay();
      var prefDay = dayNameToNum[document.addTutorialScheduleForm.prefDay[document.addTutorialScheduleForm.prefDay.selectedIndex].text];
      //ensure 2 day preparation before the prefDay
      for(var i = 0;i < 2;i++){
        prefDate.setDate(prefDate.getDate()+1);
        if((prefDate.getDay() == 6)||(prefDate.getDay() == 0)){
          i--;
        }
      }
      while(prefDate.getDay() != prefDay){
        prefDate.setDate(prefDate.getDate()+1);
      }
      document.addTutorialScheduleForm.prefDayPrev.style.display = 'none';
      break;
  }
  document.addTutorialScheduleForm.prefDateDisplay.value   =   prefDate.toLocaleDateString().substring(prefDate.toLocaleDateString().indexOf(",
")+2);
  var myDate;
  myDate = prefDate.getFullYear();
  if(prefDate.getMonth()+1 < 10){
    myDate = myDate+"-0"+(prefDate.getMonth()+1);
  }
  else{
    myDate = myDate+"-"+(prefDate.getMonth()+1);
  }
  if(prefDate.getDate()+1 < 10){
    myDate = myDate+"-0"+prefDate.getDate();
  }
  else{
    myDate = myDate+"-"+prefDate.getDate();
  }
  document.addTutorialScheduleForm.prefDate.value = myDate;
  //alert(document.addTutorialScheduleForm.prefDate.value);
}
function verifyPrefTime(){
  var timeFrom = document.addTutorialScheduleForm.prefTimeFrom.value;
  var timeTo = document.addTutorialScheduleForm.prefTimeTo.value;
  if(!((parseInt(timeFrom.substring(0,                  timeFrom.indexOf(":")))                  <                 parseInt(timeTo.substring(0,
timeTo.indexOf(":"))))||((parseInt(timeFrom.substring(0,            timeFrom.indexOf(":")))           ==           parseInt(timeTo.substring(0,
timeTo.indexOf(":"))))&&(parseInt(timeFrom.substring(timeFrom.indexOf(":")+1)) < parseInt(timeTo.substring(timeTo.indexOf(":")+1)))))){
    alert("error:\n\tInvalid time interval!");
    return false;
  }
  dayTimeArray = new Array();
  if(document.addTutorialScheduleForm.strictTutorSchedule.checked){
    dayTimeArray.Monday = document.addTutorialScheduleForm.MondayH.value;
    dayTimeArray.Tuesday = document.addTutorialScheduleForm.TuesdayH.value;
    dayTimeArray.Wednesday = document.addTutorialScheduleForm.WednesdayH.value;
    dayTimeArray.Thursday = document.addTutorialScheduleForm.ThursdayH.value;
    dayTimeArray.Friday = document.addTutorialScheduleForm.FridayH.value;
  }
  else{
    dayTimeArray.Monday = "08:00-17:30";
    dayTimeArray.Tuesday = "08:00-17:30";
    dayTimeArray.Wednesday = "08:00-17:30";
    dayTimeArray.Thursday = "08:00-17:30";
    dayTimeArray.Friday = "08:00-17:30";
  }
  var prefTimeArray  = new Array();
  var cannotBeCombined = true;
  var                                                                 prefTimeTemp                                                                 =
dayTimeArray[document.addTutorialScheduleForm.prefDay.options[document.addTutorialScheduleForm.prefDay.selectedIndex].value].split(",");
  for(var i = 0;i < prefTimeTemp.length;i++){
    for(var j = 0;j < prefTimeArray.length;j++){
      if(prefTimeArray[j].substring(prefTimeArray[j].indexOf("-")+1) == prefTimeTemp[i].substring(0, prefTimeTemp[i].indexOf("-"))){
        prefTimeArray[j]         =         prefTimeArray[j].substring(0,         prefTimeArray[j].indexOf("-"))         +         "-"         +
prefTimeTemp[i].substring(prefTimeTemp[i].indexOf("-")+1);
        cannotBeCombined = false;
        break;
      }
    }
    if(cannotBeCombined){
      prefTimeArray[prefTimeArray.length] = prefTimeTemp[i];
    }
  }
  for(var i = 0;i < prefTimeArray.length;i++){
    var timeVal = prefTimeArray[i].split("-");
    var upperLess = false;
    var lowerMore = false;
    if(parseInt(timeTo.substring(0, timeTo.indexOf(":")), 10) < parseInt(timeVal[1].substring(0, timeVal[1].indexOf(":")), 10)){
      upperLess = true;
      //alert("passed upper");
    }
    if((parseInt(timeTo.substring(0,     timeTo.indexOf(":")),     10)     ==     parseInt(timeVal[1].substring(0,     timeVal[1].indexOf(":")),
10))&&(parseInt(timeTo.substring(timeTo.indexOf(":")+1), 10) <= parseInt(timeVal[1].substring(timeVal[1].indexOf(":")+1), 10))){
      upperLess = true;
      //alert("passed upper");
    }
    if(parseInt(timeFrom.substring(0, timeFrom.indexOf(":")), 10) > parseInt(timeVal[0].substring(0, timeVal[0].indexOf(":")), 10)){
      lowerMore = true;
      //alert("passed lower");
    }
    if((parseInt(timeFrom.substring(0,    timeFrom.indexOf(":")),    10)    ==    parseInt(timeVal[0].substring(0,    timeVal[0].indexOf(":")),
10))&&(parseInt(timeFrom.substring(timeFrom.indexOf(":")+1), 10) >= parseInt(timeVal[0].substring(timeVal[0].indexOf(":")+1), 10))){
      lowerMore = true;
      //alert("passed lower");
    }
    if((upperLess)&&(lowerMore)){
      break;
    }
    else{
      if(i == prefTimeArray.length - 1){
        var errorText = "error\n\n";
        errorText = errorText + "Please make sure that your preferred time\nis within one of these time intervals:\n";
        for(var j = 0;j < prefTimeArray.length;j++){
          errorText = errorText + "\n\t" + timeConvertForDisplay(prefTimeArray[j]);
        }
        alert(errorText);
      }
    }
  }
  return true;
}
function relaxOrStrictTutorSchedule(currentForm){
  currentForm.submitMode.value = "eventListener";
  currentForm.submit();
}
function checkNewTutorialScheduleDetails(currentForm){
  currentForm.submit();
}
function verifyExamSpecsFormSubmit(currentForm){
  currentForm.qtyTfStr.value = '';
  currentForm.qtyMcStr.value = '';
  currentForm.qtyMtStr.value = '';
  for(var i = 0;i < currentForm.length;i++){
    if(currentForm.elements[i].name == 'qtyTf'){
      currentForm.qtyTfStr.value = currentForm.qtyTfStr.value + currentForm.elements[i].value + ",";
    }
    if(currentForm.elements[i].name == 'qtyMc'){
      currentForm.qtyMcStr.value = currentForm.qtyMcStr.value + currentForm.elements[i].value + ",";
    }
    if(currentForm.elements[i].name == 'qtyMt'){
      currentForm.qtyMtStr.value = currentForm.qtyMtStr.value + currentForm.elements[i].value + ",";
    }
  }
  currentForm.qtyTfStr.value = currentForm.qtyTfStr.value.substring(0, currentForm.qtyTfStr.value.length - 1);
  currentForm.qtyMcStr.value = currentForm.qtyMcStr.value.substring(0, currentForm.qtyMcStr.value.length - 1);
  currentForm.qtyMtStr.value = currentForm.qtyMtStr.value.substring(0, currentForm.qtyMtStr.value.length - 1);
}
function setBatchScheduleToAdminister(batchScheduleIdToAdminister){
  document.editCancelBatchScheduleForm.batchScheduleIdToAdministerH.value = batchScheduleIdToAdminister;
  document.editCancelBatchScheduleForm.submit();
}
function setBatchScheduleToEdit(batchScheduleIdToEdit){
  document.editCancelBatchScheduleForm.batchScheduleIdToEditH.value = batchScheduleIdToEdit;
  document.editCancelBatchScheduleForm.submit();
}
function setBatchScheduleToCancel(batchScheduleIdToCancel){
  document.editCancelBatchScheduleForm.batchScheduleIdToCancelH.value = batchScheduleIdToCancel;
  document.editCancelBatchScheduleForm.submit();
}
function checkTimeTextInput(currentElement){
  var inputTime = currentElement.value;
  var re = /\d?\d:\d\d[aApP]{1}[mM]{1}/g;

  if(inputTime.search(re) == -1){
    currentElement.focus();
    currentElement.select();
    alert("error: please use the following format: \n\t'hh:mmAM'\n\t'hh:mmPM'");
    return false;
  }
  //check if time is valid
  if(parseInt(inputTime.substring(0, inputTime.indexOf(":"))) > 12){
    currentElement.focus();
    currentElement.select();
    alert("error: ivalid time");
    return false;
  }
  if(parseInt(inputTime.substring(inputTime.indexOf(":") + 1)) > 59){
    currentElement.focus();
    currentElement.select();
    alert("error: ivalid time");
    return false;
  }
}
function checkAvailableSlotsInput(currentElement){
  if(!isNum(currentElement.value)){
    currentElement.focus();
    currentElement.select();
    alert("error: ivalid input please use numbers");
    return false;
  }
  else{
    currentElement.value = parseInt(currentElement.value, 10);
  }
}
function displayDateElementsExamSchedule(currentForm){
  var currentDate = new Date();
  var currentMonthSelected = currentForm.month.value;
  var startIndex = 1;
  var additionalDay = 2;

  if((currentMonthSelected == currentForm.month.options[0].value)&&(currentDate.getMonth() + 1 != currentForm.month.options[0].value)){
    //check default date element values
    startIndex = currentDate.getDate() + additionalDay;
    var currentMonthNumOfDays = 0;
    var currentMonth = currentDate.getMonth() + 1;
    if((currentMonth == "4")||(currentMonth == "6")||(currentMonth == "9")||(currentMonth == "11")){
      currentMonthNumOfDays = 30;
    }
    else{
      if(currentMonth == "2"){
        currentMonthNumOfDays = 28;
      }
      else{
        currentMonthNumOfDays = 31;
      }
    }
    if(startIndex > currentMonthNumOfDays){
      startIndex = startIndex - currentMonthNumOfDays;
    }
  }
  else{
    if(currentMonthSelected == currentDate.getMonth() + 1){
      startIndex = currentDate.getDate() + additionalDay;
      //if the additional days exceed the numOfDays on the currentMonthSelected currentMonthSelected++
      var currentMonthNumOfDays = 0;
      if((currentMonthSelected == "4")||(currentMonthSelected == "6")||(currentMonthSelected == "9")||(currentMonthSelected == "11")){
        currentMonthNumOfDays = 30;
      }
      else{
        if(currentMonthSelected == "2"){
          currentMonthNumOfDays = 28;
        }
        else{
          currentMonthNumOfDays = 31;
        }
      }
      if(startIndex > currentMonthNumOfDays){
        currentMonthSelected++;
        currentMonthSelected = ((currentMonthSelected - 1) % 12) + 1;
        currentForm.month.options[0] = null;
        for(var i = 0;i < currentForm.month.length;i++){
          if(currentForm.month.options[i].value == currentMonthSelected){
            currentForm.month.options[i].selected = true;
          }
        }
        startIndex = startIndex - currentMonthNumOfDays;
      }
    }
  }
  if((currentMonthSelected == "4")||(currentMonthSelected == "6")||(currentMonthSelected == "9")||(currentMonthSelected == "11")){
    currentForm.day.options.length = 0;
    for(var i = startIndex;i <= 30;i++){
      currentForm.day.options[currentForm.day.options.length] = new Option(i, i);
    }
  }
  else{
    if(currentMonthSelected == "2"){
      currentForm.day.options.length = 0;
      for(var i = startIndex;i <= 28;i++){
        currentForm.day.options[currentForm.day.options.length] = new Option(i, i);
      }
    }
    else{
      currentForm.day.options.length = 0;
      for(var i = startIndex;i <= 31;i++){
        currentForm.day.options[currentForm.day.options.length] = new Option(i, i);
      }
    }
  }
  var yearToAdvance = 0;
  var tempIndex = parseInt(currentForm.month.options[0].value);
  while(tempIndex <= parseInt(currentForm.month.options[currentForm.month.selectedIndex].value)){
    if(tempIndex % 12 == 1){
      yearToAdvance++;
    }
    tempIndex++;
  }
  currentForm.year.value = currentDate.getFullYear() + yearToAdvance;
}
function displayDateElementsExamScheduleTermSy(currentForm){
  var currentDate = new Date();
  currentForm.term.options[currentForm.term.options.length] = new Option("first", "first");
  currentForm.term.options[currentForm.term.options.length] = new Option("second", "second");
  currentForm.term.options[currentForm.term.options.length] = new Option("summer", "summer");
  var cm = currentForm.month.value;
  if((cm == 4)||(cm == 5)){
    currentForm.term.options[2].selected = true;
  }
  else{
    if((cm >= 6)&&(cm <= 10)){
      currentForm.term.options[0].selected = true;
    }
    else{
      currentForm.term.options[1].selected = true;
    }
  }
  var cy = parseInt(currentForm.year.value, 10);
  if((cm >= 1)&&(cm < 6)){
    currentForm.syFrom.value = cy - 1;
    currentForm.syTo.value = cy;
  }
  else{
    currentForm.syFrom.value = cy;
    currentForm.syTo.value = cy + 1;
  }
}
function newBatchScheduleCheck(currentForm){
  var textboxArray = new Array(currentForm.examTimeFrom, currentForm.examTimeTo, currentForm.discussionTimeFrom, currentForm.discussionTimeTo);
  for(var i = 0;i < textboxArray.length;i++){
    if(textboxArray[i].value == "hh:mmAM"){
      textboxArray[i].focus();
      textboxArray[i].select();
      alert("error: missing input, please supply the needed information.");
      return false;
    }
  }
  var etf = convertToMilitaryTime(currentForm.examTimeFrom.value);
  var ett = convertToMilitaryTime(currentForm.examTimeTo.value);
  var dtf = convertToMilitaryTime(currentForm.discussionTimeFrom.value);
  var dtt = convertToMilitaryTime(currentForm.discussionTimeTo.value);
  if(etf == ett){
    currentForm.examTimeFrom.focus();
    currentForm.examTimeFrom.select();
    alert("error: invalid exam time - 'exam time from' and 'exam time to' can not be equal.");
    return false;
  }
  if(dtf == dtt){
    currentForm.discussionTimeFrom.focus();
    currentForm.discussionTimeFrom.select();
    alert("error: invalid discussion time - 'discussion time from' and 'discussion time to' can not be equal.");
    return false;
  }
  if(parseInt(etf.substring(0, etf.indexOf(":")), 10) > parseInt(ett.substring(0, ett.indexOf(":")), 10)){
    currentForm.examTimeFrom.focus();
    currentForm.examTimeFrom.select();
    alert("error: invalid exam time");
    return false;
  }
  if((parseInt(etf.substring(etf.indexOf(":") + 1), 10) > parseInt(ett.substring(ett.indexOf(":") + 1), 10))&&(parseInt(etf.substring(0,
etf.indexOf(":")), 10) == parseInt(ett.substring(0, ett.indexOf(":")), 10))){
    currentForm.examTimeFrom.focus();
    currentForm.examTimeFrom.select();
    alert("error: invalid exam time B");
    return false;
  }
  if(parseInt(dtf.substring(0, dtf.indexOf(":")), 10) > parseInt(dtt.substring(0, dtt.indexOf(":")), 10)){
    currentForm.discussionTimeFrom.focus();
    currentForm.discussionTimeFrom.select();
    alert("error: invalid discussion time");
    return false;
  }
  if((parseInt(dtf.substring(dtf.indexOf(":") + 1), 10) > parseInt(dtt.substring(dtt.indexOf(":") + 1), 10))&&(parseInt(dtf.substring(0,
dtf.indexOf(":")), 10) == parseInt(dtt.substring(0, dtt.indexOf(":")), 10))){
    currentForm.discussionTimeFrom.focus();
    currentForm.discussionTimeFrom.select();
    alert("error: invalid discussion time");
    return false;
  }
  if(parseInt(ett.substring(0, ett.indexOf(":")), 10) > parseInt(dtf.substring(0, dtf.indexOf(":")), 10)){
    currentForm.discussionTimeFrom.focus();
    currentForm.discussionTimeFrom.select();
    alert("error: conflicting 'exam time' and 'discussion time'\n\tmake sure that the 'exam time' precedes the 'discussion'");
    return false;
  }
  if(((parseInt(ett.substring(ett.indexOf(":") + 1), 10) > parseInt(dtf.substring(dtf.indexOf(":") + 1), 10))&&(parseInt(ett.substring(0,
ett.indexOf(":")), 10) <= parseInt(dtf.substring(0, dtf.indexOf(":")), 10)))&&(parseInt(ett.substring(0, ett.indexOf(":")), 10) ==
parseInt(dtf.substring(0, dtf.indexOf(":")), 10))){
    currentForm.discussionTimeFrom.focus();
    currentForm.discussionTimeFrom.select();
    alert("error: conflicting 'exam time' and 'discussion time'\n\tmake sure that the 'exam time' period precedes the 'discussion time'
period");
    return false;
  }
  var re = /\d\d\d\d/;
  if(currentForm.syFrom.value.search(re) == -1){
    alert("error: invalid year");
    currentForm.syFrom.select();
    return false;
  }
  var re = /\d\d\d\d/;
  if(currentForm.syTo.value.search(re) == -1){
    alert("error: invalid year");
    currentForm.syTo.select();
    return false;
  }
  if(parseInt(currentForm.syTo.value) - parseInt(currentForm.syFrom.value) != 1){
    alert("error: invalid school year");
    currentForm.syFrom.select();
    return false;
  }
  currentForm.examTime.value = etf + "-" + ett;
  currentForm.discussionTime.value = dtf + "-" + dtt;
  return true;
}
function editBatchScheduleCheck(currentForm){
  if(parseInt(currentForm.availableSlots.value, 10) >= parseInt(currentForm.takenSlotsH.value, 10)){
    return true;
  }
  else{
    currentForm.availableSlots.focus();
    currentForm.availableSlots.select();
    alert("error: " + currentForm.takenSlotsH.value + " students are already registered please choose a greater number");
    return false;
  }
}
function convertToMilitaryTime(t){
  var time = "";
  t = t.toUpperCase();
  var p = t.substring(t.length - 2);
  var h = t.substring(0, t.indexOf(":"));
  var m = t.substring(t.indexOf(":") + 1, t.length - 2);
  if(p == "AM"){
    h = parseInt(h, 10) % 12;
    h = h.toString();
    if(h.length == 1){
      h = "0" + h;
    }
  }
  else{
    if(parseInt(h, 10) < 12){
      h = parseInt(h, 10) + 12;
      h = h.toString();
    }
  }
  time = h + ":" + m;
  return time;
}
function test(){
  var t = "01:00";
  alert(parseInt(t.substring(0, t.indexOf(":"))));
}
function cursorForButtonToLink(currentElement){
  currentElement.style.cursor = "hand";
}
function ensureInputIsInt(currentElement, inputLength){
  if(!isNum(currentElement.value)){
    currentElement.focus();
    currentElement.select();
    alert("error: ivalid input please use numbers");
    return false;
  }
  if((inputLength != null)&&(currentElement.value.length != inputLength)){
    currentElement.focus();
    currentElement.select();
    alert("error: invalid number of digits, the textbox expects " + inputLength + " digit(s)");
    return false;
  }
}
function checkUncheckAllExaminees(currentForm, boolCheck){
  var checkAllButtonSpan = document.getElementById("checkAllButton");
  var uncheckAllButtonSpan = document.getElementById("uncheckAllButton");
  if(boolCheck){
    checkAllButtonSpan.style.display = "none";
    uncheckAllButtonSpan.style.display = "";
  }
  else{
    checkAllButtonSpan.style.display = "";
    uncheckAllButtonSpan.style.display = "none";
  }
  for(var i = 0;i < currentForm.elements.length;i++){
    if(currentForm.elements[i].name == 'studentNumberArray[]'){
      currentForm.elements[i].checked = boolCheck;
    }
  }
}
function checkUncheckAllExamineesL(currentForm, boolCheck){
  var checkAllButtonSpan = document.getElementById("checkAllButtonL");
  var uncheckAllButtonSpan = document.getElementById("uncheckAllButtonL");
  if(boolCheck){
    checkAllButtonSpan.style.display = "none";
    uncheckAllButtonSpan.style.display = "";
  }
  else{
    checkAllButtonSpan.style.display = "";
    uncheckAllButtonSpan.style.display = "none";
  }
  for(var i = 0;i < currentForm.elements.length;i++){
    if(currentForm.elements[i].name == 'studentNumberArray[]'){
      currentForm.elements[i].checked = boolCheck;
    }
  }
}
function orderListOfExaminees(currentForm, orderBy){
  //alert(orderBy);
  if(currentForm.orderBy.value != orderBy){
    currentForm.direction.value = "DESC";
  }
  currentForm.orderBy.value = orderBy;
  currentForm.submit();
}
function confirmExamineeAuthorize(currentForm){
  if(confirm("message: you are about to start the exam\nDo you want to proceed?")){
    currentForm.action.value= "authorize";
    for(var i = 0;i < currentForm.elements.length;i++){
      if(currentForm.elements[i].name == 'studentNumberArray[]'){
        currentForm.elements[i].checked = true;
      }
    }
    currentForm.submit();
  }
}
function confirmExamineeRemove(currentForm){
  var checkedStudent = Array();
  for(var i = 0;i < currentForm.elements.length;i++){
    if(currentForm.elements[i].name == 'studentNumberArray[]'){
      if(currentForm.elements[i].checked){
        checkedStudent[checkedStudent.length] = currentForm.elements[i].value;
      }
    }
  }
  if(checkedStudent.length == 0){
    alert("error: please select a student from the list.");
  }
  else{
    //if(confirm("message: you are about to remove the following \nstudent(s) from this exam:\n\n\t" + checkedStudent.join("\n\t") + "\n\nDo you want to proceed?")){
    if(confirm("message: you are about to remove the specified student(s) from this exam:\nDo you want to proceed?")){
      currentForm.action.value= "delete";
      currentForm.submit();
    }
  }
}
function confirmExamineeAuthorizeL(currentForm){
  var checkedStudent = Array();
  for(var i = 0;i < currentForm.elements.length;i++){
    if(currentForm.elements[i].name == 'studentNumberArray[]'){
      if(currentForm.elements[i].checked){
        checkedStudent[checkedStudent.length] = currentForm.elements[i].value;
      }
    }
  }
  if(checkedStudent.length == 0){
    alert("error: please select a student from the list.");
  }
  else{
    if(confirm("message: you are about to allow the following \nstudent(s) to take the exam:\n\n\t" + checkedStudent.join("\n\t") + "\n\nDo you want to proceed?")){
      currentForm.action.value= "authorizeL";
      currentForm.submit();
    }
  }
}
function confirmExamineeRemoveL(currentForm){
  var checkedStudent = Array();
  for(var i = 0;i < currentForm.elements.length;i++){
    if(currentForm.elements[i].name == 'studentNumberArray[]'){
      if(currentForm.elements[i].checked){
        checkedStudent[checkedStudent.length] = currentForm.elements[i].value;
      }
    }
  }
  if(checkedStudent.length == 0){
    alert("error: please select a student from the list.");
  }
  else{
    //if(confirm("message: you are about toremove the following \nstudent(s) from this exam:\n\n\t" + checkedStudent.join("\n\t") + "\n\nDo you want to proceed?")){
    if(confirm("message: you are about to remove the specified student(s) from this exam:\nDo you want to proceed?")){
      currentForm.action.value= "deleteL";
      currentForm.submit();
    }
  }
}
function confirmExamineeBlockUnblock(currentForm, statusNum){
  var examineeStatusArray = currentForm.examineeStatus.value.split(",");
  var checkedStudent = Array();
  var additionalAlertMessage = "";
  var numOfIgnoredRequest = 0;
  var examineeStatusArrayIndex = 0;
  for(var i = 0;i < currentForm.elements.length;i++){
    if(currentForm.elements[i].name == 'studentNumberArray[]'){
      if(currentForm.elements[i].checked){
        if(examineeStatusArray[examineeStatusArrayIndex] == statusNum){
          checkedStudent[checkedStudent.length] = currentForm.elements[i].value;
        }
        else{
          currentForm.elements[i].checked = false;
          numOfIgnoredRequest++;
        }
      }
      examineeStatusArrayIndex++;
    }
  }
  if(numOfIgnoredRequest == examineeStatusArrayIndex){
    checkUncheckAllExaminees(currentForm, false);
  }
  if(checkedStudent.length == 0){
    if(numOfIgnoredRequest == 0){
      alert("error: please select a student from the list.");
    }
    else{
      alert("error: the system ignores the following type of requests:\n\tblocking or unblocking a 'waiting' student\n\tblocking a 'blocked' student\n\tunblocking an 'answering' student\n\tblocking or unblocking a 'finished' student");
    }
  }
  else{
    if(statusNum == 2){
      currentForm.action.value = "block";
    }
    else{
      currentForm.action.value = "unblock";
    }
    //if(confirm("message: you are about to " + currentForm.action.value + " the following \nstudent(s) from taking the exam:\n\n\t" + checkedStudent.join("\n\t") + "\n\nDo you want to proceed?")){
      if(confirm("message: you are about to " + currentForm.action.value + " the selected student(s)\n\n" + tabS + "Do you want to proceed?")){
      currentForm.submit();
    }
  }
}
function timeModSelJav(currentElt){
  if(currentElt.value == ""){
    var thisSel = document.getElementById("timeModSelId");
    var thisText = document.getElementById("timeModTextId");
    var thisButton = document.getElementById("timeModSelButtonId");
    thisSel.style.display = "none";
    thisButton.style.display = "";
    thisText.value = "00:00:00";
    thisText.style.display = "";
    thisText.focus();
  }
}
```

```
function hideMeDisplaySel(){
  var thisSel = document.getElementById("timeModSelId");
  var thisText = document.getElementById("timeModTextId");
  var thisButton = document.getElementById("timeModSelButtonId");
  thisSel.style.display = "";
  thisButton.style.display = "none";
  thisText.style.display = "none";
  thisSel.selectedIndex = 0;
}
function confirmIncDec(currentForm, modOp){
  var thisText = document.getElementById("timeModTextId");
  if(thisText.style.display == "none"){
    currentForm.timeModText.value = currentForm.timeModSel.value;
  }
  else{
    //the text box is shown therefore we must make sure that the user-inputted string is valid
    var re = /\b[0-9]{1,2}:[0-9]{1,2}:[0-9]{1,2}\b/g;
    if(currentForm.timeModText.value.search(re) == -1){
      alert("error: please use this format HH:MM:SS\n" + tabS + "H, M, and S must be numeric");
      return false;
    }
    else{
      var timeArray = currentForm.timeModText.value.split(":");
      var errorStr = "";
      if(parseInt(timeArray[0], 10) > 1){
        errorStr +="error: the HOUR value should not exceed 1\n";
      }
      if(parseInt(timeArray[1], 10) > 59){
        errorStr +="error: the MINUTE value should not exceed 59\n";
      }
      if(parseInt(timeArray[2], 10) > 59){
        errorStr +="error: the SECOND value should not exceed 59\n";
      }
      if(errorStr != ""){
        alert(errorStr);
        return false;
      }
/*
        alert(
          "error: invalid time. please study the following examples:\n"
          + tabS + "00:00:00\n"
          + tabS + "00:00:01\n"
          + tabS + "...\n"
          + tabS + "00:00:59\n"
          + tabS + "00:01:00\n"
          + tabS + "00:01:01\n"
          + tabS + "...\n"
          + tabS + "00:59:59\n"
          + tabS + "01:00:00\n"
          + tabS + "01:00:01\n"
          + tabS + "...\n"
          + tabS + "23:59:59\n"
          + tabS + "24:00:00\n"
          + tabS + "24:00:01\n"
          + tabS + "...\n"
          + tabS + "24:59:59\n"
        );
*/
    }
  }
  var confirmMessage = "message: the REMAINING TIME of the selected student(s)\n";
  if(modOp == "force"){
    confirmMessage += tabS + "will be reset to " + currentForm.timeModText.value;
  }
  else if(modOp == "inc"){
    confirmMessage += tabS + "will be INCREASED by " + currentForm.timeModText.value;
  }
  else{
    confirmMessage += tabS + "will be DECREASED by " + currentForm.timeModText.value;
  }
  confirmMessage += "\n\n";
  var examineeStatusArray = currentForm.examineeStatus.value.split(",");
  var examineeStatusArrayIndex = 0;
  var checkedStudent_1 = Array();
  var checkedStudent_2 = Array();
  var checkedStudent_3 = Array();
  var checkedStudent_4 = Array();
  var checkedStudentCount = 0;
  for(var i = 0;i < currentForm.elements.length;i++){
    if(currentForm.elements[i].name == 'studentNumberArray[]'){
      if(currentForm.elements[i].checked){
        checkedStudentCount++;
        switch(examineeStatusArray[examineeStatusArrayIndex]){
          case '1':
            checkedStudent_1[checkedStudent_1.length] = currentForm.elements[i].value;
            break;
          case '2':
            checkedStudent_2[checkedStudent_2.length] = currentForm.elements[i].value;
            break;
          case '3':
            checkedStudent_3[checkedStudent_3.length] = currentForm.elements[i].value;
            break;
          case '4':
            checkedStudent_4[checkedStudent_4.length] = currentForm.elements[i].value;
            break;
          default:
            break;
        }
      }
      examineeStatusArrayIndex++;
    }
  }
/*these part lists the checked students in the alert dialog box...
  var examineeStatus = Array('', 'waiting', 'answering', 'blocked', 'finished');
  var tempBool = new Boolean(0);
  for(var i = 1;i <= 4;i++){
    eval("if(checkedStudent_" + i + ".length != 0) tempBool = Boolean(1); else tempBool = Boolean(0);");
    if(tempBool){
      confirmMessage += tabS + "'" + examineeStatus[i] + "' student(s):\n";
      eval("for(var j = 0;j < checkedStudent_" + i + ".length;j++){ confirmMessage += tabS + tabS + checkedStudent_" + i + "[j] + NL;}");
    }
  }
*/
  currentForm.action.value = "modTime";
  if(checkedStudentCount > 0){
    if(confirm(confirmMessage)){
      var timeArray = currentForm.timeModText.value.split(":");
      currentForm.timeModText.value = (parseInt(timeArray[0], 10) * 3600) + (parseInt(timeArray[1], 10) * 60) + parseInt(timeArray[2], 10);
      if(modOp == "force"){
        currentForm.timeModText.value = "." + currentForm.timeModText.value;
      }
      else if(modOp == "inc"){
        currentForm.timeModText.value = "+" + currentForm.timeModText.value;
      }
      else{
        currentForm.timeModText.value = "-" + currentForm.timeModText.value;
      }
      currentForm.submit();
    }
  }
  else{
    alert("error: please select a student");
  }
}
function confirmExamResume(currentForm){
  if(confirm("You are about to resume the exam. Exams should only be resumed \nif the server failed (ex. power interruptions) during the
examination.\nDo you want to continue? ")){
    currentForm.action.value = "resume";
    currentForm.submit();
  }
  else{
    return false;
  }
}
function setBatchScheduleToClose(batchScheduleIdToClose){
  if(confirm("message: you are about to close the BATCH SCHEDULE EXAM\n" + tabS + "A closed batch is not accessible to both administrators and
examinees.\n\n" + tabS + "Do you wan't to continue?")){
    document.listOfExamineesForm.action.value = 'close';
    document.listOfExamineesForm.submit();
  }
}
function computeStatisticsFromAdmin(currentForm){
  //if(confirm("message: you are about to close the BATCH SCHEDULE EXAM\n" + tabS + "A closed batch is not accessible to both administrators
and examinees.\n\n" + tabS + "Do you wan't to continue?")){
    //alert("message: please be advised that a new window will pop up.\nThe new window will perform essential tasks for collecting statistical
data.\nPlease refrain from using the mouse and the keyboard when the window is displayed.\nThe new window will close itself when it finishes
its task.");
    eval("var subWindow = window.open('" + currentForm.subWindowDirective.value + "','','WIDTH=" + screen.width + ",HEIGHT=" + screen.height +
",status');");
  //}
}
function subjectAndModeSubmit(currentForm){
  if(currentForm.examSubject.value == "Select"){
    alert("Please choose a subject.");
    return false;
  }
  return true;
}
function usingStatisticsSelectDisplay(currentT, currentId){
  if(currentT.checked){
    document.getElementById(currentId).style.display = "";
  }
  else{
    document.getElementById(currentId).style.display = "none";
  }

if((!document.usingStatisticsForm.itemDifficultyC.checked)&&(!document.usingStatisticsForm.diC.checked)&&(!document.usingStatisticsForm.pbcC.ch
ecked)){
    document.getElementById("statPriority").style.display = "none";
  }
  else{
    document.getElementById("statPriority").style.display = "";
  }
}
function usingStatisticsFrequencyCheck(currentForm){
  var confirmStr = "You specified the following frequencies for each question type:\n";
  confirmStr += tabS + currentForm.tfF.value + " true or false\n";
  confirmStr += tabS + currentForm.mcF.value + " multiple choice\n";
  confirmStr += tabS + currentForm.mtF.value + " matching type\n";
  if(confirm(confirmStr)){
    return true;
  }
  return false;
}
function adminPasswordCheck(currentForm){
  if(currentForm.passwordNew.value.length < 8){
    alert("error: please use passwords of length 8 or more");
    currentForm.passwordNew.select();
    return false;
  }
  if(currentForm.passwordNewR.value.length < 8){
    alert("error: please use passwords of length 8 or more");
    currentForm.passwordNewR.select();
    return false;
  }
  return true;
}
function lrcPersonnelCheck(currentForm){
  var fieldNames = new Array(5);
  fieldNames[0] = "First name";
  fieldNames[1] = "Middle name";
  fieldNames[2] = "Last name";
  fieldNames[3] = "Personnel Type";
  fieldNames[4] = "Username";
  fieldNames[5] = "Password";
  var errorText = " error(s) found:\n";
  var errorNumber = 0;
  for(var i = 0;i < 6;i++){
    if((currentForm.elements[i].value.length == 0)&&(i != 3)){
      errorNumber++;
      errorText = errorText + errorNumber + ". " + fieldNames[i] + " is empty\n";
    }
  }
  if(errorNumber > 0){
    alert(errorNumber + errorText);
    return false;
  }
  if(currentForm.lrcPassword.value.length < 8){
    alert("error: please use passwords of length 8 or more");
    currentForm.lrcPassword.select();
    return false;
  }
  return true;
}
function checkAgainsFrequency(textBoxRef){
  eval("var textBoxRefF = document." + textBoxRef.form.name + "." + textBoxRef.name.replace("_q", "_f") + ";");
  if(!isNum(textBoxRef.value)){
    textBoxRef.focus();
    textBoxRef.select();
    alert ("Invalid string! Use numbers!");
    return false;
  }
  if((textBoxRef.value) > parseInt(textBoxRefF.value)){
    textBoxRef.focus();
    textBoxRef.select();
    alert ("That value exceeds the available quantity.\nPlease type a value <= to the available quantity");
    return false;
  }
  else{
    //recompute the total for the column where textBoxRef belongs...
    var textBoxRefNameArray = textBoxRef.name.split("_");
    textBoxRefNameArray[3] = "total";
    eval("var textBoxRefTotal = document." + textBoxRef.form.name + "." + textBoxRefNameArray.join("_") + ";");
    var colSum = 0;
    for(var i = 0;i < 5;i++){
      eval("colSum += parseInt(document." + textBoxRef.form.name + "." + textBoxRefTotal.name.replace("total", i) + ".value);");
    }
    textBoxRefTotal.value = colSum;
  }
}
function totalQuantityFrequency(){
  for(var i = 0;i < document.examCoverageForm.elements.length;i++){
    if(document.examCoverageForm.elements[i].name.indexOf("total") != -1){
      var textBoxRefTotal = document.examCoverageForm.elements[i];
      var colSum = 0;
      for(var j = 0;j < 5;j++){
        eval("colSum += parseInt(document." + textBoxRefTotal.form.name + "." + textBoxRefTotal.name.replace("total", j) + ".value);");
      }
      textBoxRefTotal.value = colSum;
    }
  }
}
function checkboxSelectToggle(eRef){
  if(eRef.name.substr(0, 2) == "c_"){
    eval("var eRefNeg = document." + eRef.form.name + "." + eRef.name.replace("c_", "s_") + ";");
    eRef.checked = false;
    eRef.style.display = "none";
    eRefNeg.style.display = "";
  }
  else{
    eval("var eRefNeg = document." + eRef.form.name + "." + eRef.name.replace("s_", "c_") + ";");
    if(eRef.options[0].selected){
      eRef.options[1].selected = true;
      eRef.style.display = "none";
      eRefNeg.style.display = "";
    }
  }
  //update quantity and frequency based on the filters used...
  updateQuantityFrequency(eRef);
}
function updateQuantityFrequency(filterRef){
  var selRefName = "";
  //if(filterRef.name.substr(0, 2) == "c_"){
    selRefName = filterRef.name.replace("c_", "s_");
  //}
  selRefName = selRefName.substr(0, selRefName.length - 3);
  var isi = new Array('id', 'di', 'pb');
  var postVarArray = new Array();
  for(var i = 0;i < isi.length;i++){
    eval("var tempSelectRef = document." + filterRef.form.name + "." + selRefName + "_" + isi[i] + ";");
    if(tempSelectRef.style.display != "none"){
      postVarArray[postVarArray.length] = isi[i] + "=" + tempSelectRef.selectedIndex;
    }
    else{
      postVarArray[postVarArray.length] = isi[i] + "=0";
    }
  }
  var eRefArray = selRefName.split("_");
  postVarArray[postVarArray.length] = "topicId=" + eRefArray[1];
  postVarArray[postVarArray.length] = "eRefName=" + selRefName;
  eval("var subWindow = window.open('/toes/admin/exam_Coverage.php?" + postVarArray.join("&") + "','subWindow','WIDTH=" + (screen.width * .20)
+ ",HEIGHT=" + (screen.height * .20) + ",status');");
}
function manageCoverageFilter(filterCode, addDelete){
  if(addDelete == "add"){
    eval("var subWindow = window.open('/toes/admin/exam_Filter.php?filterCode=" + filterCode + "','subWindow','WIDTH=" + (450)  + ",HEIGHT=" +
(380) + ",status');");
  }
  if(addDelete == "delete"){
    var examCoverageCodeArray = document.examCoverageForm.examCoverageCode.value.split(",");
    for(var i = 0;i < examCoverageCodeArray.length;i++){
      if(filterCode == examCoverageCodeArray[i]){
        examCoverageCodeArray.splice(i, 1);
      }
    }
    document.examCoverageForm.examCoverageCode.value = examCoverageCodeArray.join(",");
    document.examCoverageForm.examCoverageCodeFromSubwindowDelete.value = filterCode;
    document.examCoverageForm.submit();
  }
}
function totalFrequencyForTopic(totalName){
  var total = 0;
  eval("var totalRef = document.examCoverageForm." + totalName + ";");
  var tempA = totalName.split("_");
  for(var i = 0;i < document.examCoverageForm.elements.length;i++){
    if(document.examCoverageForm.elements[i].type == "select-one"){
      var tempB = document.examCoverageForm.elements[i].name.split("_");
      if(tempA[1] == tempB[1]){
        total += parseInt(document.examCoverageForm.elements[i].options[document.examCoverageForm.elements[i].selectedIndex].value, 10);
      }
    }
  }
  totalRef.value = total;
}
function examCoverageFormSubmitJs(currentForm){
  currentForm.activeTab.value = "Edit Exam";
  currentForm.submit();
}
function toggleExamCoverageDisplay(spanId, buttonId){
  var thisSpan = document.getElementById(spanId);
  var thisButton = document.getElementById(buttonId);
  if(thisButton.value == "hide"){
    thisSpan.style.display ='none';
    thisButton.value='show';
  }
  else{
    thisSpan.style.display ='';
    thisButton.value='hide';
  }
}
function goToAnchor(questionId){
  var thisButton = document.getElementById("b" + questionId);
  var thisAnchor = document.getElementById("a_" + questionId);

  var showHideButton = new Array('buttonTrueOrFalse', 'buttonMultipleChoice', 'buttonMatchingType');

  for(var i = 0;i < showHideButton.length;i++){
    var currentButton = document.getElementById(showHideButton[i]);
    if(currentButton.value == "show"){
      currentButton.click();
    }
  }
  if(thisButton.value == "[  ]"){
    thisButton.click();
  }
  eval("window.location = '#a_" + questionId + "';");
}
function availableTutorialRequestSortJs(col){
  if(document.availableTutorialRequestSortForm.column.value == col){
    if(document.availableTutorialRequestSortForm.direction.value == "ASC"){
      document.availableTutorialRequestSortForm.direction.value = "DESC";
    }
    else{
      document.availableTutorialRequestSortForm.direction.value = "ASC";
    }
  }
  else{
    document.availableTutorialRequestSortForm.column.value = col;
    document.availableTutorialRequestSortForm.direction.value = "DESC";
  }
  document.availableTutorialRequestSortForm.submit();
}
function deactivateStudentAccountConfirm(currentForm){
  if(confirm("You are about to DEACTIVATE ALL student accounts, do you want to continue?")){
    return true;
  }
  else{
    return false;
  }
}
function checkStudentNumberToEnlist(currentForm){
  if(currentForm.studentNumberYear.value == ""){
    alert("error: incomplete student number");
    currentForm.studentNumberYear.select();
    return false;
  }
  if(currentForm.studentNumberNumber.value == ""){
    alert("error: incomplete student number");
    currentForm.studentNumberNumber.select();
    return false;
  }
  var re = /\d\d\d\d/;
  if(currentForm.studentNumberYear.value.search(re) == -1){
    alert("error: invalid student number");
    currentForm.studentNumberYear.select();
    return false;
  }
  var re = /\d\d\d\d\d/;
  if(currentForm.studentNumberNumber.value.search(re) == -1){
    alert("error: invalid student number");
    currentForm.studentNumberNumber.select();
    return false;
  }
  currentForm.studentNumberToEnlistH.value = currentForm.studentNumberYear.value + "-" + currentForm.studentNumberNumber.value;
  currentForm.submit();
}
function sendStudentNumberToDelist(studentNumberToDelist){
  if(confirm("You are about to remove student (" + studentNumberToDelist + ") from the\ntutorial schedule, do you want to continue?")){
    document,delistStudentForm.studentNumberToDelistH.value = studentNumberToDelist;
    document,delistStudentForm.submit();
  }
  else{
    return false;
  }
}
function classListManager(){
  var classSize = prompt("Please specify the class size (1-50):", "10");
  if(classSize != null){
    if(classSize.length == 1){
      var re = /\d/;
    }
    else if(classSize.length == 2){
      var re = /\d\d/;
    }
    else{
      alert("error: invalid value please use a value ranging from 1 to 50.");
      return false;
    }
    if(classSize.search(re) == -1){
      alert("error: invalid number");
      return false;
    }
    else{
      if((parseInt(classSize, 10) > 50)||(parseInt(classSize, 10) < 0)){
        alert("error: number out of range, please limit number from 1 to 50.");
        return false;
      }
    }
  }
  eval("classListWindow = window.open('/toes/admin/classList.php?cs=" + classSize + "','classListWindow','WIDTH=" + (screen.width * .5)   +
",HEIGHT=" + (screen.height * .5) + ",menubar,status,scrollbars');");
}
function initiateChangeTutor(currentForm){
  currentForm.changeTutor.value = "yes";
  currentForm.submit();
}
function administerExamRefresh(){
  document.forms[0].submit();
}
function pageRefreshFunction(activation){
  if(activation == "enabled"){
    document.forms[0].pageRefreshActivation.value = "enabled";
  }
  else{
    clearInterval(administerExamRefreshIntervalId);
    document.forms[0].pageRefreshActivation.value = "disabled";
  }
  document.forms[0].submit();
}
function toesAccountOnReset(accountType, currentForm){
  switch(accountType){
    case 'student':
      break;
    case 'tutor':
      break;
    case 'lrc':
      document.lrcPersonnelForm.lrcPassword.focus();
      document.lrcPersonnelForm.lrcPassword.value = document.lrcPersonnelForm.lrcPasswordJ.value
      break;
    default:
      break;
  }
}
function addStudentListFormProcess(currentForm, process){
  switch(process){
    case "add new row":
      currentForm.process.value = "addNewRow";
      currentForm.submit();
      break;
    case "generate passwords":
      currentForm.process.value = "generatePasswords";
      currentForm.submit();
      break;
    case "edit student list":
      currentForm.process.value = "";
      //clear the password fields...
      for(var i = 0;i < parseInt(currentForm.studentCount.value, 10);i++){
        eval('currentForm.password_' + i + '.value = "";');
      }
      for(var i = 0;i < currentForm.elements.length; i++){
        currentForm.elements[i].disabled = false;
      }
      currentForm.submit();
      break;
    case "print student list":
      currentForm.saveStudentList.disabled = false;
      eval("var  subWindow  =  window.open('/toes/admin/printStudentList.php?studentCount="  +  currentForm.studentCount.value  +  "&college="  +
currentForm.college.value + "&course=" + currentForm.course.value + "','','');");
      break;
    case "save student list":
      if(confirm("Reminder: please make sure that you printed the student list.\nDo you want to continue?")){
        for(var i = 0;i < currentForm.elements.length; i++){
          currentForm.elements[i].disabled = false;
        }
        currentForm.process.value = "saveStudentList";
        currentForm.submit();
      }
      break;
    default:
      break;
  }
}
function addStudentListFormRemoveRow(currentForm, rowNum){
  currentForm.rowToRemove.value = rowNum;
  currentForm.submit();
}
function addStudentListFormCheck(currentForm){
  var studentCount = parseInt(currentForm.studentCount.value, 10);
  var studentNumberArray = new Array();
  var currentStudentNumber = "";
  //check for empty student_number fields and check format...
  for(var i = 0;i < studentCount; i++){
    eval("var currentElement = currentForm.studentNumberYear_" + i + ";");
    if(currentElement.value.length == 0){
      currentElement.focus();
      currentElement.select();
      alert("error: empty field!");
      return false;
    }
    else{
      if(!isNum(currentElement.value)){
        currentElement.focus();
        currentElement.select();
        alert ("Invalid string! Use numbers!");
        return false;
      }
    }
    currentStudentNumber = currentElement.value;
    eval("var currentElement = currentForm.studentNumberNumber_" + i + ";");
    if(currentElement.value.length == 0){
      currentElement.focus();
      currentElement.select();
      alert("error: empty field!");
      return false;
    }
    else{
      if(!isNum(currentElement.value)){
        currentElement.focus();
        currentElement.select();
        alert ("Invalid string! Use numbers!");
        return false;
      }
    }
    //check for duplicate student_number values...
    currentStudentNumber += currentElement.value;
    for(var j = 0;j < studentNumberArray.length;j++){
      if(studentNumberArray[j] == currentStudentNumber){
        currentElement.focus();
        currentElement.select();
        alert ("error: duplicate student number!");
        return false;
      }
    }
    studentNumberArray[studentNumberArray.length] = currentStudentNumber;
    currentStudentNumber = "";
    //check for empty lastname, middlename, firstname
    var nameArray = new Array("lastName", "middleName", "firstName");
    for(var j = 0;j < nameArray.length;j++){
      eval("var currentElement = currentForm." + nameArray[j] + "_" + i + ";");
      if(currentElement.value.length == 0){
        currentElement.focus();
        currentElement.select();
        alert("error: empty field!");
        return false;
      }
    }
  }
  if(confirm("Please check if all students for the current block are already listed.\nDo you want to continue?")){
    addStudentListFormProcess(currentForm, "generate passwords");
  }
}
```

D. DIRECTOR

director.php

```
<?php
session_start();
require_once('../toes.inc.php');
require_once('director_Fcns.php');
if($firstVisit == "true"){
  $errorMessage = "";
}
$username;
$password;
if($Logout == '1'){
  session_unregister("username");
  session_unregister("password");
  session_unregister("hasLoggedIn");
  session_unregister("errorMessage");
  session_unregister("userScript");
  session_unset();
  session_destroy();
  $Logout = 0;
  $hasLoggedIn = 0;
  $errorMessage = "";
  $returnToHomepage = true;
}
if(($Login)&&($Logout != '1')){
  authorized_User();
  session_register("hasLoggedIn");
  header("Location: " . 'http://' . $_SERVER["HTTP_HOST"] . $_SERVER["PHP_SELF"]);
}
if(($_SESSION["hasLoggedIn"] == '1')&&($_SESSION["userScript"] == 'director.php')){
  if($activeNav == ""){
    $activeNav = "Exam Statistics";
  }
  print_Top_Nav();
  print_Banner();
  print_Nav();
  print_Tab();
  print_Body();
  print_Footer();

}
else{
  if($hasLoggedIn == '2'){
    //echo "$errorMessage";
    //echo "<br>";
  }
  display_Login_Form();
}
//////////////////////////////////////////////////////////
function print_Top_Nav(){
  global $activeNav;
  global $activeTab;
  if($activeTab == "Exam Batch Analysis To Exam Analysis"){
    global $idToAnalyze;
    connect_Db();
    $query = "SELECT exam_id FROM batch WHERE batch_id='$idToAnalyze' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $idToAnalyze = $myrow[0];
    $activeTab = "Exam Analysis";
  }
  print("<html>");
  print("<head>");
  print("<title>DIRECTOR Module</title>");
  echo "<SCRIPT LANGUAGE='JavaScript' SRC='director_JavaScript.js'></SCRIPT>";
  print("<link rel='stylesheet' type='text/css' href='director_Style.css'/>");
  print("</head>");
  print("<body onLoad=\"window_Onload('$activeNav', '$activeTab')\">");
  //print("<body>");
  print("<div>");
  print("<ul class='topnav'>");
  print("<li><a href='/custhelp.php?statpos=topnav'>Help</a></li>");
  print("<li class='lastli'><a href='?Logout=1'>Log Out</a></li>");
  print("</ul>");
  print("</div>");
  print("<br>");
}
//////////////////////////////////////////////////////////
function print_Banner(){
  global $username;
  echo "<div class='banner'>";
  echo "<table>";
  echo "<tr><td height='100px' width='382px' background='/toes/files/pics/toes_logo.jpg'></td>";
  echo "<td height='100px' width='200px' background='/toes/files/pics/main-page_logos_upm_lrc.gif'></td>";
  echo   "<td   height='100px'   width='382px'   background='/toes/files/pics/director.gif'   align='center'   valign='bottom'   style='padding-
bottom:10px;'><font style='vertical-align:text-bottom;' size='4px' color='#808080'>$username</font></td>";
  echo "</tr></table>";
  echo "</div>";
}
//////////////////////////////////////////////////////////
function print_Nav(){
  global $activeNav;
  global $activeTab;
  print("<div id='nav'><div><ul>");
  if($activeNav == 'Exam Statistics')
    print("<li class='navselected'>");
  else
    print("<li>");
  print("<a href='?activeNav=Exam Statistics&activeTab='>Exam Statistics</a></li>");
  if($activeNav == 'My Account')
    print("<li class='navselected'>");
  else
    print("<li class='lastli'>");
  print("<a href='?activeNav=My Account&activeTab='>My Account</a></li>");
  print("&nbsp");
  print("</ul>");
  print("</div></div>");
  //print("<br>");
  echo "<div style='background-color:FFFFFF;font-size:75%;'>&nbsp;</div>";
  //print("<table width='100%' bgcolor='white' border='1'><tr><td>&nbsp</td></tr></table>");
}
//////////////////////////////////////////////////////////
function print_Tab(){
  global $activeNav;
  global $activeTab;
  print("<div id='content'>");
  print("<ul class='tabs'>");
  switch($activeNav){
    case 'Exam Statistics':
      if($activeTab == ''){
        $activeTab = 'Search Exam';
      }
      if($activeTab == 'Search Exam')
        print("<li class='tabselected'>Search Exam</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Search Exam'>Search Exam</a></li>");
      if($activeTab == 'Exam Analysis')
        print("<li class='tabselected'>Exam Analysis</li>");
      if($activeTab == 'Exam Batch Analysis')
        print("<li class='tabselected'>Exam Batch Analysis</li>");
      if($activeTab == 'Examinee Manager')
        print("<li class='tabselected'>Examinee Manager</li>");
      break;
    case 'Item Statistics':
      if($activeTab == 'Search Item')
        print("<li class='tabselected'>Search Item</li>");
      else
        print("<li><a                                                      href='?activeNav=$activeNav&activeTab=Search
Item&qSubject=any&qTopic=any&qQuestionType=any&qDifficulty=any&qSortedBy=Question Id&qDirection=ascending'>Search Item</a></li>");
      if($activeTab == 'Item Analysis')
        print("<li class='tabselected'>Item Analysis</li>");
      break;
    case 'My Account':
      if($activeTab == ''){
        $activeTab = 'Change Password';
      }
      if($activeTab == 'Change Password')
        print("<li class='tabselected'>Change Password</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Change Password'>Change Password</a></li>");
      break;
    default:
      break;
  }
  print("</ul>");

}
//////////////////////////////////////////////////////////
function print_Body(){
  //echo "<button onClick='return subok()'>T R Y</button>";
  print("<div class='content'>");
  print("<div class='inside'>");
  //print("<div class='insidebody'>");

  print_Function();

  //print("</div>");
  print("</div>");
  print("</div>");
}
//////////////////////////////////////////////////////////
function print_Function(){
  global $activeNav;
  global $activeTab;
  global $examEditFromBrowse;
  switch($activeNav){
    case 'Exam Statistics':
      switch($activeTab){
        case 'Search Exam':
          exam_Query();
          break;
        case 'Exam Analysis':
          exam_Analysis();
          break;
        case 'Exam Batch Analysis':
          exam_Analysis();
          break;
        case 'Examinee Manager':
          examinee_Manage();
          break;
        default:
          print("Please select from the tabbed-menu!");
          break;
      }
      break;
    case 'Item Statistics':
      switch($activeTab){
        case 'Search Item':
          question_Query();
          break;
        case 'Item Analysis':
          exam_Analysis();
          break;
        default:
          print("Please select from the tabbed-menu!");
          break;
      }
      break;
    case 'My Account':
      switch($activeTab){
        case 'Change Password':
          manage_Password();
          break;
        default:
          print("Please select from the tabbed-menu!");
          break;
      }
      break;
    default:
      print("Please select from the menu!");
      break;
  }
}
//////////////////////////////////////////////////////////
function print_Footer(){
  print("<div>");
  print("<div id='footer'>");
  print(" <div>University of the Philippines Manila, Learning Resource Center's</div>");
  print(" <div>Tutorial and Online Examination System (TOES)</div>");
  print(" <div>Copyright © 2006</div>");
  print("</div>");
  print("<div style='width:780px'>&nbsp;</div>");
  print("</div>");
  print("</div>");
  echo "<div style='background-color:#008000'>&nbsp;</div>";
  print("</body>");
  print("</html>");
}
//////////////////////////////////////////////////////////
function toHtml($htmlLine){
  return (str_replace("\"","\\\"",$htmlLine));
}
//////////////////////////////////////////////////////////
function authorized_User(){
  global $username;
  global $password;
  global $errorMessage;
  global $hasLoggedIn;
  global $userScript;

  connect_Db();
  $query = "SELECT * FROM lrc_personnel where username='$username' and password='$password' and personnelType='lrc director' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_array($result);

  if(($username != NULL)&&($password != NULL)&&($myrow[username] == $username)&&($myrow[password] == $password)){
    $hasLoggedIn=1;
    session_register("hasLoggedIn");
    session_register("username");
    session_register("password");
    $userScript= 'director.php';
    session_register("userScript");
  }
  else{
    if(($username == NULL)||($password == NULL)){
      $errorMessage = "error: Please enter your username and password!";
    }
    else{
      $errorMessage = "error: Invalid username or password!";
    }
    session_register("errorMessage");
    $hasLoggedIn=2;
    session_register("hasLoggedIn");
  }
}
//////////////////////////////////////////////////////////
function display_Login_Form(){
  global $username;
  global $password;
  global $hasLoggedIn;
  global $Logout;
  global $errorMessage;
  global $returnToHomepage;

  echo "<html style='background-image:url(\"/toes/files/pics/toes_logo_userLogin.jpg\");'>";
  echo "<head>";
  echo "<title>DIRECTOR Login Page</title>";
  echo "<SCRIPT LANGUAGE='JavaScript' SRC='director_JavaScript.js'></SCRIPT>";
  echo "</head>";
  if($returnToHomepage){
    echo "<body onLoad='window.location=\"/toes/\"'>";
  }
  else{
    echo "<body onLoad='animateUsingToesColors(\"toesHomeLink\")'>";
  }
  echo "<table width='100%' height='100%' border='0' cellpadding='0' cellspacing='0'>";
  echo "<tr><td valign='middle' align='center'>";
  echo "<table align='center' border='0' cellpadding='0' cellspacing='0' >";
  echo "<tr><td align='right' bgcolor='#000000'><b><a id='toesHomeLink' href='/toes/' style='color:white;text-decoration:none;'>back to TOES
home page</a></b></td></tr>";
  echo "<tr><td><a href='/toes/index.php' title='home'><img src='/toes/files/pics/toes.gif' style='border: 0 none;'/></a></td></tr>";
  echo "<tr><td bgcolor='#000000'><img src='/toes/files/pics/director_o.gif'/></td></tr>";
  echo "<tr><td bgcolor='#000000'>&nbsp;</td></tr>";
  echo "<tr><td align='center' bgcolor='#000000'>";
  //echo "[username=$username][password=$password][hasLoggedIn=$hasLoggedIn][Logout=$Logout][userScript=$userScript]";
  print("<table bgcolor='#c0c0c0'>");
  print("<form name='loginForm' method='post' action='$PHP_SELF' onSubmit='return loginFormCheck(this)'>");
  if($errorMessage != ""){
    echo "<tr><td colspan='2'>$errorMessage</td></tr>";
  }
  print("<tr><td>Username:</td><td><input type='text' name='username'></td></tr>");
  print("<tr><td>Password:</td><td><input type='password' name='password'></td></tr>");
  print("<tr><td colspan='2' align='center'><input type='submit' name='Login' value='Login'></td></tr>");
  print("</form>");
  print("</table>");
  echo "</td></tr>";
  echo "<tr><td bgcolor='#000000'>&nbsp;</td></tr>";
  echo "</td></tr></table>";
  echo "</body>";
  echo "</html>";
}
////////////////////////////////////////////////////////////
function refresh_Page($location){
  header("Location: $location");
}
////////////////////////////////////////////////////////////
function connect_Db() {
    //$dbuser = '';
    //$dbpword = '';
    //$dbhost = 'localhost';
    //$dbname = 'eav';
    //$db_connection = mysql_connect ($dbhost, $dbuser, $dbpword);
  //mysql_select_db ($dbname);
  $db = mysql_connect("localhost", "");
  mysql_select_db("toes",$db);
}
////////////////////////////////////////////////////////////
?>
```

director _Fcns.php

```
<?php
////////////////////////////////////////////////////////////
function exam_Query(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }

  //display the query filters...
  echo "";
  echo "Please use the following filters:";
  echo "<form name='examQuery' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' onReset='hide_examDescriptionString();'
style='display:inline'>";
  echo "<table border='1' >";
  echo "<tr><td colspan='2' align='center'>Exam Search Filters</td></tr>";

  echo "<tr><td>Subject</td><td>";
  connect_Db();
  $query = "SELECT subject_id, subjectName FROM subject";
  $result = mysql_query($query);
  echo "<input type='hidden' name='examSubjectHidden' value='$examSubject'>";
  echo "<select name='examSubject'>";
  echo "<option value='any'>any</option>";
  while($myrow = mysql_fetch_row($result)){
    echo "<option value='$myrow[0]'>$myrow[1]</option>";
  }
  echo "</select>";
  echo "</td></tr>";

  echo "<tr><td rowspan='2'>Description</td><td>";
  echo "records ";
  echo "<input type='hidden' name='examDescriptionMatchingHidden' value='any'>";
  echo "<select name='examDescriptionMatching' onChange='return unhide_examDescriptionMatchingString()'>";
  echo "<option value='any'>any</option>";
  echo "<option value='with at least one of the words'>with at least one of the words</option>";
  echo "<option value='with the exact phrase'>with the exact phrase</option>";
  echo "<option value='with all of the words'>with all of the words</option>";
  echo "<option value='without the words'>without the words</option>";
  echo "</select>";
  echo "</td></tr><tr>";
  echo "<input type='hidden' name='examDescriptionStringHidden' value='$examDescriptionString'>";
  if(($redirectedFromEdit == 'yes')||($redirectedFromExamSchedule == 'yes')){
    echo "<td><input type='text' name='examDescriptionString' size='38' style='display:none'/></td>";
  }
  else{
    echo "<td><input type='text' name='examDescriptionString' size='38' /></td>";
  }
  echo "</tr>";

  echo "<tr><td>Author</td><td>";
  $query = "SELECT DISTINCT(author) FROM exam";
  $result = mysql_query($query);
  echo "<input type='hidden' name='examAuthorHidden' value='$examAuthor'>";
  echo "<select name='examAuthor'>";
  echo "<option value='any'>any</option>";
  while($myrow = mysql_fetch_row($result)){
    echo "<option value='$myrow[0]'>$myrow[0]</option>";
  }
  echo "</select>";
  echo "</td></tr>";

  echo "<tr><td>Alloted Time</td><td>";
  $query = "SELECT DISTINCT(allottedTime) FROM exam";
  $result = mysql_query($query);
  echo "<input type='hidden' name='examAllottedTimeHidden' value='$examAllottedTime'>";
  echo "<select name='examAllottedTime'>";
  echo "<option value='any'>any</option>";
  while($myrow = mysql_fetch_row($result)){
    echo "<option value='$myrow[0]'>$myrow[0]</option>";
  }
  echo "</select>";
  echo "</td></tr>";

  echo "<tr><td>Departmental Number</td><td>";
  $query = "SELECT DISTINCT(allottedTime) FROM exam";
  $result = mysql_query($query);
  echo "<input type='hidden' name='examDepartmentalNumberHidden' value='$examDepartmentalNumber'>";
  echo "<select name='examDepartmentalNumber'>";
  echo "<option value='any'>any</option>";
  $deptNumString = array ("first departmental", "second departmental", "third departmental", "fourth departmental", "fifth departmental",
"sixth departmental", "seventh departmental");
  for($i = 0; $i < count($deptNumString);$i++){
    echo "<option value='$deptNumString[$i]'>$deptNumString[$i]</option>";
  }
  echo "</select>";
  echo "</td></tr>";

  echo "<tr><td rowspan='2'>";
  echo "<input type='hidden' name='examDateWhichHidden' value='$examDateWhich'>";
  echo "<input type='radio' name='examDateWhich' value='Date Created' onClick='return examDateResetYear(this.form)' checked='checked'>Date
Created<br>";
  echo "<input type='radio' name='examDateWhich' value='Batch Schedule' onClick='return examDateResetYear(this.form)' >Batch Schedule";
  echo "</td><td rowspan='2'>";
  echo "Year ";
  echo "<input type='hidden' name='examDateYearHidden' value='$examDateYear'>";
  echo "<select name='examDateYear'>";
  echo "<option value='____'>any</option>";
  if($examDateWhich == 'Date Created'){
    $query = "SELECT dateCreated FROM exam ORDER BY dateCreated ASC";
  }
  if($examDateWhich == 'Batch Schedule'){
    $query = "SELECT batch.date FROM exam, batch WHERE exam.exam_id=batch.exam_id ORDER BY dateCreated ASC";
  }
  $result = mysql_query($query);
  //$examDateYearArray;
  while($myrow = mysql_fetch_row($result)){
    $tempIsInTheArray = 0;
    foreach($examDateYearArray as $temp){
      if($temp == substr($myrow[0],0,4)){
        $tempIsInTheArray = 1;
        continue;
      }
    }
    if($tempIsInTheArray == 0){
      $examDateYearArray[] = substr($myrow[0],0,4);
    }
  }
  foreach($examDateYearArray as $temp){
    echo "<option value='$temp'>$temp</option>";
  }
  echo "</select>";
  echo " Month ";
  echo "<input type='hidden' name='examDateMonthHidden' value='$examDateMonth'>";
  echo "<select name='examDateMonth'>";
  echo "<option value='__'>any</option>";
  echo "<option value='01'>January</option>";
  echo "<option value='02'>February</option>";
  echo "<option value='03'>March</option>";
  echo "<option value='04'>April</option>";
  echo "<option value='05'>May</option>";
  echo "<option value='06'>June</option>";
  echo "<option value='07'>July</option>";
  echo "<option value='08'>August</option>";
  echo "<option value='09'>September</option>";
  echo "<option value='10'>October</option>";
  echo "<option value='11'>November</option>";
  echo "<option value='12'>December</option>";
  echo "</select>";
  echo "</td></tr>";
  echo "<tr></tr>";

  echo "<tr><td>Sorted By</td><td>";
  echo "<input type='hidden' name='examSortedByHidden' value='$examSortedBy'>";
  echo "<select name='examSortedBy'>";
  echo "<option value='Exam Id'>Exam Id</option>";
  echo "<option value='Subject Name'>Subject Name</option>";
  echo "<option value='Description'>Description</option>";
  echo "<option value='Author'>Author</option>";
  echo "<option value='Allotted Time'>Allotted Time</option>";
  echo "<option value='Date Created'>Date Created</option>";
  echo "</select>";
  echo "</td></tr>";

  echo "<tr><td rowspan='2'>Direction</td><td>";
  echo "<input type='hidden' name='examDirectionHidden' value='$examDirection'>";
  echo "<input type='radio' name='examDirection' value='ascending' checked='checked'>ascending";
  echo "</td></tr>";
  echo "<td><input type='radio' name='examDirection' value='descending' >descending</td></tr>";

  echo "<tr><td>Display</td><td>";
  echo "<input type='hidden' name='examNumResultsHidden' value='$examNumResults'>";
  echo "<select name='examNumResults'>";
  echo "<option value='10'>10</option>";
  echo "<option value='20'>20</option>";
  echo "<option value='30'>30</option>";
  echo "<option value='40'>40</option>";
  echo "<option value='50'>50</option>";
  echo "</select> per page";
  echo "</td></tr>";
  echo "<tr><td colspan='2' align='center'><input type='submit' name='filter' value='search'><button type='reset' name='reset'
value='reset'>reset</button></td></tr>";
  echo "</table>";
  echo "</form>";

  //display the exam records...
  if($filter == 'search'){
    if(($examSubject == 'any')&&($examDescriptionMatching == 'any')&&($examAuthor == 'any')&&($examAllottedTime == 'any')&&($examDateYear ==
'any')&&($examDateMonth == 'any')){
      $queryString = "SELECT * FROM exam, subject, batch WHERE exam.subject_id=subject.subject_id";
    }
    else{
      if($examDateWhich == 'Batch Schedule'){
        $queryString = "SELECT * FROM exam, subject, batch WHERE";
      }
      else{
        $queryString = "SELECT * FROM exam, subject WHERE";
      }
      $wherePart[] = "exam.subject_id=subject.subject_id";
      if(($examSubject != 'any')&&($examSubject != '')){
        $wherePart[] = "exam.subject_id='$examSubject'";
      }
      if(($examDescriptionMatching != 'any')&&($examDescriptionMatching != '')){
        $examDescriptionStringArray = explode(" ", $examDescriptionString);
        switch($examDescriptionMatching){
          case 'with at least one of the words':
            $finalString = "(";
            for($i = 0;$i < count($examDescriptionStringArray);$i++){
              if($i == count($examDescriptionStringArray) - 1){
                $finalString = $finalString."exam.description LIKE '%".trim($examDescriptionStringArray[$i])."%'";
              }
              else{
                $finalString = $finalString."exam.description LIKE '%".trim($examDescriptionStringArray[$i])."%' OR ";
              }
            }
            $finalString = $finalString.")";
            break;
          case 'with the exact phrase':
            $finalString = "exam.description LIKE '%".trim($examDescriptionString)."%'";
            break;
          case 'with all of the words':
            $finalString = "(";
            for($i = 0;$i < count($examDescriptionStringArray);$i++){
              if($i == count($examDescriptionStringArray) - 1){
                $finalString = $finalString."exam.description LIKE '%".trim($examDescriptionStringArray[$i])."%'";
              }
              else{
                $finalString = $finalString."exam.description LIKE '%".trim($examDescriptionStringArray[$i])."%' AND ";
              }
            }
            $finalString = $finalString.")";
            break;
          case 'without the words':
            $finalString = "(";
            for($i = 0;$i < count($examDescriptionStringArray);$i++){
              if($i == count($examDescriptionStringArray) - 1){
                $finalString = $finalString."exam.description NOT LIKE '%".trim($examDescriptionStringArray[$i])."%'";
              }
              else{
                $finalString = $finalString."exam.description NOT LIKE '%".trim($examDescriptionStringArray[$i])."%' OR ";
              }
            }
            $finalString = $finalString.")";
            break;
          default:
            break;
        }
        $wherePart[] = $finalString;
      }
      if(($examAuthor != 'any')&&($examAuthor != '')){
        $wherePart[] = "exam.author='$examAuthor'";
      }
      if(($examAllottedTime != 'any')&&($examAllottedTime != '')){
        $wherePart[] = "exam.allottedTime='$examAllottedTime'";
      }
      if(($examDepartmentalNumber != 'any')&&($examDepartmentalNumber != '')){
        $wherePart[] = "exam.deptNum='$examDepartmentalNumber'";
      }
      if((($examDateWhich == 'Date Created')||($examDateWhich == 'Batch Schedule'))&&(!(($examDateYear == '____')&&($examDateMonth == '__')))){
        if($examDateWhich == 'Date Created'){
          $wherePart[] = "(exam.dateCreated LIKE '$examDateYear-$examDateMonth%')";
        }
        else{
          $wherePart[] = "exam.exam_id=batch.exam_id";
          $wherePart[] = "(batch.date LIKE '$examDateYear-$examDateMonth%')";
        }
      }
      for($i = 0;$i < count($wherePart);$i++){
        if($i == count($wherePart) - 1){
          $queryString = $queryString." $wherePart[$i]";
        }
        else{
          $queryString = $queryString." $wherePart[$i] AND";
        }
      }
    }
    if(($examDateWhich == 'Date Created')||($examDateWhich == 'Batch Schedule')){
      $queryString = $queryString." GROUP BY exam.exam_id";
    }
    switch($examSortedBy){
      case 'Exam Id':
        $queryString = $queryString." ORDER BY exam.exam_id";
        break;
      case 'Subject Name':
        $queryString = $queryString." ORDER BY subject.subjectName";
        break;
      case 'Description':
        $queryString = $queryString." ORDER BY exam.description";
        break;
      case 'Author':
        $queryString = $queryString." ORDER BY exam.author";
        break;
      case 'Allotted Time':
        $queryString = $queryString." ORDER BY exam.allottedTime";
        break;
      case 'Date Created':
        $queryString = $queryString." ORDER BY exam.dateCreated";
        break;
      default:
        break;
    }
    if($examDirection == 'ascending'){
      $queryString = $queryString." ASC";
    }
    else{
      $queryString = $queryString." DESC";
    }
  }
//  $date = date("M d, Y h:i:s A", time());
  //echo "[$queryString][$date]<br>";
  echo "<br><hr width='100%' size='1' align='left' color='#008000'/>";
  //query the query string
  if($filter == 'search'){
    //determine how many records...
    $resultQuery = mysql_query($queryString);
    $num_records = mysql_num_rows ($resultQuery);
    $display_number = $examNumResults;
    if ($num_records > $display_number) {
      $num_pages = ceil ($num_records/$display_number);
    } else {
      $num_pages = 1;
    }
    //Determine where in the database to start returning results...
    if (isset($_GET['s'])) {
      $start = $_GET['s'];
    } else {
      $start = 0;
    }
    //retrieve the records applying LIMIT...
    $queryString = $queryString. ' LIMIT '.$start.', '.$display_number;
    $resultQuery = mysql_query($queryString);

    if(mysql_num_rows($resultQuery) == 0){
      echo "<center>0 results returned</center>";
    }
    else{
      /*#008B8B #F0FFF0*/
      echo "<table border='0' bgcolor='#F1FBF1' width='100%' cellpadding='10px' align='center'>";
      if($num_records < ((($start/$display_number) + 1) * $display_number)){
        echo "<tr><td align='right'>Result ".($start + 1)." - ".$num_records." of about $num_records</td></tr>";
      }
      else{
        echo "<tr><td align='right'>Result ".($start + 1)." - ".((($start/$display_number) + 1) * $display_number)." of about
$num_records</td></tr>";
      }
      echo "<tr><td align='center'>";

      while($records = mysql_fetch_row($resultQuery)){
        echo "<div class='greenBar'>";
        echo "&nbsp&nbsp&nbsp";
        echo "<a href='javascript:void idOfElementToAnalyze($records[0], \"Exam Analysis\")'>EXAM ANALYSIS</a>&nbsp&nbsp|&nbsp&nbsp";
        echo           "<a           href='javascript:void           open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
exam&examIdToPreview=$records[0]\",\"\",\"fullscreen,scrollbars\");'>PREVIEW</a>";
        echo "</div>";
        echo "<table border='1' class='examTableResult' >";
        echo "<tr><td id='examTableResultTd'>";
        echo "<table class='questionInfo'>";
        echo "<tr><td>Exam Id:</td><td>$records[0]<br></td></tr>";
        echo "<tr><td>Subject Name:</td><td>$records[8]<br></td></tr>";
        echo "<tr><td>Description:</td><td>$records[2]<br></td></tr>";
        echo "<tr><td>Author:</td><td>$records[3]<br></td></tr>";
        echo "<tr><td>Allotted Time:</td><td>$records[4]<br></td></tr>";
        echo "<tr><td>Date Created</td><td>$records[5]<br></td></tr>";
        echo "<tr><td>Departmental Number</td><td>$records[6]<br></td></tr>";
        echo "</table>";
        echo "</td></tr>";
        echo "<tr><td id='examTableResultBatch' align='center'>";
        //display batch schedules
        $query = "SELECT batch_id, date, examTime, discussionTime, accessibility, term, sy FROM batch WHERE exam_id='$records[0]' ORDER BY date
ASC, examTime ASC ";
        $result = mysql_query($query);
        if(mysql_num_rows($result) == 0){
          echo "no batch schedule record";
        }
        else{
          echo "<table border='1' class='examBatchSchedTable'>";
          $batchColumnName = array('', 'batch id', 'date', 'exam time', 'discussion time', 'term', 'sy');
          echo "<tr><td colspan='".count($batchColumnName)."' align='center'>Batch Schedule</td></tr>";
          echo "<tr>";
          foreach($batchColumnName AS $batchColumnNameElem){
            echo "<td align='center'>$batchColumnNameElem</td>";
          }
          echo "</tr>";
          while($myrow = mysql_fetch_row($result)){
            echo "<tr><td id='examBatchStatLink'>";
            if($myrow[4] == 'closed'){
              echo "<a href='javascript:void idOfElementToAnalyze($myrow[0], \"Exam Batch Analysis\")'>EXAM BATCH ANALYSIS</a>";
            }
            else{
              echo "<span style='font-size:75%;'>EXAM BATCH ANALYSIS</span>";
            }
            echo "</td><td align='center'>$myrow[0]";
            echo "</td><td>$myrow[1]";
            echo "</td><td>$myrow[2]";
            echo "</td><td>$myrow[3]";
            echo "</td><td>$myrow[5]";
            echo "</td><td>$myrow[6]";
            echo "</td></tr>";
          }
          echo "</table>";
        }
        echo "</td></tr>";
        echo "</table>";
        echo "<br><hr width='100%' size='1' align='left' color='#008000'/>";
      }//end of while
      echo "</td></tr></table>";
      //make the links to other query pages...
      if ($num_pages > 1){
        echo "<center>Result Page:";
        // Determine what page the script is on.
        $current_page = ($start/$display_number) + 1;
        // If it's not the first page, make a Previous button.
        if ($current_page != 1){
          $postString = '';
          $postString = '?';
          foreach($GLOBALS as $key=>$value){
            if ( ereg("[a-z]", $key[0],$array ) ){
              $postString = $postString."$key=$value"."&";
            }
          }
          $sLink = $start - $display_number;
          $postString = $postString."s=$sLink"."&np=$num_pages";
          echo "<a href='$postString'>Previous</a> ";
        }
        // Make all the numbered pages.
        for ($i = 1; $i <= $num_pages; $i++){
          if ($i != $current_page){
            $postString = '';
            $postString = '?';
            foreach($GLOBALS as $key=>$value){
              if ( ereg("[a-z]", $key[0],$array ) ){
                $postString = $postString."$key=$value"."&";
              }
            }
            $sLink = $display_number * ($i - 1);
            $postString = $postString."s=$sLink"."&np=$num_pages";
            echo "<a href='$postString'>$i</a> ";
          } else {
            echo $i . ' ';
          }
        }
        // If it's not the last page, make a Next button.
        if ($current_page != $num_pages){
          $postString = '';
          $postString = '?';
          foreach($GLOBALS as $key=>$value){
            if ( ereg("[a-z]", $key[0],$array ) ){
              $postString = $postString."$key=$value"."&";
            }
          }
          $sLink = $start + $display_number;
          $postString = $postString."s=$sLink"."&np=$num_pages";
          echo "<a href='$postString'>Next</a> ";
        }
      }
      echo "</center>";
    }
  }
  echo "<form style='display:none;' name='passIdToAnalysisForm' action='?activeNav=$activeNav' method='POST'>";
  echo "<input type='hidden' name='idToAnalyze' value='' />";
  echo "<input type='hidden' name='activeTab' value='' />";
  echo "</form>";
}
//////////////////////////////////////////////////////////
function exam_Analysis(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  echo "<button onClick='return computeStatistics(\"recompute\")'>compute statistics</button>";
  echo "<div id='content'>";
  echo "<ul class='tabs'>";
  if($activeTab == 'Exam Analysis'){
    $analysisTabNameArray = array('Exam Details', 'Exam Statistics', 'Examinees', 'Exam Item Statistics');
  }
  elseif($activeTab == 'Exam Batch Analysis'){
    $analysisTabNameArray = array('Exam Details', 'Exam Batch Statistics', 'Examinees', 'Exam Item Statistics');
  }
  else{
    $analysisTabNameArray = array('Exam Item Details', 'Exam Item Statistics', 'Examinees', 'Exam Statistics');
  }
  for($i = 0;$i < count($analysisTabNameArray);$i++){
    if($i == 0){
      echo "<li class='tabSelected'><a onMouseOver=\"document.body.style.cursor='pointer';\"
onMouseOut=\"document.body.style.cursor='default';\" onClick=\"toggleAnalysisTab('$i', '".count($analysisTabNameArray)."');\"
id='analysis_tab_$i'>$analysisTabNameArray[$i]</a></li>";
    }
    else{
      echo "<li><a onMouseOver=\"document.body.style.cursor='pointer';\" onMouseOut=\"document.body.style.cursor='default';\"
onClick=\"toggleAnalysisTab('$i', '".count($analysisTabNameArray)."');\" id='analysis_tab_$i'>$analysisTabNameArray[$i]</a></li>";
    }
  }
  echo "</ul>";
  //display the tab contents
  $contentStyle = "border:1px solid #008000;width:100%;padding:10px;";
  for($i = 0;$i < count($analysisTabNameArray);$i++){
    if($i == 0){
      echo "<div id='analysis_$i' style='$contentStyle'>";
    }
    else{
      echo "<div id='analysis_$i' style='display:none;$contentStyle'>";
    }
    exam_Analysis_Contents($analysisTabNameArray[$i]);
    echo "</div>";
  }
  echo "</div>";
}
//////////////////////////////////////////////////////////
function exam_Analysis_Contents($analysisTabName){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  switch($analysisTabName){
    case 'Exam Details':
      connect_Db();
      if($activeTab == 'Exam Analysis'){
        $query = "SELECT exam.exam_id, subject.subjectName, exam.description, exam.author, exam.allottedTime, exam.dateCreated, exam.deptNum
FROM exam, subject WHERE subject.subject_id=exam.subject_id AND exam.exam_id='$idToAnalyze' ";
      }
      if($activeTab == 'Exam Batch Analysis'){
        $query = "SELECT exam.exam_id, subject.subjectName, exam.description, exam.author, exam.allottedTime, exam.dateCreated, exam.deptNum,
batch.batch_id, batch.date, batch.examTime, batch.discussionTime FROM batch, exam, subject WHERE subject.subject_id=exam.subject_id AND
exam.exam_id=batch.exam_id AND batch.batch_id='$idToAnalyze' ";
      }
      $result = mysql_query($query);
      $myrow = mysql_fetch_row($result);
      echo "<table border='1'>";
      echo "<tr><td colspan='2' align='center'>Exam Details&nbsp;";
      echo "<a href='javascript:void open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
exam&examIdToPreview=$myrow[0]\",\"\",\"fullscreen,scrollbars\");' style='font-size:75%;color:blue;text-decoration:none;'>PREVIEW</a>";
      echo "</td></tr>";
      $examIdUser = $myrow[0];
      echo "<tr><td>Exam Id</td><td>$myrow[0]<br></td></tr>";
      echo "<tr><td>Subject Name</td><td>$myrow[1]<br></td></tr>";
      echo "<tr><td>Description</td><td>$myrow[2]<br></td></tr>";
      echo "<tr><td>Author</td><td>$myrow[3]<br></td></tr>";
      echo "<tr><td>Allotted Time</td><td>$myrow[4]<br></td></tr>";
      echo "<tr><td>Date Created</td><td>$myrow[5]<br></td></tr>";
      echo "<tr><td>Departmental Number</td><td>$myrow[6]<br></td></tr>";
      echo "</table>";

      //get some more exam paremeters for javascript...
      global $examItemOrderArray;
      global $examItemQuestionTypeArray;
      global $examAnswerArray;
      global $examItemWeightArray;
      $questionTypeArray = array('true or false', 'multiple choice', 'matching type', 'problem solving', 'essay');
      foreach($questionTypeArray AS $questionTypeArrayElem){
        $queryA = "SELECT exam_item.question_id, question.answer, exam_item.pointAssigned FROM exam_item, question WHERE
question.question_id=exam_item.question_id AND question.questionType='$questionTypeArrayElem' AND exam_item.exam_id='$myrow[0]' ORDER BY
question.question_id ASC ";
        $resultA = mysql_query($queryA);
        while($myrowA = mysql_fetch_row($resultA)){
          $examItemOrderArray[] = $myrowA[0];
          $examItemQuestionTypeArray[] = $questionTypeArrayElem;
          $examAnswerArray[] = $myrowA[1];
          if($questionTypeArrayElem == "matching type"){
            $mtSubAnswers = explode(",", $myrowA[1]);
            $numOfSubQuestions = count($mtSubAnswers);
            $wtOfEachSubQuestions = $myrowA[2] / $numOfSubQuestions;
            $mtWeight = "";
            while($numOfSubQuestions > 0){
              $mtWeight .= $wtOfEachSubQuestions.",";
              $numOfSubQuestions--;
            }
            $examItemWeightArray[] = substr($mtWeight, 0, strlen($mtWeight) - 1);
          }
          else{
            $examItemWeightArray[] = $myrowA[2];
          }
        }
      }
      echo "<form name='examValues' style='display:none;'>";
      echo "<input type='hidden' name='examId' value='$examIdUser' />";
      echo "<input type='hidden' name='examItemOrder' value='".implode(",", $examItemOrderArray)."'/>";
      echo "<input type='hidden' name='examItemQuestionType' value='".implode(",", $examItemQuestionTypeArray)."'/>";
      echo "<input type='hidden' name='examAnswer' value='".implode("-", $examAnswerArray)."'/>";
      echo "<input type='hidden' name='examItemWeight' value='".implode("-", $examItemWeightArray)."'/>";
      echo "</form>";

      //form for system intrinsic events...
      if(isset($directive)){
        echo "<form name='systemEvents' style='display:none;' action='' method='POST'>";
        echo "<input type='hidden' name='examId' value='$examId'/>";
        echo "<input type='hidden' name='batchId' value='$batchId'/>";
        echo "<input type='hidden' name='directive' value='$directive'/>";
        if($directive == "examBatchAnalysis"){
          echo "<input type='hidden' name='examineeList' value=''/>";
          echo "<input type='hidden' name='examineeScoreList' value=''/>";
        }
        if($directive == "examAnalysis"){
          echo "<input type='hidden' name='examStatisticsValues' value=''/>";
          echo "<input type='hidden' name='examItemOrder' value='".implode(",", $examItemOrderArray)."'/>";
          echo "<input type='hidden' name='itemAnalysisValues' value=''/>";
        }
        echo "</form>";
      }
      //form for user initiated events...
      echo "<form name='systemEventsUser' style='display:none;' action='' method='POST'>";
      echo "<input type='hidden' name='examId' value='$examIdUser'/>";
      echo "<input type='hidden' name='directive' value=''/>";
      echo "<input type='hidden' name='examStatisticsValues' value=''/>";
      echo "<input type='hidden' name='examItemOrder' value=''/>";
      echo "<input type='hidden' name='itemAnalysisValues' value=''/>";
      echo "</form>";
      break;
    case 'Exam Item Details':
      connect_Db();
      $query = "SELECT q.question_id, subject.subjectName, topic.topicName, q.questionType, q.answer, q.author, q.difficulty FROM question AS
q, subject, topic WHERE q.question_id='$idToAnalyze' AND q.topic_id=topic.topic_id AND subject.subject_id=topic.subject_id ";
      $result = mysql_query($query);
      $myrow = mysql_fetch_row($result);
      echo "<table border='1'>";
      echo "<tr><td colspan='2' align='center'>Exam Item Details</td></tr>";
      echo "<tr><td>Question Id</td><td>$myrow[0]<br></td></tr>";
      echo "<tr><td>Subject Name</td><td>$myrow[1]<br></td></tr>";
      echo "<tr><td>Topic Name</td><td>$myrow[2]<br></td></tr>";
      echo "<tr><td>Question Type</td><td>$myrow[3]<br></td></tr>";
      echo "<tr><td>Answer</td><td>$myrow[4]<br></td></tr>";
      echo "<tr><td>Author</td><td>$myrow[5]<br></td></tr>";
      echo "<tr><td>Difficulty</td><td>$myrow[6]<br></td></tr>";
      echo "</table>";
      //get some more exam paremeters for javascript...
      global $examItemOrderArray;
      global $examItemQuestionTypeArray;
      global $examAnswerArray;

      $examItemOrderArray[] = $myrow[0];
      $examItemQuestionTypeArray[] = $myrow[3];
      $examAnswerArray[] = $myrow[4];
      echo "<form name='examValues' style='display:none;'>";
      echo "<input type='hidden' name='examItemOrder' value='".implode(",", $examItemOrderArray)."'/>";
      echo "<input type='hidden' name='examItemQuestionType' value='".implode(",", $examItemQuestionTypeArray)."'/>";
      echo "<input type='hidden' name='examAnswer' value='".implode("-", $examAnswerArray)."'/>";
      echo "</form>";
      break;
    case 'Examinees':
      if($activeTab == 'Exam Analysis'){
        //display control panel...

        connect_Db();
        $query = "SELECT batch_id FROM batch WHERE exam_id='$idToAnalyze' AND accessibility='closed' ORDER BY date ASC, examTime ASC ";
        $result = mysql_query($query);
        while($myrow = mysql_fetch_row($result)){
          display_Batch_Examinees($myrow[0]);
        }
      }
      elseif($activeTab == 'Exam Batch Analysis'){
        display_Batch_Examinees($idToAnalyze);
      }
      else{
        //'Exam Item Analysis' tab ON
        connect_Db();
        $query = "SELECT b.batch_id FROM batch AS b, exam AS e, exam_item AS eI WHERE eI.question_id='$idToAnalyze' AND eI.exam_id=e.exam_id
AND b.exam_id=e.exam_id AND b.accessibility='closed' ORDER BY e.exam_id ASC, b.date ASC, b.examTime ASC";
        $result = mysql_query($query);
        while($myrow = mysql_fetch_row($result)){
          display_Batch_Examinees($myrow[0]);
        }
      }
      break;
    case 'Exam Item Statistics':
      display_Exam_Item_Statistics();
      break;
    default:
      if(($analysisTabName == 'Exam Statistics')||($analysisTabName == 'Exam Batch Statistics')){
        $statisticsName = array(
          array("N Included Items", "nIncItems","The number of selected items"),
          array("N Omitted Items", "nOmitItems", "The number of omitted items"),
          array("N Included Examinees", "nIncExaminees", "The number of selected examinees"),
          array("N Omitted Examinees", "nOmitExaminees","The number of omitted examinees"),
          array("Mean", "mean", "the average score"),
          array("Variance", "variance", "a measure of spread of test scores"),
          array("Standard Deviation", "standardDeviation", "another measure of spread of test scores. (The standard deviation is the square
root of the variance)"),
          array("Skew", "skew", "This index summarises the extent of symmetry in the disribution of candidates scores. A symmetrical
distribution has a skewness of 0; negative values indicate more high scores than low scores and positive values indicate more low scores than
high scores."),
          array("Kurtosis", "kurtosis", "This index compares the distribution of candidate scores with a particular mathematical distribution
of scores known as the Normal or Gaussian distribution. Positive values indicate a more peaked distribution than the specified distribution;
negative values indicate a flatter distribution"),
          array("Minimum", "minimum", "This is the lowest candidate score in this group."),
          array("Maximum", "maximum", "This is the highest candidate score in this group."),
          array("Median", "median", "This is the middle score when all candidates scores in this group are arranged in order."),
          array("KR20", "KR20", "This statistic measures test reliability of inter-item consistency. A higher value indicates a strong
relationship between items on the test. The Kuder Richardson 20 will always be greater or equal to the Kuder Richardson 21. It is considered
more accurate than the Kuder Richardson 21."),
          array("KR21", "KR21", "The Kuder Richardson 21 approximates inter-item consistency. A high value indicates a strong relationship
between items and a lower value a weaker relationship. The mean or average score of the exam is part of the formula. The values of both KR20
and KR21 range from 0 to 1"),
          array("SB", "SB", "The Spearman-Brown method divides the corrected test into odd and even halves. Each half is scored as though it
were a separate test."),
        );
        echo "<table border='1'>";
        echo "<form name='examStatisticsForm'>";
        //echo "<tr><td id='examBatchStatLink' align='center'><a href='javascript:void
openStatisticsPopup(\"examAnalysisUser\")'>SAVE</a></td>";
        echo "<tr><td id='examBatchStatLink' align='center'>&nbsp;</td>";
        echo "<td align='center'>Value</td><td align='center'>Description</td><td align='center'>Interpretation</td></tr>";
        for($i = 0;$i < count($statisticsName);$i++){
          echo "<tr>";
          echo "<td valign='top'>".$statisticsName[$i][0]."</td>";
          $statisticsNameArray[] = $statisticsName[$i][1];
          echo "<td valign='top'><input type='text' id='textBoxDefaced' name='".$statisticsName[$i][1]."' maxLength='5' size='5' value='0'
readonly='readonly'></td>";
          echo "<td valign='top'>".$statisticsName[$i][2]."</td>";
          echo "<td valign='top'><textarea id='textAreaDefaced' name='".$statisticsName[$i][1]."_textarea' rows='3' cols='40'
readonly='readonly'></textarea></td>";
          echo "</tr>";
        }
        echo "<input type='hidden' name='statisticsName' value='".implode(",", $statisticsNameArray)."'/>";
        echo "</form>";
        echo "</table>";
      }
      break;
  }
}
//////////////////////////////////////////////////////
function display_Batch_Examinees($batchIdToDisplay){
  global $activeTab;
  connect_Db();
  $query = "SELECT batch_id, date, examTime, discussionTime, exam_id FROM batch WHERE batch_id='$batchIdToDisplay' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  echo "<table border='0' width='100%'>";
  $batchExamineesFormName = "e_".$myrow[4]."_".$myrow[0];
  echo "<form name='$batchExamineesFormName'>";
  echo "<tr><td>";
  echo "<table border='1'>";
  if($activeTab == "Item Analysis"){
    echo "<tr><td colspan='5' align='center'>Exam Batch Schedule Details</td></tr>";
    echo "<tr><td align='center'>exam id</td><td align='center'>batch id</td><td align='center'>date</td><td align='center'>exam time</td><td
align='center'>discussion time</td></tr>";
    echo "<tr><td align='center'>$myrow[4]</td><td align='center'>$myrow[0]</td><td>$myrow[1]</td><td>$myrow[2]</td><td>$myrow[3]</td></tr>";
  }
  else{
    echo "<tr><td colspan='4' align='center'>Exam Batch Schedule Details</td></tr>";
    echo "<tr><td align='center'>batch id</td><td align='center'>date</td><td align='center'>exam time</td><td align='center'>discussion
time</td></tr>";
    echo "<tr><td align='center'>$myrow[0]</td><td>$myrow[1]</td><td>$myrow[2]</td><td>$myrow[3]</td></tr>";
  }
  echo "</table>";
  echo "</td></tr>";
  echo "<tr id='studList_$batchIdToDisplay'><td>";
  echo "<table align='center' border='1'>";
  echo "<tr>";
  echo "<td align='center'>";
  echo "<a href='?activeNav=Exam Statistics&activeTab=Examinee Manager&exam_id=$myrow[4]&batch_id=$batchIdToDisplay' style='font-size:75%;text-
decoration:none;color:#0000FF;'>MANAGE</a>";
  echo "</td><td colspan='5' align='center'>Student List</td></tr>";
  echo "<tr id='rowWithCenteredColumnNames'><td>";
  echo "<input type='button' id='buttonToLink' name='checkUncheckButton' value='check all' onClick='return checkUncheckAll(this.form)'
onMouseOver='return cursorForButtonToLink(this)'/>";
  echo "</td><td>student number</td><td>score</td><td>Z score</td><td>T score</td><td>weighted score</td></tr>";
  $query = "SELECT student_number, answerString, randomItem FROM answer WHERE batch_id='$batchIdToDisplay' ORDER BY student_number ";
  $result = mysql_query($query);
  while($myrow = mysql_fetch_row($result)){
    $modStudentNumber = str_replace("-", "_", $myrow[0]);
    echo "<tr><td align='center'><input type='checkbox' name='$modStudentNumber' value='".remove_Answer_Random_Order($myrow[1], $myrow[2])."'
checked='checked'/>";
    echo "</td><td align='center'>$myrow[0]</td>";
    echo "<td><input type='text' id='textBoxDefaced' name='score_"."$modStudentNumber' maxLength='5' size='5' value='0'
readonly='readonly'></td>";
    echo "<td><input type='text' id='textBoxDefaced' name='z_"."$modStudentNumber' maxLength='5' size='5' value='0' readonly='readonly'></td>";
    echo "<td><input type='text' id='textBoxDefaced' name='t_"."$modStudentNumber' maxLength='5' size='5' value='0' readonly='readonly'></td>";
    //echo "<td>weighted score[".remove_Answer_Random_Order($myrow[1], $myrow[2])."]</td></tr>";
    echo "<td><input type='text' id='textBoxDefaced' name='wt_"."$modStudentNumber' maxLength='5' size='5' value='0'
readonly='readonly'></td></tr>";
  }
  echo "</table>";
  echo "</td></tr>";
  echo "<tr><td align='center'><input type='button' id='studList_".$batchIdToDisplay."_b' value='hide student list'
onClick=\"show_Hide('studList_$batchIdToDisplay')\" /></td></tr>";
  echo "</form>";
  echo "</table>";
  echo "<br>";
}
//////////////////////////////////////////////////////////
function remove_Answer_Random_Order($answerString, $randomItem){
  global $examItemOrderArray;
  $answerStringArray = explode("-", $answerString);
  $randomItemArray = explode(",", $randomItem);
  for($i = 0;$i < count($randomItemArray);$i++){
    $answerArray[$randomItemArray[$i]] = $answerStringArray[$i];
  }
  foreach($examItemOrderArray AS $examItemOrderArrayElem){
    $answerToReturn[] = $answerArray[$examItemOrderArrayElem];
  }
  return implode("-", $answerToReturn);
}
//////////////////////////////////////////////////////////
function display_Exam_Item_Statistics(){
  global $examItemOrderArray;
  global $examItemQuestionTypeArray;
  global $examAnswerArray;
  $currentQuestionType = "";
  for($i = 0;$i < count($examItemOrderArray);$i++){
    if($currentQuestionType != $examItemQuestionTypeArray[$i]){
      if($i != 0){
        echo "</div><br></span>";
      }
      $currentQuestionType = $examItemQuestionTypeArray[$i];
      echo "<form style='display:inline;';>";
      echo "<table cellspacing='1' cellpadding='0'><tr><td>";
      echo strtoupper($examItemQuestionTypeArray[$i]);
      echo "</td><td>";
      echo "<input type='button' value='hide' onClick='return hideUnhideQuestionTypeContent(this, \"div_".str_replace(" ",
"_",$currentQuestionType)."\")'/>";
      echo "</td></tr></table>";
      echo "</form>";
      echo "<span id='div_".str_replace(" ", "_",$currentQuestionType)."'><div class='questionTypeContent'>";
    }
    echo "<form name='exam_Item_$examItemOrderArray[$i]'>";
    switch($examItemQuestionTypeArray[$i]){
      case 'true or false':
        echo "<div class='greenBarA'>";
        echo "<input type='checkbox' name='include' onClick='return includeExcludeExamItem(this.parentElement, this.form,
$examItemOrderArray[$i]);' checked='checked'/>&nbsp;include&nbsp;|&nbsp;";
        echo "<a style='font-size:75%;text-decoration:none;' href='javascript:void
open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
question&questionIdToDisplay=$examItemOrderArray[$i]\",\"\",\"fullscreen,scrollbars\");'><font color='blue'>PREVIEW</font></a>";
        echo "</div>";
        echo "<div id='examItemStatisticsDiv_$examItemOrderArray[$i]' style='height:auto; width:100%; overflow:scroll;'>";
        echo "<table cellspacing='1' cellpadding='0' id='examItemTable'>";
        $columnNameArray = array('Question<br>Id', 'frequency', 'percent');
        echo "<tr>";
        for($j = 0;$j < count($columnNameArray);$j++){
          echo "<td align='center' valign='top'>".ucwords($columnNameArray[$j]);
          if(($j > 0)&&($j < count($columnNameArray))){
            echo "<br>";
            echo "<table width='100%' cellspacing='1' cellpadding='0'>";
            echo "<tr>";
            $choicesArray = array('true', 'false', 'o');
            foreach($choicesArray AS $choicesArrayElem){
              echo "<td align='center'><input type='text' name='static' id='textBoxDefaced' style='text-align:center;' maxLength='5' size='5'
value='".strtoupper($choicesArrayElem)."' readonly='readonly'></td>";
            }
            echo "</tr>";
            echo "</table>";
          }
          echo "</td>";
        }
        echo "</tr>";
        $rowLeftestArray = array($examItemOrderArray[$i], 'total');
        for($j = 0;$j < count($rowLeftestArray);$j++){
          echo "<tr>";
          for($k = 0;$k < count($columnNameArray);$k++){
            if($k == 0){
              echo "<td align='center'>".strtoupper($rowLeftestArray[$j])."</td>";
            }
            else{
              echo "<td align='center'>";
              echo "<table width='100%' cellspacing='1' cellpadding='0'><tr>";
              foreach($choicesArray AS $choicesArrayElem){
                if(($examAnswerArray[$i] == strtolower($choicesArrayElem))&&($j == 0)){
                  echo "<td align='center'><input type='text' style='text-align:center;' name='static' id='textBoxDefaced' maxLength='5'
size='5' value='*' readonly='readonly'></td>";
                }
                else{
                  if((($j > 0)&&(($k == 1)||($k == 2)))||(($j == 4)&&($k == 3))){
                    if($choicesArrayElem == "o"){
                      echo "<td align='center'><input type='text' id='textBoxDefaced' name='".substr($rowLeftestArray[$j], 0,
1)."_".substr($columnNameArray[$k], 0, 1)."_' maxLength='5' size='5' value='0' readonly='readonly'></td>";
                    }
                    else{
                      echo "<td align='center'><input type='text' id='textBoxDefaced' name='".substr($rowLeftestArray[$j], 0,
1)."_".substr($columnNameArray[$k], 0, 1)."_$choicesArrayElem' maxLength='5' size='5' value='0' readonly='readonly'></td>";
                    }
                  }
                  else{
                    echo "<td align='center'><input type='text' name='static' id='textBoxDefaced' maxLength='5' size='5'
readonly='readonly'></td>";
                  }
                }
              }
              echo "</tr></table>";
              echo "</td>";
            }
          }
          echo "</tr>";
        }
        //echo "<tr><td colspan='3'><br></td></tr>";
        echo "</table>";
        echo "<table cellspacing='1' cellpadding='0' id='examItemTableB'>";
        echo "<tr><td valign='top'>Item Difficulty</td><td valign='top'><input type='text' id='textBoxDefaced' name='itemDifficulty'
maxLength='5' size='5' value='0' readonly='readonly'></td>";
        echo "<td>The percentage of examinees who got the item correct.</td>";
        echo "<td valign='top' style='border-right:0px'><textarea id='textAreaDefaced' name='itemDifficulty_textarea' rows='3' cols='40'
readonly='readonly'></textarea></td></tr>";
        echo "<tr><td valign='top'>Discrimination Index</td><td valign='top'><input type='text' id='textBoxDefaced' name='DI' maxLength='5'
size='5' value='0' readonly='readonly'></td>";
        echo "<td>Measures the extent to which item responses can discriminate between individuals who have a high score on the test and those
that get a low score.</td>";
        echo "<td valign='top' style='border-right:0px'><textarea id='textAreaDefaced' name='DI_textarea' rows='3' cols='40'
readonly='readonly'></textarea></td></tr>";
        echo "<tr><td valign='top'>Point Biserial</td><td valign='top'><input type='text' id='textBoxDefaced' name='PBC' maxLength='5' size='5'
value='0' readonly='readonly'></td>";
        echo "<td>A point biserial correlation is the correlation between the student scores for a given item and the student scores for the
test as a whole.</td>";
        echo "<td valign='top' style='border-right:0px'><textarea id='textAreaDefaced' name='PBC_textarea' rows='3' cols='40'
readonly='readonly'></textarea></td></tr>";
        echo "</table>";
        echo "</div>";
        break;
      case 'multiple choice':
        echo "<div class='greenBarA'>";
        echo "<input type='checkbox' name='include' onClick='return includeExcludeExamItem(this.parentElement, this.form,
$examItemOrderArray[$i]);' checked='checked'/>&nbsp;include&nbsp;|&nbsp;";
        echo "<a style='font-size:75%;text-decoration:none;' href='javascript:void
open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
question&questionIdToDisplay=$examItemOrderArray[$i]\",\"\",\"fullscreen,scrollbars\");'><font color='blue'>PREVIEW</font></a>";
        echo "</div>";
        echo "<div id='examItemStatisticsDiv_$examItemOrderArray[$i]' style='height:auto; width:100%; overflow:scroll;'>";
        echo "<table cellspacing='1' cellpadding='0' id='examItemTable'>";
        $columnNameArray = array('Question<br>Id', 'frequency', 'percent', 'item discrimination');
        echo "<tr>";
        for($j = 0;$j < count($columnNameArray);$j++){
          echo "<td align='center' valign='top'>".ucwords($columnNameArray[$j]);
          if(($j > 0)&&($j < count($columnNameArray))){
            echo "<br>";
            echo "<table width='100%' cellspacing='1' cellpadding='0'>";
            echo "<tr>";
            $choicesArray = array('a', 'b', 'c', 'd', 'o');
            foreach($choicesArray AS $choicesArrayElem){
              echo "<td align='center'><input type='text' name='static' id='textBoxDefaced' style='text-align:center;' maxLength='5' size='5'
value='".strtoupper($choicesArrayElem)."' readonly='readonly'></td>";
            }
            echo "</tr>";
            echo "</table>";
          }
          echo "</td>";
        }
        echo "</tr>";
        $rowLeftestArray = array($examItemOrderArray[$i], 'upper', 'middle', 'lower', 'total');
        for($j = 0;$j < count($rowLeftestArray);$j++){
          echo "<tr>";
          for($k = 0;$k < count($columnNameArray);$k++){
            if($k == 0){
              echo "<td align='center'>".strtoupper($rowLeftestArray[$j])."</td>";
            }
            else{
              echo "<td align='center'>";
              echo "<table width='100%' cellspacing='1' cellpadding='0'><tr>";
              foreach($choicesArray AS $choicesArrayElem){
                if(($examAnswerArray[$i] == strtolower($choicesArrayElem))&&($j == 0)){
                  echo "<td align='center'><input type='text' style='text-align:center;' name='static' id='textBoxDefaced' maxLength='5'
size='5' value='*' readonly='readonly'></td>";
                }
                else{
                  if((($j > 0)&&(($k == 1)||($k == 2)))||(($j == 4)&&($k == 3))){
                    if($choicesArrayElem == "o"){
                      echo "<td align='center'><input type='text' id='textBoxDefaced' name='".substr($rowLeftestArray[$j], 0,
1)."_".substr($columnNameArray[$k], 0, 1)."_' maxLength='5' size='5' value='0' readonly='readonly'></td>";
                    }
                    else{
                      echo "<td align='center'><input type='text' id='textBoxDefaced' name='".substr($rowLeftestArray[$j], 0,
1)."_".substr($columnNameArray[$k], 0, 1)."_$choicesArrayElem' maxLength='5' size='5' value='0' readonly='readonly'></td>";
                    }
                  }
                  else{
                    echo "<td align='center'><input type='text' name='static' id='textBoxDefaced' maxLength='5' size='5'
readonly='readonly'></td>";
                  }
                }
              }
              echo "</tr></table>";
              echo "</td>";
            }
          }
          echo "</tr>";
        }
        //echo "<tr><td colspan='4'>&nbsp;</td></tr>";
        echo "</table>";
        echo "<table cellspacing='1' cellpadding='0' id='examItemTableB'>";
        echo "<tr><td valign='top'>Item Difficulty</td><td valign='top'><input type='text' id='textBoxDefaced' name='itemDifficulty'
maxLength='5' size='5' value='0' readonly='readonly'></td>";
        echo "<td>The percentage of examinees who got the item correct.</td>";
        echo "<td valign='top' style='border-right:0px'><textarea id='textAreaDefaced' name='itemDifficulty_textarea' rows='3' cols='40'
readonly='readonly'></textarea></td></tr>";
        echo "<tr><td valign='top'>Discrimination Index</td><td valign='top'><input type='text' id='textBoxDefaced' name='DI' maxLength='5'
size='5' value='0' readonly='readonly'></td>";
        echo "<td>Measures the extent to which item responses can discriminate between individuals who have a high score on the test and those
that get a low score.</td>";
        echo "<td valign='top' style='border-right:0px'><textarea id='textAreaDefaced' name='DI_textarea' rows='3' cols='40'
readonly='readonly'></textarea></td></tr>";
        echo "<tr><td valign='top'>Point Biserial</td><td valign='top'><input type='text' id='textBoxDefaced' name='PBC' maxLength='5' size='5'
value='0' readonly='readonly'></td>";
```

```
        echo "<td>A point biserial correlation is the correlation between the student scores for a given item and the student scores for the
test as a whole.</td>";
        echo "<td valign='top' style='border-right:0px'><textarea id='textAreaDefaced' name='PBC_textarea' rows='3' cols='40'
readonly='readonly'></textarea></td></tr>";
        echo "</table>";
        echo "</div>";
        break;
      case 'matching type':
        //get the 'matchingTypeTagAttributeCount' from the .htm file...
        $matchingTypeTagAttributeCount = getAttributeCount($examItemOrderArray[$i]);
        echo "<div style='height:auto; width:100%; overflow:scroll;'>";
        echo "<table cellspacing='1' cellpadding='0' id='examItemTable'>";
        $columnNameArray = array('Question<br>Id', 'frequency', 'percent');
        //echo "<tr>";
        //$topTr = "<tr>";
        $topTr = "";
        for($j = 0;$j < count($columnNameArray);$j++){
          //echo "<td align='center' valign='top'>".ucwords($columnNameArray[$j]);
          $topTr .= "<td align='center' valign='top'>".ucwords($columnNameArray[$j]);
          if(($j > 0)&&($j < count($columnNameArray))){
            //echo "<br>";
            //echo "<table width='100%' cellspacing='1' cellpadding='0'>";
            //echo "<tr>";
            $topTr .= "<br><table width='100%' cellspacing='1' cellpadding='0'></tr>";
            $choicesArray = range(1, $matchingTypeTagAttributeCount);
            $choicesArray[] = "o";
            foreach($choicesArray AS $choicesArrayElem){
              //echo "<td align='center'><input type='text' name='static' id='textBoxDefaced' style='text-align:center;' maxLength='5' size='5'
value='".strtoupper($choicesArrayElem)."' readonly='readonly'></td>";
              $topTr .= "<td align='center'><input type='text' name='static' id='textBoxDefaced' style='text-align:center;' maxLength='5'
size='5' value='".strtoupper($choicesArrayElem)."' readonly='readonly'></td>";
            }
            //echo "</tr>";
            //echo "</table>";
            $topTr .= "</tr></table>";
          }
          //echo "</td>";
          $topTr .= "</td>";
        }
        //echo "</tr>";
        $topTr .= "</tr>";
        //echo $topTr;
        //echo "<tr><td colspan='3' style='background-color:#FFFFFF'><br></td></tr>";
        $matchingAnswerArray = explode(",", $examAnswerArray[$i]);
        for($l = 0;$l < count($matchingAnswerArray);$l++){
          $idForTr = "examItemStatisticsGroup_".$examItemOrderArray[$i]."_$l";
          echo "<tr><td colspan='".count($columnNameArray)."' style='background-color:#D3F2D3;'>";
          echo "<input type='checkbox' name='include_$l' onClick='return includeExcludeExamItemMT(this, \"$examItemOrderArray[$i]"."_$l\");'
checked='checked'/>&nbsp;include&nbsp;|&nbsp;";
          echo "<a style='font-size:75%;text-decoration:none;' href='javascript:void
open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
question&questionIdToDisplay=$examItemOrderArray[$i]\",\"\",\"fullscreen,scrollbars\");'><font color='blue'>PREVIEW</font></a>";
          echo "</td></tr>";
          echo "<tr id='$idForTr'>";
          echo $topTr;
          $rowLeftestArray = array($examItemOrderArray[$i].".".($l + 1), 'total');
          for($j = 0;$j < count($rowLeftestArray);$j++){
            echo "<tr id='$idForTr'>";
            for($k = 0;$k < count($columnNameArray);$k++){
              if($k == 0){
                echo "<td align='center'>".strtoupper($rowLeftestArray[$j])."</td>";
              }
              else{
                echo "<td align='center'>";
                echo "<table width='100%' cellspacing='1' cellpadding='0'><tr>";
                foreach($choicesArray AS $choicesArrayElem){
                  if(($matchingAnswerArray[$l] == strtolower($choicesArrayElem))&&($j == 0)){
                    echo "<td align='center'><input type='text' style='text-align:center;' name='static' id='textBoxDefaced' maxLength='5'
size='5' value='*' readonly='readonly'></td>";
                  }
                  else{
                    if((($j > 0)&&(($k == 1)||($k == 2)))||(($j == 4)&&($k == 3))){
                      if($choicesArrayElem == "o"){
                        echo "<td align='center'><input type='text' id='textBoxDefaced' name='".substr($rowLeftestArray[$j], 0,
1)."_".substr($columnNameArray[$k], 0, 1)."_0_"."$l' maxLength='5' size='5' value='0' readonly='readonly'></td>";
                      }
                      else{
                        echo "<td align='center'><input type='text' id='textBoxDefaced' name='".substr($rowLeftestArray[$j], 0,
1)."_".substr($columnNameArray[$k], 0, 1)."_$choicesArrayElem"."_$l' maxLength='5' size='5' value='0' readonly='readonly'></td>";
                      }
                    }
                    else{
                      echo "<td align='center'><input type='text' name='static' id='textBoxDefaced' maxLength='5' size='5'
readonly='readonly'></td>";
                    }
                  }
                }
                echo "</tr></table>";
                echo "</td>";
              }
            }
            echo "</tr>";
          }
          echo "<tr id='$idForTr'><td colspan='3'>";
          echo "<table cellspacing='1' cellpadding='0' id='examItemTableC'>";
          echo "<tr><td valign='top'>Item Difficulty</td><td valign='top'><input type='text' id='textBoxDefaced' name='itemDifficulty_".$l."'
maxLength='5' size='5' value='0' readonly='readonly'></td>";
          echo "<td>The percentage of examinees who got the item correct.</td>";
          echo "<td valign='top' style='border-right:0px'><textarea id='textAreaDefaced' name='itemDifficulty_textarea_".$l."' rows='3'
cols='40' readonly='readonly'></textarea></td></tr>";
          echo "<tr><td valign='top'>Discrimination Index</td><td valign='top'><input type='text' id='textBoxDefaced' name='DI_".$l."'
maxLength='5' size='5' value='0' readonly='readonly'></td>";
          echo "<td>Measures the extent to which item responses can discriminate between individuals who have a high score on the test and
those that get a low score.</td>";
          echo "<td valign='top' style='border-right:0px'><textarea id='textAreaDefaced' name='DI_textarea_".$l."' rows='3' cols='40'
readonly='readonly'></textarea></td></tr>";
          echo "<tr id='examItemTableCTr'><td valign='top'>Point Biserial</td><td valign='top'><input type='text' id='textBoxDefaced'
name='PBC_".$l."' maxLength='5' size='5' value='0' readonly='readonly'></td>";
          echo "<td>A point biserial correlation is the correlation between the student scores for a given item and the student scores for the
test as a whole.</td>";
          echo "<td valign='top' style='border-right:0px'><textarea id='textAreaDefaced' name='PBC_textarea_".$l."' rows='3' cols='40'
readonly='readonly'></textarea></td></tr>";
          echo "</table>";
          echo "</td></tr>";
          if($l < count($matchingAnswerArray) - 1){
            echo "<tr><td colspan='3' style='background-color:#FFFFFF'><br></td></tr>";
          }
        }
        echo "</table>";
        echo "</div>";
        break;
      default:
        break;
    }
    echo "</form>";
  }
  echo "</div><br></span>";
}
///////////////////////////////////////////////////////////
```

```
function getAttributeCount($questionId){
  connect_Db();
  $query = "SELECT objects FROM question WHERE question_id='$questionId' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  $myrow[0] = str_replace("/", "\\", $myrow[0]).".htm";
  if($fo = fopen($myrow[0], "r")){
    while(!feof($fo)){
      $origLine = fgets($fo, 1024);
      if(ereg("name='matchingTypeTagAttributeCount' value='(.*)'", $origLine, $arr)){
        flock($fo, 3);
        fclose($fo);
        return $arr[1];
      }
    }
    flock($fo, 3);
    fclose($fo);
  }
}
//////////////////////////////////////////////////////////
function question_Query(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  if($redirectedFromEdit == 'yes'){
    echo "Please choose the question to be edited<br>";
  }
  if($questionToDelete != ''){
    connect_Db();
    $query = "SELECT objects FROM question WHERE question_id='$questionToDelete' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $fileLink = $myrow[0];
    unlink($fileLink.".doc");
    unlink($fileLink.".htm");
    $fileLink = $fileLink."_files";
    if(is_dir($fileLink)){
      $dh = opendir($fileLink);
      while(gettype($file = readdir($dh)) != boolean){
        if(is_file($fileLink.'\\'.$file)){
          //echo "($file)";
          unlink($fileLink.'\\'.$file);
        }
      }
      closedir($dh);
      rmdir($fileLink);
    }
    //delete the linked multimedia files...
    $query = "SELECT src FROM file WHERE question_id='$questionToDelete' ";
    $result = mysql_query($query);
    while($myrow = mysql_fetch_row($result)){
      unlink($myrow[0]);
    }
    $query = "DELETE FROM file WHERE question_id='$questionToDelete' ";
    $result = mysql_query($query);
    $query = "DELETE FROM question WHERE question_id='$questionToDelete' ";
    $result = mysql_query($query);
    echo "Question id: $questionToDelete has been deleted!<br>";
  }
  //display the query filters...
  echo "Please use the following filters:";
  echo "<table border='1' >";
  echo "<form name='questionQuery' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
  echo "<tr><td colspan='3' align='center'>Question Search Filters</td></tr>";
  echo "<tr><td>Subject</td><td>";
  connect_Db();
  $query = "SELECT subject_id, subjectName FROM subject";
  $result = mysql_query($query);
  echo "<input type='hidden' name='hSubject' value='$qSubject'>";
  echo "<select name='qSubject'>";
  echo "<option value='any'>any</option>";
  while($myrow = mysql_fetch_row($result)){
    echo "<option value='$myrow[0]'>$myrow[1]</option>";
  }
  echo "</select>";
  echo "</td><td>";
  echo "<input type='submit' name='filter' value='go'>";
  echo "</td></tr>";
  echo "<tr><td>Topic</td><td>";
  echo "<input type='hidden' name='hTopic' value='$qTopic'>";
  $query = "SELECT topic_id, topicName FROM topic WHERE subject_id='$qSubject' ";
  $result = mysql_query($query);
  echo "<select name='qTopic'>";
  if($qSubject == 'any'){
    $qTopic = 'any';
    echo "<option value='any'>any</option>";
  }
  elseif(mysql_num_rows($result) == 0){
    $filter = 'subject chosen has no topics';
    echo "<option value='subject chosen has no topics'>subject chosen has no topics</option>";
  }
  else{
    if($qTopic == 'subject chosen has no topics'){
      $qTopic = 'any';
    }
    echo "<option value='any'>any</option>";
    while($myrow = mysql_fetch_row($result)){
      echo "<option value='$myrow[0]'>$myrow[1]</option>";
    }
  }
  echo "</select>";
  echo "</td><td>";
  echo "<input type='submit' name='filter' value='go'>";
  echo "</td></tr>";
  echo "<tr><td>Question Type</td><td>";
  echo "<input type='hidden' name='hQuestionType' value='$qQuestionType'>";
  echo "<select name='qQuestionType'>";
  echo "<option value='any'>any</option>";
  echo "<option value='multiple choice'>multiple choice</option>";
  echo "<option value='true or false'>true or false</option>";
  echo "<option value='matching type'>matching type</option>";
  echo "<option value='essay'>essay</option>";
  echo "<option value='problem solving'>problem solving</option>";
  echo "</select>";
  echo "</td><td>";
  echo "<input type='submit' name='filter' value='go'>";
  echo "</td></tr>";
  echo "<tr><td>Difficulty</td><td>";
  echo "<input type='hidden' name='hDifficulty' value='$qDifficulty'>";
  echo "<select name='qDifficulty'>";
  echo "<option value='any'>any</option>";
  echo "<option value='very easy'>very easy</option>";
  echo "<option value='easy'>easy</option>";
  echo "<option value='medium'>medium</option>";
  echo "<option value='hard'>hard</option>";
  echo "<option value='very hard'>very hard</option>";
  echo "</select>";
  echo "</td><td>";
  echo "<input type='submit' name='filter' value='go'>";
  echo "</td></tr>";
  echo "<tr><td>Sorted By</td><td>";
  echo "<input type='hidden' name='hSortedBy' value='$qSortedBy'>";
  echo "<select name='qSortedBy'>";
  echo "<option value='Question Id'>Question Id</option>";
  echo "<option value='Topic Name'>Topic Name</option>";
  echo "<option value='Question Type'>Question Type</option>";
  echo "<option value='Author'>Author</option>";
  echo "<option value='Difficulty'>Difficulty</option>";
  echo "</select>";
  echo "</td><td>";
  echo "<input type='submit' name='filter' value='go'>";
  echo "</td></tr>";

  echo "<tr><td rowspan='2'>Direction</td><td>";
  echo "<input type='hidden' name='hDirection' value='$qDirection'>";
  echo "<input type='radio' name='qDirection' value='ascending' checked='checked'>ascending";
  echo "</td><td>";
  echo "<input type='submit' name='filter' value='go'>";
  echo "</td></tr>";
  echo "<td><input type='radio' name='qDirection' value='descending' >descending</td><td>";
  echo "<input type='submit' name='filter' value='go'></td></tr>";

  echo "<tr><td>Display</td><td>";
  echo "<input type='hidden' name='hNumResults' value='$qNumResults'>";
  echo "<select name='qNumResults'>";
  echo "<option value='1'>1</option>";
  echo "<option value='2'>2</option>";
  echo "<option value='3'>3</option>";
  echo "<option value='4'>4</option>";
  echo "<option value='5'>5</option>";
  echo "<option value='6'>6</option>";
  echo "</select> per page";
  echo "</td><td>";
  echo "<input type='submit' name='filter' value='go'>";
  echo "</td></tr>";
  echo "<tr><td colspan='3' align='center'><input type='submit' name='filter' value='search'><button type='reset' name='reset'
value='reset'>reset</button></td></tr>";
  echo "</form>";
  echo "</table>";

  if($filter == 'search'){
    if(($qTopic == 'any')&&($qQuestionType == 'any')&&($qDifficulty == 'any')){
      $queryString = "SELECT question.question_id, subject.subjectName, topic.topicName, question.questionType, question.objects,
question.author, question.difficulty FROM question, subject, topic WHERE question.topic_id=topic.topic_id AND
subject.subject_id=topic.subject_id";
    }
    else{
      $queryString = "SELECT question.question_id, subject.subjectName, topic.topicName, question.questionType, question.objects,
question.author, question.difficulty FROM question, subject, topic WHERE question.topic_id=topic.topic_id AND
subject.subject_id=topic.subject_id";
      if(($qTopic != 'any')&&($qTopic != "")){
        $wherePart[] = "question.topic_id='$qTopic'";
      }
      if(($qQuestionType != 'any')&&($qQuestionType != "")){
        $wherePart[] = "question.questionType='$qQuestionType'";
      }
      if(($qDifficulty != 'any')&&($qDifficulty != "")){
        $wherePart[] = "question.difficulty='$qDifficulty'";
      }
      for($i = 0;$i < count($wherePart);$i++){
        $queryString = $queryString." AND $wherePart[$i]";
      }
    }
    switch($qSortedBy){
      case 'Question Id':
        $queryString = $queryString." ORDER BY question.question_id";
        break;
      case 'Topic Name':
        $queryString = $queryString." ORDER BY topic.topicName";
        break;
      case 'Question Type':
        $queryString = $queryString." ORDER BY question.questionType";
        break;
      case 'Author':
        $queryString = $queryString." ORDER BY question.author";
        break;
      case 'Difficulty':
        $queryString = $queryString." ORDER BY question.difficulty";
        break;
      default:
        break;
    }
    if($qDirection == 'ascending'){
      $queryString = $queryString." ASC";
    }
    else{
      $queryString = $queryString." DESC";
    }
    if($qTopic == 'subject chosen has no topics'){
      $filter = 'subject chosen has no topics';
    }
  }

  echo "[$queryString]<br>";
  echo "<br><hr width='100%' size='1' align='left' color='#008000'/>";
  //query the query string
  if($filter == 'subject chosen has no topics'){
    echo "subject chosen has no topics";
  }
  elseif($filter == 'search'){
    //determine how many records...
    $resultQuery = mysql_query($queryString);
    $num_records = mysql_num_rows ($resultQuery);
    $display_number = $qNumResults;
    if ($num_records > $display_number) {
      $num_pages = ceil ($num_records/$display_number);
    } else {
      $num_pages = 1;
    }
    //Determine where in the database to start returning results...
    if (isset($_GET['s'])) {
      $start = $_GET['s'];
    } else {
      $start = 0;
    }
    //retrieve the records applying LIMIT...
    $queryString = $queryString. ' LIMIT '.$start.', '.$display_number;
    $resultQuery = mysql_query($queryString);

    if(mysql_num_rows($resultQuery) == 0){
      echo "<center>0 results returned</center>";
    }
    else{
      /*#008B8B #F0FFF0*/
      echo "<table class='questionResults' border='0' bgcolor='#F1FBF1' width='100%' cellpadding='10px' align='center'>";
      if($num_records < ((($start/$display_number) + 1) * $display_number)){
        echo "<tr><td align='right'>Result ".($start + 1)." - ".$num_records." of about $num_records</td></tr>";
      }
      else{
        echo "<tr><td align='right'>Result ".($start + 1)." - ".((($start/$display_number) + 1) * $display_number)." of about
$num_records</td></tr>";
      }
      echo "<tr><td align='center'>";

      while($records = mysql_fetch_row($resultQuery)){
        echo "<div class='greenBar'>";
        echo "&nbsp&nbsp&nbsp";
        echo "<a href='javascript:void idOfElementToAnalyze($records[0], \"Item Analysis\")'>ITEM STATISTICS</a>&nbsp&nbsp|&nbsp&nbsp";
        echo "<a href='javascript:void open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
question&questionIdToDisplay=$records[0]\",\"\",\"fullscreen,scrollbars\");'>PREVIEW</a>";
        //echo "<a href='javascript:void fullwin(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
question&questionIdToDisplay=$records[0]\")'>PREVIEW</a>";
        echo "</div>";
        echo "<table border='1' class='questionTableResult' >";
        echo "<tr><td>";
        echo "<table class='questionInfo'>";
        echo "<tr><td>Question Id:</td><td>$records[0]<br></td></tr>";
        echo "<tr><td>Subject Name:</td><td>$records[1]<br></td></tr>";
        echo "<tr><td>Topic Name:</td><td>$records[2]<br></td></tr>";
        echo "<tr><td>Question Type:</td><td>$records[3]<br></td></tr>";
        echo "<tr><td>Author:</td><td>$records[5]<br></td></tr>";
        echo "<tr><td>Difficulty:</td><td>$records[6]<br></td></tr>";
        echo "</table>";
        echo "</td></tr>";
        echo "<tr><td class='questionTd' align='center' style='display:inline;'>";
        include("$records[4].htm");
        echo "</td></tr>";
        echo "</table>";
        echo "<br><hr width='100%' size='1' align='left' color='#008000'/>";
      }//end of while
      echo "</td></tr></table>";

      //make the links to other query pages...

      if ($num_pages > 1){
        echo "<center>Result Page:";
        // Determine what page the script is on.
        $current_page = ($start/$display_number) + 1;
        // If it's not the first page, make a Previous button.
        if ($current_page != 1){
          $postString = '';
          $postString = '?';
          foreach($GLOBALS as $key=>$value){
            if ( ereg("[a-z]", $key[0],$array ) ){
              $postString = $postString."$key=$value"."&";
            }
          }
          $sLink = $start - $display_number;
          $postString = $postString."s=$sLink"."&np=$num_pages";
          echo "<a href='$postString'>Previous</a> ";
        }
        // Make all the numbered pages.
        for ($i = 1; $i <= $num_pages; $i++){
          if ($i != $current_page){
            $postString = '';
            $postString = '?';
            foreach($GLOBALS as $key=>$value){
              if ( ereg("[a-z]", $key[0],$array ) ){
                $postString = $postString."$key=$value"."&";
              }
            }
            $sLink = $display_number * ($i - 1);
            $postString = $postString."s=$sLink"."&np=$num_pages";
            echo "<a href='$postString'>$i</a> ";
          } else {
            echo $i . ' ';
          }
        }
        // If it's not the last page, make a Next button.
        if ($current_page != $num_pages){
          $postString = '';
          $postString = '?';
          foreach($GLOBALS as $key=>$value){
            if ( ereg("[a-z]", $key[0],$array ) ){
              $postString = $postString."$key=$value"."&";
            }
          }
          $sLink = $start + $display_number;
          $postString = $postString."s=$sLink"."&np=$num_pages";
          echo "<a href='$postString'>Next</a> ";
        }
      }
      echo "</center>";
    }//else part

  }
  echo "<br><hr width='100%' size='1' align='left' color='#008000'/>";
  echo "<form style='display:none;' name='passIdToAnalysisForm' action='?activeNav=$activeNav' method='POST'>";
  echo "<input type='hidden' name='idToAnalyze' value='' />";
  echo "<input type='hidden' name='activeTab' value='' />";
  echo "</form>";
}
////////////////////////////////////////////////////////
function manage_Password(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  if($directorPasswordSubmit == "change"){
    connect_Db();
    if($password != $passwordOld){
      echo "error: the supplied 'old password' does not match the one stored in the database.<br><br>";
    }
    else{
      if($passwordNew != $passwordNewR){
        echo "error: the 'new password' and the 'retyped new password' does not match.<br><br>";
      }
      else{
        $query = "UPDATE lrc_personnel SET password='$passwordNew', username='$usernameNew' WHERE username='$username' AND password='$password'
";
        $result = mysql_query($query);
        if($username != $usernameNew){
          echo "message: the 'new username' was successfully stored.<br><br>";
        }
        echo "message: the 'new password' was successfully stored.<br><br>";
        $username = $usernameNew;
        $password = $passwordNew;
        session_register("username");
        session_register("password");
      }
    }
  }
  echo "<table border='1'>";
  echo "<form name='directorPasswordForm' method='POST' action='' onSubmit='return directorPasswordCheck(this)'>";
  echo "<tr><td>username</td><td><input type='text' name='usernameNew' maxLength='16' size='16' value='$username'/></td></tr>";
  echo "<tr><td>old password</td><td><input type='password' name='passwordOld' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td>new password</td><td><input type='password' name='passwordNew' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td>retype new password</td><td><input type='password' name='passwordNewR' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td colspan='2' align='center'><input type='submit' name='directorPasswordSubmit' value='change'/></td></tr>";
  echo "</form>";
  echo "</table>";
}
//////////////////////////////////////////////////////////
function examinee_Manage(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  connect_Db();
  if($answerSheetToDelete != ""){
    $query = "DELETE FROM answer WHERE student_number='$answerSheetToDelete' AND batch_id='$batch_id' ";
    $result = mysql_query($query);
    echo "message: the ANSWER SHEET of student [$answerSheetToDelete] in the current batch_id [$batch_id] was successfully deleted.<br><br>";
    $answerSheetToDelete = "";
  }
  $additionQueryMessage = "added";
  if($addAnswerSheetSubmit == "apply changes"){
    $query = "DELETE FROM answer WHERE student_number='$studNumA-$studNumB' AND batch_id='$batch_id' ";
    $result = mysql_query($query);
    $addAnswerSheetSubmit = "add";
    $additionQueryMessage = "edited";
  }
  if($addAnswerSheetSubmit == "add"){
    //get the answerString...
    $examItemOrderArrayE = explode(",", $examItemOrder);
    foreach($examItemOrderArrayE AS $examItemOrderArrayEElement){
      $elementName = "ans_".$examItemOrderArrayEElement;
      $answerStringE[] = $$elementName;
    }
    //check if student is real...
    $query = "SELECT s.student_number, a.student_number FROM student AS s LEFT JOIN answer AS a ON (s.student_number=a.student_number AND
a.batch_id='$batch_id') WHERE s.student_number='$studNumA-$studNumB' ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) == 0){
      echo "error: the student [$studNumA-$studNumB] does not exist.<br><br>";
    }
    else{
      $myrow = mysql_fetch_row($result);
      if($myrow[1] != ""){
        echo "error: the ANSWER SHEET of student [$studNumA-$studNumB] already exist in the current batch_id [$batch_id].<br><br>";
      }
      else{
        $query = "INSERT INTO answer VALUES ('$batch_id', '$studNumA-$studNumB', '".implode("-", $answerStringE)."', '$examItemOrder', '',
'')";
        $result = mysql_query($query);
        echo "message: the answer sheet of student [$studNumA-$studNumB] was successfully $additionQueryMessage.<br><br>";
        //unset the ans_... vars
        foreach($GLOBALS as $key=>$value){
          if ( ereg("ans_(.*)", $key, $array) ){
            unset($$key);
          }
        }
        unset($examItemOrder);
        unset($studNumA);
        unset($studNumB);
      }
    }
  }
  global $examItemOrderArray;
  $questionTypeArray = array('true or false', 'multiple choice', 'matching type');
  foreach($questionTypeArray AS $questionTypeArrayElem){
    $queryA = "SELECT exam_item.question_id, question.answer FROM exam_item, question WHERE question.question_id=exam_item.question_id AND
question.questionType='$questionTypeArrayElem' AND exam_item.exam_id='$exam_id' ORDER BY question.question_id ASC ";

    $resultA = mysql_query($queryA);
    while($myrowA = mysql_fetch_row($resultA)){
      $examItemOrderArray[] = $myrowA[0];
      $examItemQuestionTypeArray[] = $questionTypeArrayElem;
      $examAnswerArray[] = $myrowA[1];
      if($questionTypeArrayElem == "matching type"){
        $tempArray = explode(",", $myrowA[1]);
        $examItemLen += count($tempArray);
        unset($tempArray);
      }
      else{
        $examItemLen++;
      }
    }
  }
  if($answerSheetToEdit != ""){
    $studNumArray = explode("-", $answerSheetToEdit);
    $studNumA = $studNumArray[0];
    $studNumB = $studNumArray[1];
    $query = "SELECT answerString, randomItem FROM answer WHERE student_number='$answerSheetToEdit' AND batch_id='$batch_id' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $answerStringArrayE = remove_Answer_Random_Order_Examinee_Manage($myrow[0], $myrow[1]);
    for($i = 0;$i < count($examItemOrderArray);$i++){
      $elementName = "ans_".$examItemOrderArray[$i];
      $$elementName = $answerStringArrayE[$i];
      if($examItemQuestionTypeArray[$i] == "matching type"){
        $tempArray = explode(",", $answerStringArrayE[$i]);
        for($j = 0;$j < count($tempArray);$j++){
          $elementNameA = $elementName."_".($j + 1);
          $$elementNameA = $tempArray[$j];
        }
        unset($tempArray);
      }
    }
  }
  if($examItemLen > 25){
    echo "<div style='height:auto; width:100%; overflow:scroll;'>";
  }
  echo "<table border='1'>";
  echo "<tr><td colspan='".($examItemLen + 2)."' align='center'>EXAMINEES ANSWER SHEETS</td></tr>";
  echo "<tr><td colspan='2' rowspan='2' align='center'>&nbsp;</td><td colspan='$examItemLen' align='center'>QUESTION ID</td></tr>";
  echo "<tr>";
  for($i = 0;$i < count($examItemOrderArray);$i++){
    if($examItemQuestionTypeArray[$i] == "matching type"){
      $tempArray = explode(",", $examAnswerArray[$i]);
      for($j = 0;$j < count($tempArray);$j++){
        echo "<td align='center' valign='middle'><img src='/toes/director/strToPic.php?textToPic=".$examItemOrderArray[$i].".".($j +
1)."'/></td>";
      }
      unset($tempArray);
    }
    else{
      echo "<td align='center' valign='middle'><img src='/toes/director/strToPic.php?textToPic=$examItemOrderArray[$i]'/></td>";
    }
  }
  echo "</tr>";
  echo "<tr><td>&nbsp;</td><td align='center'>answer key</td>";
  for($i = 0;$i < count($examAnswerArray);$i++){
    if($examItemQuestionTypeArray[$i] == "matching type"){
      $tempArray = explode(",", $examAnswerArray[$i]);
      foreach($tempArray AS $tempArrayElem){
        echo "<td align='center'>$tempArrayElem</td>";
      }
      unset($tempArray);
    }
    else if($examItemQuestionTypeArray[$i] == "true or false"){
      echo "<td align='center'>".strtoupper(substr($examAnswerArray[$i], 0, 1))."</td>";
    }
    else{
      echo "<td align='center'>$examAnswerArray[$i]</td>";
    }
  }
  echo "</tr>";
  $query = "SELECT student_number, answerString, randomItem, lastViewedItem FROM answer WHERE batch_id='$batch_id' ";
  $result = mysql_query($query);
  while($myrow = mysql_fetch_row($result)){
    $examineeArray[] = $myrow[0];
    $examineeAnswerStringArray[] = $myrow[1];
    $examineeRandomItem[] = $myrow[2];
    $examineeLastViewedItem[] = $myrow[3];
  }
  echo "<form name='editDeleteAnswerSheetSubmit' method='POST' action='?activeNav=$activeNav&activeTab=$activeTab'>";
  echo "<input type='hidden' name='batch_id' value='$batch_id'/>";
  echo "<input type='hidden' name='exam_id' value='$exam_id'/>";
  echo "<input type='hidden' name='answerSheetToEdit' value=''/>";
  echo "<input type='hidden' name='answerSheetToDelete' value=''/>";
  for($i = 0;$i < count($examineeArray);$i++){
    echo "<tr>";
    echo "<td align='center'>";
    if(($examineeLastViewedItem[$i] == 0)||($examineeLastViewedItem[$i] == "")){
      if($answerSheetToEdit == $examineeArray[$i]){
        echo "<font style='font-size:75%;'>***EDITING***</font>";
      }
      else{
        echo  "<a  href='javascript:  setEditDeleteAnswerSheet(\"editDeleteAnswerSheetSubmit\",  \"answerSheetToEdit\",  \"$examineeArray[$i]\")' 
style='font-size:75%;text-decoration:none;color:blue;'>EDIT</a>";
        echo "&nbsp;<a href='javascript: setEditDeleteAnswerSheet(\"editDeleteAnswerSheetSubmit\", \"answerSheetToDelete\", \"".str_replace('-
', '_', $examineeArray[$i])."\")' style='font-size:75%;text-decoration:none;color:blue;'>DELETE</a>";
      }
    }
    else{
      echo "<font style='font-size:75%;'>EDIT DELETE</font>";
    }
    echo "</td>";
    echo "<td align='center'>$examineeArray[$i]</td>";
    $examineeAnswerArray = remove_Answer_Random_Order_Examinee_Manage($examineeAnswerStringArray[$i], $examineeRandomItem[$i]);
    for($j = 0;$j < count($examineeAnswerArray);$j++){
      if($examItemQuestionTypeArray[$j] == "matching type"){
        $tempArray = explode(",", $examineeAnswerArray[$j]);
        foreach($tempArray AS $tempArrayElem){
          echo "<td align='center'>$tempArrayElem</td>";
        }
        unset($tempArray);
      }
      else if($examItemQuestionTypeArray[$j] == "true or false"){
        echo "<td align='center'>".strtoupper(substr($examineeAnswerArray[$j], 0, 1))."</td>";
      }
      else{
        echo "<td align='center'>$examineeAnswerArray[$j]</td>";
      }
    }

    echo "</tr>";
    unset($examineeAnswerArray);
  }
  echo "</form>";
  echo "</table>";
  if($examItemLen > 25){
    echo "</div>";
  }
  echo "<br><table border='1'>";
  echo     "<form     name='addAnswerSheetSubmit'     method='POST'     action='?activeNav=$activeNav&activeTab=$activeTab'     onSubmit='return 
addAnswerSheetJs(this)'>";
  echo "<input type='hidden' name='examItemOrder' value='".implode(",", $examItemOrderArray)."'/>";
  echo "<input type='hidden' name='batch_id' value='$batch_id'/>";
  echo "<input type='hidden' name='exam_id' value='$exam_id'/>";
  if($answerSheetToEdit != ""){
    echo "<tr><td colspan='2' align='center'>EDIT ANSWER SHEET</td></tr>";
    $readOnlyStr = "readOnly='readOnly'";
  }
  else{
    echo "<tr><td colspan='2' align='center'>ADD ANSWER SHEET</td></tr>";
    $readOnlyStr = "";
  }
  echo "<tr><td>Student Number</td><td>";
  echo "<input type='text' maxLength='4' size='4' name='studNumA' value='$studNumA' $readOnlyStr> - ";
  echo "<input type='text' maxLength='5' size='5' name='studNumB' value='$studNumB' $readOnlyStr>";
  echo "</td></tr>";
  echo "<tr><td align='center'>QUESTION ID</td><td align='center'>CHOICES </td></tr>";
  $tfChoices = array('true', 'false', '');
  $mcChoices = array('a', 'b', 'c', 'd', '');
  for($i = 0;$i < count($examItemOrderArray);$i++){
    $elementName = "ans_$examItemOrderArray[$i]";
    echo "<tr><td align='center' valign='middle'>$examItemOrderArray[$i]</td><td>";
    switch($examItemQuestionTypeArray[$i]){
      case 'true or false':
        foreach($tfChoices AS $tfChoicesElem){
          if($$elementName == $tfChoicesElem){
            echo "<input type='radio' name='$elementName' value='$tfChoicesElem'  checked='checked'/>";
          }
          else{
            echo "<input type='radio' name='$elementName' value='$tfChoicesElem'/>";
          }
          if($tfChoicesElem == ""){
            echo "BLANK";
          }
          else{
            echo "$tfChoicesElem";
          }
        }
        break;
      case 'multiple choice':
        foreach($mcChoices AS $mcChoicesElem){
          if($$elementName == $mcChoicesElem){
            echo "<input type='radio' name='$elementName' value='$mcChoicesElem' checked='checked'/>";
          }
          else{
            echo "<input type='radio' name='$elementName' value='$mcChoicesElem'/>";
          }
          if($mcChoicesElem == ""){
            echo "BLANK";
          }
          else{
            echo "$mcChoicesElem";
          }
        }
        break;
      case 'matching type':
        $matchingTypeTagAttributeCount = getMatchingTypeTagAttributeCount($examItemOrderArray[$i]);
        echo "<input type='hidden' name='$elementName' value='".$$elementName."'/>";
        $tempArray = explode(",", $examAnswerArray[$i]);
        for($j = 1;$j <= count($tempArray);$j++){
          echo "$examItemOrderArray[$i].$j".$tabS;
          //display select...
          $elementNameA = $elementName."_$j";
          echo "<select name='$elementNameA' onChange='return joinMatchingTypeSubAnswers(\"$elementName\", this.form)'>";
          for($k = 0;$k <= $matchingTypeTagAttributeCount;$k++){
            if(($$elementNameA == $k)||(($$elementNameA == "")&&($k == 0))){
              echo "<option value='$k' selected='selected'>";
            }
            else{
              echo "<option value='$k'>";
            }
            if($k == 0){
              echo "BLANK";
            }
            else{
              echo "$k";
            }
            echo "</option>";
          }
          echo "</select>";
          echo "<br>";
        }
        unset($tempArray);
        break;
      default:
        break;
    }
    echo "</td></tr>";
  }
  echo "<tr><td colspan='2' align='center'>";
  if($answerSheetToEdit != ""){
    echo "<input type='submit' name='addAnswerSheetSubmit' value='apply changes'/>";
    echo "<button type='reset' name='reset' value='reset'>reset</button>";
  }
  else{
    echo "<input type='submit' name='addAnswerSheetSubmit' value='add'/>";
  }
  echo "</td></tr>";
  echo "</form>";
  echo "</table>";

  echo "<form name='passIdToAnalysisForm' action='?activeNav=$activeNav' method='POST'>";
  echo "<input type='hidden' name='idToAnalyze' value='$batch_id' />";
  echo "<input type='hidden' name='activeTab' value='Exam Batch Analysis' />";
  echo "<input type='button' name='a' value='proceed to Exam Analysis' onClick='return setActiveTab(this.form, \"Exam Batch Analysis To Exam
Analysis\")'/>";
  echo "<br><input type='submit' name='b' value='proceed to Exam Batch Analysis'/>";
  echo "</form>";
}
//////////////////////////////////////////////////////////
function remove_Answer_Random_Order_Examinee_Manage($answerString, $randomItem){
  global $examItemOrderArray;
  $answerStringArray = explode("-", $answerString);
  $randomItemArray = explode(",", $randomItem);
  for($i = 0;$i < count($randomItemArray);$i++){
    $answerArray[$randomItemArray[$i]] = $answerStringArray[$i];
  }
  foreach($examItemOrderArray AS $examItemOrderArrayElem){
    $answerToReturn[] = $answerArray[$examItemOrderArrayElem];
  }
  return $answerToReturn;
}
//////////////////////////////////////////////////////////
function getMatchingTypeTagAttributeCount($question_id){
  connect_Db();
  $query = "SELECT objects FROM question WHERE question_id='$question_id' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  if($fo = fopen($myrow[0].".htm", "r")){
    flock($fo, 1);
    while(!feof($fo)){
      $origLine = fgets($fo, 1024);
      if(ereg("<input type='hidden' name='matchingTypeTagAttributeCount' value='(.*)'", $origLine, $tempArray)){
        $matchingTypeTagAttributeCount = $tempArray[1];
        break;
      }
    }
    flock($fo, 3);
    fclose($fo);
  }
  else{
    echo "error: '$myrow[0].htm' is currently inaccessible, please inform the administrator immediately.<br><br>";
  }
  return $matchingTypeTagAttributeCount;
}
//////////////////////////////////////////////////////////
function get_next_id($id, $table){
  $previous = 0;
  $current = 0;
  connect_Db();
  $query = "SELECT $id FROM $table ORDER BY $id";
  $result = mysql_query($query);
  while($myrow = mysql_fetch_row($result)){
    $current = $myrow[0];
    if($current-$previous > 1){
      return $previous+1;
    }
    $previous = $current;
  }
  return $current+1;
}
//////////////////////////////////////////////////////////

?>
```

director _Javascript.php

```
var activeTab_global = "";

var animateUsingToesColorsIndex = 0;
var animateUsingToesColorsInterval = 0;
var animateUsingToesColorsElement = "";
function animateUsingToesColors(elementId){
  if(animateUsingToesColorsElement == ""){
    animateUsingToesColorsElement = elementId
  }
  var secs = 0;
  var color = "white";
  if(animateUsingToesColorsInterval){
    clearInterval(animateUsingToesColorsInterval);
  }
  animateUsingToesColorsIndex++;
  animateUsingToesColorsIndex = animateUsingToesColorsIndex % 9;
  switch(animateUsingToesColorsIndex){
    case 1:
      color = "blue";
      secs = 1000;
      break;
    case 2:
      color = "red";
      secs = 1000;
      break;
    case 3:
      color = "green";
      secs = 1000;
      break;
    case 4:
      color = "yellow";
      secs = 1000;
      break;
    case 5:
      color = "blue";
      secs = 500;
      break;
    case 6:
      color = "red";
      secs = 500;
      break;
    case 7:
      color = "green";
      secs = 500;
      break;
    case 8:
      color = "yellow";
      secs = 500;
      break;
    default:
      color = "white";
      secs = 1;
      break;
  }
  document.getElementById(animateUsingToesColorsElement).style.color = color;
  animateUsingToesColorsInterval = setInterval(animateUsingToesColors, secs);
}
function loginFormCheck(currentForm){
  if(currentForm.username.value == ""){
    alert("error: please include your username");
    return false;
  }
  if(currentForm.password.value == ""){
    alert("error: please include your password");
    return false;
  }
  return true;
}
function highlightSystemMessages(){
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'error:', '<br><br>', '#000000', '#FF8080');
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'message:', '<br><br>', '#000000', '#80FF80');
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'warning:', '<br><br>', '#000000', '#FFFF80');
}
function highlightMessage(bodyText, searchTermA, searchTermB, textColor, bgColor){
  var highlightStartTag = "<font style='color:" + textColor + "; background-color:" + bgColor + ";line-height:1.1;'>";
  var highlightEndTag = "</font>";

  var newText = "";
  var i = -1;
  var j = -1;
  var lcBodyText = bodyText.toLowerCase();
  while(bodyText.length > 0){
    i = bodyText.indexOf(searchTermA, i+1);
    if(i < 0){
      newText += bodyText;
      bodyText = "";
    }
    else{
      // skip anything inside an HTML tag
      if(bodyText.lastIndexOf(">", i) >= bodyText.lastIndexOf("<", i)){
        // skip anything inside a <script> block
        if(lcBodyText.lastIndexOf("/script>", i) >= lcBodyText.lastIndexOf("<script", i)){
          //search for the closing term of the system message...
          j = lcBodyText.indexOf(searchTermB, i + searchTermA.length);
          if(j > 0){
            newText  +=  bodyText.substring(0,  i)  +  highlightStartTag  +  bodyText.substr(i,  j  -  i)  +  highlightEndTag  +  bodyText.substr(j, 
searchTermB.length);
            bodyText = bodyText.substr(j + searchTermB.length);
            j = -1;
          }
          else{
            newText += bodyText.substring(0, i) + bodyText.substr(i, searchTermA.length);
            bodyText = bodyText.substr(i + searchTermA.length);
          }
          lcBodyText = bodyText.toLowerCase();
          i = -1;
        }
      }
    }
  }
  return newText;
}
function window_Onload(activeNav, activeTab){
  highlightSystemMessages();
  if( top != self){
    top.location = location;
  }
  activeTab_global = activeTab;
  switch(activeNav){
        case 'Exam Statistics':
          if(activeTab == 'Search Exam'){
            for(i = 0;i < document.examQuery.examSubject.length;i++){
              if(document.examQuery.examSubject[i].value == document.examQuery.examSubjectHidden.value){
                document.examQuery.examSubject[i].selected = true;
              }
            }
            for(i = 0;i < document.examQuery.examDescriptionMatching.length;i++){
              if(document.examQuery.examDescriptionMatching[i].value == document.examQuery.examDescriptionMatchingHidden.value){
                document.examQuery.examDescriptionMatching[i].selected = true;
              }
            }
            if(document.examQuery.examDescriptionMatchingHidden.value == "any"){
              document.examQuery.examDescriptionString.style.display = 'none';
            }
            else{
            document.examQuery.examDescriptionString.value = document.examQuery.examDescriptionStringHidden.value;
          }
            for(i = 0;i < document.examQuery.examAuthor.length;i++){
              if(document.examQuery.examAuthor[i].value == document.examQuery.examAuthorHidden.value){
                document.examQuery.examAuthor[i].selected = true;
              }
            }
            for(i = 0;i < document.examQuery.examAllottedTime.length;i++){
              if(document.examQuery.examAllottedTime[i].value == document.examQuery.examAllottedTimeHidden.value){
                document.examQuery.examAllottedTime[i].selected = true;
              }
            }
            for(i = 0;i < document.examQuery.examDepartmentalNumber.length;i++){
              if(document.examQuery.examDepartmentalNumber[i].value == document.examQuery.examDepartmentalNumberHidden.value){
                document.examQuery.examDepartmentalNumber[i].selected = true;
              }
            }
            for(i = 0;i < document.examQuery.examDateWhich.length;i++){
              if(document.examQuery.examDateWhich[i].value == document.examQuery.examDateWhichHidden.value){
                document.examQuery.examDateWhich[i].checked = true;
              }
            }
            for(i = 0;i < document.examQuery.examDateYear.length;i++){
              if(document.examQuery.examDateYear[i].value == document.examQuery.examDateYearHidden.value){
                document.examQuery.examDateYear[i].selected = true;
              }
            }
            for(i = 0;i < document.examQuery.examDateMonth.length;i++){
              if(document.examQuery.examDateMonth[i].value == document.examQuery.examDateMonthHidden.value){
                document.examQuery.examDateMonth[i].selected = true;
              }
            }
            for(i = 0;i < document.examQuery.examSortedBy.length;i++){
              if(document.examQuery.examSortedBy[i].value == document.examQuery.examSortedByHidden.value){
                document.examQuery.examSortedBy[i].selected = true;
              }
            }
            for(i = 0;i < document.examQuery.examDirection.length;i++){
              if(document.examQuery.examDirection[i].value == document.examQuery.examDirectionHidden.value){
                document.examQuery.examDirection[i].checked = true;
              }
            }
            for(i = 0;i < document.examQuery.examNumResults.length;i++){
              if(document.examQuery.examNumResults[i].value == document.examQuery.examNumResultsHidden.value){
                document.examQuery.examNumResults[i].selected = true;
              }
            }
        }
        if((activeTab == 'Exam Analysis')||(activeTab == 'Exam Batch Analysis')){
          if(document.examValues != null){
            computeStatistics("compute");
          }
        }
          break;
        case 'Item Statistics':
          if(activeTab == 'Search Item'){
            for(i = 0;i < document.questionQuery.qSubject.length;i++){
              if(document.questionQuery.qSubject[i].value == document.questionQuery.hSubject.value){
                document.questionQuery.qSubject[i].selected = true;
              }
            }
            for(i = 0;i < document.questionQuery.qTopic.length;i++){
              if(document.questionQuery.qTopic[i].value == document.questionQuery.hTopic.value){
                document.questionQuery.qTopic[i].selected = true;
              }
            }
            for(i = 0;i < document.questionQuery.qQuestionType.length;i++){
              if(document.questionQuery.qQuestionType[i].value == document.questionQuery.hQuestionType.value){
                document.questionQuery.qQuestionType[i].selected = true;
              }
            }
            for(i = 0;i < document.questionQuery.qDifficulty.length;i++){
              if(document.questionQuery.qDifficulty[i].value == document.questionQuery.hDifficulty.value){
                document.questionQuery.qDifficulty[i].selected = true;
              }
            }
            for(i = 0;i < document.questionQuery.qSortedBy.length;i++){
              if(document.questionQuery.qSortedBy[i].value == document.questionQuery.hSortedBy.value){
                document.questionQuery.qSortedBy[i].selected = true;
              }
            }
            for(i = 0;i < document.questionQuery.qDirection.length;i++){
              if(document.questionQuery.qDirection[i].value == document.questionQuery.hDirection.value){
                document.questionQuery.qDirection[i].checked = true;
              }
            }
            for(i = 0;i < document.questionQuery.qNumResults.length;i++){
              if(document.questionQuery.qNumResults[i].value == document.questionQuery.hNumResults.value){
                document.questionQuery.qNumResults[i].selected = true;
              }
          }
      }
        if(activeTab == 'Item Analysis'){
          if(document.examValues != null){
            computeStatistics("compute");
          }
        }
          break;
        case 'User Accounts':
          if((activeTab == 'Tutor Account')&&(document.searchTutorAccount)){
            if(!document.searchTutorAccount.peerInSearch.checked){
              document.searchTutorAccount.degreeProgram.style.display='none';
            }
            if(!document.searchTutorAccount.facultyInSearch.checked){
              document.searchTutorAccount.department.style.display='none';
            }
            var thisSpanTutorSearchSchedule = document.getElementById("spanTutorSearchSchedule");
        if(document.searchTutorAccount.scheduleCriteria.value == "any"){
          thisSpanTutorSearchSchedule.style.display ='none';
        }
        else{
          thisSpanTutorSearchSchedule.style.display ='';
        }
          }
          if((activeTab == 'Tutor Account')&&(document.newTutorAccountDetails)){
            if(!((document.newTutorAccountDetails.tutorType[0].checked)||(document.newTutorAccountDetails.tutorType[1].checked))){
              document.newTutorAccountDetails.tutorType[0].checked = true;
          }
          displayCoursesOrDepartments(document.newTutorAccountDetails);
        }
          break;
        default:
          break;
    }
}
function unhide_examDescriptionMatchingString(){
  //alert("Please enter the word(s) filter");
  if(document.examQuery.examDescriptionMatching.value == "any"){
    document.examQuery.examDescriptionString.style.display = 'none';
  }
  else{
    document.examQuery.examDescriptionString.style.display = '';
    document.examQuery.examDescriptionString.focus();
  }
}
function hide_examDescriptionString(){
  document.examQuery.examDescriptionString.style.display = 'none';
}
function examDateResetYear(currentForm){
  currentForm.submit();
}
function idOfElementToAnalyze(id, activeTab){
  document.passIdToAnalysisForm.idToAnalyze.value = id;
  document.passIdToAnalysisForm.activeTab.value = activeTab;
  document.passIdToAnalysisForm.submit();
}
function toggleAnalysisTab(tabId, tabCount){
  for (var i=0; i < tabCount; i++) {
    if (i == tabId) {
      document.getElementById("analysis_tab_"+i).parentNode.className = 'tabselected';
      document.getElementById("analysis_"+i).style.display = "inline";
    }
    else{
      document.getElementById("analysis_tab_"+i).parentNode.className = null;
      document.getElementById("analysis_"+i).style.display = "none";
    }
  }
}
function show_Hide(spanId){
  var thisSpan = document.getElementById(spanId);
  var thisButton = document.getElementById(spanId + "_b");
  switch(thisButton.value){
    case 'hide student list':
      thisSpan.style.display ='none';
      thisButton.value='show student list';
      break;
    case 'show student list':
      thisSpan.style.display ='';
      thisButton.value='hide student list';
      break;
    default:
      break;
  }
}
function cursorForButtonToLink(currentElement){
  currentElement.style.cursor = "hand";
}
function checkUncheckAll(currentForm){
  if(currentForm.checkUncheckButton.value == "check all"){
    currentForm.checkUncheckButton.value = "uncheck all";

    for(var i = 0;i < currentForm.length;i++){
      if( currentForm.elements[i].type == "checkbox"){
        currentForm.elements[i].checked = true;
      }
    }
  }
  else{
    currentForm.checkUncheckButton.value = "check all";
    for(var i = 0;i < currentForm.length;i++){
      if( currentForm.elements[i].type == "checkbox"){
        currentForm.elements[i].checked = false;
      }
    }
  }
}
function hideUnhideQuestionTypeContent(thisButton, divId){
  var thisDiv = document.getElementById(divId);
  if(thisButton.value == "hide"){
    thisButton.value = "unhide";
    thisDiv.style.display = "none";
  }
  else{
    thisButton.value = "hide";
    thisDiv.style.display = "";
  }
}
function examineeRecord(inclusionBit, answerStringArray, checkBitArray, score, uml, batchExamineeForm, studentNumber){
  var examItemQuestionTypeArray = document.examValues.examItemQuestionType.value.split(",");
  var examItemWeightArray = document.examValues.examItemWeight.value.split("-");
  //splice items that are not included...
  var removedIndexCount = 0;
  for(var i = 0;i < inclusionBit.length;i++){
    if(examItemQuestionTypeArray[i] != "matching type"){
      if(inclusionBit[i] == 0){
        answerStringArray.splice(i - removedIndexCount, 1);
        checkBitArray.splice(i - removedIndexCount, 1);
        examItemWeightArray.splice(i - removedIndexCount, 1);
        removedIndexCount++;
      }
    }
    else{
      var tempArray = inclusionBit[i].split(",");
      var tempArrayA = checkBitArray[i - removedIndexCount].split(",");
      var tempArrayB = answerStringArray[i - removedIndexCount].split(",");
      var tempArrayC = examItemWeightArray[i - removedIndexCount].split(",");
      var inclusionBool = new Boolean(0);
      for(var j = 0;j < tempArray.length;j++){
        if(tempArray[j] == "1"){
          inclusionBool = Boolean(1);
        }
        else{
          tempArrayA[j] = "";
          tempArrayB[j] = "";
          tempArrayC[j] = "";
        }
      }
      if(!inclusionBool){
        checkBitArray.splice(i - removedIndexCount, 1);
        answerStringArray.splice(i - removedIndexCount, 1);
        examItemWeightArray.splice(i - removedIndexCount, 1);
        removedIndexCount++;
      }
      else{
        checkBitArray[i - removedIndexCount] = tempArrayA.join(",");
        answerStringArray[i - removedIndexCount] = tempArrayB.join(",");
        examItemWeightArray[i - removedIndexCount] = tempArrayC.join(",");
      }
    }
  }
  //count the score
  var scoreCount = 0;
  var weightedScoreCount = 0;
  for(var i = 0;i < examItemQuestionTypeArray.length;i++){
    if(examItemQuestionTypeArray[i] != "matching type"){
      if(checkBitArray[i - removedIndexCount] == 1){
        scoreCount++;
        weightedScoreCount += parseFloat(examItemWeightArray[i - removedIndexCount]);
      }
    }
    else{
      var tempArrayA = checkBitArray[i - removedIndexCount].split(",");
      var tempArrayB = inclusionBit[i].split(",");
      var tempArrayC = examItemWeightArray[i - removedIndexCount].split(",");
      for(var j = 0;j < tempArrayA.length;j++){
        if((tempArrayA[j] == 1)&&(tempArrayB[j] == "1")){
          scoreCount++;
          weightedScoreCount += parseFloat(tempArrayC[j]);
        }
      }
    }
  }
  this.answerStringArray = answerStringArray;
  this.checkBitArray = checkBitArray;
  this.score = scoreCount;
  this.uml = uml;
  this.batchExamineeForm = batchExamineeForm;
  this.studentNumber = studentNumber;
  this.weightedScoreCount = weightedScoreCount;
}
function computeStatistics(computation){
  if(computation == "recompute"){
    //reset the values of non static textboxes...
    for(var i = 0;i < document.forms.length;i++){
      if(document.forms[i].name.indexOf("exam_Item_") != -1){
        for(var j = 0;j < document.forms[i].elements.length;j++){
          if((document.forms[i].elements[j].type == "text")&&(document.forms[i].elements[j].name != "static")){
            document.forms[i].elements[j].value = 0;
          }
        }
      }
      if(document.forms[i].name.indexOf("e_") != -1){
        for(var j = 0;j < document.forms[i].elements.length;j++){
          if((document.forms[i].elements[j].name.indexOf("score_")     !=     -1)||(document.forms[i].elements[j].name.indexOf("z_")     !=     -
1)||(document.forms[i].elements[j].name.indexOf("t_") != -1)){
            document.forms[i].elements[j].value = 0;
          }
        }
      }
    }
  }
  var examItemOrderArray = document.examValues.examItemOrder.value.split(",");
  var examItemQuestionTypeArray = document.examValues.examItemQuestionType.value.split(",");
  var answerKey = document.examValues.examAnswer.value.split("-");
  var inclusionBit = new Array();
  var totalNumExamItem = 0;
  var totalNumExamItemOmit = 0;
  for(var i = 0;i < examItemOrderArray.length;i++){
    if(examItemQuestionTypeArray[i] != "matching type"){
      totalNumExamItem++;
      eval("var currentCheckbox = document.exam_Item_" + examItemOrderArray[i] + ".include;");
      inclusionBit[inclusionBit.length] = 1;
      if(!currentCheckbox.checked){
        inclusionBit[inclusionBit.length - 1] = 0;
        totalNumExamItemOmit++;
        examItemOrderArray.splice(i, 1);
        examItemQuestionTypeArray.splice(i, 1);
        answerKey.splice(i, 1);
        i--;
      }
    }
    else{
      var tempArray = answerKey[i].split(",");
      var tempArrayA = new Array(tempArray.length);
      var tempArrayB = new Array(tempArray.length);
      for(var j = 0;j < tempArray.length;j++){
        totalNumExamItem++;
        tempArrayA[j] = 1;
        tempArrayB[j] = tempArray[j];
        eval("var currentCheckbox = document.exam_Item_" + examItemOrderArray[i] + ".include_" + j + ";");
        if(!currentCheckbox.checked){
          totalNumExamItemOmit++;
          tempArrayA[j] = 0;
          tempArrayB[j] = "";
        }
      }
      var inclusionBool = new Boolean(0);
      for(var j = 0;j < tempArrayB.length;j++){
        if(tempArrayB[j] != ""){
          inclusionBool = Boolean(1);
          break;
        }
      }
      if(inclusionBool){
        answerKey[i] = tempArrayB.join(",");
      }
      else{
        examItemOrderArray.splice(i, 1);
        examItemQuestionTypeArray.splice(i, 1);
        answerKey.splice(i, 1);
        i--;
      }
      inclusionBit[inclusionBit.length] = tempArrayA.join(",");
    }
  }
  var examinees = new Array();
  var totalNumExaminees = 0;
  for(var i = 0;i < document.forms.length;i++){
    if(document.forms[i].name.indexOf("e_") != -1){
      for(var j = 0;j < document.forms[i].length;j++){
        if(document.forms[i].elements[j].type == "checkbox"){
          totalNumExaminees++;
          if(document.forms[i].elements[j].checked){
            examinees[examinees.length]      =      new      examineeRecord(inclusionBit,      document.forms[i].elements[j].value.split("-"),
getCheckBit(document.forms[i].elements[j].value), 0, "m", document.forms[i].name, document.forms[i].elements[j].name);
          }
        }
      }
    }
  }
  //populate the 'Exam Item Statistics' tab
  examinees.sort(compare);
  var tempArray = new Array(examinees.length);
  tempArray = examinees;
  examinees = null;
  examinees = new Array(tempArray.length);
  for(var i = examinees.length - 1;i >= 0;i--){
    examinees[i] = tempArray.pop();
  }
  var upperLowerN = Math.ceil(examinees.length * .27);
  //mark the upper
  for(var i = 0;i < upperLowerN;i++){
    examinees[i].uml = "u";
  }
  //mark the lower
  for(var i = examinees.length - 1;i > examinees.length - upperLowerN - 1;i--){
    examinees[i].uml = "l";
  }
  /*
  //this alert displays all the examinee attributes...
  var alertStr = "";
  for(var i = 0;i < examinees.length;i++){
    alertStr += "[" + examinees[i].answerStringArray.join("-") + "][" + examinees[i].checkBitArray.join("-") + "][" + examinees[i].score + "]["
+ examinees[i].uml + "]\n";
  }
  alert(alertStr);
  */
  for(var i = 0;i < examItemOrderArray.length;i++){
    //locate the form for this exam item
    for(var j = 0;j < document.forms.length;j++){
      if(document.forms[j].name.indexOf("exam_Item_" + examItemOrderArray[i]) != -1){
        var currentExamItem = document.forms[j];
        break;
      }
    }
    switch(examItemQuestionTypeArray[i]){
      case 'true or false':
        var u_f_ = 0;
        var l_f_ = 0;
        //fill frequency textbox
        for(var j = 0;j < examinees.length;j++){
          eval("var currentTextBox = currentExamItem.t_f_" + examinees[j].answerStringArray[i] + ";");
          currentTextBox.value = parseInt(currentTextBox.value, 10) + 1;
          if(examinees[j].answerStringArray[i] == answerKey[i]){
            if(examinees[j].uml == "u"){
              u_f_++;
            }
            if(examinees[j].uml == "l"){
              l_f_++;
            }
          }
        }
        //fill percentage textbox
        var leftMostArray = new Array('t');
        for(var j = 0;j < leftMostArray.length;j++){
          var rowSum = 0;
          for(var k = 0;k < currentExamItem.length;k++){
            if(currentExamItem.elements[k].name.indexOf(leftMostArray[j] + "_f_" ) != -1){
              rowSum += parseInt(currentExamItem.elements[k].value, 10);
            }
          }
          if(rowSum != 0){
            for(var k = 0;k < currentExamItem.length;k++){
              if(currentExamItem.elements[k].name.indexOf(leftMostArray[j] + "_f_") != -1){
                var currentTextBoxNameP = currentExamItem.elements[k].name;
                currentTextBoxNameP = currentTextBoxNameP.replace("_f_", "_p_");
                eval("currentExamItem." + currentTextBoxNameP + ".value = Math.round((parseInt(" + currentExamItem.elements[k].value + ", 10) /
" + rowSum + ") * 100);");
              }
            }
          }
        }
        //'Discrimination Index'
        var numResult = new Number();
        numResult = (u_f_ - l_f_) / upperLowerN;
        currentExamItem.DI.value = numResult.toFixed(2).toString();
        break;
      case 'multiple choice':
        //fill frequency textbox
        for(var j = 0;j < examinees.length;j++){
          eval("var currentTextBox = currentExamItem." + examinees[j].uml + "_f_" + examinees[j].answerStringArray[i] + ";");
          currentTextBox.value = parseInt(currentTextBox.value, 10) + 1;
          eval("currentTextBox = currentExamItem." + "t_f_" + examinees[j].answerStringArray[i] + ";");
          currentTextBox.value = parseInt(currentTextBox.value, 10) + 1;
        }
        //fill percentage textbox
        var leftMostArray = new Array('u', 'm', 'l', 't');
        for(var j = 0;j < leftMostArray.length;j++){
          var rowSum = 0;
          for(var k = 0;k < currentExamItem.length;k++){
            if(currentExamItem.elements[k].name.indexOf(leftMostArray[j] + "_f_" ) != -1){
              rowSum += parseInt(currentExamItem.elements[k].value, 10);
            }
          }
          if(rowSum != 0){
            for(var k = 0;k < currentExamItem.length;k++){
              if(currentExamItem.elements[k].name.indexOf(leftMostArray[j] + "_f_") != -1){
                var currentTextBoxNameP = currentExamItem.elements[k].name;
                currentTextBoxNameP = currentTextBoxNameP.replace("_f_", "_p_");
                eval("currentExamItem." + currentTextBoxNameP + ".value = Math.round((parseInt(" + currentExamItem.elements[k].value + ", 10) /
" + rowSum + ") * 100);");
              }
            }
          }
        }
        //fill the 'item discrimination' column...
        for(var j = 0;j < currentExamItem.length;j++){
          if(currentExamItem.elements[j].name.indexOf("t_i_") != -1){
            var currentTextBoxNameI = currentExamItem.elements[j].name;
            eval("var uNum = new Number(currentExamItem." + currentTextBoxNameI.replace("t_i_", "u_f_") + ".value);");
            eval("var lNum = new Number(currentExamItem." + currentTextBoxNameI.replace("t_i_", "l_f_") + ".value);");
            var numResult = new Number();
            numResult = (uNum - lNum) / upperLowerN;
            currentExamItem.elements[j].value = numResult.toFixed(2).toString();
            //'Discrimination Index'
            if(currentExamItem.elements[j].name == "t_i_" + answerKey[i]){
              currentExamItem.DI.value = currentExamItem.elements[j].value;
            }
          }
        }
        break;
      case 'matching type':
        //fill frequency textbox
        var matchingAnswerKeyArray = answerKey[i].split(",");
        var u_f_a = new Array();
        var l_f_a = new Array();
        for(var k = 0;k < matchingAnswerKeyArray.length;k++){
          u_f_a[k] = 0;
          l_f_a[k] = 0;
        }
        for(var j = 0;j < examinees.length;j++){
          var matchingAnswerArray = examinees[j].answerStringArray[i].split(",");
          for(var k = 0;k < matchingAnswerArray.length;k++){
            if(matchingAnswerKeyArray[k] == ""){
              continue;
            }
            eval("currentTextBox = currentExamItem." + "t_f_" + matchingAnswerArray[k] + "_" + k + ";");
            //alert(currentTextBox.name);
            currentTextBox.value = parseInt(currentTextBox.value, 10) + 1;
            if(matchingAnswerArray[k] == matchingAnswerKeyArray[k]){
              if(examinees[j].uml == "u"){
                u_f_a[k]++;
              }
              if(examinees[j].uml == "l"){
                l_f_a[k]++;
              }
            }
          }
        }
        //fill percentage textbox
        for(var l = 0;l < matchingAnswerKeyArray.length;l++){
          if(matchingAnswerKeyArray[k] == ""){
            continue;
          }
          var leftMostArray = new Array('t');
          for(var j = 0;j < leftMostArray.length;j++){
            var rowSum = 0;
            for(var k = 0;k < currentExamItem.length;k++){
              eval("var re = /" + leftMostArray[j] + "_f_[0-9]*_" + l + "/g;");
              if(currentExamItem.elements[k].name.search(re) != -1){
                rowSum += parseInt(currentExamItem.elements[k].value, 10);
              }
            }
            if(rowSum != 0){
              for(var k = 0;k < currentExamItem.length;k++){
                eval("var re = /" + leftMostArray[j] + "_f_[0-9]*_" + l + "/g;");
                if(currentExamItem.elements[k].name.search(re) != -1){
                  var currentTextBoxNameP = currentExamItem.elements[k].name;
                  currentTextBoxNameP = currentTextBoxNameP.replace("_f_", "_p_");
                  eval("currentExamItem." + currentTextBoxNameP + ".value = Math.round((parseInt(" + currentExamItem.elements[k].value + ", 10)
/ " + rowSum + ") * 100);");
                }
              }
            }
          }
          //'Discrimination Index
          var numResult = new Number();
          numResult = (u_f_a[l] - l_f_a[l]) / upperLowerN;
          eval("currentExamItem.DI_" + l + ".value = numResult.toFixed(2);");
        }
        break;
      default:
        break;
    }
  }
  //halt if 'Item Analysis' tab is ON
  //if(activeTab_global == "Item Analysis"){
  //  return false;
  //}
  //initialize the statistical variables
  var tempSum = new Number();
  var statisticsNameArray = document.examStatisticsForm.statisticsName.value.split(",");
  for(var i = 0;i < statisticsNameArray.length;i++){
    eval("var " + statisticsNameArray[i] + " = new Number();");
  }
  //proceed with the computation...
  nIncItems = totalNumExamItem - totalNumExamItemOmit;
  nOmitItems = totalNumExamItemOmit;
  nIncExaminees = examinees.length;
  nOmitExaminees = totalNumExaminees - nIncExaminees;
  minimum = examinees[0].score;
  maximum = examinees[examinees.length - 1].score;
  //compute mean
  tempSum = 0;
  for(var i = 0;i < examinees.length;i++){
    tempSum += examinees[i].score;
  }
  mean = tempSum / nIncExaminees;
  //compute variance and std dev
  tempSum = 0;
  for(var i = 0;i < examinees.length;i++){
    tempSum += Math.pow(examinees[i].score - mean, 2);
  }
  variance = tempSum / (nIncExaminees - 1);
  standardDeviation = Math.sqrt(variance);
  //compute skewness
  tempSum = 0;
  for(var i = 0;i < examinees.length;i++){
    tempSum += Math.pow(examinees[i].score - mean, 3);
  }
  skew = (tempSum / (nIncExaminees - 1)) / (Math.pow(standardDeviation, 3));
  //compute kurtosis
  tempSum = 0;
  for(var i = 0;i < examinees.length;i++){
    tempSum += Math.pow(examinees[i].score - mean, 4);
  }
  kurtosis = (tempSum / (nIncExaminees - 1)) / (Math.pow(standardDeviation, 4));
  //compute median
  if(nIncExaminees % 2 == 1){
    median = examinees[Math.floor(nIncExaminees / 2)].score;
  }
  else{
    median = (examinees[nIncExaminees / 2].score + examinees[(nIncExaminees / 2) - 1].score) / 2;
  }
  //compute KR20
  var expandedCheckBit = new Array();
  for(var i = 0;i < examinees.length;i++){
    expandedCheckBit[expandedCheckBit.length] = (examinees[i].checkBitArray.join(",")).split(",");
  }
  tempSum = 0;
  var numCorrect = 0;
  for(var i = 0;i < expandedCheckBit[0].length;i++){
    numCorrect = 0;
    for(var j = 0;j < expandedCheckBit.length;j++){
      if(expandedCheckBit[j][i] == "1"){
        numCorrect++;
      }
    }
    tempSum += ((numCorrect / nIncExaminees) * ((nIncExaminees - numCorrect)/ nIncExaminees));
  }
  KR20 = (nIncExaminees / (nIncExaminees - 1)) * (1 - (tempSum / variance));
  //compute KR21
  KR21 = (nIncItems / (nIncItems - 1)) * (1 - ((mean * (nIncItems - mean)) / (nIncItems * variance)));
  //Spearman Brown Prophecy
  tempSum = 0;
  if(expandedCheckBit[0].length % 2 == 0){
    var balancingIndex = expandedCheckBit[0].length;
  }
  else{
    var balancingIndex = expandedCheckBit[0].length - 1;
  }
  var oddScore = 0;
  var evenScore = 0;
  var pX = 0;
  var pY = 0;
  var pXY = 0;
  var pX2 = 0;
  var pY2 = 0;
  for(var i = 0;i < expandedCheckBit.length;i++){
    oddScore = 0;
    evenScore = 0;
    for(var j = 0;j <= balancingIndex;j++){
      if(j % 2 == 0){
        if(expandedCheckBit[i][j] == "1"){
          oddScore++;
        }
      }
      else{
        if(expandedCheckBit[i][j] == "1"){
          evenScore++;
        }
      }
    }
    pX += oddScore;
    pY += evenScore;
    pXY += (oddScore * evenScore);
    pX2 += Math.pow(oddScore, 2);
    pY2 += Math.pow(evenScore, 2);
  }
  tempSum = ((nIncExaminees * pXY) - (pX * pY)) / Math.sqrt(((nIncExaminees * pX2) - Math.pow(pX, 2)) * ((nIncExaminees * pY2) - Math.pow(pY,
2)));
  SB = (2 * tempSum)/(1 + tempSum);
  //calculate 'Item Difficulty' and 'point biserial'
  for(var i = 0;i < examItemOrderArray.length;i++){
    //get the current form for the current item
    for(var j = 0;j < document.forms.length;j++){
      if(document.forms[j].name.indexOf("exam_Item_" + examItemOrderArray[i]) != -1){
        var currentExamItem = document.forms[j];
        break;
      }
    }
    //plug 'item difficulty'
    if(examItemQuestionTypeArray[i] != "matching type"){
      eval("currentExamItem.itemDifficulty.value = currentExamItem.t_p_" + answerKey[i] + ".value;");
      tempSum = 0;
      var correctStudentCount = 0;
      for(var l = 0;l < examinees.length;l++){
        if(examinees[l].checkBitArray[i] == "1"){
          tempSum += examinees[l].score;
          correctStudentCount++;
        }
      }
      var p = currentExamItem.itemDifficulty.value / 100;
      tempSum = tempSum / correctStudentCount;
      currentExamItem.PBC.value = (((tempSum - mean) / standardDeviation) * Math.sqrt(p / (1 - p))).toFixed(2);
    }
    else{
      var tempArray = answerKey[i].split(",");
      for(var k = 0;k < tempArray.length;k++){
        if(tempArray[k] == ""){
          continue;
        }
        eval("currentExamItem.itemDifficulty_" + k + ".value = currentExamItem.t_p_" + tempArray[k] + "_" + k + ".value;");
        tempSum = 0;
        var correctStudentCount = 0;
        for(var l = 0;l < examinees.length;l++){
          var tempArrayCheckBit = examinees[l].checkBitArray[i].split(",");
          if(tempArrayCheckBit[k] == "1"){
            tempSum += examinees[l].score;
            correctStudentCount++;
          }
        }
        eval("var p = currentExamItem.itemDifficulty_" + k + ".value / 100;");
        tempSum = tempSum / correctStudentCount;
        eval("currentExamItem.PBC_" + k + ".value = (((tempSum - mean) / standardDeviation) * Math.sqrt(p / (1 - p))).toFixed(2);");
      }
    }
  }
  //plug the statistical values...
  for(var i = 0;i < statisticsNameArray.length;i++){
    if(i < 4){
      eval("document.examStatisticsForm." + statisticsNameArray[i] + ".value = " + statisticsNameArray[i] + ".toFixed(0);");
    }
    else{
      eval("document.examStatisticsForm." + statisticsNameArray[i] + ".value = " + statisticsNameArray[i] + ".toFixed(2);");
    }
    var currentValue = eval("document.examStatisticsForm." + statisticsNameArray[i] + ".value;");
    var currentTextarea = eval("document.examStatisticsForm." + statisticsNameArray[i] + "_textarea;");
    switch(statisticsNameArray[i]){
      case 'KR20':
        if(currentValue > .70){
          currentTextarea.value = "acceptable reliability coefficient. We can use this test (with some degree of confidence) to evaluate
student performance.";
        }
        else{
          currentTextarea.value = "the test exhibited low reliability, therefore we can't use it to evaluate student performance. Serious
attention must be given to improving the quality of individual test items.";
        }
        break;
      case 'KR21':
        if(currentValue > .70){
          currentTextarea.value = "acceptable reliability coefficient. We can use this test (with some degree of confidence) to evaluate
student performance.";
        }
        else{
          currentTextarea.value = "the test exhibited low reliability, therefore we can't use it to evaluate student performance. Serious
attention must be given to improving the quality of individual test items.";
        }
        break;
      case 'SB':
        if(currentValue > .70){
          currentTextarea.value = "acceptable reliability coefficient. We can use this test (with some degree of confidence) to evaluate
student performance.";
        }
        else{
          currentTextarea.value = "the test exhibited low reliability, therefore we can't use it to evaluate student performance. Serious
attention must be given to improving the quality of individual test items.";
        }
        break;
      default:
        break;
    }
  }
  //plug the textArea values for the exam_Item_ forms...
  for(var i = 0;i < document.forms.length;i++){
    if(document.forms[i].name.indexOf("exam_Item_") != -1){
      for(var j = 0;j < document.forms[i].elements.length;j++){
        //itemDifficulty
        if((document.forms[i].elements[j].type == "text")&&(document.forms[i].elements[j].name.indexOf("itemDifficulty") != -1)){
          var currentField = document.forms[i].elements[j];
          var      currentTextarea      =      eval("document.forms[i]."      +      document.forms[i].elements[j].name.replace("itemDifficulty",
"itemDifficulty_textarea"));
          if((currentField.value < 0)||(currentField.value > 100)){
            currentTextarea.value = "error: value is out of range";
          }
          else if(currentField.value > 90){
            currentTextarea.value = "the item is very easy. Please check the item for possible clues.";
          }
          else{
            if(currentField.value < 25){
              currentTextarea.value = "the item is very hard. Please check the item for possible ambiguity of confusion in the wording. It is
also possible that this item was not covered in the instruction.";
            }
            else{
              currentTextarea.value = "the item has acceptable difficulty";
            }
          }
        }
        //'discrimination index'
        if((document.forms[i].elements[j].type == "text")&&(document.forms[i].elements[j].name.indexOf("DI") != -1)){
          var currentField = document.forms[i].elements[j];
          var currentTextarea = eval("document.forms[i]." + document.forms[i].elements[j].name.replace("DI", "DI_textarea"));
          if((currentField.value < -1)||(currentField.value > 1)){
            currentTextarea.value = "error: value is out of range";
          }
          else if(currentField.value < 0){
            currentTextarea.value = "students receiving a low score tended to select the option more than higher-scoring students.";
          }
          else if(currentField.value == 0){
            currentTextarea.value = "there was no difference between the high-scoring students and the low-scoring students.";
          }
          else{
            currentTextarea.value = "students receiving a high score tended to select the option more than lower-scoring students (ideal).";
          }
        }
        //point biserial correlation
        if((document.forms[i].elements[j].type == "text")&&(document.forms[i].elements[j].name.indexOf("PBC") != -1)){
          var currentField = document.forms[i].elements[j];
          var currentTextarea = eval("document.forms[i]." + document.forms[i].elements[j].name.replace("PBC", "PBC_textarea"));
          if((currentField.value < -1)||(currentField.value > 1)){
            currentTextarea.value = "error: value is out of range";
          }
          else if(currentField.value > .40){
            currentTextarea.value = "very good item";
          }
          else{
            if(currentField.value < .10){
              currentTextarea.value = "poor item";
            }
            else if((currentField.value >= .10)&&(currentField.value <= .19)){
              currentTextarea.value = "marginal item";
            }
            else if((currentField.value >= .20)&&(currentField.value <= .29)){
              currentTextarea.value = "fairly good item";
            }
            else if((currentField.value >= .30)&&(currentField.value <= .39)){
              currentTextarea.value = "good item";
            }
          }
        }
      }
    }
  }
  //plug production rules in the 'title' attribute
/*
  for(var i = 0;i < document.forms.length;i++){
    if(document.forms[i].name.indexOf("exam_Item_") != -1){
      for(var j = 0;j < document.forms[i].elements.length;j++){
        //itemDifficulty
        if((document.forms[i].elements[j].type == "textarea")&&(document.forms[i].elements[j].name.indexOf("itemDifficulty_textarea") != -1)){
          document.forms[i].elements[j].title = "production rules:\n";
          document.forms[i].elements[j].title += "> 40% excellent discrimination\n";
          document.forms[i].elements[j].title += "25% to 39% excellent discrimination\n";
          document.forms[i].elements[j].title += "< 25% poor discrimination\n";
        }
      }
    }
  }
*/
  //fill examinees tab
  for(var i = 0;i < examinees.length;i++){
    var zScore = new Number();
    zScore = (examinees[i].score - mean) / standardDeviation;
    var currentForm = eval("document." + examinees[i].batchExamineeForm + ";");
    eval("document." + examinees[i].batchExamineeForm + ".score_" + examinees[i].studentNumber + ".value = " + examinees[i].score + ";");
    /**/
    eval("document." + examinees[i].batchExamineeForm + ".wt_" + examinees[i].studentNumber + ".value = " + examinees[i].weightedScoreCount +
";");
    /**/
    eval("document." + examinees[i].batchExamineeForm + ".z_" + examinees[i].studentNumber + ".value = " + zScore.toFixed(2) + ";");
    zScore = (zScore * 10) + 50;
    eval("document." + examinees[i].batchExamineeForm + ".t_" + examinees[i].studentNumber + ".value = " + zScore.toFixed(2) + ";");
  }

  //start system intrinsic events...
  if(document.systemEvents != null){
    if(document.systemEvents.directive.value == "examBatchAnalysis"){
      //fill the examineeList and examineeScoreList
      var examineeListArray = new Array(examinees.length);
      var examineeScoreListArray = new Array(examinees.length);
      for(var i = 0;i < examinees.length;i++){
        examineeListArray[i] = examinees[i].studentNumber.replace("_", "-");
        examineeScoreListArray[i] = examinees[i].score;
      }
      document.systemEvents.examineeList.value = examineeListArray.join(",");
      document.systemEvents.examineeScoreList.value = examineeScoreListArray.join(",");
      document.systemEvents.submit();
    }
    if(document.systemEvents.directive.value == "examAnalysis"){
      var statisticsNameArray = document.examStatisticsForm.statisticsName.value.split(",");
      var examStatisticsValuesArray = new Array(statisticsNameArray.length);
      for(var i = 0;i < statisticsNameArray.length;i++){
        examStatisticsValuesArray[i] = eval("document.examStatisticsForm." + statisticsNameArray[i] + ".value;");
      }
      var itemAnalysisValuesArray = new Array(examItemOrderArray.length);
      for(var i = 0;i < examItemOrderArray.length;i++){
        if(examItemQuestionTypeArray[i] != "matching type"){
          eval("var currItemDifficulty = document.exam_Item_" + examItemOrderArray[i] + ".itemDifficulty.value;");
          eval("var currDI = document.exam_Item_" + examItemOrderArray[i] + ".DI.value;");
          eval("var currPBC = document.exam_Item_" + examItemOrderArray[i] + ".PBC.value;");
          itemAnalysisValuesArray[i] = currItemDifficulty + "_" + currDI + "_" + currPBC;
        }
        else{
          var matchingArray = answerKey[i].split(",");
          var currItemDifficulty = new Number();
          var currDI = new Number();
          var currPBC = new Number();
          currItemDifficulty = 0;
          currDI = 0;
          currPBC = 0;
          for(var j = 0;j < matchingArray.length;j++){
            currItemDifficulty += eval("parseFloat(document.exam_Item_" + examItemOrderArray[i] + ".itemDifficulty_" + j + ".value);");
            currDI += eval("parseFloat(document.exam_Item_" + examItemOrderArray[i] + ".DI_" + j + ".value);");
            currPBC += eval("parseFloat(document.exam_Item_" + examItemOrderArray[i] + ".PBC_" + j + ".value);");
          }
          currItemDifficulty = currItemDifficulty / matchingArray.length;
          currDI = currDI / matchingArray.length;
          currPBC = currPBC / matchingArray.length;
          itemAnalysisValuesArray[i] = currItemDifficulty.toFixed(2) + "_" + currDI.toFixed(2) + "_" + currPBC.toFixed(2);
        }
      }
      document.systemEvents.examStatisticsValues.value = examStatisticsValuesArray.join(",");
      document.systemEvents.itemAnalysisValues.value = itemAnalysisValuesArray.join(",");
      document.systemEvents.submit();
    }
  }
  //check for user initiated events...
  if(document.systemEventsUser.directive.value == "examAnalysisUser"){
    var statisticsNameArray = document.examStatisticsForm.statisticsName.value.split(",");
    var examStatisticsValuesArray = new Array(statisticsNameArray.length);
    for(var i = 0;i < statisticsNameArray.length;i++){
      examStatisticsValuesArray[i] = eval("document.examStatisticsForm." + statisticsNameArray[i] + ".value;");
    }
    var examItemOrderArrayMod = new Array();
    var itemAnalysisValuesArray = new Array();
    for(var i = 0;i < examItemOrderArray.length;i++){
      if(examItemQuestionTypeArray[i] != "matching type"){
        eval("var currItemDifficulty = document.exam_Item_" + examItemOrderArray[i] + ".itemDifficulty.value;");
        eval("var currDI = document.exam_Item_" + examItemOrderArray[i] + ".DI.value;");
        eval("var currPBC = document.exam_Item_" + examItemOrderArray[i] + ".PBC.value;");
        examItemOrderArrayMod[examItemOrderArrayMod.length] = examItemOrderArray[i];
        itemAnalysisValuesArray[itemAnalysisValuesArray.length] = currItemDifficulty + "_" + currDI + "_" + currPBC;
      }
      else{
        var matchingArray = answerKey[i].split(",");
        var matchingArrayCount = 0;
        var currItemDifficulty = new Number();
        var currDI = new Number();
        var currPBC = new Number();
        currItemDifficulty = 0;
        currDI = 0;
        currPBC = 0;
        for(var j = 0;j < matchingArray.length;j++){
          if(matchingArray[j] == ""){
            continue;
          }
          currItemDifficulty += eval("parseFloat(document.exam_Item_" + examItemOrderArray[i] + ".itemDifficulty_" + j + ".value);");
          currDI += eval("parseFloat(document.exam_Item_" + examItemOrderArray[i] + ".DI_" + j + ".value);");
          currPBC += eval("parseFloat(document.exam_Item_" + examItemOrderArray[i] + ".PBC_" + j + ".value);");
          matchingArrayCount++;
        }
        currItemDifficulty = currItemDifficulty / matchingArrayCount;
        currDI = currDI / matchingArrayCount;
        currPBC = currPBC / matchingArrayCount;
        examItemOrderArrayMod[examItemOrderArrayMod.length] = examItemOrderArray[i];
        itemAnalysisValuesArray[itemAnalysisValuesArray.length]   =   currItemDifficulty.toFixed(2)   +   "_"   +   currDI.toFixed(2)   +   "_"   +
currPBC.toFixed(2);
      }
    }
    document.systemEventsUser.examStatisticsValues.value = examStatisticsValuesArray.join(",");
    document.systemEventsUser.examItemOrder.value = examItemOrderArrayMod.join(",");
    document.systemEventsUser.itemAnalysisValues.value = itemAnalysisValuesArray.join(",");
  }
}
function getCheckBit(answerString){
  var answerKey = document.examValues.examAnswer.value.split("-");
  var examItemQuestionTypeArray = document.examValues.examItemQuestionType.value.split(",");
  var answerStringArray = answerString.split("-");
  var checkBit = new Array(answerKey.length);
  for(var i = 0;i < answerKey.length;i++){
    if(examItemQuestionTypeArray[i] == "matching type"){
      var tempArrayA = answerKey[i].split(",");
      var tempArrayB = answerStringArray[i].split(",");
      var tempArrayC = new Array(tempArrayA.length);
      for(var j = 0;j < tempArrayA.length;j++){
        if(tempArrayA[j] == tempArrayB[j]){
          tempArrayC[j] = 1;
        }
        else{
          tempArrayC[j] = 0;
        }
      }
      checkBit[i] = tempArrayC.join(",");
    }
    else{
      if(answerKey[i] == answerStringArray[i]){
        checkBit[i] = 1;
      }
      else{
        checkBit[i] = 0;
      }
    }
  }
  //return checkBit.join("-");
  return checkBit;
}
function compare(a, b){
  return parseInt(a.score, 10) - parseInt(b.score, 10);
}
function includeExcludeExamItem(div, currentForm, questionId){
  if(currentForm.include.checked){
    document.getElementById("examItemStatisticsDiv_" + questionId).style.display = "";
    div.style.borderBottom = "#008000 solid 0px";
  }
  else{
    document.getElementById("examItemStatisticsDiv_" + questionId).style.display = "none";
    div.style.borderBottom = "#008000 solid 1px";
  }
}
function includeExcludeExamItemMT(checkbox, currentId){
  var currentGroup = document.all["examItemStatisticsGroup_" + currentId];
  if(checkbox.checked){
    //document.getElementsByName("examItemStatisticsGroup_" + currentId).style.display = "";

    for(var i = 0;i < currentGroup.length;i++){
      currentGroup[i].style.display = "";
    }
  }
  else{
    //document.getElementById("examItemStatisticsGroup_" + currentId).style.display = "none";
    for(var i = 0;i < currentGroup.length;i++){
      currentGroup[i].style.display = "none";
    }
  }
}
function subok(){
  var arr1 = new Array('a', 'b', 'c', 'd');
  arr1.splice(0, 1);
  alert(arr1);

}
function backToMainAfterStatisticsComputation(){
  opener.document.forms[opener.document.forms.length - 1].submit();
  close();
}
function openStatisticsPopup(directive){
  eval("var     subWindow     =     window.open('/toes/director/statistics_Popup.php?directive="     +     directive     +     "&examId="     +
document.examValues.examId.value + "','subWindow','WIDTH=" + (screen.width * .30)  + ",HEIGHT=" + (screen.height * .30) + ",status');");
  document.systemEventsUser.directive.value = "examAnalysisUser";
  computeStatistics("recompute");
}
function statisticsPopup(directive){
  switch(directive){
    case 'examAnalysisUser':
      document.systemEvents.examStatisticsValues.value = opener.document.systemEventsUser.examStatisticsValues.value;
      document.systemEvents.examItemOrder.value = opener.document.systemEventsUser.examItemOrder.value;
      document.systemEvents.itemAnalysisValues.value = opener.document.systemEventsUser.itemAnalysisValues.value;
      break;
    case 'close':
      opener.document.systemEventsUser.directive.value = "";
      close();
      break;
    default:
      break;
  }
}
function directorPasswordCheck(currentForm){
  if(currentForm.passwordNew.value.length < 8){
    alert("error: please use passwords of length 8 or more");
    currentForm.passwordNew.select();
    return false;
  }
  if(currentForm.passwordNewR.value.length < 8){
    alert("error: please use passwords of length 8 or more");
    currentForm.passwordNewR.select();
    return false;
  }
  return true;
}
function addAnswerSheetJs(currentForm){
  if((currentForm.studNumA.value == "")&&(currentForm.studNumB.value == "")){
    alert("error: please include the student number");
    return false;
  }
  if((currentForm.studNumA.value == "")||(currentForm.studNumB.value == "")){
    alert("error: please complete the student number");
    return false;
  }
  var re = /\d\d\d\d/;
  if(currentForm.studNumA.value.search(re) == -1){
    alert("error: invalid student number");
    currentForm.studNumA.select();
    return false;
  }
  var re = /\d\d\d\d\d/;
  if(currentForm.studNumB.value.search(re) == -1){
    alert("error: invalid student number");
    currentForm.studNumB.select();
    return false;
  }
  return true;
}
function joinMatchingTypeSubAnswers(elementName, currentForm){
  eval("var answerElement = document." + currentForm.name + "." + elementName + ";");
  var answerElementArray = new Array();
  for(var i = 0;i < currentForm.elements.length;i++){
    if((currentForm.elements[i].name.indexOf(elementName) != -1)&&(currentForm.elements[i].name != elementName)){
      answerElementArray[answerElementArray.length] =  currentForm.elements[i].options[currentForm.elements[i].selectedIndex].value;
    }
  }
  answerElement.value = answerElementArray.join(",");
}
function setEditDeleteAnswerSheet(formName, formElementName, stud){
  eval("var currentElement = document." + formName + "." + formElementName + " ;");
  currentElement.value = stud.replace("_", "-");
  eval("document." + formName + ".submit();");
}
function setActiveTab(currentForm, val){
  currentForm.activeTab.value = val;
  currentForm.submit();
}
```

E. EXAM

questionnaire.js

```
/*******************************************************************************************************/
self.onbeforeunload = onbeforeunloadHandler;
var intervalID = 0;
var studentModule = self.opener;
var onbeforeunloadFired = 0;
function notifyStudentModule(){
  if(studentModule.closed){
    //alert("The STUDENT MODULE window was closed!");
    if(intervalID){
      clearInterval(intervalID);
    }
    document.toesExamItemForm.violation.value = "blocked";
    document.toesExamItemForm.offense.value = "TOES blocked you because the 'STUDENT MODULE' window was closed.";
    jumpToQuestion(document.toesExamItemForm.questionIdDisplayed.value);
  }
  else{
    if(studentModule || !studentModule.popupExam){
      studentModule.popupExam = self;
      if(studentModule.intervalID == 0){
        studentModule.runSetIntervalFromPopup();
      }
    }
  }
}
function loadExamWindowWithViolation(){
  studentModule.exitClearance = 1;
}
function closeWithClearance(){
  studentModule.exitClearance = 1;
  self.close();
}
function onbeforeunloadHandler(){
  onbeforeunloadFired = 1;
}
/*******************************************************************************************************/
var focusStatus = null;
var lostFocusCount = 0;
var timer = null;
var timerID = 0;
function startTimer(){
  timer = new Date();
  var remainingTimeArray = document.toesExamItemForm.remainingTime.value.split(":");
  timer.setHours(remainingTimeArray[0]);
  timer.setMinutes(remainingTimeArray[1]);
  timer.setSeconds(remainingTimeArray[2]);
  document.navigationForm.remainingTime.value = timer.getHours() + " : " + timer.getMinutes() + " : " + timer.getSeconds();
  if(document.navigationForm.remainingTime.value == "0 : 0 : 0"){
    //alert("TIME IS UP!");
    document.toesExamItemForm.violation.value = "time is up";
    jumpToQuestion(document.toesExamItemForm.questionIdDisplayed.value);
  }
  else{
    timerID = setTimeout("updateTimer()", 1000);
  }
}
function updateTimer(){
  if(timerID){
    clearTimeout(timerID);
  }
  timer.setTime(timer.getTime() - 1000);
  document.navigationForm.remainingTime.value = timer.getHours() + " : " + timer.getMinutes() + " : " + timer.getSeconds();
  if(document.navigationForm.remainingTime.value == "0 : 0 : 0"){
    //alert("TIME IS UP!");
    document.toesExamItemForm.violation.value = "time is up";
    jumpToQuestion(document.toesExamItemForm.questionIdDisplayed.value);
  }
  else{
    timerID = setTimeout("updateTimer()", 1000);
  }
  self.window.moveTo(0, 0);
}
function windowOnload(operationMode, navigationBit){
  if( top != self){
    top.location = location;
  }
  if(document.toesExamItemForm.style.value != "printStyle"){
    self.window.resizeTo(screen.width, screen.height);
    self.window.moveTo(0, 0);
  }
  keyboard();
  rightClick();
  switch(operationMode){
    case 'preview question':
      navigationDisplay("01020");
      document.getElementById('toesSection2').style.display = 'none';
      document.getElementById('toesSection3').style.display = 'none';

      switch(document.toesExamItemForm.toesExamItemQuestionType.value){
        case 'matching type':
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if(document.toesExamItemForm.elements[i].name == 'matchingTypeSelect[]'){
              for(var j = 0;j < parseInt(document.toesExamItemForm.matchingTypeTagAttributeCount.value) + 1;j++){
                if(j == 0){
                  document.toesExamItemForm.elements[i].options[document.toesExamItemForm.elements[i].options.length] = new Option('--', '--');
                }
                else{
                  document.toesExamItemForm.elements[i].options[document.toesExamItemForm.elements[i].options.length] = new Option(j, j);
                }
              }
            }
          }
          break
        default:
          break;
      }
      break;
    case 'preview exam':
      if(document.toesExamItemForm.style.value == "printStyle"){
        var bodyText = document.body.innerHTML;
        //alert(bodyText.substr(1000));
        var searchTerm = '<p class=msonormal>&nbsp;</p>';
        var newText = "";
        var i = -1;
        var lcBodyText = bodyText.toLowerCase();
        while(bodyText.length > 0){
          i = lcBodyText.indexOf(searchTerm, i+1);
          if(i < 0){
            newText += bodyText;
            bodyText = "";
          }
          else{
            //alert("1");
            // skip anything inside an HTML tag
            //if(bodyText.lastIndexOf(">", i) >= bodyText.lastIndexOf("<", i)){
              // skip anything inside a <script> block
              //if(lcBodyText.lastIndexOf("/script>", i) >= lcBodyText.lastIndexOf("<script", i)){
                newText += bodyText.substring(0, i);
                bodyText = bodyText.substr(i + searchTerm.length);
                lcBodyText = bodyText.toLowerCase();
                i = -1;
              //}
            //}
          }
        }
        document.body.innerHTML = newText;
      }
      if(document.toesExamItemForm.style.value == "printStyle"){
        /*
        var myDiv = document.getElementById("toesSection2");
        myDiv.style.display = "none";
        var myDiv = document.getElementById("toesSection3");
        myDiv.style.display = "none";
        var myDiv = document.getElementById("toesQuestionAnswerElements");
        myDiv.style.display = "none";
        */
      }
      else{
        navigationDisplay(navigationBit);
      }
      switch(document.toesExamItemForm.toesExamItemQuestionType.value){
        case 'matching type':
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if(document.toesExamItemForm.elements[i].name == 'matchingTypeSelect[]'){
              for(var j = 0;j < parseInt(document.toesExamItemForm.matchingTypeTagAttributeCount.value) + 1;j++){
                if(j == 0){
                  document.toesExamItemForm.elements[i].options[document.toesExamItemForm.elements[i].options.length] = new Option('--', '--');
                }
                else{
                  document.toesExamItemForm.elements[i].options[document.toesExamItemForm.elements[i].options.length] = new Option(j, j);
                }
              }
            }
          }
          break
        default:
          break;
      }
      break;
    case 'review exam':
      navigationDisplay(navigationBit);
      break;
    case 'take exam':
      //studentModule = self.opener;
      intervalID = setInterval( notifyStudentModule, 1 );
      //self.window.focus();
      navigationDisplay(navigationBit);
      switch(document.toesExamItemForm.toesExamItemQuestionType.value){
        case 'matching type':
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if(document.toesExamItemForm.elements[i].name == 'matchingTypeSelect[]'){
              for(var j = 0;j < parseInt(document.toesExamItemForm.matchingTypeTagAttributeCount.value) + 1;j++){
                if(j == 0){
                  document.toesExamItemForm.elements[i].options[document.toesExamItemForm.elements[i].options.length] = new Option('--', '--');
                }
                else{
                  document.toesExamItemForm.elements[i].options[document.toesExamItemForm.elements[i].options.length] = new Option(j, j);
                }
              }
            }
          }
          break
        default:
          break;
      }
      if(document.toesExamItemForm.currentUserAnswer.value != ""){
        switch(document.toesExamItemForm.toesExamItemQuestionType.value){
          case 'multiple choice':
            //select the user's answer
            for(var i = 0;i < document.toesExamItemForm.length;i++){
              if((document.toesExamItemForm.elements[i].name    ==    'multipleChoiceRadio')&&(document.toesExamItemForm.elements[i].value    ==
document.toesExamItemForm.currentUserAnswer.value)){
                document.toesExamItemForm.elements[i].checked = true;
              }
            }
            break;
          case 'true or false':
            //select the user's answer
            for(var i = 0;i < document.toesExamItemForm.length;i++){
              if((document.toesExamItemForm.elements[i].name     ==     'trueOrFalseRadio')&&(document.toesExamItemForm.elements[i].value     ==
document.toesExamItemForm.currentUserAnswer.value)){
                document.toesExamItemForm.elements[i].checked = true;
              }
            }
            break;
          case 'matching type':
            //select the user's answer
            var userAttributeMatching = document.toesExamItemForm.currentUserAnswer.value.split(",");
            var dropDownMenuIndex = 0;
            for(var i = 0;i < document.toesExamItemForm.length;i++){
              if(document.toesExamItemForm.elements[i].name == 'matchingTypeSelect[]'){
                document.toesExamItemForm.elements[i].selectedIndex = userAttributeMatching[dropDownMenuIndex];
                dropDownMenuIndex++;
              }
            }
            break;
          case 'problem solving':
            break;
          case 'essay':
            break;
          default:
            break;
        }
      }
      startTimer();
      break;
    default:
      break;
  }
}
function userWantsToExit(operationMode, exitParam){
  if(operationMode == "take exam"){
    if(exitParam == "fromOnUnloadEvent"){
      document.toesExamItemForm.exitStatus.value = "initial";
      exitParam = "final";
    }
    if(document.toesExamItemForm.exitStatus.value == "initial"){
      if(exitParam == "final"){
        document.toesExamItemForm.exitStatus.value = "final";
        jumpToQuestion(document.toesExamItemForm.questionIdDisplayed.value);
      }
      if(exitParam == "cancel"){
        //studentModule.exitClearance = 1;
        document.toesExamItemForm.exitStatus.value = "";
        jumpToQuestion(document.toesExamItemForm.questionIdDisplayed.value);
      }
    }
    else{
      document.getElementById('first').focus();
      document.getElementById('second').style.display = "none";
      document.getElementById('third').style.display = "none";
      document.getElementById('first').focus();
      document.toesExamItemForm.exitStatus.value = "initial";
      var exitConfirm = document.getElementById('exitConfirm');
      var exitConfirmCss = exitConfirm.style;
      exitConfirmCss.display = '';
    }
  }
  else{
    if(timerID){
      clearTimeout(timerID);
    }
    window.close();
  }
}
function nextTestQuestion(){
  switch(document.toesExamItemForm.operationMode.value){
    case 'preview question':
      switch(document.toesExamItemForm.toesExamItemQuestionType.value){
        case 'multiple choice':
          navigationDisplay("10021");
          //pass selected choice to the textbox
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if((document.toesExamItemForm.elements[i].name == 'multipleChoiceRadio')&&(document.toesExamItemForm.elements[i].checked)){
              document.toesExamItemForm.toesQuestionUserAnswer.value = document.toesExamItemForm.elements[i].value;
            }
          }
          //select the correct answer
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if((document.toesExamItemForm.elements[i].name     ==     'multipleChoiceRadio')&&(document.toesExamItemForm.elements[i].value     ==
document.toesExamItemForm.toesQuestionAnswer.value)){
              document.toesExamItemForm.elements[i].checked = true;
            }
          }
          //disable all form elements
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if(document.toesExamItemForm.elements[i].name == 'multipleChoiceRadio'){
              document.toesExamItemForm.elements[i].disabled = true;
            }
          }
          //correct incorrect
          if(document.toesExamItemForm.toesQuestionAnswer.value == document.toesExamItemForm.toesQuestionUserAnswer.value){
            document.getElementById('toesExamItemCorrectAnswer').style.display = '';
            document.getElementById('toesExamItemIncorrectAnswer').style.display = 'none';
          }
          else{
            document.getElementById('toesExamItemCorrectAnswer').style.display = 'none';
            document.getElementById('toesExamItemIncorrectAnswer').style.display = '';
          }
          //display explanation
          document.getElementById('toesSection2').style.display = '';
          break;
        case 'true or false':
          navigationDisplay("10021");
          //pass selected choice to the textbox
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if((document.toesExamItemForm.elements[i].name == 'trueOrFalseRadio')&&(document.toesExamItemForm.elements[i].checked)){
              document.toesExamItemForm.toesQuestionUserAnswer.value = document.toesExamItemForm.elements[i].value;
            }
          }
          //select the correct answer
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if((document.toesExamItemForm.elements[i].name == 'trueOrFalseRadio')&&(document.toesExamItemForm.elements[i].value ==
document.toesExamItemForm.toesQuestionAnswer.value)){
              document.toesExamItemForm.elements[i].checked = true;
            }
          }
          //disable all form elements
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if(document.toesExamItemForm.elements[i].name == 'trueOrFalseRadio'){
              document.toesExamItemForm.elements[i].disabled = true;
            }
          }
          //correct incorrect
          if(document.toesExamItemForm.toesQuestionAnswer.value == document.toesExamItemForm.toesQuestionUserAnswer.value){
            document.getElementById('toesExamItemCorrectAnswer').style.display = '';
            document.getElementById('toesExamItemIncorrectAnswer').style.display = 'none';
          }
          else{
            document.getElementById('toesExamItemCorrectAnswer').style.display = 'none';
            document.getElementById('toesExamItemIncorrectAnswer').style.display = '';
          }
          //display explanation
          document.getElementById('toesSection2').style.display = '';
          break;
        case 'matching type':
          navigationDisplay("10021");
          //pass selected choice to the textbox
          var itemMatchedAttributeArray = new Array();
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if(document.toesExamItemForm.elements[i].name == 'matchingTypeSelect[]'){
              itemMatchedAttributeArray[itemMatchedAttributeArray.length] = document.toesExamItemForm.elements[i].selectedIndex;
            }
          }
          document.toesExamItemForm.toesQuestionUserAnswer.value = itemMatchedAttributeArray.join(",");
          //check number of correct user answers...
          var correctAttributeMatching = document.toesExamItemForm.toesQuestionAnswer.value.split(",");
          var correctMatch = 0;
          for(var i = 0;i < itemMatchedAttributeArray.length;i++){
            if(itemMatchedAttributeArray[i] == correctAttributeMatching[i]){
              correctMatch++;
            }
          }
          document.toesExamItemForm.toesExamItemMatchingCorrectIncorrectTextbox.value = "you answered " + correctMatch + " correct match(es)
out of " + itemMatchedAttributeArray.length;
          //enter the correct values in the dropdown menu
          var dropDownMenuIndex = 0;
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if(document.toesExamItemForm.elements[i].name == 'matchingTypeSelect[]'){
              document.toesExamItemForm.elements[i].selectedIndex = correctAttributeMatching[dropDownMenuIndex];
              document.toesExamItemForm.elements[i].disabled = true;
              dropDownMenuIndex++;
            }
          }
          //display explanation
          document.getElementById('toesSection2').style.display = '';
          break;
        case 'problem solving':
          navigationDisplay("10020");
          document.getElementById('toesSection2').style.display = '';
          document.getElementById('toesSection3').style.display = '';
          break;
        case 'essay':
          navigationDisplay("10020");
          document.getElementById('toesSection2').style.display = '';
          document.getElementById('toesSection3').style.display = '';
          break;
        default:
          break;
      }
      break;
    case 'preview exam':
      document.toesExamItemForm.questionIdToDisplay.value = document.toesExamItemForm.nextQuestionIdToDisplay.value;
      document.toesExamItemForm.submit();
      break;
    case 'review exam':
      break;
    case 'take exam':
      switch(document.toesExamItemForm.toesExamItemQuestionType.value){
        case 'multiple choice':
          //pass selected choice to the textbox
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if((document.toesExamItemForm.elements[i].name == 'multipleChoiceRadio')&&(document.toesExamItemForm.elements[i].checked)){
              document.toesExamItemForm.toesQuestionUserAnswer.value = document.toesExamItemForm.elements[i].value;
            }
          }
          break;
        case 'true or false':
          navigationDisplay("10021");
          //pass selected choice to the textbox
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if((document.toesExamItemForm.elements[i].name == 'trueOrFalseRadio')&&(document.toesExamItemForm.elements[i].checked)){
              document.toesExamItemForm.toesQuestionUserAnswer.value = document.toesExamItemForm.elements[i].value;
            }
          }
          break;
        case 'matching type':
          //pass selected choice to the textbox
          var itemMatchedAttributeArray = new Array();
          var allAreZeros = new Boolean(1);
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if(document.toesExamItemForm.elements[i].name == 'matchingTypeSelect[]'){
              itemMatchedAttributeArray[itemMatchedAttributeArray.length] = document.toesExamItemForm.elements[i].selectedIndex;
              if((allAreZeros)&&(document.toesExamItemForm.elements[i].selectedIndex != 0)){
                allAreZeros = Boolean(0);
              }
            }
          }
          if(allAreZeros){
            document.toesExamItemForm.toesQuestionUserAnswer.value = "";
          }
          else{
            document.toesExamItemForm.toesQuestionUserAnswer.value = itemMatchedAttributeArray.join(",");
          }
          break;
        case 'problem solving':
          break;
        case 'essay':
          break;
        default:
          break;
      }
      document.toesExamItemForm.remainingTime.value = document.navigationForm.remainingTime.value;
      document.toesExamItemForm.questionIdToDisplay.value = document.toesExamItemForm.nextQuestionIdToDisplay.value;
      document.toesExamItemForm.submit();
      break;
    default:
      break;
  }
}
function backTestQuestion(){
  switch(document.toesExamItemForm.operationMode.value){
    case 'preview question':
      document.toesExamItemForm.toesQuestionUserAnswer.value = '';
      switch(document.toesExamItemForm.toesExamItemQuestionType.value){
        case 'multiple choice':
          navigationDisplay("01020");
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if(document.toesExamItemForm.elements[i].name == 'multipleChoiceRadio'){
              document.toesExamItemForm.elements[i].checked = false;
              document.toesExamItemForm.elements[i].disabled = false;
            }
          }
          //hide explanation
          document.getElementById('toesSection2').style.display = 'none';
          break;
        case 'true or false':
          navigationDisplay("01020");
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if(document.toesExamItemForm.elements[i].name == 'trueOrFalseRadio'){
              document.toesExamItemForm.elements[i].checked = false;
              document.toesExamItemForm.elements[i].disabled = false;
            }
          }
          //hide explanation
          document.getElementById('toesSection2').style.display = 'none';
          break;
        case 'matching type':
          navigationDisplay("01020");
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if(document.toesExamItemForm.elements[i].name == 'matchingTypeSelect[]'){
              document.toesExamItemForm.elements[i].selectedIndex = 0;
              document.toesExamItemForm.elements[i].disabled = false;
            }
          }
          //hide explanation
          document.getElementById('toesSection2').style.display = 'none';
          break;
        case 'problem solving':
          navigationDisplay("01020");
          document.getElementById('toesSection2').style.display = 'none';
          document.getElementById('toesSection3').style.display = 'none';
          break;
        case 'essay':
          navigationDisplay("01020");
          document.getElementById('toesSection2').style.display = 'none';
          document.getElementById('toesSection3').style.display = 'none';
          break;
        default:
          break;
      }
      break;
    case 'preview exam':
      document.toesExamItemForm.questionIdToDisplay.value = document.toesExamItemForm.backQuestionIdToDisplay.value;
      document.toesExamItemForm.submit();
      break;
    case 'review exam':
      break;
    case 'take exam':
      switch(document.toesExamItemForm.toesExamItemQuestionType.value){
        case 'multiple choice':
          //pass selected choice to the textbox
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if((document.toesExamItemForm.elements[i].name == 'multipleChoiceRadio')&&(document.toesExamItemForm.elements[i].checked)){
              document.toesExamItemForm.toesQuestionUserAnswer.value = document.toesExamItemForm.elements[i].value;
            }
          }
          break;
        case 'true or false':
          navigationDisplay("10021");
          //pass selected choice to the textbox
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if((document.toesExamItemForm.elements[i].name == 'trueOrFalseRadio')&&(document.toesExamItemForm.elements[i].checked)){
              document.toesExamItemForm.toesQuestionUserAnswer.value = document.toesExamItemForm.elements[i].value;
            }
          }
          break;
        case 'matching type':
          //pass selected choice to the textbox
          var itemMatchedAttributeArray = new Array();
          var allAreZeros = new Boolean(1);
          for(var i = 0;i < document.toesExamItemForm.length;i++){
            if(document.toesExamItemForm.elements[i].name == 'matchingTypeSelect[]'){
              itemMatchedAttributeArray[itemMatchedAttributeArray.length] = document.toesExamItemForm.elements[i].selectedIndex;
              if((allAreZeros)&&(document.toesExamItemForm.elements[i].selectedIndex != 0)){
                allAreZeros = Boolean(0);
              }
            }
          }
          if(allAreZeros){
            document.toesExamItemForm.toesQuestionUserAnswer.value = "";
          }
          else{
            document.toesExamItemForm.toesQuestionUserAnswer.value = itemMatchedAttributeArray.join(",");
          }
          break;
        case 'problem solving':
          break;
        case 'essay':
          break;
        default:
          break;
      }
      document.toesExamItemForm.remainingTime.value = document.navigationForm.remainingTime.value;
      document.toesExamItemForm.questionIdToDisplay.value = document.toesExamItemForm.backQuestionIdToDisplay.value;
      document.toesExamItemForm.submit();
      break;
    default:
      break;
  }
}
function jumpToQuestion(idToDisplay){
  switch(document.toesExamItemForm.toesExamItemQuestionType.value){
    case 'multiple choice':
      //pass selected choice to the textbox
      for(var i = 0;i < document.toesExamItemForm.length;i++){
        if((document.toesExamItemForm.elements[i].name == 'multipleChoiceRadio')&&(document.toesExamItemForm.elements[i].checked)){
          document.toesExamItemForm.toesQuestionUserAnswer.value = document.toesExamItemForm.elements[i].value;
        }
      }
      break;
    case 'true or false':
      navigationDisplay("10021");
      //pass selected choice to the textbox
      for(var i = 0;i < document.toesExamItemForm.length;i++){
        if((document.toesExamItemForm.elements[i].name == 'trueOrFalseRadio')&&(document.toesExamItemForm.elements[i].checked)){
          document.toesExamItemForm.toesQuestionUserAnswer.value = document.toesExamItemForm.elements[i].value;
        }
      }
      break;
    case 'matching type':
      //pass selected choice to the textbox
      var itemMatchedAttributeArray = new Array();
      var allAreZeros = new Boolean(1);
      for(var i = 0;i < document.toesExamItemForm.length;i++){
        if(document.toesExamItemForm.elements[i].name == 'matchingTypeSelect[]'){
          itemMatchedAttributeArray[itemMatchedAttributeArray.length] = document.toesExamItemForm.elements[i].selectedIndex;
          if((allAreZeros)&&(document.toesExamItemForm.elements[i].selectedIndex != 0)){
            allAreZeros = Boolean(0);
          }
        }
      }
      if(allAreZeros){
        document.toesExamItemForm.toesQuestionUserAnswer.value = "";
      }
      else{
        document.toesExamItemForm.toesQuestionUserAnswer.value = itemMatchedAttributeArray.join(",");
      }
      break;
    case 'problem solving':
      break;
    case 'essay':
      break;
    default:
      break;
  }
  //alert(idToDisplay);

  if(idToDisplay != null){
    document.toesExamItemForm.questionIdToDisplay.value = idToDisplay;
  }
  else{
    document.toesExamItemForm.questionIdToDisplay.value = document.navigationForm.jumpTo.value;
  }
  document.toesExamItemForm.submit();
}
function navigationDisplay(displayBit){
  //bit assignment:
  //1 = back button
  //2 = next button
  //3 = jump to elements
  //4 = remaining elements
  //5 = toesQuestionAnswerElements
  if(displayBit.substring(0,1) == '1'){
    document.getElementById('backImgButton').style.display = '';
    document.getElementById('backImgButtonInactive').style.display = 'none';
  }
  else{
    document.getElementById('backImgButton').style.display = 'none';
    document.getElementById('backImgButtonInactive').style.display = '';
  }
  if(displayBit.substring(1,2) == '1'){
    document.getElementById('nextImgButton').style.display = '';
    document.getElementById('nextImgButtonInactive').style.display = 'none';
  }
  else{
    document.getElementById('nextImgButton').style.display = 'none';
    document.getElementById('nextImgButtonInactive').style.display = '';
  }
  if(displayBit.substring(2,3) == '1'){
    document.getElementById('navTextJumpTo').style.color = '#FFFFFF';
    document.navigationForm.jumpTo.disabled = false;
  }
  else{
    document.getElementById('navTextJumpTo').style.color = '#2F972F';
    document.navigationForm.jumpTo.disabled = true;
  }
  switch(displayBit.substring(3,4)){
    case '0':
      document.getElementById('navTextRemainingTime').style.color = '#2F972F';
      document.navigationForm.remainingTime.disabled = true;
      document.getElementById('buttonGroup').style.display = '';
      document.getElementById('remainingGroup').style.display = 'none';
      break;
    case '1':
      document.getElementById('navTextRemainingTime').style.color = '#FFFFFF';
      document.navigationForm.remainingTime.disabled = false;
      document.getElementById('buttonGroup').style.display = 'none';
      document.getElementById('remainingGroup').style.display = '';
      break;
    case '2':
      document.getElementById('buttonGroup').style.display = 'none';
      document.getElementById('remainingGroup').style.display = 'none';
      break;
    default:
      break;
  }
  switch(displayBit.substring(4,5)){
    case '0':
      document.getElementById('toesQuestionAnswerElements').style.display = 'none';
      break;
    case '1':
      document.getElementById('toesQuestionAnswerElements').style.display = '';
      break;
    default:
      break;
  }
  focusStatus = null;
}
function windowLostFocus(){
  if((focusStatus)&&(onbeforeunloadFired != 1)&&(!studentModule.closed)){
    //for firefox compatibility we issue some delay...(ensures that a close-student-module window event does not precede the onBlur)
    setTimeout("windowLostFocusBlock()", 100);
  }
  else{
    focusStatus = 1;
    opener.bringExamToFront(self.window);
  }
}
function windowLostFocusBlock(){
  if(document.toesExamItemForm.style.value == "printStyle"){
    return false;
  }
  if(document.navigationForm.jumpTo.focus){
    return false;
  }
  opener.bringExamToFront(self.window);
  lostFocusCount++;
  if(lostFocusCount > 10){
    lostFocusCount = 0;
    document.toesExamItemForm.violation.value = "blocked";
    document.toesExamItemForm.offense.value = "TOES blocked you because the examination window lost focus";
    jumpToQuestion(document.toesExamItemForm.questionIdDisplayed.value);
    clearInterval(interValID);
  }
}
function keyboard(){
  document.onkeydown = register;
  document.onkeyup = register;
  var x = document.forms[0].elements[0];
  x.onkeydown = register;
  x.onkeyup = register;
}
function register(e){
  if (!e) e = window.event;
  var keyInfo = String.fromCharCode(e.keyCode) + '\n';
  keyInfo += 'Event: ' + e.type + '\n\n';
  keyInfo += 'You pressed: ' + String.fromCharCode(e['keyCode']) + ' [Decimal: ' + e['keyCode'] + ']\n';
  keyInfo += 'ALT: ' + e['altKey'] + '\n';
  keyInfo += 'CTRL: ' + e['ctrlKey'] + '\n';
  keyInfo += 'SHIFT: ' + e['shiftKey'] + '\n';
  keyInfo += 'REPEAT: ' + e['repeat'] + '\n';
  keyInfo += 'WHICH: ' + e['which'];
  window.status = keyInfo;
  if(e['keyCode'] == 44){
    //alert("PRINTSCREEN");
  }
  //alert(keyInfo);
  //document.forms[1].log.value = keyInfo;
}
function rightClick(){
  if (document.layers){
    document.captureEvents(Event.MOUSEDOWN);
    document.onmousedown=clickNS4;
  }
  else if (document.all&&!document.getElementById){
    document.onmousedown=clickIE4;
  }
  document.oncontextmenu=new Function("return false;")
}
function clickIE4(){
  if (event.button==2){
    alert(message);
    return false;
  }
}
function clickNS4(e){
  if (document.layers||document.getElementById&&!document.all){
    if (e.which==2||e.which==3){
      alert(message);
      return false;
    }
  }
}
```

questionnaire.php

```
<?php
$validSystemAction = true;

switch($operationMode){
  case 'preview question':
    break;
  case 'preview exam':
    if($examItemOrder != ""){
      $examItemOrderArray = explode(",", $examItemOrder);
      $examItemQuestionTypeArray = explode(",", $examItemQuestionType);
    }
    else{
      $questionTypeArray = array('true or false', 'multiple choice', 'matching type', 'problem solving', 'essay');
      connect_Db();
      foreach($questionTypeArray AS $questionTypeArrayElem){
        $query = "SELECT exam_item.question_id FROM exam_item, question WHERE question.question_id=exam_item.question_id AND
question.questionType='$questionTypeArrayElem' AND exam_item.exam_id='$examIdToPreview' ORDER BY question.question_id ASC ";
        $result = mysql_query($query);
        while($myrow = mysql_fetch_row($result)){
          $examItemOrderArray[] = $myrow[0];
          $examItemQuestionTypeArray[] = $questionTypeArrayElem;
        }
      }
      $examItemOrder = implode(",", $examItemOrderArray);
      $examItemQuestionType = implode(",", $examItemQuestionTypeArray);
      $questionIdToDisplay = $examItemOrderArray[0];
    }
    for($i = 0;$i < count($examItemOrderArray);$i++){
      if($examItemOrderArray[$i] == $questionIdToDisplay){
        $questionIdToDisplayIndex = $i;
        break;
      }
    }
    $backButtonVisible = "0";
    $nextButtonVisible = "0";
    if($questionIdToDisplayIndex != 0){
      $backButtonVisible = "1";
      $backQuestionIdToDisplay = $examItemOrderArray[$questionIdToDisplayIndex - 1];
    }
    if($questionIdToDisplayIndex != count($examItemOrderArray) - 1){
      $nextButtonVisible = "1";
      $nextQuestionIdToDisplay = $examItemOrderArray[$questionIdToDisplayIndex + 1];
    }
    $navigationBit = $backButtonVisible.$nextButtonVisible."120";
    break;
  case 'review exam':
    break;
  case 'take exam':
    $takeExamDispStyleOverride = "style='display:none;'";
    connect_Db();
    //apply clipping operation when needed...
    $query = "UPDATE registration SET remainingTime = '000000' WHERE batch_id='$batch_id' AND student_number='$student_number' AND
TIME_TO_SEC(remainingTime) < 0 ";
    $result = mysql_query($query);
    //apply system operations depending on examinees violations...
    switch($violation){
      case 'blocked':
        $query = "UPDATE registration SET status='blocked', offense='$offense' WHERE batch_id='$batch_id' AND student_number='$student_number'
";
        $result = mysql_query($query);
        break;
      case 'time is up':
        $query = "UPDATE registration SET status='finished', remainingTime='00:00:00', offense='none' WHERE batch_id='$batch_id' AND
student_number='$student_number' ";
        $result = mysql_query($query);
        break;
      default:
        break;
    }
    //check if the examinee is allowed to take the exam...
    $query = "SELECT remainingTime, status, authorization, offense FROM registration WHERE batch_id='$batch_id' AND
student_number='$student_number' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $remainingTime = $myrow[0];
    $offense = $myrow[3];
    if(($myrow[0] == "00:00:00")||($myrow[1] == "blocked")||($myrow[1] == "finished")||($myrow[2] == "no")){
      $validSystemAction = false;
      if($myrow[1] == "blocked"){
        $violation = "blocked";
      }
      if($myrow[2] == "no"){
        $violation = "unauthorized";
      }
      if($myrow[0] == "00:00:00"){
        $violation = "time is up";
        $offense = "";
        $query = "UPDATE registration SET status='finished', offense='none' WHERE batch_id='$batch_id' AND student_number='$student_number' ";
        $result = mysql_query($query);
      }
      if($myrow[1] == "finished"){
        if($myrow[0] != "00:00:00"){
          //at this point it is most likely that the student's 'remaining time' was extended by the administrator
          $query = "UPDATE registration SET status='answering', offense='none', previousTimeStamp=NOW() WHERE batch_id='$batch_id' AND
student_number='$student_number' ";
          $result = mysql_query($query);
          $validSystemAction = true;
        }
        else{
          $violation = "finished";
        }
      }
    }
    //check if the student has acquired his answer sheet
    $query = "SELECT batch_id FROM answer WHERE batch_id='$batch_id' AND student_number='$student_number' ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      //determine if a BACK, NEXT, JUMP operation occurred
      if(!isset($examItemOrder)){
        //update the remaining time
        $query = "UPDATE registration SET remainingTime=SEC_TO_TIME(TIME_TO_SEC(remainingTime) - TIME_TO_SEC(CURTIME()) +
TIME_TO_SEC(DATE_FORMAT(previousTimeStamp, '%T'))), previousTimeStamp=NOW() WHERE batch_id='$batch_id' AND student_number='$student_number' ";
        $result = mysql_query($query);
        //apply clipping operation when needed...
        $query = "UPDATE registration SET remainingTime = '000000' WHERE batch_id='$batch_id' AND student_number='$student_number' AND
TIME_TO_SEC(remainingTime) < 0 ";
        $result = mysql_query($query);
        //retrieve necessary 'anser sheet' info...
        $query = "SELECT answer.randomItem, answer.lastViewedItem, answer.answerString, registration.remainingTime FROM answer, registration
WHERE answer.batch_id='$batch_id' AND answer.student_number='$student_number' AND registration.batch_id='$batch_id' AND
registration.student_number='$student_number' ";
        $result = mysql_query($query);
        $myrow = mysql_fetch_row($result);
        $remainingTime = $myrow[3];
        $answerString = $myrow[2];
        $questionIdToDisplay = $myrow[1];
        $examItemOrder = $myrow[0];
        $examItemOrderArray = explode(",", $examItemOrder);
        foreach($examItemOrderArray AS $examItemOrderArrayElem){
          $query = "SELECT questionType FROM question WHERE question_id='$examItemOrderArrayElem' ";
          $result = mysql_query($query);
          $myrow = mysql_fetch_row($result);
          $examItemQuestionTypeArray[] = $myrow[0];
        }
        $examItemQuestionType = implode(",", $examItemQuestionTypeArray);
        $answerStringArray = explode("-", $answerString);
        for($i = 0;$i < count($examItemOrderArray);$i++){
          $questionAnswer[$examItemOrderArray[$i]] = $answerStringArray[$i];
        }
        if(($questionIdToDisplay == 0)||($questionIdToDisplay == "0")||($questionIdToDisplay == "")){
          $questionIdToDisplay = $examItemOrderArray[0];
        }
      }
      else{
        $examItemOrderArray = explode(",", $examItemOrder);
        $examItemQuestionTypeArray = explode(",", $examItemQuestionType);
        $answerStringArray = explode("-", $answerString);
        for($i = 0;$i < count($examItemOrderArray);$i++){
          $questionAnswer[$examItemOrderArray[$i]] = $answerStringArray[$i];
        }
      }
      //save the answer for the question previously displayed...
      if(isset($questionIdDisplayed)){
        $questionAnswer[$questionIdDisplayed] = $toesQuestionUserAnswer;
        $answerString = implode("-", array_values($questionAnswer));
        $query = "UPDATE answer SET answerString='$answerString', lastViewedItem='$questionIdDisplayed' WHERE batch_id='$batch_id' AND
student_number='$student_number' ";
        $result = mysql_query($query);
        //update the remaining time and previous time stamp...
        $query = "UPDATE registration SET remainingTime=SEC_TO_TIME(TIME_TO_SEC(remainingTime) - TIME_TO_SEC(CURTIME()) +
TIME_TO_SEC(DATE_FORMAT(previousTimeStamp, '%T'))), previousTimeStamp=NOW() WHERE batch_id='$batch_id' AND student_number='$student_number' ";
        $result = mysql_query($query);
        //apply clipping operation when needed...
        $query = "UPDATE registration SET remainingTime = '000000' WHERE batch_id='$batch_id' AND student_number='$student_number' AND
TIME_TO_SEC(remainingTime) < 0 ";
        $result = mysql_query($query);
        if(!$validSystemAction){
          //putting this check here ensures that all toesExamItemForm info are stored before applying penalties to violations...
          break;
        }
        //get the 'remaining time'
        $query = "SELECT remainingTime FROM registration WHERE batch_id='$batch_id' AND student_number='$student_number' ";
        $result = mysql_query($query);
        $myrow = mysql_fetch_row($result);
        $remainingTime = $myrow[0];
      }
    }
    else{
      //give the answer sheet and then change the 'waiting' status into 'aswering'
      $questionTypeArray = array('true or false', 'multiple choice', 'matching type', 'problem solving', 'essay');
      foreach($questionTypeArray AS $questionTypeArrayElem){
        $query = "SELECT exam_item.question_id FROM batch, exam_item, question WHERE question.question_id=exam_item.question_id AND
question.questionType='$questionTypeArrayElem' AND exam_item.exam_id=batch.exam_id AND batch.batch_id='$batch_id' ORDER BY RAND() ";
        $result = mysql_query($query);
        while($myrow = mysql_fetch_row($result)){
          $examItemOrderArray[] = $myrow[0];
          $examItemQuestionTypeArray[] = $questionTypeArrayElem;
          $answerStringArray[] = "";
        }
      }
      $examItemOrder = implode(",", $examItemOrderArray);
      $examItemQuestionType = implode(",", $examItemQuestionTypeArray);
      $answerString = implode("-", $answerStringArray);
      $query = "INSERT INTO answer VALUES('$batch_id', '$student_number', '".implode("-", $answerStringArray)."', '$examItemOrder',
'$examItemOrder[0]', '0') ";
      $result = mysql_query($query);
      $questionIdToDisplay = $examItemOrder[0];
      $query = "SELECT remainingTime FROM registration WHERE batch_id='$batch_id' AND student_number='$student_number' ";
      $result = mysql_query($query);
      $myrow = mysql_fetch_row($result);
      $remainingTime = $myrow[0];
      $query = "UPDATE registration SET status='answering', previousTimeStamp=NOW() WHERE batch_id='$batch_id' AND
student_number='$student_number' ";
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      $result = mysql_query($query);
    }
    for($i = 0;$i < count($examItemOrderArray);$i++){
      if($examItemOrderArray[$i] == $questionIdToDisplay){
        $questionIdToDisplayIndex = $i;
        break;
      }
    }
    //set display modification bits
    $backButtonVisible = "0";
    $nextButtonVisible = "0";
    if($questionIdToDisplayIndex != 0){
      $backButtonVisible = "1";
      $backQuestionIdToDisplay = $examItemOrderArray[$questionIdToDisplayIndex - 1];
    }
    if($questionIdToDisplayIndex != count($examItemOrderArray) - 1){
      $nextButtonVisible = "1";
      $nextQuestionIdToDisplay = $examItemOrderArray[$questionIdToDisplayIndex + 1];
    }
    $navigationBit = $backButtonVisible.$nextButtonVisible."110";
    $answerStringArray = explode("-", $answerString);
    break;
  default:
    break;
}
if($validSystemAction){
  print_Banner();
  print_Navigation();
  print_Body();
}
else{
  echo "<html>";
  echo "<head>";
  echo "<title>TOES EXAM WINDOW</title>";
  echo "<SCRIPT LANGUAGE='JavaScript' SRC='questionnaire.js'></SCRIPT>";
  echo "</head>";
  echo "<body onLoad='loadExamWindowWithViolation()'>";
  echo "<table width='100%' height='100%'><tr><td align='center' valign='center'>";
  echo "<table border='1' align='center' valign='center'>";
  echo "<tr><td align='center' valign='center' bgcolor='#DCDCDC'><font size='9'>$violation</font></td></tr>";
  echo "<tr><td align='center' valign='center'>$offense</td></tr>";
  echo "<tr><td align='center'>";
  if($violation == "blocked"){
    echo "<form name='toesExamItemForm' method='post' action='$PHP_SELF'>";
    echo "<input type='hidden' name='student_number' value='$student_number'/>";
    echo "<input type='hidden' name='batch_id' value='$batch_id'/>";
    echo "<input type='hidden' name='operationMode' value='$operationMode'/>";
    echo "<input type='submit' value='continue'/>";
    echo "</form>";
  }
  else{
    echo "<button onClick='window.close()'>E X I T</button>";
  }
  echo "</td></tr>";
  echo "</table>";
  echo "</td></tr></table>";
  echo "</body>";
  echo "</html>";
}
//////////////////////////////////////////////////////////
function print_Banner(){
  global $operationMode;
  global $navigationBit;
  global $exitStatus;
  global $style;
  echo "<html><head>";
  echo "<title>TOES EXAM WINDOW</title>";
  echo "<SCRIPT LANGUAGE='JavaScript' SRC='questionnaire.js'></SCRIPT>";
  if($style == "printStyle"){
    echo "<link rel='stylesheet' type='text/css' href='questionnaire_Style_Print.css'/>";
  }
  else{
    echo "<link rel='stylesheet' type='text/css' href='questionnaire_Style.css'/>";
  }
  echo "</head>";
  if(($operationMode == "take exam")&&($exitStatus == "final")){
    global $batch_id;
    global $student_number;
    connect_Db();
    $query    =    "UPDATE    registration    SET    status='finished',    remainingTime='00:00:00'    WHERE    batch_id='$batch_id'    AND
student_number='$student_number' ";
    $result = mysql_query($query);
    echo "<body onLoad='closeWithClearance()'>";
  }
  else{
    echo "<body onLoad='windowOnload(\"$operationMode\", \"$navigationBit\")' onBlur='return windowLostFocus()' >";
  }
  echo "<div id='first'><img src='/toes/files/pics/toes_logo.jpg'/>";
  switch($operationMode){
    case 'preview question':
      echo "<img src='/toes/files/pics/question_preview.gif'/>";
      break;
    case 'preview exam':
      echo "<img src='/toes/files/pics/exam_preview.gif'/>";
      break;
    case 'take exam':
      echo "<img src='/toes/files/pics/exam.gif'/>";
    default:
      break;
  }
  echo "</div>";
}
//////////////////////////////////////////////////////////
function print_Navigation(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  echo "<div id='second'>";
  echo "<table cellspacing='0' cellpadding='0'>";
  echo "<tr><td>";

  echo "<table cellspacing='0' cellpadding='0'>";
  echo "<form name='navigationForm'>";
  echo "<tr><td style='border-right:1px dashed #dcdcdc'>";
  $nextImgButtonHref = "href='javascript:nextTestQuestion()'";
  $backImgButtonHref = "href='javascript:backTestQuestion()'";
  echo      "<a      id='backImgButton'      $backImgButtonHref      target=\"_parent\"      onmouseover=\"document.b6.src='back-over.gif'\"
onmouseout=\"document.b6.src='back-off.gif'\" style=\"text-decoration:none;\"><img src=\"back-off.gif\" name=\"b6\" /></a>";
  echo "<img id='backImgButtonInactive' src='back-inactive.gif' style='display:none'/>";
  echo      "<a      id='nextImgButton'      $nextImgButtonHref      target=\"_parent\"      onmouseover=\"document.b5.src='next-over.gif'\"
onmouseout=\"document.b5.src='next-off.gif'\" style=\"text-decoration:none;\"><img src=\"next-off.gif\" name=\"b5\" /></a>";
  echo "<img id='nextImgButtonInactive' src='next-inactive.gif' style='display:none'/>";
  echo "</td>";
  echo "<td style='border-right:1px dashed #dcdcdc' nowrap>";
  echo "<font id='navTextJumpTo' color='white' size='4' >&nbsp;Jump&nbsp;To</font>";
  echo "&nbsp;<select name='jumpTo' onChange='jumpToQuestion();'>";
  switch($operationMode){
    case 'preview question':
      echo "<option>Please click here...</option>";
      echo "<option>Please click here..1</option>";
      echo "<option>Please click here..2</option>";
      echo "<option>Please click here..3</option>";
      break;
    case 'preview exam':
      $currentQuestionTypeGroup = $examItemQuestionTypeArray[0];
      echo "<option value='$examItemOrderArray[0]'>".strtoupper($examItemQuestionTypeArray[0])."</option>";
      for($i = 0;$i < count($examItemOrderArray);$i++){
        if($currentQuestionTypeGroup != $examItemQuestionTypeArray[$i]){
          $currentQuestionTypeGroup = $examItemQuestionTypeArray[$i];
          echo "<option value='$examItemOrderArray[$i]'>".strtoupper($examItemQuestionTypeArray[$i])."</option>";
        }
        if($questionIdToDisplay == $examItemOrderArray[$i]){
          echo "<option value='$examItemOrderArray[$i]' selected='selected'>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;question number ".($i +
1)."</option>";
        }
        else{
          echo "<option value='$examItemOrderArray[$i]'>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;question number ".($i + 1)."</option>";
        }
      }
      break;
    case 'review exam':
      break;
    case 'take exam':
      $currentQuestionTypeGroup = $examItemQuestionTypeArray[0];
      echo "<option value='$examItemOrderArray[0]'>".strtoupper($examItemQuestionTypeArray[0])."</option>";
      for($i = 0;$i < count($examItemOrderArray);$i++){
        if($currentQuestionTypeGroup != $examItemQuestionTypeArray[$i]){
          $currentQuestionTypeGroup = $examItemQuestionTypeArray[$i];
          echo "<option value='$examItemOrderArray[$i]'>".strtoupper($examItemQuestionTypeArray[$i])."</option>";
        }
        $answeredStatus = "[answered]";
        if($answerStringArray[$i] == ""){
          $answeredStatus = "[no answer]";
        }
        if($currentQuestionTypeGroup == "matching type"){
          $matchingAnswerStringArray = explode(",", $answerStringArray[$i]);
          if(in_array("0", $matchingAnswerStringArray)){
            $answeredStatus = "[answered but incomplete]";
          }
        }
        if($questionIdToDisplay == $examItemOrderArray[$i]){
          echo "<option value='$examItemOrderArray[$i]' selected='selected'>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;question number ".($i +
1)."&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;$answeredStatus</option>";
        }
        else{
          echo "<option value='$examItemOrderArray[$i]'>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;question number ".($i +
1)."&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;$answeredStatus</option>";
        }
      }
      break;
    default:
      break;
  }
  echo "</select>&nbsp;";
  echo "</td><td id='dashedPartitionForSummary'>";
  echo "<span id='remainingGroup' $takeExamDispStyleOverride>";
  echo "<font id='navTextRemainingTime' color='white' size='4' >&nbsp;remaining&nbsp;time&nbsp;</font>";
  echo "<input type='text' name='remainingTime' value='ramaining time here' maxLength='12' size='12' readonly='readonly'/>";
  echo "</span><span id='buttonGroup' $takeExamDispStyleOverride>";
  echo "&nbsp;<button>summary</button>";
  echo "<button>hide</button>";
  echo "<button>unhide</button>";
  echo "</span>";
  echo "</td></tr>";
  echo "</form>";
  echo "</table>";

  echo "</td><td align='right'>";
  echo "<button id='exitButton' onClick='return userWantsToExit(\"$operationMode\")'>E X I T</button>&nbsp;";
  echo "</td>";
  echo "</tr>";
  echo "</table>";
  echo "</div>";
}
////////////////////////////////////////////////////////////
function print_Body(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  echo "<div id='third'>";
  echo "<form name='toesExamItemForm' method='post' action='$PHP_SELF'>";
  if($style == "printStyle"){
    global $qn;
    for($qn = 0;$qn < count($examItemOrderArray);$qn++){
      display_Exam_Item($examItemOrderArray[$qn]);
      echo "<br>";
    }
  }
  else{
    display_Exam_Item($questionIdToDisplay);
  }
  switch($operationMode){
    case 'preview question':
      break;
    case 'preview exam':
      echo "<input type='hidden' name='examIdToPreview' value='$examIdToPreview'>";
      echo "<input type='hidden' name='questionIdToDisplay' value=''>";
      echo "<input type='hidden' name='nextQuestionIdToDisplay' value='$nextQuestionIdToDisplay'>";
      echo "<input type='hidden' name='backQuestionIdToDisplay' value='$backQuestionIdToDisplay'>";
      echo "<input type='hidden' name='examItemOrder' value='$examItemOrder'>";
      echo "<input type='hidden' name='examItemQuestionType' value='$examItemQuestionType'>";
      if($style == "printStyle"){
        echo "<input type='hidden' name='style' value='printStyle'>";
      }
      break;
    case 'review exam':

      break;
    case 'take exam':
      echo "<input type='hidden' name='batch_id' value='$batch_id'>";
      echo "<input type='hidden' name='student_number' value='$student_number'>";
      echo "<input type='hidden' name='questionIdToDisplay' value='$questionIdToDisplay'>";
      echo "<input type='hidden' name='questionIdDisplayed' value='$questionIdToDisplay'>";
      echo "<input type='hidden' name='currentUserAnswer' value='$questionAnswer[$questionIdToDisplay]'>";
      echo "<input type='hidden' name='nextQuestionIdToDisplay' value='$nextQuestionIdToDisplay'>";
      echo "<input type='hidden' name='backQuestionIdToDisplay' value='$backQuestionIdToDisplay'>";
      echo "<input type='hidden' name='examItemOrder' value='$examItemOrder'>";
      echo "<input type='hidden' name='examItemQuestionType' value='$examItemQuestionType'>";
      echo "<input type='hidden' name='answerString' value='$answerString'>";
      echo "<input type='hidden' name='remainingTime' value='$remainingTime'>";
      echo "<input type='hidden' name='violation' value=''>";
      echo "<input type='hidden' name='offense' value=''>";
      echo "<input type='hidden' name='exitStatus' value=''>";
      break;
    default:
      break;
  }
  echo "<input type='hidden' name='operationMode' value='$operationMode'>";
  echo "</form>";
  echo "</div>";
  if($operationMode == 'take exam'){
    echo "<div id='exitConfirm' style='display:none'>";
    echo "<table height='100%' width='100%' align='center' valign='center'>";
    echo "<tr><td align='center' valign='middle'>";
    echo "<table border='1' width='75%'>";
    echo "<tr><td colspan='2'><font size='9'>Warning: The exam will no longer be accessible once you exit. Do you want to
continue?</font></td></tr>";
    echo "<tr>";
    echo "<td align='center'><button onClick='return userWantsToExit(\"$operationMode\", \"final\")'>YES</button></td>";
    echo "<td align='center'><button onClick='return userWantsToExit(\"$operationMode\", \"cancel\")'>NO</button></td>";
    echo "</tr>";
    echo "</table>";
    echo "</td></tr></table>";
    echo "</div>";
  }
  echo "</body>";
  echo "</html>";
}
//////////////////////////////////////////////////////////
function display_Exam_Item($questionIdToDisplay){
  global $takeExamDispStyleOverride;
  global $operationMode;
  global $questionIdToDisplayIndex;
  global $style;
  global $currentQuestionTypeSection;
  global $currentQuestionTypeSectionPart;
  global $qn;
  connect_Db();
  $query = "SELECT questionType, objects, answer FROM question WHERE question_id='$questionIdToDisplay' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);

  $queryB = "SELECT file_id FROM file WHERE question_id='$questionIdToDisplay' ";
  $resultB = mysql_query($queryB);
  if($style == "printStyle"){
    echo "<table border='0' cellpadding='0' cellspacing='0' width='100%' bgcolor='white'>";
  }
  else{
    echo "<table border='1' cellpadding='0' cellspacing='0' width='100%' bgcolor='white'>";
  }
  echo "<tr border='0'><td colspan='2' align='left'>";
  if($style == "printStyle"){
    if($currentQuestionTypeSection != $myrow[0]){
      $currentQuestionTypeSectionPart++;
      echo "<b>PART $currentQuestionTypeSectionPart: ".strtoupper($myrow[0])."</b><br><br>";
      $currentQuestionTypeSection = $myrow[0];
    }
    echo "Question Number: ".($qn + 1);
  }
  else{
    echo "Question Number: ".($questionIdToDisplayIndex + 1)."<br>";
    echo "Question Type: ".strtoupper($myrow[0]);
  }
  echo "</td></tr>";
  echo "<tr>";
  if($style == "printStyle"){
    echo "<td colspan='2' align='left' valign='top'>";
  }
  else{
    echo "<td colspan='2' align='center' valign='center'>";
  }
  switch($operationMode){
    case 'preview question':
      break;
    case 'take exam':
      //print section 1 only...
      break;
    case 'view exam result':
      //print section 1 and section 2...plus add
      break;
    default:
      break;
  }
  $web = $myrow[1].".htm";
  $web = str_replace("/", "\\", $web);
  //echo "[web='$web']";
  if($operationMode == "take exam"){
    if($fo = fopen($web, "r")){
      flock($fo, 1);
      $validSection = true;
      while(!feof($fo)){
        $origLine = fgets($fo, 1024);
        //string "<span id='toesSection2'>" is detected...
        if(strpos($origLine, "<span id='toesSection2'>") !== false){
          echo "</span>";
          $validSection = false;
        }
        if($validSection){
          //<file></file> detected
          if(ereg('&lt;FILE&gt;(.*)&lt;/FILE&gt;', $origLine, $fileArray)){
            $queryF = "SELECT origFilename, src FROM file WHERE file_id='$fileArray[1]' ";
            $resultF = mysql_query($queryF);
            $myrowF = mysql_fetch_row($resultF);
            $firstFileTagStr = '&lt;FILE&gt;';
            $secondFileTagStr = '&lt;/FILE&gt;';
            $origLine = substr($origLine, 0, strpos($origLine, $firstFileTagStr)).insertEmbeddedFile($origLine, $myrowF[0],
$myrowF[1]).substr($origLine, strpos($origLine, $secondFileTagStr) + strlen($secondFileTagStr));
          }
          echo $origLine;
        }
        else{
          //search for other valuable lines...
          if(ereg("<input type='hidden' name='matchingTypeTagAttributeCount' value='(.*)'", $origLine, $tempArray)){
            echo "<input type='hidden' name='matchingTypeTagAttributeCount' value='$tempArray[1]'/>";
          }
        }
      }
      flock($fo, 3);
      fclose($fo);
    }
    else{
      echo "error: '$web' is currently inaccessible, please inform the administrator immediately";
    }
  }
  else{
    if(mysql_num_rows($resultB) > 0){
      if($fo = fopen($web, "r")){
        flock($fo, 1);
        while(!feof($fo)){
          $origLine = fgets($fo, 1024);
          //<file></file> detected
          if(ereg('&lt;FILE&gt;(.*)&lt;/FILE&gt;', $origLine, $fileArray)){
            $queryF = "SELECT origFilename, src FROM file WHERE file_id='$fileArray[1]' ";
            $resultF = mysql_query($queryF);
            $myrowF = mysql_fetch_row($resultF);
            $firstFileTagStr = '&lt;FILE&gt;';
            $secondFileTagStr = '&lt;/FILE&gt;';
            $origLine     =     substr($origLine,     0,     strpos($origLine,     $firstFileTagStr)).insertEmbeddedFile($origLine,     $myrowF[0],
$myrowF[1]).substr($origLine, strpos($origLine, $secondFileTagStr) + strlen($secondFileTagStr));
          }
          echo $origLine;
        }
        flock($fo, 3);
        fclose($fo);
      }
      else{
        echo "error: '$web' is currently inaccessible, please inform the administrator immediately";
      }
    }
    else{
      include($web);
    }
  }
  echo "</td></tr>";
  echo "<tr id='toesQuestionAnswerElements'>";
  echo "<td $takeExamDispStyleOverride>Your answer: <input name='toesQuestionUserAnswer' type='text' value='' readonly='readonly'/></td>";
  echo "<td align='right' $takeExamDispStyleOverride>";
  if($myrow[0] == "matching type"){
    echo "<span id='toesExamItemMatchingCorrectIncorrect'>";
    echo "<input name='toesExamItemMatchingCorrectIncorrectTextbox' type='textbox' value='' readonly='readonly' size='45'/>";
    echo "</span>";
  }
  else{
    echo "<span id='toesExamItemCorrectAnswer'>CORRECT</span>";
    echo "<span id='toesExamItemIncorrectAnswer'>INCORRECT</span>";
  }
  echo "</td></tr>";
  echo "<input name='toesQuestionAnswer' type='hidden' value='$myrow[2]'>";
  echo "<input name='toesExamItemQuestionType' type='hidden' value='$myrow[0]'>";
  echo "</table>";
}
//////////////////////////////////////////////////////////
function insertEmbeddedFile($line, $fileName, $source){
  $srcArray = explode(".", $source);
  //echo "[$source]";
  switch($srcArray[count($srcArray) - 1]){
    case 'swf':
      $line = '<OBJECT classid="clsid:D27CDB6E-AE6D-11cf-96B8-444553540000"';
      $line .= ' codebase="http://download.macromedia.com/pub/shockwave/cabs/flash/swflash.cab#version=5,0,0,0"';
      $line .= ' WIDTH=715 HEIGHT=520>';
      $line .= ' <PARAM NAME=movie VALUE="'.$source.'">';
      $line .= ' <PARAM NAME=quality VALUE=high>';
      $line .= ' <PARAM NAME=bgcolor VALUE=#FFFFFF>';
      $line   .=   '   <EMBED   src="'.$source.'"   quality=high   bgcolor=#FFFFFF     WIDTH=550   HEIGHT=400   TYPE="application/x-shockwave-flash"
PLUGINSPAGE="http://www.macromedia.com/shockwave/download/index.cgi?P1_Prod_Version=ShockwaveFlash">';
      $line .= ' </EMBED>';
      $line .= ' </OBJECT>';
      break;
    case 'mov':
      $line = "<embed src=\"$source\" height=\"790\" width=\"750\" controller=\"true\"></embed>";
      break;
    default:
      $line = "<embed src=\"$source\" HEIGHT=\"750\" WIDTH=\"750\" AUTOSTART=\"false\" CONTROLLER=\"true\" CONSOLE=\"true\"></embed>";
      break;
  }
  $line = str_replace('C:\\apache\\htdocs', "http://localhost", $line);
  $line = str_replace("\\", "/", $line);
  return $line;
}
//////////////////////////////////////////////////////////
function final_Remaining_Time($rTime, $sTime){
  $rTimeArr = explode(":", $rTime);
  $rTimeInt = (3600 * $rTimeArr[0]) + (60 * $rTimeArr[1]) + $rTimeArr[2];
  if($sTime > $rTimeInt){
    return "00:00:00";
  }
  else{
    return seconds_to_HMS($rTimeInt - $sTime);
  }
}
//////////////////////////////////////////////////////////
function seconds_to_HMS($time_in_secs){
  $secs = $time_in_secs % 60;
  $time_in_secs -= $secs;
  $time_in_secs /= 60;

  if ($secs < 10)
    $secs = "0" . $secs;
  else
    $secs = "" . $secs; // force conversion to string

  $mins = $time_in_secs % 60;
  $time_in_secs -= $mins;
  $time_in_secs /= 60;

  if ($mins < 10)
    $mins = "0" . $mins;
  else
    $mins = "" . $mins; // force conversion to string

  $hours = $time_in_secs % 60;

  if($hours < 10)
    $hours = "0" . $hours;
  else
    $hours = "" . $hours; // force conversion to string

  return $hours . ":" . $mins . ":" . $secs;
}
//////////////////////////////////////////////////////////
function connect_Db() {
    //$dbuser = '';
    //$dbpword = '';
    //$dbhost = 'localhost';
    //$dbname = 'eav';
    //$db_connection = mysql_connect ($dbhost, $dbuser, $dbpword);
  //mysql_select_db ($dbname);
  $db = mysql_connect("localhost", "");
  mysql_select_db("toes",$db);
}
//////////////////////////////////////////////////////////
?>
```

F. STAFF

staff.php

```
<?php
session_start();
require_once('../toes.inc.php');
require_once('staff_Fcns.php');
if($firstVisit == "true"){
  $errorMessage = "";
}
$username;
$password;
if($Logout == '1'){
  session_unregister("username");
  session_unregister("password");
  session_unregister("hasLoggedIn");
  session_unregister("errorMessage");
  session_unregister("userScript");
  session_unset();
  session_destroy();
  $Logout = 0;
  $hasLoggedIn = 0;
  $errorMessage = "";
  $returnToHomepage = true;
}
if(($Login)&&($Logout != '1')){
  authorized_User();
  session_register("hasLoggedIn");
  header("Location: " . 'http://' . $_SERVER["HTTP_HOST"] . $_SERVER["PHP_SELF"]);
}
if(($_SESSION["hasLoggedIn"] == '1')&&($_SESSION["userScript"] == 'staff.php')){
  if($activeNav == ""){
    $activeNav = "Tutorial";
  }
  print_Top_Nav();
  print_Banner();
  print_Nav();
  print_Tab();
  print_Body();
  print_Footer();

}
else{
  if($hasLoggedIn == '2'){
    //echo "$errorMessage";
    //echo "<br>";
  }
  display_Login_Form();
}
//////////////////////////////////////////////////////////
function print_Top_Nav(){
  global $activeNav;
  global $activeTab;
  print("<html>");
  print("<head>");
  print("<title>STAFF Module</title>");
  echo "<SCRIPT LANGUAGE='JavaScript' SRC='staff_JavaScript.js'></SCRIPT>";
  print("<link rel='stylesheet' type='text/css' href='staff_Style.css'/>");
  print("</head>");
  print("<body onLoad=\"window_Onload('$activeNav', '$activeTab')\">");
  print("<div>");
  print("<ul class='topnav'>");
  print("<li><a href='/custhelp.php?statpos=topnav'>Help</a></li>");
  print("<li class='lastli'><a href='?Logout=1'>Log Out</a></li>");
  print("</ul>");
  print("</div>");
  print("<br>");
}
//////////////////////////////////////////////////////////
function print_Banner(){
  global $username;
  echo "<div class='banner'>";
  echo "<table>";
  echo "<tr><td height='100px' width='382px' background='/toes/files/pics/toes_logo.jpg'></td>";
  echo "<td height='100px' width='200px' background='/toes/files/pics/main-page_logos_upm_lrc.gif'></td>";
  echo   "<td   height='100px'   width='382px'   background='/toes/files/pics/staff.gif'   align='center'   valign='bottom'   style='padding-
bottom:10px;'><font style='vertical-align:text-bottom;' size='4px' color='#808080'>$username</font></td>";
  echo "</tr></table>";
  echo "</div>";
}
//////////////////////////////////////////////////////////
function print_Nav(){
  global $activeNav;
  global $activeTab;
  print("<div id='nav'><div><ul>");
  if($activeNav == 'Tutorial')
    print("<li class='navselected'>");
  else
    print("<li>");
  print("<a href='?activeNav=Tutorial&activeTab='>Tutorial</a></li>");
  if($activeNav == 'Subject')
    print("<li class='navselected'>");
  else
    print("<li>");
  print("<a href='?activeNav=Subject&activeTab='>Subject</a></li>");
  if($activeNav == 'Topic')
    print("<li class='navselected'>");
  else
    print("<li>");
  print("<a href='?activeNav=Topic&activeTab='>Topic</a></li>");
  if($activeNav == 'Question')
    print("<li class='navselected'>");
  else
    print("<li>");
  print("<a href='?activeNav=Question&activeTab='>Question</a></li>");
  if($activeNav == 'My Account')
    print("<li class='navselected'>");
  else
    print("<li class='lastli'>");
  print("<a href='?activeNav=My Account&activeTab='>My Account</a></li>");
  print("&nbsp");
  print("</ul>");
  print("</div></div>");
  //print("<br>");
  echo "<div style='background-color:FFFFFF;font-size:75%;'>&nbsp;</div>";
  //print("<table width='100%' bgcolor='white' border='1'><tr><td>&nbsp</td></tr></table>");
}
//////////////////////////////////////////////////////////
function print_Tab(){
  global $activeNav;
  global $activeTab;
  print("<div id='content'>");
  print("<ul class='tabs'>");
  switch($activeNav){
    case 'Tutorial':
      if($activeTab == ''){
        $activeTab = 'Tutorial Schedule';
      }
      if($activeTab == 'Tutorial Schedule')
        print("<li class='tabselected'>Tutorial Schedule</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Tutorial Schedule'>Tutorial Schedule</a></li>");
      if($activeTab == 'Tutorial Attendance')
        print("<li class='tabselected'>Tutorial Attendance</li>");
      break;
    case 'Subject':
      print("<li class='tabselected'>Subject List</li>");
      break;
    case 'Topic':
      print("<li class='tabselected'>Topic List</li>");
      break;
    case 'Question':
      if($activeTab == ''){
        $activeTab = 'Add Question';
      }
      if($activeTab == 'Add Question')
        print("<li class='tabselected'>Add Question</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Add Question'>Add Question</a></li>");
      if($activeTab == 'Edit Question')
        print("<li class='tabselected'>Edit Question</li>");
      else
        print("<li><a                                                               href='?activeNav=$activeNav&activeTab=Search
Question&redirectedFromEdit=yes&qSubject=any&qTopic=any&qQuestionType=any&qDifficulty=any&qSortedBy=Question      Id&qDirection=ascending'>Edit
Question</a></li>");
      if($activeTab == 'Search Question')
        print("<li class='tabselected'>Search Question</li>");
      else
        print("<li><a                                                               href='?activeNav=$activeNav&activeTab=Search
Question&qSubject=any&qTopic=any&qQuestionType=any&qDifficulty=any&qSortedBy=Question Id&qDirection=ascending'>Search Question</a></li>");
      break;
    case 'My Account':
      $activeTab = 'Change Password';
      if($activeTab == 'Change Password')
        print("<li class='tabselected'>Change Password</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Change Password'>Change Password</a></li>");
      break;
    default:
      break;
  }
  print("</ul>");

}
//////////////////////////////////////////////////////////
function print_Body(){
  print("<div class='content'>");
  print("<div class='inside'>");
  //print("<div class='insidebody'>");

  print_Function();

  //print("</div>");
  print("</div>");
  print("</div>");
}
//////////////////////////////////////////////////////////
function print_Function(){
  global $activeNav;
  global $activeTab;
  global $questionEditFromBrowse;
  switch($activeNav){
    case 'Tutorial':
      switch($activeTab){
        case 'Tutorial Schedule':
          manage_Tutorial_Schedule();
          break;
        case 'Tutorial Attendance':
          manage_Tutorial_Attendance();
          break;
        default:
          print("Please select from the tabbed-menu!");
          break;
      }
      break;
    case 'Subject':
      manage_Subject();
      break;
    case 'Topic':
      manage_Topic();
      break;
    case 'Question':
      switch($activeTab){
        case 'Add Question':
          add_Question();
          break;
        case 'Edit Question':
          if(isset($questionEditFromBrowse)){
            connect_Db();
            $query = "SELECT exam_id FROM exam_item WHERE question_id='$questionEditFromBrowse' LIMIT 1 ";
            $result = mysql_query($query);
            if(mysql_num_rows($result) == 0){
              get_Question_Info();
            }
            else{
              echo "error: the system detected EXAMS related to the QUESTION therefore it CAN'T be EDITED.<br><br>";
              question_Query();
              break;
            }
          }
          add_Question();
          break;
        case 'Search Question':
          question_Query();
          break;
        default:
          print("Please select from the tabbed-menu!");
          break;
      }
      break;
    case 'My Account':
      switch($activeTab){
        case 'Change Password':
          manage_Password();
          break;
        default:
          print("Please select from the tabbed-menu!");
          break;
      }
      break;
    default:
      print("Please select from the menu!");
      break;
  }
}
//////////////////////////////////////////////////////////
function print_Footer(){
  print("<div>");
  print("<div id='footer'>");
  print(" <div>University of the Philippines Manila, Learning Resource Center's</div>");
  print(" <div>Tutorial and Online Examination System (TOES)</div>");
  print(" <div>Copyright © 2006</div>");
  print("</div>");
  print("<div style='width:780px'>&nbsp;</div>");
  print("</div>");
  print("</div>");
  echo "<div style='background-color:#008000'>&nbsp;</div>";
  print("</body>");
  print("</html>");
}
//////////////////////////////////////////////////////////
function toHtml($htmlLine){
  return (str_replace("\"","\\\"",$htmlLine));
}
//////////////////////////////////////////////////////////
function authorized_User(){
  global $username;
  global $password;
  global $errorMessage;
  global $hasLoggedIn;
  global $userScript;

  connect_Db();
  $query = "SELECT * FROM lrc_personnel where username='$username' and password='$password' and personnelType='staff' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_array($result);

  if(($username != NULL)&&($password != NULL)&&($myrow[username] == $username)&&($myrow[password] == $password)){
    $hasLoggedIn=1;
    session_register("hasLoggedIn");
    session_register("username");
    session_register("password");
    $userScript= 'staff.php';
    session_register("userScript");
  }
  else{
    if(($username == NULL)||($password == NULL)){
      $errorMessage = "error: Please enter your username and password!";
    }
    else{
      $errorMessage = "error: Invalid username or password!";
    }
    session_register("errorMessage");
    $hasLoggedIn=2;
    session_register("hasLoggedIn");
  }
}
//////////////////////////////////////////////////////////
function display_Login_Form(){
  global $username;
  global $password;
  global $hasLoggedIn;
  global $Logout;
  global $errorMessage;
  global $returnToHomepage;

  echo "<html style='background-image:url(\"/toes/files/pics/toes_logo_userLogin.jpg\");'>";
  echo "<head>";
  echo "<title>STAFF Login Page</title>";
  echo "<SCRIPT LANGUAGE='JavaScript' SRC='staff_JavaScript.js'></SCRIPT>";
  echo "</head>";
  if($returnToHomepage){
    echo "<body onLoad='window.location=\"/toes/\"'>";
  }
  else{
    echo "<body onLoad='animateUsingToesColors(\"toesHomeLink\")'>";
  }
  echo "<table width='100%' height='100%' border='0' cellpadding='0' cellspacing='0'>";
  echo "<tr><td valign='middle' align='center'>";
  echo "<table align='center' border='0' cellpadding='0' cellspacing='0' >";
  echo "<tr><td align='right' bgcolor='#008000'><b><a id='toesHomeLink' href='/toes/' style='color:white;text-decoration:none;'>back to TOES
home page</a></b></td></tr>";
  echo "<tr><td><a href='/toes/index.php' title='home'><img src='/toes/files/pics/toes.gif' style='border: 0 none;'/></a></td></tr>";
  echo "<tr><td bgcolor='#008000'><img src='/toes/files/pics/staff_o.gif'/></td></tr>";
  echo "<tr><td bgcolor='#008000'>&nbsp;</td></tr>";
  echo "<tr><td align='center' bgcolor='#008000'>";
  //echo "[username=$username][password=$password][hasLoggedIn=$hasLoggedIn][Logout=$Logout][userScript=$userScript]";
  print("<table bgcolor='#c0c0c0'>");
  print("<form name='loginForm' method='post' action='$PHP_SELF' onSubmit='return loginFormCheck(this)'>");
  if($errorMessage != ""){
    echo "<tr><td colspan='2'>$errorMessage</td></tr>";
  }
  print("<tr><td>Username:</td><td><input type='text' name='username'></td></tr>");
  print("<tr><td>Password:</td><td><input type='password' name='password'></td></tr>");
  print("<tr><td colspan='2' align='center'><input type='submit' name='Login' value='Login'></td></tr>");
  print("</form>");
  print("</table>");
  echo "</td></tr>";
  echo "<tr><td bgcolor='#008000'>&nbsp;</td></tr>";
  echo "</td></tr></table>";
  echo "</body>";
  echo "</html>";
}
//////////////////////////////////////////////////////////
function refresh_Page($location){
  header("Location: $location");
}
//////////////////////////////////////////////////////////
function connect_Db() {
    //$dbuser = '';
    //$dbpword = '';
    //$dbhost = 'localhost';
    //$dbname = 'eav';
    //$db_connection = mysql_connect ($dbhost, $dbuser, $dbpword);
  //mysql_select_db ($dbname);
  $db = mysql_connect("localhost", "");
  mysql_select_db("toes",$db);
}
//////////////////////////////////////////////////////////
?>
```

staff _Fcns.php

```
<?php
//////////////////////////////////////////////////////////
function manage_Subject(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
    else{

    }
  }
  global $verifierCode;

  //check if the page is refreshed...
  $refreshed = 0;
  if($action){
    if($verifierCode == $code){
      $refreshed = 1;
    }
    $verifierCode = $code;
    session_register("verifierCode");
  }
  //obsessive check for dependencies...
  if($action == 'delete'){
    connect_Db();
    $query = "SELECT topic_id FROM topic WHERE subject_id='$subjToDelete' LIMIT 1 ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      echo "error: the system detected TOPICS related to the SUBJECT therefore it CAN'T be DELETED.<br><br>";
      $action = "";
    }
  }
  if($action == 'submitEdited'){
    connect_Db();
    $query = "SELECT topic_id FROM topic WHERE subject_id='$subjToEdit' LIMIT 1 ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      echo "error: the system detected TOPICS related to the SUBJECT therefore the CHANGES CAN'T be APPLIED.<br><br>";
      $action = "";
    }
  }
  switch($action){
    case 'delete':
      connect_Db();
      $query = "DELETE FROM subject WHERE subject_id='$subjToDelete' ";
      $result = mysql_query($query);
      //rmdir("C:\\apache\\htdocs\\toes\\files\\$subjToDelete");
      $fileLink = "C:\\apache\\htdocs\\toes\\files\\".$subjToDelete;
      //delete the directory including all of its contents...
      if(is_dir($fileLink)){
        $dh = opendir($fileLink);
        while(gettype($file = readdir($dh)) != boolean){
          if(($file = '.')&&($file = '..')){
          }
          else{
            if(is_file($fileLink.'\\'.$file)){
              unlink($fileLink.'\\'.$file);
            }
            if(is_dir($fileLink.'\\'.$file)){
              rmdir($fileLink.'\\'.$file);
            }
          }
        }
        closedir($dh);
        rmdir($fileLink);
      }
      print(" '$subjName' was successfully deleted.<br><br>");
      break;
    case 'add':
      if($refreshed == 0){
        connect_Db();
        $query = "SELECT subject_id FROM subject WHERE subjectName='$subjName' AND subjDescription='$subjDescription' ";
        $result = mysql_query($query);
        if(mysql_num_rows($result) == 0){
          $nextId = get_Next_Id('subject_id','subject');
          $query = "INSERT INTO subject (subject_id, subjectName, subjDescription) VALUES ('$nextId', '$subjName', '$subjDescription') ";
          $result = mysql_query($query);
          mkdir("C:\\apache\\htdocs\\toes\\files\\$nextId", 0777);
          print(" '$subjName' was successfully added.<br><br>");
        }
        else{
          echo "error: the SUBJECT submitted already EXISTS in the database therefore it was not ADDED.<br><br>";
        }
      }
      break;
    case 'submitEdited':
      connect_Db();
      $query = "SELECT subject_id FROM subject WHERE subjectName='$subjName' AND subjDescription='$subjDescription' AND
subject_id!='$subjToEdit' ";
      $result = mysql_query($query);
      if(mysql_num_rows($result) == 0){
        $query = "UPDATE subject SET subjectName = '$subjName', subjDescription = '$subjDescription' WHERE subject_id = '$subjToEdit' ";
        $result = mysql_query($query);
        print(" '$subjName' was successfully edited.<br><br>");
        unset($subjToEdit);
      }
      else{
        echo "error: the SUBJECT submitted already EXISTS in the database therefore the CHANGES CAN'T be APPLIED.<br><br>";
        $action = "edit";
      }
      break;
    default:
      break;
  }//form for sorting the table...
  if(!isset($direction)){
    $direction = "DESC";
  }
  if($column != ""){
    $query = "SELECT s.subject_id, s.subjectName, s.subjDescription, COUNT(t.subject_id) FROM subject AS s LEFT JOIN topic AS t ON
(s.subject_id=t.subject_id) GROUP BY s.subject_id ORDER BY $column $direction";
  }
  else{
    $query = "SELECT s.subject_id, s.subjectName, s.subjDescription, COUNT(t.subject_id) FROM subject AS s LEFT JOIN topic AS t ON
(s.subject_id=t.subject_id) GROUP BY s.subject_id ";
  }
  echo "<form name='availableSubjectSortForm' method='POST' action='?activeNav=$activeNav' style='display:none;'>";
  echo "<input type='hidden' name='column' value='$column'/>";
  echo "<input type='hidden' name='direction' value='$direction'/>";
  echo "</form>";
  //display the subjects table here...
  connect_Db();
  $result = mysql_query($query);
  echo "<table border='1' >";
  echo "<tr><td colspan='4' align='center'>List of Available Subjects</td></tr>";
  echo "<tr><td></td><td></td>";
  $availableSubjectColumnNames = array('Subject Name', 'Subject Description');
  $availableSubjectColumnNamesDb = array('s.subjectName', 's.subjDescription');
  for($i = 0;$i < count($availableSubjectColumnNames);$i++){
    echo "<td align='center'>";
    echo "<a href='javascript: void availableSubjectSortJs(\"$availableSubjectColumnNamesDb[$i]\")' style='text-decoration:none;color:blue;'>";
    echo "$availableSubjectColumnNames[$i]";
    if($availableSubjectColumnNamesDb[$i] == $column){
      echo "&nbsp;";
      if($direction == "ASC"){
        echo "&#8593";
      }
      else{
        echo "&#8595";
      }
    }
    echo "</a></td>";
  }
  echo "</tr>";
  if(mysql_num_rows($result) == 0){
    echo "<tr><td colspan='4' align='center'>no records</td></tr>";
  }
  while($myrow = mysql_fetch_row($result)){
    echo "<tr>";
    if($myrow[3] == 0){
      if($myrow[0] == $subjToEdit){
        echo "<td colspan='2' align='center'>***EDITING***</td>";
      }
      else{
        echo                                                          "<td                                                        align='center'><a
href='?direction=$direction&column=$column&activeNav=Subject&activeTab=&action=edit&subjToEdit=$myrow[0]&subjName=$myrow[1]&subjDescription=$my
row[2]'>edit</a></td>";
        echo                                                          "<td                                                        align='center'><a
href='?direction=$direction&column=$column&activeNav=Subject&activeTab=&action=delete&subjToDelete=$myrow[0]&subjName=$myrow[1]'>delete</a></td
>";
      }
    }
    else{
      echo "<td align='center'>edit</td>";
      echo "<td align='center'>delete</td>";
    }
    echo "<td>$myrow[1]</td><td>$myrow[2]</td></tr>";
  }
  echo "</table><br>";

  //display the subject form here...
  if($action == 'edit'){
    echo "<table border='1'>";
    echo    "<form    name='subjectForm'    method='post'    action='?activeNav=Subject&activeTab=&action=submitEdited&subjToEdit=$subjToEdit'
onSubmit='return subjectFormCheck(this)'>";
    echo "<tr><td colspan='2' align='center'>Edit Subject</td></tr>";
    echo "<tr><td>Subject Name</td>";
    echo "<td><input type=text name='subjName' value='$subjName'></td></tr>";
    echo "<tr><td>Subject Description</td>";
    echo "<td><textarea name='subjDescription' rows='3' cols='36' >$subjDescription</textarea></td></tr>";
    echo "<tr><td colspan='2' align='center'><input type='submit' name='addSubj' value='apply changes'>";
    echo "<button type='reset' name='reset' value='reset'>reset</button></td></tr>";
    echo "</form></table>";
  }
  else{
    echo "<table border='1'>";
    echo "<form name='subjectForm' method='post' action='?activeNav=Subject&activeTab=&action=add' onSubmit='return subjectFormCheck(this)'>";
    echo "<tr><td colspan='2' align='center'>Add New Subject</td></tr>";
    echo "<tr><td>Subject Name</td>";
    $time = time();
    echo "<input type='hidden' name='code' value='$time'/>";
    echo "<td><input type='text' name='subjName'></td></tr>";
    echo "<tr><td>Subject Description</td>";
    echo "<td><textarea name='subjDescription' rows='3' cols='36'></textarea></td></tr>";
    echo "<tr><td colspan='2' align='center'><input type='submit' name='addSubj' value='add'>";
    echo "<button type='reset' name='reset' value='reset'>reset</button></td></tr>";
    echo "</form></table>";
  }
}
//////////////////////////////////////////////////////////
function manage_Topic(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
    else{

    }
  }
  global $verifierCode;

  //check if the page is refreshed...
  $refreshed = 0;
  if($action){
    if($verifierCode == $code){
      $refreshed = 1;
    }
    $verifierCode = $code;
    session_register("verifierCode");
  }

  echo "<form name='loginForm' method='post' action='?activeNav=Topic&activeTab=&action=changeSubj'>";
  echo "Select subject:<br>";
  echo "<select name='subjCurrent' onChange='this.form.submit()'>";
  connect_Db();
  $query = "SELECT subject_id, subjectName FROM subject ORDER BY subjectName ASC ";
  $result = mysql_query($query);
  if(($subjCurrent == '')||($subjCurrent == 'Select')){
    echo "<option selected='selected' value='Select'>Please Select</option>";
  }
  while($myrow = mysql_fetch_row($result)){
    echo "<option";
    if($myrow[0] == $subjCurrent){
      echo " selected='selected'";
    }
    echo " value='$myrow[0]' label='$myrow[1]'>$myrow[1]</option>";
  }
  echo "</select>";
  //echo "<input type='submit' name='chooseSubj' value='go'>";
  echo "</form>";
  //obsessive check for dependencies...
  if($action == 'delete'){
    $query = "SELECT question_id FROM question WHERE topic_id='$subjToDelete' LIMIT 1 ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      echo "error: the system detected QUESTIONS related to the TOPIC therefore it CAN'T be DELETED. <br><br>";
      $action = "";
    }
  }
  if($action == 'submitEdited'){
    $query = "SELECT question_id FROM question WHERE topic_id='$subjToEdit' LIMIT 1 ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      echo "error: the system detected QUESTIONS related to the TOPIC therefore the CHANGES CAN'T be APPLIED. <br><br>";
      $action = "";
    }
  }
  switch($action){
    case 'delete':
      connect_Db();
      $query = "DELETE FROM topic WHERE topic_id='$subjToDelete' ";
      $result = mysql_query($query);
      rmdir("C:\\apache\\htdocs\\toes\\files\\$subjCurrent\\$subjToDelete");
      print(" '$subjName' was successfully deleted.<br>");
      break;
    case 'add':
      if($refreshed == 0){
        connect_Db();
        $query = "SELECT topic_id FROM topic WHERE subject_id='$subjCurrent' AND topicName='$subjName' AND deptNum='$deptNum' ";
        $result = mysql_query($query);
        if(mysql_num_rows($result) == 0){
          $nextId = get_Next_Id('topic_id','topic');
          $query = "INSERT INTO topic (topic_id, subject_id, topicName, deptNum) VALUES ('$nextId', '$subjCurrent', '$subjName', '$deptNum') ";
          mkdir("C:\\apache\\htdocs\\toes\\files\\$subjCurrent\\$nextId", 0777);
          $result = mysql_query($query);
          print(" '$subjName' was successfully added.<br><br>");
        }
        else{
          echo "error: the TOPIC submitted already EXISTS in the database therefore it was not ADDED.<br><br>";
        }
      }
      break;
    case 'submitEdited':
      connect_Db();
      $query = "SELECT topic_id FROM topic WHERE subject_id='$subjCurrent' AND topicName='$subjName' AND deptNum='$deptNum' AND
topic_id!='$subjToEdit' ";
      $result = mysql_query($query);
      if(mysql_num_rows($result) == 0){
        $query = "UPDATE topic SET topicName = '$subjName', deptNum = '$deptNum' WHERE topic_id = '$subjToEdit' ";
        $result = mysql_query($query);
        print(" '$subjName' was successfully edited.<br>");
        unset($subjToEdit);
      }
      else{
        echo "error: the TOPIC submitted already EXISTS in the database therefore the CHANGES CAN'T be APPLIED.<br><br>";
        $action = "edit";
      }
      break;
    default:
      break;
  }
  //form for sorting table...
  if(!isset($direction)){
    $direction = "DESC";
  }
  if($column != ""){
    $query = "SELECT t.topic_id, t.subject_id, t.topicName, t.deptNum, COUNT(q.topic_id) FROM topic AS t LEFT JOIN question AS q ON
(t.topic_id=q.topic_id) WHERE t.subject_id='$subjCurrent' GROUP BY t.topic_id ORDER BY $column $direction";
  }
  else{
    $query = "SELECT t.topic_id, t.subject_id, t.topicName, t.deptNum, COUNT(q.topic_id) FROM topic AS t LEFT JOIN question AS q ON
(t.topic_id=q.topic_id) WHERE t.subject_id='$subjCurrent' GROUP BY t.topic_id ";
  }
  echo "<form name='availableTopicSortForm' method='POST' action='?activeNav=$activeNav' style='display:none;'>";
  echo "<input type='hidden' name='column' value='$column'/>";
  echo "<input type='hidden' name='direction' value='$direction'/>";
  echo "<input type='hidden' name='subjCurrent' value='$subjCurrent'/>";
  echo "</form>";
  //display topic table here...
  $resultTopic = mysql_query($query);
  echo "<table border='1'>";
  echo "<tr><td colspan='4' align='center'>List of Topics</td></tr>";
  echo "<tr><td></td><td></td>";
  if(($subjCurrent == "")||mysql_num_rows($resultTopic) == 0){
    echo "<td align='center'>Topic Name</td><td align='center'>Departmental number</td>";
  }
  else{
    $availableTopicColumnNames = array('Topic Name', 'Departmental number');
    $availableTopicColumnNamesDb = array('t.topicName', 't.deptNum');
    for($i = 0;$i < count($availableTopicColumnNames);$i++){
      echo "<td align='center'>";
      echo "<a href='javascript: void availableTopicSortJs(\"$availableTopicColumnNamesDb[$i]\")' style='text-decoration:none;color:blue;'>";
      echo "$availableTopicColumnNames[$i]";
      if($availableTopicColumnNamesDb[$i] == $column){
        echo "&nbsp;";
        if($direction == "ASC"){
          echo "&#8593";
        }
        else{
          echo "&#8595";
        }
      }
      echo "</a></td>";
    }
  }
  echo "</tr>";
  if(mysql_num_rows($resultTopic) == 0){
    echo "<tr><td colspan='4' align='center'>no records</td></tr>";
  }
  while($myrow = mysql_fetch_row($resultTopic)){
    echo "<tr>";
    if($subjToEdit == $myrow[0]){
      echo "<td colspan='2' align='center'>***EDITING***</td>";
    }
    else{
      if($myrow[4] == 0){
        echo "<td align='center'><a
href='?direction=$direction&column=$column&activeNav=Topic&activeTab=&action=edit&subjToEdit=$myrow[0]&subjName=$myrow[2]&deptNum=$myrow[3]&sub
jCurrent=$subjCurrent'>edit</a></td>";
        echo "<td align='center'><a
href='?direction=$direction&column=$column&activeNav=Topic&activeTab=&action=delete&subjToDelete=$myrow[0]&subjName=$myrow[2]&subjCurrent=$subj
Current'>delete</a></td>";
      }
      else{
        echo "<td align='center'>edit</td>";
        echo "<td align='center'>delete</td>";
      }
    }
    echo "<td>$myrow[2]</td><td>$myrow[3]</td></tr>";
  }
  echo "</table>";

  //display the subject form here...
  if($action == 'edit'){
    echo "<form name='topicForm' method='post' action='?activeNav=Topic&activeTab=&action=submitEdited&subjToEdit=$subjToEdit'
onSubmit='return topicFormCheck(this)'>";
    echo "<table border='1'>";
    echo "<tr><td colspan='2' align='center'>Edit Topic</td></tr>";
    echo "<tr><td>Topic Name</td>";
    echo "<td><input type=text name='subjName' value='$subjName'></td></tr>";
    echo "<tr><td>Topic Description</td>";
    //echo "<td><textarea name='subjDescription' rows='3' cols='36' >$subjDescription</textarea></td></tr>";
    echo "<td>";
    $deptNumString = array ("first departmental", "second departmental", "third departmental", "fourth departmental", "fifth departmental",
"sixth departmental", "seventh departmental");
    echo "<select name='deptNum'>";
    for($i = 0; $i < count($deptNumString);$i++){
      if($deptNumString[$i] == $deptNum){
        echo "<option selected='selected' value='$deptNumString[$i]'>$deptNumString[$i]</option>";
      }
      else{
        echo "<option value='$deptNumString[$i]'>$deptNumString[$i]</option>";
      }
    }
    echo "</select>";
    echo "</td></tr>";
    echo "<input type='hidden' name='subjCurrent' value='$subjCurrent'/>";
    echo "<tr><td colspan='2' align='center'><input type='submit' name='addSubj' value='APPLY CHANGES'>";
    echo "<button type='reset' name='reset' value='reset'>RESET</button></td></tr>";
    echo "</table></form>";
  }
  else{
    echo "<form name='topicForm' method='post' action='?activeNav=Topic&activeTab=&action=add' onSubmit='return topicFormCheck(this)'>";
    echo "<table border='1'>";
    echo "<tr><td colspan='2' align='center'>Add New Topic</td></tr>";
    echo "<tr><td>Topic Name</td>";
    $time = time();
    echo "<input type='hidden' name='code' value='$time'/>";
    echo "<input type='hidden' name='subjCurrent' value='$subjCurrent'/>";
    echo "<td><input type='text' name='subjName'></td></tr>";
    echo "<tr><td>Departmental number</td>";
    //echo "<td><textarea name='subjDescription' rows='3' cols='36'></textarea></td></tr>";
    //------------------------------
    echo "<td>";
    echo "<select name='deptNum'>";
    echo "<option value='please select'>please select</option>";
    echo "<option value='first departmental'>first departmental</option>";
    echo "<option value='second departmental'>second departmental</option>";
    echo "<option value='third departmental'>third departmental</option>";
    echo "<option value='fourth departmental'>fourth departmental</option>";
    echo "<option value='fifth departmental'>fifth departmental</option>";
    echo "<option value='sixth departmental'>sixth departmental</option>";
    echo "<option value='seventh departmental'>seventh departmental</option>";
    echo "</select>";
    echo "</td></tr>";
    //------------------------------
    echo "<tr><td colspan='2' align='center'><input type='submit' name='addSubj' value='ADD'>";
    echo "<button type='reset' name='reset' value='reset'>RESET</button></td></tr>";
    echo "</table></form>";
  }
}
//////////////////////////////////////////////////////////
function add_Question(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      //print "\$GLOBALS[\"$key\"] == $value<br>";
      global $$key;
    }
    else{

    }
  }
  global $verifierCode;
  global $HTTP_POST_FILES;
  global $hasLoggedIn;
  global $fileToDelete;
  global $errorText;
  global $hrFlag;

  //check if the page is refreshed (i.e. user pressed f5 or clicked refresh button)...
  $refreshed = 0;
  if($action){
    if(($verifierCode == $code)||($code < $verifierCode)){
      $refreshed = 1;
    }
    $verifierCode = $code;
    session_register("verifierCode");
  }

  if(($action == 'create question')&&($uploadFile == 'upload extraFile')&&($hasLoggedIn == 1)){
    if((isset($tupload))&&($hasLoggedIn == 1)){
      //echo "<br>You uploaded the file:<br>";

      $uploadDir = 'C:\apache\htdocs\toes\files';
      $uploadDir = $uploadDir."\\$subjCurrent"."\\$topicCurrent"."\\$folderName";
      //echo "<br>$uploadDir<br>";
      $uploadDir = addslashes($uploadDir);
      //echo "<br>$uploadDir<br>";

      //empty the uploadDir...
      $dh = opendir($uploadDir);
      while(gettype($file = readdir($dh)) != boolean){
        if(is_file("$uploadDir/$file")){
          unlink("$uploadDir/$file");
        }
      }

      for($i = 0; $i < count($tupload); $i++){
        //print" path:$tupload[$i] <br>\n";
        //print" name:$tupload_name[$i]<br>\n";
        //print" size:$tupload_size[$i] bytes<br>\n";
        //print" type:$tupload_type[$i]<p>\n\n";
        if($refreshed == 0){
          copy($tupload[$i],"$uploadDir/$tupload_name[$i]");
        }
        else{
          echo "Couldn't Copy.";
        }
      }
    }
    echo "extra file(s) were uploaded.";
    echo "<table align='center' width='100%' height='100%'>";
    //display button for preview...
    echo "<tr><td colspan='2' align='center'>";
    echo              "<button              onClick='javascript:window.open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
question&questionIdToDisplay=$question_id\",\"\",\"fullscreen,scrollbars\")'>preview this question</button>";
    echo "</td></tr>";
    echo "<tr><td colspan='2' align='center'>";
    include($web);
    echo "</td></tr>";
    //display options 'edit this question' or 'create another question'
    echo "<tr>";
    echo "<td align='center'><a href='?";

    foreach($GLOBALS as $key=>$value){
      if ( ereg("[a-z]", $key[0],$array ) ){
        switch($key){
          case 'activeTab':
            echo "$key=Edit Question"."&";
            break;
          case 'action':
            echo "$key=create question"."&";
            break;
          case 'uploadFile':
            break;
          case 'fileToDelete':
            break;
          case 'questionEditFromBrowse':
            break;
          default:
            echo "$key=$value"."&";
            break;
        }
      }
    }
    echo "'>EDIT THIS QUESTION</a></td>";

    echo "<td align='center'><a href='?activeNav=$activeNav&activeTab=Add Question'>NEW QUESTION</a></td>";
    echo "</tr>";
    echo "</table>";

  }
  elseif(($action == 'create question')&&($uploadFile == 'upload template')&&($hasLoggedIn == 1)){
    $uploadTemplateSuccessful = true;
    if((isset($tupload))&&($hasLoggedIn == 1)){
      if($tupload[0] == "none"){
        echo "error: the $question_id.doc file was not uploaded.<BR><BR>";
        $uploadTemplateSuccessful = false;
      }
      if($tupload[1] == "none"){
        echo "error: the $question_id.htm file was not uploaded.<BR><BR>";
        $uploadTemplateSuccessful = false;
      }
      if(!$uploadTemplateSuccessful){
        echo "<span style='font-size:75%;'>";
        echo "The error above is probably caused by one of the following:";
        echo "<ol>";
        echo "<li>The 'c:\\toes\' folder is not present in your machine (PC) please create one and save the downloaded question template in
it.</li>";
        echo "<li>The specified files were not saved in the 'c:\\toes\' folder. Download the question template again and save it in 'c:\\toes\'
folder.</li>";
        echo "<li>The internet connection failed while the files were being uploaded. Please reupload the files.</li>";
        echo "</ol>";
        echo "</span>";
        echo   "<a   href='?questionEditFromBrowse=$question_id&activeNav=Question&activeTab=Edit   Question&displayUploadTemplateTable=display'
style='color:blue;'>PLEASE CLICK HERE TO EDIT THE FAULTY QUESTION</a>";
      }
    }
    if((isset($tupload))&&($hasLoggedIn == 1)&&($uploadTemplateSuccessful)){
      //echo "<br>You uploaded the file:<br>";
      $uploadDir = 'C:\apache\htdocs\toes\files';
      $uploadDir = $uploadDir."\\$subjCurrent"."\\$topicCurrent";
      //echo "<br>$uploadDir<br>";
      $uploadDir = addslashes($uploadDir);
      //echo "<br>$uploadDir<br>";

      for($i = 0; $i < count($tupload); $i++){
        //print" path:$tupload[$i] <br>\n";
        //print" name:$tupload_name[$i]<br>\n";
        //print" size:$tupload_size[$i] bytes<br>\n";
        //print" type:$tupload_type[$i]<p>\n\n";

        if($refreshed == 0){
          copy($tupload[$i],"$uploadDir/$tupload_name[$i]");
          $web = "$uploadDir/$tupload_name[$i]";
        }
        else{
          echo "Couldn't Copy.";
        }
      }
      //reformat the .htm file
      //echo "[web='$web']";
      if($fo = fopen($web, "r")){
        flock($fo, 2);
        //create bak file...
        touch($web.".bak");
        if($fb = fopen($web.".bak", "a")){
          flock($fb, 2);
          //read orig write to bak
          $tableFlag = 0;
          $tagTable = array();
          $tagTr = array();
          $tagTd = array();
          $tagSelect = array();
          $tagStyle = array();
          $numLine = 1;
          $writeToFile = true;
          while(!feof($fo)){
            $origLine = fgets($fo, 1024);
            $len = strlen($origLine);
            //print "<br>[$numLine][".htmlentities($origLine)."]";
            $numLine++;
            $errorText = array();
            if(detectInvalidStr($origLine, $questionType)){
              break;
            }
            //note: for better performance...
            //initially substr_count() was used primarily to implement strong restrictions...
            //imposing a limited n occurences of the needle such as 'substr_count($origLine, "<hr size=") == n'
            //this is very sympathetic/compatible with ms office 2000's conversion of .doc to .htm...
            //that is, every element tag (specifically table, tr, td etc) is printed alone within each line (n == 1)...
            //strpos() was used in the proceeding 'search for needle in the haystack' for faster execution and
            //more flexible .htm (friendlier .htm code for direct .htm encoders...)
            //however .htm encoding is not advised because at the time of this writing I stick with the default
            //element tag string CASE making the 'search for needle in the haystack' case-sensitive!
            $specialPass = false;
            if(strpos($origLine, "</body>") !== false){
              $specialPass = true;
              $writeToFile = false;
            }
            if((strpos($origLine, "<hr") !== false)||($specialPass)){
              $hrFlag++;
              switch($hrFlag){
                case 1:
                  //$origLine    =    "<span    id='toesSection1'><div    class=Section1><div    class=MsoNormal    align=center    style='text-
align:center'>".$origLine;
                  $origLine = "<span id='toesSection1'><div class=Section1><div class=MsoNormal align=center style='text-align:center'>";
                  break;
                case 2:
                  $origLine = "</span><span id='toesSection2'>".$origLine;
                  break;
                case 3:
                  $origLine = "</span><span id='toesSection3'>".$origLine;
                  break;
                case 4:
                  $origLine = "</span>";
                  if($questionType == 'matching type'){
                    $origLine = $origLine."<input type='hidden' name='matchingTypeTagAttributeCount' value='$tagAttributeCount'/>";
                  }
                  fwrite($fb, $origLine);
                  break;
                default :
                  break;
              }
              if($hrFlag == 2){
                //perform specific checks for elements found in section 1
                switch($questionType){
                  case 'multiple choice':
                    if($tagRadioCount > 4){
                      $errorText[] = "form structure violation: the required number of radio buttons is 4";
                    }
                    if($tagTableCount != 1){
                      $errorText[] = "main table structure violation: faulty &lttable&gt tags in section ".($hrFlag-1);
                    }
                    if($tagTrCount != 5){
                      $errorText[] = "main table structure violation: incorrect number of rows caused by faulty &lttr&gt tags in section
".($hrFlag-1);
                    }
                    if($tagTdCount < 4){
                      $errorText[] = "main table structure violation: faulty &lttd&gt tags in section ".($hrFlag-1);
                    }
                    $tagTableCount = 0;
                    $tagTrCount = 0;
                    $tagTdCount = 0;
                    break;
                  case 'true or false':
                    if($tagRadioCount > 2){
                      $errorText[] = "form structure violation: the required number of radio buttons is 4";
                    }
                    if($tagTableCount != 1){
                      $errorText[] = "main table structure violation: faulty &lttable&gt tags in section ".($hrFlag-1);
                    }
                    if($tagTrCount != 3){
                      $errorText[] = "main table structure violation: incorrect number of rows caused by faulty &lttr&gt tags in section
".($hrFlag-1);
                    }
                    if($tagTdCount < 3){
                      $errorText[] = "main table structure violation: faulty &lttd&gt tags in section ".($hrFlag-1);
                    }
                    $tagTableCount = 0;
                    $tagTrCount = 0;
                    $tagTdCount = 0;
                    break;
                  case 'matching type':
                    //check number of dropdown (items)
                    if(!($tagSelectCount > 0)){
                      $errorText[] = "form structure violation: please supply atleast 1 item";
                    }
                    if(!($tagTrCount >= $tagSelectCount)){
                      $errorText[] = "form structure violation: the number of attributes should be equal or greater than the number of items";
                    }
                    if($tagTableCount != 2){
                      $errorText[] = "main table structure violation: faulty &lttable&gt tags in section ".($hrFlag-1);
                    }
                    $tagTableCount = 0;
                    $tagTrCount = 0;
                    $tagTdCount = 0;
                    break;
                  //apply checks on essay and problem solving...
                  default:
                    if($tagTableCount != 1){
                      $errorText[] = "main table structure violation: faulty &lttable&gt tags in section ".($hrFlag-1);
                    }
                    if($tagTrCount != 1){
                      $errorText[] = "main table structure violation: incorrect number of rows caused by faulty &lttr&gt tags in section
".($hrFlag-1);
                    }
                    if($tagTdCount != 1){
                      $errorText[] = "main table structure violation: faulty &lttd&gt tags in section ".($hrFlag-1);
                    }
                    $tagTableCount = 0;
                    $tagTrCount = 0;
                    $tagTdCount = 0;
                    break;
                }
              }
              if(($hrFlag == 3)||($hrFlag == 4)){
                //perform specific checks for elements found in section 2 and 3
                if($tagTableCount != 1){
                  $errorText[] = "main table structure violation: faulty &lttable&gt tags in section ".($hrFlag-1);
                }
                if($tagTrCount != 1){
                  $errorText[] = "main table structure violation: incorrect number of rows caused by faulty &lttr&gt tags in section
".($hrFlag-1);
                }
                if($tagTdCount != 1){
                  $errorText[] = "main table structure violation: faulty &lttd&gt tags in section ".($hrFlag-1);
                }
                if($hrFlag == 3){
                  $tagTableCount = 0;
                  $tagTrCount = 0;
                  $tagTdCount = 0;
                }
                //perform specific checks for elements found in section 3
                if($hrFlag == 4){
                  switch($questionType){
                    case 'multiple choice':
                      $answerString = strtolower($answerString);
                      if(!(($answerString == 'a')||($answerString == 'b')||($answerString == 'c')||($answerString == 'd'))){
                        $errorText[] = "answer string violation: invalid answer string please use A B C or D";
                      }
                      break;
                    case 'true or false':
                      $answerString = strtolower($answerString);
                      if(!(($answerString == 'true')||($answerString == 'false'))){
                        $errorText[] = "answer string violation: invalid answer string please use 'TRUE' or 'FALSE'";
                      }
                      break;
                    case 'matching type':
                      $answerString = strtolower($answerString);
                      $answerStringArray = explode(",", $answerString);
                      if(count($answerStringArray) != $tagSelectCount){
                        $errorText[] = "answer string violation: the number of attribute identifiers in the answer sequence does not match the
number of items";
                      }
                      else{
                        foreach($answerStringArray AS $answerStringArrayElem){
                          if(ereg('^[0-9]+$', $answerStringArrayElem)){
                            if(!((0 < intVal($answerStringArrayElem))&&(intVal($answerStringArrayElem) <= $tagAttributeCount))){
                              $errorText[] = "answer string violation: invalid attribute identifier '$answerStringArrayElem' please use numbers
from 1 to $tagAttributeCount";
                            }
                          }
                          else{
                            $errorText[] = "answer string violation: invalid attribute identifier '$answerStringArrayElem' please use numbers";
                          }
                        }
                      }
                      break;
                    default:
                      break;
                  }
                }
              }
              if(count($errorText) > 0){
                break;
              }
            }
            //fill the stack with push operations
            if(strpos($origLine, "<style>") !== false){
              array_push($tagStyle, "<style>");
            }
            if(strpos($origLine, "<table") !== false){
              array_push($tagTable, "<table>");
            }
            if(strpos($origLine, "<tr") !== false){
              array_push($tagTr, "<tr>");
            }
            if(strpos($origLine, "<td") !== false){
              array_push($tagTd, "<td>");
            }
            //empty the stacks with pop operations
            if(strpos($origLine, "</td") !== false){
              if(count($tagTd) > 0){
                array_pop($tagTd);
                if(count($tagTd) == 0){
                  $tagTdCount++;
                }
              }
            }
            if(strpos($origLine, "</tr") !== false){
              if(count($tagTr) > 0){
                array_pop($tagTr);
                if(count($tagTr) == 0){
                  $tagTrCount++;
                }
              }
            }
            if(strpos($origLine, "</table") !== false){
              if(count($tagTable) > 0){
                array_pop($tagTable);
                if(count($tagTable) == 0){
                  $tagTableCount++;
                }
              }
            }
            if(strpos($origLine, "</style>") !== false){
              if(count($tagStyle) > 0){
                array_pop($tagStyle);
                if(count($tagStyle) == 0){
                  fwrite($fb, $origLine);
                  $tagStyleCount++;
                }
              }
            }
            if(count($tagStyle) == 1){
              fwrite($fb, $origLine);
            }
            switch($hrFlag){
              //first section
              case 1:
                //perform search for specific tags for each question type...
                switch($questionType){
                  case 'multiple choice':
                    if(strpos($origLine, "<INPUT TYPE=\"RADIO\"") !== false){
                      $tagRadioCount++;
                      $choiceArray = array('','a', 'b', 'c', 'd');
                      $additionalAttribute = "name='multipleChoiceRadio' value='$choiceArray[$tagRadioCount]' ";
                      $searchString = "<INPUT ";
                      $origLine = substr($origLine, 0, strpos($origLine, $searchString) +
strlen($searchString)).$additionalAttribute.substr($origLine, strpos($origLine, $searchString) + strlen($searchString));
                    }
                    break;
                  case 'true or false':
                    if(strpos($origLine, "<INPUT TYPE=\"RADIO\"") !== false){
                      $tagRadioCount++;
                      $choiceArray = array('','true', 'false');
                      $additionalAttribute = "name='trueOrFalseRadio' value='$choiceArray[$tagRadioCount]' ";
                      $searchString = "<INPUT ";
                      $origLine = substr($origLine, 0, strpos($origLine, $searchString) +
strlen($searchString)).$additionalAttribute.substr($origLine, strpos($origLine, $searchString) + strlen($searchString));
                    }
                    break;
                  case 'matching type':
                    if(strpos($origLine, "<SELECT") !== false){
                      $additionalAttribute = " name='matchingTypeSelect[]' ";
                      $searchString = "<SELECT";
                      $origLine = substr($origLine, 0, strpos($origLine, $searchString) +
strlen($searchString)).$additionalAttribute.substr($origLine, strpos($origLine, $searchString) + strlen($searchString));
                      array_push($tagSelect, '<SELECT>');
                    }
                    if(strpos($origLine, "</SELECT>") !== false){
                      if(count($tagSelect) > 0){
                        array_pop($tagSelect);
                        if(count($tagSelect) == 0){
                          $tagSelectCount++;
                        }
                      }
                    }
                    //count the attribute for the items found above
                    if(($tagTableCount == 1)&&(strpos($origLine, "</table") !== false)){
                      $tagTrCount = 0;
                      $tagTdCount = 0;
                    }
                    if(($tagTableCount == 1)&&(count($tagTable) == 1)){
                      $tagAttributeCount = $tagTrCount;
                    }
                    break;
                  case 'essay':
                    break;
                  case 'problem solving':
                    break;
                  default:
                    break;
                }
                break;
              //second section
              case 2:
                break;
              //third section getting the answer string
              case 3:
                switch($questionType){
                  case 'multiple choice':
                    if(ereg('>answer=&quot;(.*)&quot;<', $origLine, $answerArray)){
                      $answerString = $answerArray[1];
                    }
                    break;
                  case 'true or false':
                    if(ereg('>answer=&quot;(.*)&quot;<', $origLine, $answerArray)){
                      $answerString = $answerArray[1];
                    }
                    break;
                  case 'matching type':
                    if(ereg('>answer=&quot;(.*)&quot;<', $origLine, $answerArray)){
                      $answerString = $answerArray[1];
                    }
                    break;
                  case 'essay':
                    break;
                  case 'problem solving':
                    break;
                  default:
                    break;
                }
                break;
              default:
                break;
            }
            if((strpos($origLine, "</html>") !== false)&&($hrFlag != 4)){
              $errorText[] = "section structure violation: invalid number of sections found";
            }
            if($hrFlag > 0){
              //file attachments from _files detected...
              if(strpos($origLine, "src=\"") !== false){
                $folderName = $tupload_name[1];
                $folderName = str_replace(".htm", "_files", $folderName);
                //print "foldername: [$folderName]";
                if(!is_dir("$uploadDir\\$folderName")){
                  mkdir("$uploadDir\\$folderName", 0777);
                }
                $first = strpos($origLine, $folderName);
                $first = strpos($origLine, '/', $first);
                $last = strpos($origLine, '"', $first);
                $str = substr($origLine, $first+1, $last-$first-1);
                $extraFile[] = $str;
                //echo "[$first][$last][$str]";
                $srcDir = 'http://localhost/toes/files/'.$subjCurrent.'/'.$topicCurrent.'/';
                $origLine = str_replace($folderName."/$str", $srcDir.$folderName."/$str", $origLine);
              }
              //<file></file> detected
              if(ereg('&lt;FILE&gt;(.*)&lt;/FILE&gt;', $origLine, $fileArray)){
                connect_Db();
                $queryF = "SELECT src FROM file WHERE file_id='$fileArray[1]' AND question_id='$question_id' ";
                $resultF = mysql_query($queryF);
                if(mysql_num_rows($resultF) == 0){
                  $errorText[] = "embedded file violation: the file id '$fileArray[1]' does not exist, please upload the file first ";
                  break;
                }
              }
              if($writeToFile){
                fwrite($fb, $origLine);
              }
            }
          }
          flock($fb, 3);
          fclose($fb);
        }
        flock($fo, 3);
        fclose($fo);
      }
      //delete orig
      //rename bak
      unlink("$uploadDir/$tupload_name[1]");
      copy($web.".bak","$uploadDir/$tupload_name[1]");
      unlink($web.".bak");

      if(count($errorText) > 0){
        //display errors found in the file
        for($i = 0;$i < count($errorText);$i++){
          echo "<br>error ".($i+1).": ".$errorText[$i];
        }
        //display recommendations
        //displayConventionsFOrQuestionTypes($questionType)
        echo "<br><a href='?questionEditFromBrowse=$question_id&activeNav=Question&activeTab=Edit Question' style='color:blue;'>PLEASE CLICK
HERE TO EDIT THE FAULTY QUESTION</a>";
      }
      else{
        //upload answer string for question table...
        connect_Db();
        $query = "UPDATE question SET answer='$answerString' WHERE question_id='$question_id' ";
        $result = mysql_query($query);
        //dislpay upload form for the extra files...
        if(count($extraFile) > 0){
          echo "<br><br>";
          echo "<form name='clientUpload' enctype='multipart/form-data' action='?activeNav=Question&activeTab=$activeTab&action=create
question' method='POST' onsubmit='return check_File(13)'>";
          $time = time();
          //$time++;
          echo "<input type='hidden' name='code' value='$time' />";
          echo "<input type='hidden' name='question_id' value='$question_id' />";
          echo "<input type='hidden' name='subjCurrent' value='$subjCurrent'/>";
          echo "<input type='hidden' name='subjName' value='$subjName'>";
          echo "<input type='hidden' name='topicCurrent' value='$topicCurrent'/>";
          echo "<input type='hidden' name='topicName' value='$topicName'/>";
          echo "<input type='hidden' name='author' value='$author'>";
          echo "<input type='hidden' name='questionType' value='$questionType'/>";
          echo "<input type='hidden' name='difficulty' value='$difficulty'/>";
          echo "<input type='hidden' name='numVisits' value='$numVisits'/>";
          echo "<input type='hidden' name='folderName' value='$folderName'/>";
          echo "<input type='hidden' name='web' value='$web'/>";
          echo "<input type='hidden' name='MAX_FILE_SIZE' value='36700160'/>";
          echo "<table border='1'><tr>";
          $index = 13;
          for($i = 0;$i < count($extraFile); $i++){
            $templateA = 'c:\\toes\\'.$folderName.'\\'.$extraFile[$i];
            echo "<tr>";
            echo "<td><input name='myText' value='$templateA' readonly='readonly' /></td>";
            echo "<td><INPUT name='button' TYPE=BUTTON OnClick='insert_To_Upload_Field($index)' VALUE='click here then ctrl-V' /></td>";
            echo "<td><input type='file' name='tupload[]' ></td>";
            echo "</tr>";
            $index = $index + 3;
          }
          echo "<tr><td colspan='3' align='center'><input type='submit' name='uploadFile' value='upload extraFile' /><button type='reset'
name='reset' value='reset'>reset</button>";
          echo "</td></tr></table>";
          echo "</form>";
        }
        else{
          //question preview
          echo "<table align='center' width='100%' height='100%'>";
          //display button for preview...
          echo "<tr><td colspan='2' align='center'>";
          echo "<button onClick='javascript:window.open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
question&questionIdToDisplay=$question_id\",\"\",\"fullscreen,scrollbars\")'>preview this question</button>";
          //echo "<button onClick='newWindowOpener(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
question&questionIdToDisplay=$question_id\")'>preview this question</button>";
          echo "</td></tr>";
          echo "<tr><td colspan='2' align='center'>";
          //echo "[$web]";
          include($web);
          echo "</td></tr>";
          //display options 'edit this question' or 'create another question'
          echo "<tr>";
          echo "<td align='center'><a href='?questionEditFromBrowse=$question_id&activeNav=Question&activeTab=Edit Question'>EDIT THIS
QUESTION</a></td>";
          echo "<td align='center'><a href='?activeNav=$activeNav&activeTab=Add Question'>NEW QUESTION</a></td>";
          echo "</tr>";
          echo "</table>";
        }
      }
    }
  }
  elseif($action == 'create question'){
    if($numVisits == 0){
      //get subjName and topicName
      connect_Db();
      $query = "SELECT subjectName FROM subject WHERE subject_id='$subjCurrent' ";
      $result = mysql_query($query);
      $myrow = mysql_fetch_row($result);
      $subjName = $myrow[0];
      $query = "SELECT topicName FROM topic WHERE topic_id='$topicCurrent' ";
      $result = mysql_query($query);
      $myrow = mysql_fetch_row($result);
      $topicName = $myrow[0];

      //add a new question id...
      if(($refreshed == 0)&&($activeTab == 'Add Question')){
        connect_Db();
        $nextId = get_Next_Id('question_id','question');
        $question_id = $nextId;


        //create the question template as well...copy then rename the default template...
        switch($questionType){
          case 'multiple choice':
            $origTemplate = 'C:\apache\htdocs\toes\files\templates\c.doc';
            $templateName = "c"."$question_id";
            break;
          case 'true or false':
            $origTemplate = 'C:\apache\htdocs\toes\files\templates\t.doc';
            $templateName = "t"."$question_id";
            break;
          case 'matching type':
            $origTemplate = 'C:\apache\htdocs\toes\files\templates\m.doc';
            $templateName = "m"."$question_id";
            break;
          case 'essay':
            $origTemplate = 'C:\apache\htdocs\toes\files\templates\e.doc';
            $templateName = "e"."$question_id";
            break;
          case 'problem solving':
            $origTemplate = 'C:\apache\htdocs\toes\files\templates\p.doc';
            $templateName = "p"."$question_id";
            break;
          default:
            break;
        }
        $extension = '.doc';
        $uploadDir = 'C:\apache\htdocs\toes\files';
        $uploadDir = $uploadDir."\\$subjCurrent"."\\$topicCurrent";
        $uploadDir = addslashes($uploadDir);
        copy($origTemplate,"$uploadDir/$templateName"."$extension");

        $srcInclude = 'c:/apache/htdocs/toes/files/'.$subjCurrent.'/'.$topicCurrent.'/'.$templateName;
        $query = "INSERT INTO question (question_id, topic_id, questionType, objects, author, difficulty) VALUES ('$question_id',
'$topicCurrent', '$questionType', '$srcInclude', '$author', '$difficulty') ";
        $result = mysql_query($query);
      }
      $numVisits++;
    }
    echo "<table border='1'>";
    echo "<tr><td colspan='2' align='center'>Question Properties</td></tr>";
    echo "<tr><td>Subject name</td><td>$subjName</td></tr>";
    echo "<tr><td>Topic name</td><td>$topicName</td></tr>";
    echo "<tr><td>Author</td><td>$author</td></tr>";
    echo "<tr><td>Question type</td><td>$questionType</td></tr>";
    echo "<tr><td>Difficulty</td><td>$difficulty</td></tr>";
    echo "</table>";

    //delete the fileToDelete...
    if(isset($fileToDelete)){
      //echo "<br>fiel to delete: $fileToDelete<br>";
      connect_Db();
      $query = "DELETE FROM file WHERE file_id='$fileToDelete' ";
      $result = mysql_query($query);
      unset($fupload);
    }
    //get the uploaded file
    if((isset($fupload))&&($hasLoggedIn == 1)){
      //echo "<br>You uploaded the file:<br>";
      //print" path:$fupload <br>\n";
      //print" name:$fupload_name<br>\n";
      //print" size:$fupload_size bytes<br>\n";
      //print" type:$fupload_type<p>\n\n";

      $uploadDir = 'C:\apache\htdocs\toes\files';
      $uploadDir = $uploadDir."\\$subjCurrent"."\\$topicCurrent";
      //echo "<br>$uploadDir<br>";
      $uploadDir = addslashes($uploadDir);
      //echo "<br>$uploadDir<br>";

      //get the file's extension
      $textArray = split("\.", $fupload_name);
      $n = count($textArray);
      $n = $n-1;
      $extension = ".".$textArray[$n];
      connect_Db();
      $nextId = get_Next_Id('file_id','file');
      $src = "$uploadDir\\$nextId"."$extension";
      $src = str_replace("\\\\","\\", $src);
      $src = str_replace("\\","\\\\", $src);
      //echo "src [$src]";
      if(($refreshed == 0)&&(copy($fupload,"$uploadDir/$nextId"."$extension"))){
        $query = "INSERT INTO file (file_id, question_id, type, origFilename, src) VALUES ('$nextId', '$question_id', '$fupload_type',
'$fupload_name', '$src') ";
        $result = mysql_query($query);
      }
      else{
        echo "error: Couldn't Copy.<br><br>";
      }
    }
    //then output the question's files table...
    echo "<br><table border='1'>";
    echo "<tr><td colspan='4' align='center'>Files</td></tr>";
    echo "<tr><td></td><td>file id</td><td>file type</td><td>original filename</td></tr>";
    connect_Db();
    $query = "SELECT file_id, type, origFilename FROM file WHERE question_id='$question_id' ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) == 0){
      echo "<tr><td colspan='4' align='center'>no records</td></tr>";
    }
    while($myrow = mysql_fetch_row($result)){
      echo "<tr><td><a href='?";
      foreach($GLOBALS as $key=>$value){
        if ( ereg("[a-z]", $key[0],$array ) ){
          echo "$key=$value"."&";
        }
      }
      echo "fileToDelete=$myrow[0]'>delete</a>";
      echo "</td><td>$myrow[0]</td><td>$myrow[1]</td><td>$myrow[2]</td></tr>";
    }
    echo "<tr><td colspan='4' align='center'>";
    echo "<form name='questionFilesForm' enctype='multipart/form-data' action='?activeNav=Question&activeTab=$activeTab&action=create question'
method='POST' onSubmit='return questionFilesJs(this)'>";
    $time = time();
    //$time++;
    echo "<input type='hidden' name='code' value='$time' />";
    echo "<input type='hidden' name='question_id' value='$question_id' />";
    echo "<input type='hidden' name='subjCurrent' value='$subjCurrent'/>";
    echo "<input type='hidden' name='subjName' value='$subjName'>";
    echo "<input type='hidden' name='topicCurrent' value='$topicCurrent'/>";
    echo "<input type='hidden' name='topicName' value='$topicName'/>";
    echo "<input type='hidden' name='author' value='$author'>";
    echo "<input type='hidden' name='questionType' value='$questionType'/>";
    echo "<input type='hidden' name='difficulty' value='$difficulty'/>";
    echo "<input type='hidden' name='numVisits' value='$numVisits'/>";
    echo "<input type='hidden' name='MAX_FILE_SIZE' value='36700160'/>";
    if(isset($questionEditFromBrowse)){
      echo "<input type='hidden' name='questionEditFromBrowse' value='$questionEditFromBrowse'/>";
    }
    echo "<input type='file' name='fupload'/><br>";
    echo "</td></tr>";
    echo "<tr><td colspan='4' align='center'><input type='submit' name='uploadFile' value='upload file'/>";
    echo "<button type='reset' name='reset' value='reset'>reset</button>";
    echo "</td></tr>";
    echo "</form></table>";

    //display link to the question template
    echo "<br>Warning! Please save this template in the toes folder \"c:\\toes\\\" ";
    switch($questionType){
      case 'multiple choice':
        $templateName = "c"."$question_id";
        break;
      case 'true or false':
        $templateName = "t"."$question_id";
        break;
      case 'matching type':
        $templateName = "m"."$question_id";
        break;
      case 'essay':
        $templateName = "e"."$question_id";
        break;
      case 'problem solving':
        $templateName = "p"."$question_id";
        break;
      default:
        break;
    }
    $templateName = $templateName.'.doc';
    $sourceDir = '/toes/files';
    $sourceDir = $sourceDir."/$subjCurrent"."/$topicCurrent/".$templateName;
    echo "<br><a href='$sourceDir' target='_BLANK' style='color:blue;' onClick='showUploadTemplateForm()'>click here to download the question
template</a>";

    //display upload form for the edited question template...
    echo "<br><br>";
    echo "<form name='clientUpload' enctype='multipart/form-data' action='?activeNav=Question&activeTab=$activeTab&action=create question'
method='POST' onsubmit='return check_File(11)'>";
    $time = time();
    //$time++;
    echo "<input type='hidden' name='code' value='$time' />";
    echo "<input type='hidden' name='question_id' value='$question_id' />";
    echo "<input type='hidden' name='subjCurrent' value='$subjCurrent'/>";
    echo "<input type='hidden' name='subjName' value='$subjName'>";
    echo "<input type='hidden' name='topicCurrent' value='$topicCurrent'/>";
    echo "<input type='hidden' name='topicName' value='$topicName'/>";
    echo "<input type='hidden' name='author' value='$author'>";
    echo "<input type='hidden' name='questionType' value='$questionType'/>";
    echo "<input type='hidden' name='difficulty' value='$difficulty'/>";
    echo "<input type='hidden' name='numVisits' value='$numVisits'/>";
    echo "<input type='hidden' name='MAX_FILE_SIZE' value='36700160'/>";
    $uploadTemplateTableStyleDisplay = "style='display:none'";
    if($displayUploadTemplateTable == "display"){
      $uploadTemplateTableStyleDisplay = "";
    }
    echo "<table id='uploadTemplateTable' border='1' $uploadTemplateTableStyleDisplay><tr>";
    $templateA = 'c:\\toes\\'.$templateName;
    echo "<td><input name='myText0' value='$templateA' readonly='readonly' /></td>";
    echo "<td><INPUT name='button0' TYPE=BUTTON OnClick='insert_To_Upload_Field(11)' VALUE='click here then ctrl-V' /></td>";
    echo "<td><input type='file' name='tupload[]'></td>";
    echo "</tr><tr>";
    $templateA = str_replace('.doc', '.htm', $templateA);
    echo "<td><input name='myText1' value='$templateA' readonly='readonly' /></td>";
    echo "<td><INPUT name='button1' TYPE=BUTTON OnClick='insert_To_Upload_Field(14)' VALUE='click here then ctrl-V' /></td>";
    echo "<td><input type='file' name='tupload[]'></td>";
    echo "</tr><tr><td colspan='3' align='center'>";
    echo "<input type='submit' name='uploadFile' value='upload template' /><button type='reset' name='reset' value='reset'>reset</button>";
    echo "</td></tr></table>";
    echo "</form>";

  }
  else{
    echo "<table border='1'>";
    echo "<tr>";
    echo "<td>Select Subject</td>";
    echo "<td>";
    echo "<form name='loginForm' method='post' action='?activeNav=Question&activeTab=$activeTab' style='display:inline'>";
    echo "<select name='subjCurrent' onChange='this.form.submit()'>";
    connect_Db();
    $query = "SELECT subject_id, subjectName FROM subject ORDER BY subjectName ASC ";
    $result = mysql_query($query);
    if(($subjCurrent == '')||($subjCurrent == 'Select')){
      echo "<option selected='selected' value='Select'>Please Select</option>";
    }
    while($myrow = mysql_fetch_row($result)){
      echo "<option";
      if($myrow[0] == $subjCurrent){
        echo " selected='selected'";
      }
      echo " value='$myrow[0]' label='$myrow[1]'>$myrow[1]</option>";
    }
    echo "</select>";
    //echo "<input type='submit' name='chooseSubj' value='go' />";
    echo "</form>";
    echo "</td></tr>";
    echo "<tr>";
    echo "<td>Select Topic:</td>";
    echo "<td>";
    echo "<form name='addQuestionForm' method='post' action='?activeNav=Question&activeTab=$activeTab' onSubmit='return addQuestionJs(this)'>";
    echo "<select name='topicCurrent'>";
    connect_Db();
    $query = "SELECT topic_id, topicName, CASE deptNum WHEN 'first departmental' THEN 1 WHEN 'second departmental' THEN 2 WHEN 'third
departmental' THEN 3 WHEN 'fourth departmental' THEN 4 WHEN 'fifth departmental' THEN 5 WHEN 'sixth departmental' THEN 6 WHEN 'seventh
departmental' THEN 7 END AS deptNumInt FROM topic WHERE subject_id='$subjCurrent' ORDER BY deptNumInt ASC, topicName ASC";
    //$query = "SELECT topic_id, topicName FROM topic WHERE subject_id='$subjCurrent' ORDER BY topicName ASC ";
    $result = mysql_query($query);
    if(($subjCurrent == '')||($subjCurrent == 'Select')){
      echo "<option selected='selected' value='Select'>Please select the subject</option>";
    }
    elseif(mysql_num_rows($result) == 0){
      echo "<option selected='selected' value='Select'>The selected subject has no topics</option>";
    }
    elseif(($topicCurrent == '')||($topicCurrent == 'Select')){
      echo "<option selected='selected' value='Select'>Please Select</option>";
    }

    while($myrow = mysql_fetch_row($result)){
      echo "<option";
      if($myrow[0] == $topicCurrent){
        echo " selected='selected'";
      }
      echo " value='$myrow[0]' label='$myrow[1]'>[$myrow[2]] $myrow[1]</option>";
    }
    echo "</select>";
    echo "</td>";
    $time = time();
    //$time++;
    echo "<input type='hidden' name='code' value='$time'/>";
    echo "<input type='hidden' name='numVisits' value='0' />";
    echo "<input type='hidden' name='subjCurrent' value='$subjCurrent' />";
    if(($subjCurrent != '')&&($subjCurrent != 'Select')&&(mysql_num_rows($result) != 0)){
      echo "<tr><td>Author</td>";
      echo "<td><input type='text' name='author' /></td></tr>";
      echo "<tr><td>Question Type</td><td>";
      if($questionType == ""){
        $questionType = 'true or false';
      }
      echo "<input type='radio' name='questionType' value='true or false' ";
      if($questionType == 'true or false'){
        echo "checked='checked'";
      }
      echo "/>true or false";

      echo "<br><input type='radio' name='questionType' value='multiple choice' ";
      if($questionType == 'multiple choice'){
        echo "checked='checked'";
      }
      echo "/>multiple choice";



      echo "<br><input type='radio' name='questionType' value='matching type' ";
      if($questionType == 'matching type'){
        echo "checked='checked'";
      }
      echo "/>matching type";
      echo "</td></tr><tr><td>Difficulty</td><td>";
      if($difficulty == ""){
        $difficulty = 'very easy';
      }
      echo "<input type='radio' name='difficulty' value='very easy' ";
      if($difficulty == 'very easy'){
        echo "checked='checked'";
      }
      echo "/>very easy";
      echo "<br><input type='radio' name='difficulty' value='easy' ";
      if($difficulty == 'easy'){
        echo "checked='checked'";
      }
      echo "/>easy";
      echo "<br><input type='radio' name='difficulty' value='medium' ";
      if($difficulty == 'medium'){
        echo "checked='checked'";
      }
      echo "/>medium";
      echo "<br><input type='radio' name='difficulty' value='hard' ";
      if($difficulty == 'hard'){
        echo "checked='checked'";
      }
      echo "/>hard";
      echo "<br><input type='radio' name='difficulty' value='very hard' ";
      if($difficulty == 'very hard'){
        echo "checked='checked'";
      }
      echo "/>very hard";
      echo "<td></tr><tr><td colspan='2' align='center'><input type='submit' name='action' value='create question' /></td></tr>";
    }
    echo "</form>";
  }
  echo "</table>";
}
//////////////////////////////////////////////////////////
function question_Query(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      //print "\$GLOBALS[\"$key\"] == $value<br>";
      global $$key;
    }
    else{
    }
  }
  if($redirectedFromEdit == 'yes'){
    echo "Please choose the question to be edited<br>";
  }
  if($questionToDelete != ''){
    connect_Db();
    $query = "SELECT exam_id FROM exam_item WHERE question_id='$questionToDelete' LIMIT 1 ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) == 0){
      $query = "SELECT objects FROM question WHERE question_id='$questionToDelete' ";
      $result = mysql_query($query);
      $myrow = mysql_fetch_row($result);
      $fileLink = $myrow[0];
      if(file_exists($fileLink.".doc")){
        unlink($fileLink.".doc");
      }
      if(file_exists($fileLink.".htm")){
        unlink($fileLink.".htm");
      }
      $fileLink = $fileLink."_files";
      if(is_dir($fileLink)){
        $dh = opendir($fileLink);
        while(gettype($file = readdir($dh)) != boolean){
          if(is_file($fileLink.'\\'.$file)){
            //echo "($file)";
            unlink($fileLink.'\\'.$file);
          }
        }
        closedir($dh);
        rmdir($fileLink);
      }
      //delete the linked multimedia files...
      $query = "SELECT src FROM file WHERE question_id='$questionToDelete' ";
      $result = mysql_query($query);
      while($myrow = mysql_fetch_row($result)){
        unlink($myrow[0]);
      }
      $query = "DELETE FROM file WHERE question_id='$questionToDelete' ";
      $result = mysql_query($query);
      $query = "DELETE FROM question WHERE question_id='$questionToDelete' ";
      $result = mysql_query($query);
      echo "message: Question id [$questionToDelete] was deleted.<br><br>";
      $questionToDelete = '';
    }
    else{
      echo "error: the system detected EXAMS related to the QUESTION therefore it CAN'T be DELETED.<br><br>";
      $questionToDelete = '';
    }

  }
  //display the query filters...
  echo "Please use the following filters:";
  echo "<form name='questionQuery' action='?activeNav=Question&activeTab=$activeTab' method='POST' style='display:inline;'>";
  echo "<table border='1' >";
  echo "<tr><td colspan='2' align='center'>Question Search Filters</td></tr>";
  echo "<tr><td>Subject</td><td>";
  connect_Db();
  $query = "SELECT subject_id, subjectName FROM subject";
  $result = mysql_query($query);
  echo "<input type='hidden' name='hSubject' value='$qSubject'>";
  echo "<select name='qSubject' onChange='this.form.submit()'>";
  echo "<option value='any'>any</option>";
  while($myrow = mysql_fetch_row($result)){
    echo "<option value='$myrow[0]'>$myrow[1]</option>";
  }
  echo "</select>";
  echo "</td></tr>";
  echo "<tr><td>Topic</td><td>";
  echo "<input type='hidden' name='hTopic' value='$qTopic'>";
  $query = "SELECT topic_id, topicName, CASE deptNum WHEN 'first departmental' THEN 1 WHEN 'second departmental' THEN 2 WHEN 'third
departmental' THEN 3 WHEN 'fourth departmental' THEN 4 WHEN 'fifth departmental' THEN 5 WHEN 'sixth departmental' THEN 6 WHEN 'seventh
departmental' THEN 7 END AS deptNumInt FROM topic WHERE subject_id='$qSubject' ORDER BY deptNumInt ASC, topicName ASC";
  //$query = "SELECT topic_id, topicName FROM topic WHERE subject_id='$qSubject' ";
  $result = mysql_query($query);
  echo "<select name='qTopic'>";
  if($qSubject == 'any'){
    $qTopic = 'any';
    echo "<option value='any'>any</option>";
  }
  elseif(mysql_num_rows($result) == 0){
    $filter = 'subject chosen has no topics';
    echo "<option value='subject chosen has no topics'>subject chosen has no topics</option>";
  }
  else{
    if($qTopic == 'subject chosen has no topics'){
      $qTopic = 'any';
    }
    echo "<option value='any'>any</option>";
    while($myrow = mysql_fetch_row($result)){
      echo "<option value='$myrow[0]'>[$myrow[2]] $myrow[1]</option>";
    }
  }
  echo "</select>";
  echo "</td></tr>";
  echo "<tr><td>Question Type</td><td>";
  echo "<input type='hidden' name='hQuestionType' value='$qQuestionType'>";
  echo "<select name='qQuestionType'>";
  echo "<option value='any'>any</option>";
  echo "<option value='true or false'>true or false</option>";
  echo "<option value='multiple choice'>multiple choice</option>";
  echo "<option value='matching type'>matching type</option>";
  //echo "<option value='essay'>essay</option>";
  //echo "<option value='problem solving'>problem solving</option>";
  echo "</select>";
  echo "</td></tr>";
  echo "<tr><td>Difficulty</td><td>";
  echo "<input type='hidden' name='hDifficulty' value='$qDifficulty'>";
  echo "<select name='qDifficulty'>";
  echo "<option value='any'>any</option>";
  echo "<option value='very easy'>very easy</option>";
  echo "<option value='easy'>easy</option>";
  echo "<option value='medium'>medium</option>";
  echo "<option value='hard'>hard</option>";
  echo "<option value='very hard'>very hard</option>";
  echo "</select>";
  echo "</td></tr>";
  echo "<tr><td>Sorted By</td><td>";
  echo "<input type='hidden' name='hSortedBy' value='$qSortedBy'>";
  echo "<select name='qSortedBy'>";
  echo "<option value='Question Id'>Question Id</option>";
  echo "<option value='Topic Name'>Topic Name</option>";
  echo "<option value='Question Type'>Question Type</option>";
  echo "<option value='Author'>Author</option>";
  echo "<option value='Difficulty'>Difficulty</option>";
  echo "</select>";
  echo "</td></tr>";

  echo "<tr><td rowspan='2'>Direction</td><td>";
  echo "<input type='hidden' name='hDirection' value='$qDirection'>";
  echo "<input type='radio' name='qDirection' value='ascending' checked='checked'>ascending";
  echo "</td></tr>";
  echo "<td><input type='radio' name='qDirection' value='descending' >descending</td></tr>";

  echo "<tr><td>Display</td><td>";
  echo "<input type='hidden' name='hNumResults' value='$qNumResults'>";
  echo "<select name='qNumResults'>";;
  echo "<option value='10'>10</option>";
  echo "<option value='20'>20</option>";
  echo "<option value='30'>30</option>";
  echo "<option value='40'>40</option>";
  echo "<option value='50'>50</option>";
  echo "</select> per page";
  echo "</td></tr>";
  echo "<tr><td colspan='2' align='center'><input type='submit' name='filter' value='search'><button type='reset' name='reset'
value='reset'>reset</button></td></tr>";
  echo "</form>";
  echo "</table>";

  if($filter == 'search'){
    if(($qTopic == 'any')&&($qQuestionType == 'any')&&($qDifficulty == 'any')){
      $queryString = "SELECT question.question_id, subject.subjectName, topic.topicName, question.questionType, question.objects,
question.author, question.difficulty, COUNT(exam_item.exam_id) FROM question LEFT JOIN exam_item ON
(question.question_id=exam_item.question_id), subject, topic WHERE question.topic_id=topic.topic_id AND subject.subject_id=topic.subject_id";
    }
    else{
      $queryString = "SELECT question.question_id, subject.subjectName, topic.topicName, question.questionType, question.objects,
question.author, question.difficulty, COUNT(exam_item.exam_id) FROM question LEFT JOIN exam_item ON
(question.question_id=exam_item.question_id), subject, topic WHERE question.topic_id=topic.topic_id AND subject.subject_id=topic.subject_id";
      if(($qTopic != 'any')&&($qTopic != "")){
        $wherePart[] = "question.topic_id='$qTopic'";
      }
      if(($qQuestionType != 'any')&&($qQuestionType != "")){
        $wherePart[] = "question.questionType='$qQuestionType'";
      }
      if(($qDifficulty != 'any')&&($qDifficulty != "")){
        $wherePart[] = "question.difficulty='$qDifficulty'";
      }
      for($i = 0;$i < count($wherePart);$i++){
        $queryString = $queryString." AND $wherePart[$i]";
      }
    }
    if($qSubject != "any"){
      $queryString .= " AND topic.subject_id='$qSubject'";
    }
    $queryString .= " GROUP BY question.question_id";
    switch($qSortedBy){
      case 'Question Id':
        $queryString = $queryString." ORDER BY question.question_id";
        break;
      case 'Topic Name':
        $queryString = $queryString." ORDER BY topic.topicName";
        break;
      case 'Question Type':
        $queryString = $queryString." ORDER BY question.questionType";
        break;
      case 'Author':
        $queryString = $queryString." ORDER BY question.author";
        break;
      case 'Difficulty':
        $queryString = $queryString." ORDER BY question.difficulty";
        break;
      default:
        break;
    }
    if($qDirection == 'ascending'){
      $queryString = $queryString." ASC";
    }
    else{
      $queryString = $queryString." DESC";
    }
    if($qTopic == 'subject chosen has no topics'){
      $filter = 'subject chosen has no topics';
    }
  }

  //echo "[$queryString]<br>";
  echo "<br><hr width='100%' size='1' align='left' color='#008000'/>";
  //query the query string
  if($filter == 'subject chosen has no topics'){
    echo "subject chosen has no topics";
  }
  elseif($filter == 'search'){
    //determine how many records...
    $resultQuery = mysql_query($queryString);
    $num_records = mysql_num_rows ($resultQuery);
    $display_number = $qNumResults;
    if ($num_records > $display_number) {
      $num_pages = ceil ($num_records/$display_number);
    } else {
      $num_pages = 1;
    }
    //Determine where in the database to start returning results...
    if (isset($_GET['s'])) {
      $start = $_GET['s'];
    } else {
      $start = 0;
    }
    //retrieve the records applying LIMIT...
    $queryString = $queryString. ' LIMIT '.$start.', '.$display_number;
    $resultQuery = mysql_query($queryString);

    if(mysql_num_rows($resultQuery) == 0){
      echo "<center>0 results returned</center>";
    }
    else{
      /*#008B8B #F0FFF0*/
      echo "<table border='0' bgcolor='#F1FBF1' width='100%' cellpadding='10px' align='center'>";
      if($num_records < ((($start/$display_number) + 1) * $display_number)){
        echo "<tr><td align='right'>Result ".($start + 1)." - ".$num_records." of about $num_records</td></tr>";
      }
      else{
        echo "<tr><td align='right'>Result ".($start + 1)." - ".((($start/$display_number) + 1) * $display_number)." of about
$num_records</td></tr>";
      }
      echo "<tr><td align='center'>";

      while($records = mysql_fetch_row($resultQuery)){
        echo "<div class='greenBar'>";
        echo "&nbsp;&nbsp;&nbsp;";
        if($records[7] == 0){
          echo "<a href='?questionEditFromBrowse=$records[0]&activeNav=Question&activeTab=Edit Question'>EDIT</a>&nbsp;&nbsp;|&nbsp;&nbsp;";
          $deleteQuestionPost = "questionToDelete=$records[0]";
          foreach($GLOBALS as $key=>$value){
            if ( ereg("[a-z]", $key[0],$array ) ){
              if($key != 'questionToDelete'){
                $deleteQuestionPost = $deleteQuestionPost."&$key=$value";
              }
            }
          }
          echo "<a href='?$deleteQuestionPost'>DELETE</a>&nbsp;&nbsp;|&nbsp;&nbsp;";
        }
        else{
          echo "<font style='font-size:75%;'>EDIT&nbsp;&nbsp;|&nbsp;&nbsp;DELETE&nbsp;&nbsp;|&nbsp;&nbsp;</font>";
        }
        //echo "<a href='?questionEditFromBrowse=$records[0]&activeNav=Question&activeTab=Edit Question'>SAVE AS</a>&nbsp&nbsp|&nbsp&nbsp";
        echo "<a href='javascript:void open(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
question&questionIdToDisplay=$records[0]\",\"\",\"fullscreen,scrollbars\");'>PREVIEW</a>";
        //echo "<a href='javascript:void fullwin(\"http://localhost/toes/exam/questionnaire.php?operationMode=preview
question&questionIdToDisplay=$records[0]\")'>PREVIEW</a>";
        echo "</div>";
        echo "<table border='1' class='questionTableResult' >";
        echo "<tr><td>";
        echo "<table class='questionInfo'>";
        echo "<tr><td>Question Id:</td><td>$records[0]<br></td></tr>";
        echo "<tr><td>Subject Name:</td><td>$records[1]<br></td></tr>";
        echo "<tr><td>Topic Name:</td><td>$records[2]<br></td></tr>";
        echo "<tr><td>Question Type:</td><td>$records[3]<br></td></tr>";
        echo "<tr><td>Author:</td><td>$records[5]<br></td></tr>";
        echo "<tr><td>Difficulty:</td><td>$records[6]<br></td></tr>";
        echo "</table>";
        echo "</td></tr>";
        echo "<tr><td class='questionTd' align='center' style='display:inline;'>";
        if(file_exists("$records[4].htm")){
          include("$records[4].htm");
        }
        else{
          echo "error: MISSING FILE. The $records[0].doc or the $records[0].htm file for this question is missing if you have these required
files please click on EDIT otherwise please click on DELETE to remove this question completely.<BR><BR>";
        }
        echo "</td></tr>";
        echo "</table>";
        echo "<br><hr width='100%' size='1' align='left' color='#008000'/>";
      }//end of while
      echo "</td></tr></table>";

      //make the links to other query pages...

      if ($num_pages > 1){
        echo "<center>Result Page:";
        // Determine what page the script is on.
        $current_page = ($start/$display_number) + 1;
        // If it's not the first page, make a Previous button.
        if ($current_page != 1){
          $postString = '';
          $postString = '?';
          foreach($GLOBALS as $key=>$value){
            if ( ereg("[a-z]", $key[0],$array ) ){
              $postString = $postString."$key=$value"."&";
            }
          }
          $sLink = $start - $display_number;
          $postString = $postString."s=$sLink"."&np=$num_pages";
          echo "<a href='$postString'>Previous</a> ";
        }
        // Make all the numbered pages.
        for ($i = 1; $i <= $num_pages; $i++){
          if ($i != $current_page){
            $postString = '';
            $postString = '?';
            foreach($GLOBALS as $key=>$value){
              if ( ereg("[a-z]", $key[0],$array ) ){
                $postString = $postString."$key=$value"."&";
              }
            }
            $sLink = $display_number * ($i - 1);
            $postString = $postString."s=$sLink"."&np=$num_pages";
            echo "<a href='$postString'>$i</a> ";
          } else {
            echo $i . ' ';
          }
        }
        // If it's not the last page, make a Next button.
        if ($current_page != $num_pages){
          $postString = '';
          $postString = '?';
          foreach($GLOBALS as $key=>$value){
            if ( ereg("[a-z]", $key[0],$array ) ){
              $postString = $postString."$key=$value"."&";
            }
          }
          $sLink = $start + $display_number;
          $postString = $postString."s=$sLink"."&np=$num_pages";
          echo "<a href='$postString'>Next</a> ";
        }
      }
      echo "</center>";
    }//else part

  }
  echo "<br><hr width='100%' size='1' align='left' color='#008000'/>";
}
///////////////////////////////////////////////////////////
function get_Question_Info(){
  global $questionEditFromBrowse;
  global $time;
  global $question_id;
  global $subjCurrent;
  global $subjName;
  global $topicCurrent;
  global $topicName;
  global $author;
  global $questionType;
  global $difficulty;
  global $numVisits;
  global $action;
  $time = time();
  $question_id = $questionEditFromBrowse;
  connect_Db();
  $query = "SELECT subject.subject_id, subject.subjectName, topic.topic_id, topic.topicName, question.author, question.questionType,
question.difficulty FROM question, subject, topic WHERE subject.subject_id=topic.subject_id AND question.topic_id=topic.topic_id AND
question.question_id='$question_id' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  $subjCurrent = $myrow[0];
  $subjName = $myrow[1];
  $topicCurrent = $myrow[2];
  $topicName = $myrow[3];
  $author = $myrow[4];
  $questionType = $myrow[5];
  $difficulty = $myrow[6];
  $numVisits = 1;
  $action = 'create question';
}
///////////////////////////////////////////////////////////
function detectInvalidStr($hayStack, $control){
  global $errorText;
  global $hrFlag;
  switch($control){
    case 'multiple choice':
      $validStr[] = "<INPUT TYPE=\"RADIO\"";
      break;
    case 'true or false':
      $validStr[] = "<INPUT TYPE=\"RADIO\"";
      break;
    case 'matching type':
      $validStr[] = "<SELECT";
      $validStr[] = "</SELECT>";
      break;
    case 'essay':
      $validStr = array();
      break;
    case 'problem solving':
      $validStr = array();
      break;
    default:
      break;
  }
  $strArray[0] = "<form";
  $strArray[1] = "<INPUT TYPE=\"TEXT\"";
  $strArray[2] = "<INPUT TYPE=\"PASSWORD\"";
  $strArray[3] = "<INPUT TYPE=\"RADIO\"";
  $strArray[4] = "<INPUT TYPE=\"CHECKBOX\"";
  $strArray[5] = "<SELECT";
  $strArray[6] = "</SELECT>";
  $strArray[7] = "<TEXTAREA";
  $strArray[8] = "</TEXTAREA>";
  $strArray[9] = "<INPUT TYPE=\"FILE\"";
  $strArray[10] = "<INPUT TYPE=\"HIDDEN\"";
  $strArray[11] = "<INPUT TYPE=\"SUBMIT\"";
  $strArray[12] = "<BUTTON";
  $strArray[13] = "</BUTTON>";
  $strArray[14] = "<INPUT TYPE=\"RESET\"";
  $strArray[15] = "<INPUT TYPE=\"IMAGE\"";
  foreach($strArray AS $strArrayElem){
    if((strpos($hayStack, $strArrayElem) !== false)&&(!in_array($strArrayElem, $validStr))){
      $errorText[] = "element tag violation found in section ".($hrFlag-1)." : the form element '".htmlentities($strArrayElem)."' is not
allowed in a $control";
      return true;
    }
  }
  return false;
}
//////////////////////////////////////////////////////////
function manage_Password(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  if($staffPasswordSubmit == "change"){
    connect_Db();
    if($password != $passwordOld){
      echo "error: the supplied 'old password' does not match the one stored in the database.<br><br>";
    }
    else{
      if($passwordNew != $passwordNewR){
        echo "error: the 'new password' and the 'retyped new password' does not match.<br><br>";
      }
      else{
        $query = "UPDATE lrc_personnel SET password='$passwordNew', username='$usernameNew' WHERE username='$username' AND password='$password'
";
        $result = mysql_query($query);
        if($username != $usernameNew){
          echo "message: the 'new username' was successfully stored.<br><br>";
        }
        echo "message: the 'new password' was successfully stored.<br><br>";
        $username = $usernameNew;
        $password = $passwordNew;
        session_register("username");
        session_register("password");
      }
    }
  }
  echo "<table border='1'>";
  echo "<form name='staffPasswordForm' method='POST' action='' onSubmit='return staffPasswordCheck(this)'>";
  echo "<tr><td>username</td><td><input type='text' name='usernameNew' maxLength='16' size='16' value='$username'/></td></tr>";
  echo "<tr><td>old password</td><td><input type='password' name='passwordOld' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td>new password</td><td><input type='password' name='passwordNew' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td>retype new password</td><td><input type='password' name='passwordNewR' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td colspan='2' align='center'><input type='submit' name='staffPasswordSubmit' value='change'/></td></tr>";
  echo "</form>";
  echo "</table>";
}
//////////////////////////////////////////////////////////
function manage_Tutorial_Schedule(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  echo "<table width='100%'>";
  echo "<tr><td align='center'>Tutorial Schedule</td></tr>";
  echo "</table>";
  echo "</tr>";
  connect_Db();
  if(!isset($direction)){
    $direction = "DESC";
  }
  if($column != ""){
    $query = "SELECT tl.tutorial_id, s.subjectName, tl.topic, tl.date, tl.time, CONCAT(t.firstName, ' ', t.middleName, ' ', t.lastName) AS
tutorFullname, t.tutorType, t.deptCourse FROM subject AS s, tutor AS t, tutorial AS tl WHERE tl.tutor_id=t.tutor_id AND tl.subject=s.subject_id
ORDER BY $column $direction ";
  }
  else{
    $query = "SELECT tl.tutorial_id, s.subjectName, tl.topic, tl.date, tl.time, CONCAT(t.firstName, ' ', t.middleName, ' ', t.lastName) AS
tutorFullname, t.tutorType, t.deptCourse FROM subject AS s, tutor AS t, tutorial AS tl WHERE tl.tutor_id=t.tutor_id AND tl.subject=s.subject_id
ORDER BY tl.date DESC, tl.time DESC ";
  }
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    $tutorialSchedulesTableColumnNames = array('', 'Attendees', 'Subject', 'Date', 'Time', 'Tutor', 'Course/Department', 'Topic');
    $tutorialSchedulesTableColumnNamesDb = array('', '', 's.subjectName', 'tl.date', 'tl.time', 'tutorFullname', '', '');
    echo "<div style='height:auto; width:100%; overflow:scroll;'>";
    echo "<table id='tutorScheduleTable' border='1'>";
    echo "<tr>";
    echo "<form name='tutorialScheduleSortForm'>";
    echo "<input type='hidden' name='column' value='$column'/>";
    echo "<input type='hidden' name='direction' value='$direction'/>";
    for($i = 0;$i < count($tutorialSchedulesTableColumnNames);$i++){
      if($tutorialSchedulesTableColumnNamesDb[$i] == ""){
        echo "<td align='center' nowrap='nowrap'>$tutorialSchedulesTableColumnNames[$i]</td>";
      }
      else{
        echo "<td align='center' nowrap='nowrap'><a href='javascript: void
tutorialScheduleSortJs(\"$tutorialSchedulesTableColumnNamesDb[$i]\")' style='text-
decoration:none;color:blue;'>$tutorialSchedulesTableColumnNames[$i]";
        if($tutorialSchedulesTableColumnNamesDb[$i] == $column){
          echo "&nbsp;";
          if($direction == "ASC"){
            echo "&#8593";
          }
          else{
            echo "&#8595";
          }
        }
        echo "</a></td>";
      }
    }
    echo "</form>";
    echo "</tr>";
    echo "<form name='tutorialScheduleAttendanceForm' action='?activeNav=$activeNav&activeTab=Tutorial Attendance' method='POST' >";
    echo "<input type='hidden' name='tutorial_id'/>";
    while($myrow = mysql_fetch_row($result)){
      echo "<tr><td>";
      echo "<input type='button' id='buttonToLinkNoUnderline' onClick='return sendTutorialIdToAttendance(this.form, \"$myrow[0]\")'
onMouseOver='return cursorForButtonToLink(this)' value='attendance'/>";
      echo "</td>";
      echo "<td align='center'>";
      $queryA = "SELECT student_number FROM attendance WHERE tutorial_id='$myrow[0]' AND status='present' ";
      $resultA = mysql_query($queryA);
      echo mysql_num_rows($resultA);
      echo "</td>";
      echo "<td>$myrow[1]</td>";
      echo "<td>".reformatDateForDisplay($myrow[3])."</td>";
      echo "<td>".reformatTimeForDisplay($myrow[4])."</td>";
      echo "<td>$myrow[5]</td>";
      echo "<td>";
      if($myrow[6] == 'p'){
        echo "peer:<br>";
        $queryA = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrow[7]' ";
      }
      else{
        echo "faculty:<br>";
        $queryA = "SELECT departmentName FROM upm_departments WHERE department_id='$myrow[7]' ";
      }
      $resultA = mysql_query($queryA);
      $myrowA = mysql_fetch_row($resultA);
      echo "$myrowA[0]";
      echo "</td>";
      echo "<td>";
      foreach(explode(",", $myrow[2]) AS $topicArrayElem){
        $queryA = "SELECT topicName FROM topic WHERE topic_id='$topicArrayElem' ";
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        echo "$myrowA[0]<br>";
      }
      echo "</td>";
      echo "</tr>";
    }
    echo "</form>";
    echo "</table>";
    echo "</div>";
  }
  else{
    echo "<table width='100%'>";
    echo "<tr><td align='center'>no records</td></tr>";
    echo "</table>";
  }

}
//////////////////////////////////////////////////////////
function reformatDateForDisplay($date){
  $dateArray = explode("-", $date);
  $dateUnix = mktime("", "", "", $dateArray[1], $dateArray[2], $dateArray[0]);
  return date("l F j, Y", $dateUnix);
}
//////////////////////////////////////////////////////////
function reformatTimeForDisplay($time){
  $timeArray = explode("-", $time);
  $index = 0;
  foreach($timeArray AS $timeArrayElem){
    //fileter seconds if it exists...
    if(strlen($timeArrayElem) == 8){
      $s = ":".substr($timeArrayElem, 6);
      $timeArrayElem = substr($timeArrayElem, 0, 5);
    }
    $timeExt = "AM";
    $timeArrayElemArray = explode(":", $timeArrayElem);
    if(substr($timeArrayElemArray[0], 0, 1) == "0"){
      $timeArrayElemArray[0] = substr($timeArrayElemArray[0], 1, 1);
    }
    if($timeArrayElemArray[0] > 11){
      $timeExt = 'PM';
    }
    if($timeArrayElemArray[0] > 12){
      $timeArrayElemArray[0] = $timeArrayElemArray[0] - 12;
    }
    $timeArray[$index] = implode(":", $timeArrayElemArray)."$s ".$timeExt;
    $index++;
  }
  return implode("-", $timeArray);
}
//////////////////////////////////////////////////////////
function manage_Tutorial_Attendance(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  connect_Db();
  if($tutorialAttendanceWalkInSubmit == "add to attendees"){
    $attendees = explode(",", $attendeesStr);
    for($i = 0;$i < count($attendees);$i++){
      $query = "SELECT student_number FROM student WHERE student_number='$attendees[$i]' ";
      $result = mysql_query($query);
      if(mysql_num_rows($result) > 0){
        $query = "SELECT student_number FROM attendance WHERE tutorial_id='$tutorial_id' AND student_number='$attendees[$i]' ";
        $result = mysql_query($query);
        if(mysql_num_rows($result) > 0){
          echo "error: the student number [$attendees[$i]] is already listed in the ATTENDEES table.<br><br>";
        }
        else{
          $query = "INSERT INTO attendance VALUES ('$attendees[$i]', '$tutorial_id', 'present', 'walk in') ";
          $result = mysql_query($query);
        }
      }
      else{
        echo "error: the student number [$attendees[$i]] does not exist in the database.<br><br>";
      }
    }
  }
  if($tutorialAttendanceSubmit == "add to attendees"){
    $query = "SELECT student_number FROM enlistment WHERE tutorial_id='$tutorial_id' ";
    $result = mysql_query($query);
    while($myrow = mysql_fetch_row($result)){
      if(in_array($myrow[0], $attendees)){
        $queryA = "INSERT INTO attendance VALUES ('$myrow[0]', '$tutorial_id', 'present', 'online') ";
        $resultA = mysql_query($queryA);
      }
      else{
        $queryA = "INSERT INTO attendance VALUES ('$myrow[0]', '$tutorial_id', 'absent', 'online') ";
        $resultA = mysql_query($queryA);
      }
    }
    //delete the enlistments...
    $query = "DELETE FROM enlistment WHERE tutorial_id='$tutorial_id' ";
    $result = mysql_query($query);
    echo "<br>";
  }
  if($studentNumberToRemoveFromAttendance != ""){
    $query = "DELETE FROM attendance WHERE student_number='$studentNumberToRemoveFromAttendance' AND tutorial_id='$tutorial_id' ";
    $result = mysql_query($query);
    echo "message: the specified student [$studentNumberToRemoveFromAttendance] was successfully removed from the ATTENDEES table.<br><br>";
  }
  if($studentNumberToMarkAsAbsent != ""){
    $query = "UPDATE attendance SET status='absent' WHERE student_number='$studentNumberToMarkAsAbsent' AND tutorial_id='$tutorial_id' ";
    $result = mysql_query($query);
  }
  if($studentNumberToMarkAsPresent != ""){
    $query = "UPDATE attendance SET status='present' WHERE student_number='$studentNumberToMarkAsPresent' AND tutorial_id='$tutorial_id' ";
    $result = mysql_query($query);
  }
  $query = "SELECT tutorial.tutorial_id, subject.subjectName, tutorial.topic, tutorial.date, tutorial.time, CONCAT(tutor.firstName, ' ',
tutor.middleName, ' ', tutor.lastName) AS tutorFullname, tutor.tutorType, tutor.deptCourse FROM subject, tutor, tutorial WHERE
tutorial.tutorial_id='$tutorial_id' AND tutorial.tutor_id=tutor.tutor_id AND tutorial.subject=subject.subject_id ORDER BY tutorial.date DESC,
tutorial.time DESC ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  echo "<table border='1'>";
  echo "<tr><td colspan='2' align='center'>Tutorial Details</td></tr>";
  echo "<tr><td>Subject</td><td>$myrow[1]</td></tr>";
  echo "<tr><td>Date</td><td>".reformatDateForDisplay($myrow[3])."</td></tr>";
  echo "<tr><td>Time</td><td>".reformatTimeForDisplay($myrow[4])."</td></tr>";
  echo "<tr><td>Tutor</td><td>$myrow[5]</td></tr>";
  echo "<tr>";
  if($myrow[6] == 'p'){
    echo "<td valign='top'>Course</td><td>(peer)&nbsp;";
    $queryA = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrow[7]' ";
  }
  else{
    echo "<td valign='top'>Department</td><td>(faculty)&nbsp;";
    $queryA = "SELECT departmentName FROM upm_departments WHERE department_id='$myrow[7]' ";
  }
  $resultA = mysql_query($queryA);
  $myrowA = mysql_fetch_row($resultA);
  echo "$myrowA[0]";
  echo "</td></tr>";
  echo "<tr><td>Topic</td><td>";
  foreach(explode(",", $myrow[2]) AS $topicArrayElem){
    $queryA = "SELECT topicName FROM topic WHERE topic_id='$topicArrayElem' ";
    $resultA = mysql_query($queryA);
    $myrowA = mysql_fetch_row($resultA);
    echo "$myrowA[0]<br>";
  }
  echo "</td></tr>";
  echo "</table>";
  //display attendance sheet
  echo "<br>";
  echo "<table border='1'>";
  echo "<form name='tutorialAttendeesForm' action='' method='POST'>";
  $attendeeListColumnName = array('', 'Student Number', 'Name', 'Course', 'Enlistment Method');
  echo "<tr><td colspan='5' align='center'>ATTENDEES</td></tr>";
  $query = "SELECT a.student_number, CONCAT(s.firstName, ' ', s.middleName, ' ', s.lastName), s.course, a.enlistmentMethod, a.enlistmentMethod
FROM attendance AS a, student AS s WHERE s.student_number=a.student_number AND a.tutorial_id='$tutorial_id' AND a.status='present' ORDER BY
a.enlistmentMethod ASC, a.student_number ASC ";
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    echo "<tr>";
    foreach($attendeeListColumnName AS $attendeeListColumnNameElem){
      echo "<td align='center'>$attendeeListColumnNameElem</td>";
    }
    echo "</tr>";
    while($myrow = mysql_fetch_row($result)){
      echo "<tr><td align='center'>";
      if($myrow[3] == "online"){
        echo "<input id='buttonToLinkNoUnderline' type='button' name='removeButton' value='mark as absent' onClick='return
tutorialAttendeesConfirm(this.form, \"$myrow[0]\", \"absent\")' onMouseOver='return cursorForButtonToLink(this)'/>";
      }
      else{
        echo "<input id='buttonToLinkNoUnderline' type='button' name='removeButton' value='remove' onClick='return
tutorialAttendeesConfirm(this.form, \"$myrow[0]\", \"remove\")' onMouseOver='return cursorForButtonToLink(this)'/>";
      }
      echo "</td><td align='center'>$myrow[0]</td><td>$myrow[1]</td><td>$myrow[2]</td><td align='center'>$myrow[3]</td></tr>";
    }
  }
  else{
    echo "<tr><td align='center'>no records</td></tr>";
  }
  echo "<tr bgcolor='#FFFFFF'><td colspan='5'>&nbsp;</td></tr>";
  echo "<tr><td colspan='5' align='center'>ABSENTEES</td></tr>";
  $query = "SELECT a.student_number, CONCAT(s.firstName, ' ', s.middleName, ' ', s.lastName), s.course, a.enlistmentMethod, a.enlistmentMethod
FROM attendance AS a, student AS s WHERE s.student_number=a.student_number AND a.tutorial_id='$tutorial_id' AND a.status='absent' ORDER BY
a.enlistmentMethod ASC, a.student_number ASC ";
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    echo "<tr>";
    foreach($attendeeListColumnName AS $attendeeListColumnNameElem){
      echo "<td align='center'>$attendeeListColumnNameElem</td>";
    }
    echo "</tr>";
    while($myrow = mysql_fetch_row($result)){
      echo "<tr><td align='center'>";
      echo "<input id='buttonToLinkNoUnderline' type='button' name='removeButton' value='mark as present' onClick='return
tutorialAttendeesConfirm(this.form, \"$myrow[0]\", \"present\")' onMouseOver='return cursorForButtonToLink(this)'/></td>";
      echo "<td align='center'>$myrow[0]</td><td>$myrow[1]</td><td>$myrow[2]</td><td align='center'>$myrow[3]</td></tr>";
    }
  }
  else{
    echo "<tr><td colspan='5' align='center'>no records</td></tr>";
  }
  echo "<input type='hidden' name='studentNumberToRemoveFromAttendance' value=''/>";
  echo "<input type='hidden' name='studentNumberToMarkAsAbsent' value=''/>";
  echo "<input type='hidden' name='studentNumberToMarkAsPresent' value=''/>";
  echo "<input type='hidden' name='tutorial_id' value='$tutorial_id'/>";
  echo "</form>";
  echo "</table>";
  //display forms used for adding students in the 'ATTENDEES' table...
  $query = "SELECT COUNT(student_number) FROM enlistment WHERE tutorial_id='$tutorial_id' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  $enlistedStudentCount = $myrow[0];
  if($enlistedStudentCount > 0){
    //display enlisted students...
    echo "<br>";
    echo "message: please add the ENLISTED STUDENT who ATTENDED the tutorial using the form below.<br><br>";
    echo "<table border='1'>";
    echo "<form name='tutorialAttendanceForm' action='' method='POST' >";
    echo "<tr><td align='center' colspan='5'>ENLISTED STUDENTS</td></tr>";
    echo "<tr><td></td><td align='center'>Student Number</td><td align='center'>Name</td><td align='center'>Priority Number</td><td
align='center'>Priority Listing</td></tr>";
    $query = "SELECT e.student_number, e.priorityNumber, CONCAT(s.firstName, ' ', s.middleName, ' ', s.lastName) AS fullName FROM enlistment AS
e, student AS s WHERE e.student_number=s.student_number AND e.tutorial_id='$tutorial_id' ORDER BY e.priorityNumber ASC LIMIT 0,
$maxTutorialEnlistees ";
    $result = mysql_query($query);
    $numOfPriorityEnlistees = 0;
    $priorityNumberDisplay = 0;
    while($myrow = mysql_fetch_row($result)){
      $priorityNumberDisplay++;
      echo "<tr><td><input type='checkbox' name='attendees[]' value='$myrow[0]'/></td><td>$myrow[0]</td><td>$myrow[2]</td><td
align='center'>$priorityNumberDisplay</td><td align='center'>PRIORITY</td></tr>";
      $numOfPriorityEnlistees++;

    }
    $query = "SELECT e.student_number, e.priorityNumber, CONCAT(s.firstName, ' ', s.middleName, ' ', s.lastName) AS fullName FROM enlistment AS
e, student AS s WHERE e.student_number=s.student_number AND e.tutorial_id='$tutorial_id' ORDER BY e.priorityNumber ASC LIMIT
$numOfPriorityEnlistees, ".($enlistedStudentCount - $numOfPriorityEnlistees)." ";
    $result = mysql_query($query);
    while($myrow = mysql_fetch_row($result)){
      $priorityNumberDisplay++;
      echo "<tr style='background-color=#FFFF80;'><td><input type='checkbox' name='attendees[]'
value='$myrow[0]'/></td><td>$myrow[0]</td><td>$myrow[2]</td><td align='center'>$priorityNumberDisplay</td><td align='center'>WAIT
LISTED</td></tr>";
    }
    echo "<tr><td align='center' colspan='5'><input type='submit' name='tutorialAttendanceSubmit' value='add to attendees'/></td></tr>";
    echo "<input type='hidden' name='tutorial_id' value='$tutorial_id'/>";
    echo "</form>";
    echo "</table>";
  }
  else{
    //display form for walk-in students
    echo "<br>";
    echo "<table border='1'>";
    echo "<form name='tutorialAttendanceWalkInForm' action='' method='POST' onSubmit='return tutorialAttendanceWalkInCheck(this)'>";
    echo "<tr><td colspan='2' align='center'>WALK IN STUDENTS</td></tr>";
    echo "<tr><td>submission</td><td>";
    echo "<input type='radio' name='submissionType' value='single' checked='checked' onClick='return toggleExtraStudNum(this.form)'>single";
    echo "<input type='radio' name='submissionType' value='multiple' onClick='return toggleExtraStudNum(this.form)'>multiple";
    echo "</td></tr>";
    echo "<tr><td>Student Number</td><td>&nbsp;<input type='text' name='studNumA' maxLength='4' size='4'/>&nbsp;-&nbsp;<input type='text'
name='studNumB' maxLength='5' size='5'/></td></tr>";
    echo "<tr id='extraStudNum' style='display:none;'><td>Student Number</td><td>&nbsp;<input type='text' name='studNumA' maxLength='4'
size='4'/>&nbsp;-&nbsp;<input type='text' name='studNumB' maxLength='5' size='5'/></td></tr>";
    echo "<tr id='extraStudNum' style='display:none;'><td>Student Number</td><td>&nbsp;<input type='text' name='studNumA' maxLength='4'
size='4'/>&nbsp;-&nbsp;<input type='text' name='studNumB' maxLength='5' size='5'/></td></tr>";
    echo "<tr id='extraStudNum' style='display:none;'><td>Student Number</td><td>&nbsp;<input type='text' name='studNumA' maxLength='4'
size='4'/>&nbsp;-&nbsp;<input type='text' name='studNumB' maxLength='5' size='5'/></td></tr>";
    echo "<tr id='extraStudNum' style='display:none;'><td>Student Number</td><td>&nbsp;<input type='text' name='studNumA' maxLength='4'
size='4'/>&nbsp;-&nbsp;<input type='text' name='studNumB' maxLength='5' size='5'/></td></tr>";
    echo "<tr><td colspan='2' align='center'><input type='submit' name='tutorialAttendanceWalkInSubmit' value='add to attendees'/></td></tr>";
    echo "<input type='hidden' name='tutorial_id' value='$tutorial_id'/>";
    echo "<input type='hidden' name='attendeesStr'/>";
    echo "</form>";
    echo "</table>";
  }
}
//////////////////////////////////////////////////////////
function get_next_id($id, $table){
  $previous = 0;
  $current = 0;
  connect_Db();
  $query = "SELECT $id FROM $table ORDER BY $id";
  $result = mysql_query($query);
  while($myrow = mysql_fetch_row($result)){
    $current = $myrow[0];
    if($current-$previous > 1){
      return $previous+1;
    }
    $previous = $current;
  }
  return $current+1;
}
//////////////////////////////////////////////////////////

?>
```

staff _Javascript.php

```
tabS = "        ";
NL = "\n";

var animateUsingToesColorsIndex = 0;
var animateUsingToesColorsInterval = 0;
var animateUsingToesColorsElement = "";
function animateUsingToesColors(elementId){
  if(animateUsingToesColorsElement == ""){
    animateUsingToesColorsElement = elementId
  }
  var secs = 0;
  var color = "white";
  if(animateUsingToesColorsInterval){
    clearInterval(animateUsingToesColorsInterval);
  }
  animateUsingToesColorsIndex++;
  animateUsingToesColorsIndex = animateUsingToesColorsIndex % 9;
  switch(animateUsingToesColorsIndex){
    case 1:
      color = "blue";
      secs = 1000;
      break;
    case 2:
      color = "red";
      secs = 1000;
      break;
    case 3:
      color = "green";
      secs = 1000;
      break;
    case 4:
      color = "yellow";
      secs = 1000;
      break;
    case 5:
      color = "blue";
      secs = 500;
      break;
    case 6:
      color = "red";
      secs = 500;
      break;
    case 7:
      color = "green";
      secs = 500;
      break;
    case 8:
      color = "yellow";
      secs = 500;
      break;
    default:
      color = "white";
      secs = 1;
      break;
  }
  document.getElementById(animateUsingToesColorsElement).style.color = color;
  animateUsingToesColorsInterval = setInterval(animateUsingToesColors, secs);
}
function loginFormCheck(currentForm){
  if(currentForm.username.value == ""){
    alert("error: please include your username");
    return false;
  }
  if(currentForm.password.value == ""){
    alert("error: please include your password");
    return false;
  }
  return true;
}
function highlightSystemMessages(){
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'error:', '<br><br>', '#000000', '#FF8080');
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'message:', '<br><br>', '#000000', '#80FF80');
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'warning:', '<br><br>', '#000000', '#FFFF80');
}
function highlightMessage(bodyText, searchTermA, searchTermB, textColor, bgColor){
  var highlightStartTag = "<font style='color:" + textColor + "; background-color:" + bgColor + ";line-height:1.1;'>";
  var highlightEndTag = "</font>";

  var newText = "";
  var i = -1;
  var j = -1;
  var lcBodyText = bodyText.toLowerCase();
  while(bodyText.length > 0){
    i = bodyText.indexOf(searchTermA, i+1);
    if(i < 0){
      newText += bodyText;
      bodyText = "";
    }
    else{
      // skip anything inside an HTML tag
      if(bodyText.lastIndexOf(">", i) >= bodyText.lastIndexOf("<", i)){
        // skip anything inside a <script> block
        if(lcBodyText.lastIndexOf("/script>", i) >= lcBodyText.lastIndexOf("<script", i)){
          //search for the closing term of the system message...
          j = lcBodyText.indexOf(searchTermB, i + searchTermA.length);
          if(j > 0){
            newText  +=  bodyText.substring(0,  i)  +  highlightStartTag  +  bodyText.substr(i,  j  -  i)  +  highlightEndTag  +  bodyText.substr(j,
searchTermB.length);
            bodyText = bodyText.substr(j + searchTermB.length);
            j = -1;
          }
          else{
            newText += bodyText.substring(0, i) + bodyText.substr(i, searchTermA.length);
            bodyText = bodyText.substr(i + searchTermA.length);
          }
          lcBodyText = bodyText.toLowerCase();
          i = -1;
        }
      }
    }
  }
  return newText;
}
function window_Onload(activeNav, activeTab){
  highlightSystemMessages();
  if( top != self){
    top.location = location;
  }
  switch(activeNav){
    case 'Question':
      if(activeTab == 'Search Question'){
        for(i = 0;i < document.questionQuery.qSubject.length;i++){
          if(document.questionQuery.qSubject[i].value == document.questionQuery.hSubject.value){
            document.questionQuery.qSubject[i].selected = true;
          }
        }
        for(i = 0;i < document.questionQuery.qTopic.length;i++){
          if(document.questionQuery.qTopic[i].value == document.questionQuery.hTopic.value){
            document.questionQuery.qTopic[i].selected = true;
          }
        }
        for(i = 0;i < document.questionQuery.qQuestionType.length;i++){
          if(document.questionQuery.qQuestionType[i].value == document.questionQuery.hQuestionType.value){
            document.questionQuery.qQuestionType[i].selected = true;
          }
        }
        for(i = 0;i < document.questionQuery.qDifficulty.length;i++){
          if(document.questionQuery.qDifficulty[i].value == document.questionQuery.hDifficulty.value){
            document.questionQuery.qDifficulty[i].selected = true;
          }
        }
        for(i = 0;i < document.questionQuery.qSortedBy.length;i++){
          if(document.questionQuery.qSortedBy[i].value == document.questionQuery.hSortedBy.value){
            document.questionQuery.qSortedBy[i].selected = true;
          }
        }
        for(i = 0;i < document.questionQuery.qDirection.length;i++){
          if(document.questionQuery.qDirection[i].value == document.questionQuery.hDirection.value){
            document.questionQuery.qDirection[i].checked = true;
          }
        }
        for(i = 0;i < document.questionQuery.qNumResults.length;i++){
          if(document.questionQuery.qNumResults[i].value == document.questionQuery.hNumResults.value){
            document.questionQuery.qNumResults[i].selected = true;
          }
        }
      }
      break;
    default:
      break;
  }
}
function insert_To_Upload_Field(index){
  window.clipboardData.setData("Text",document.clientUpload.elements[index].value);
  index++;
  index++;
  document.clientUpload.elements[index].focus();
  document.clientUpload.elements[index].select();
}
function check_File(index){
  for(var i = index; i < document.clientUpload.length;i++){
    if(document.clientUpload.elements[i].value != document.clientUpload.elements[i+2].value){
      alert ("Please click ctrl-V again right after clicking OK");
      window.clipboardData.setData("Text",document.clientUpload.elements[i].value);
      with(document.clientUpload.elements[i+2]){
        focus(); select();
      }
      return false;
    }
    i = i+2;
  }
  //alert ("Okey pede na yan!");
  return true;
}
function fullwin(url){
  window.open(url,"","fullscreen,scrollbars");

}
function staffPasswordCheck(currentForm){
  if(currentForm.passwordNew.value.length < 8){
    alert("error: please use passwords of length 8 or more");
    currentForm.passwordNew.select();
    return false;
  }
  if(currentForm.passwordNewR.value.length < 8){
    alert("error: please use passwords of length 8 or more");
    currentForm.passwordNewR.select();
    return false;
  }
  return true;
}
function cursorForButtonToLink(currentElement){
  currentElement.style.cursor = "hand";
}
function sendTutorialIdToAttendance(currentForm, id){
  currentForm.tutorial_id.value = id;
  currentForm.submit();
}
function toggleExtraStudNum(currentForm){
  var currentTr = document.all["extraStudNum"];
  if(currentForm.submissionType[0].checked){
    var displayStr = "none";
  }
  else{
    var displayStr = "";
  }
  for(var i = 0;i < currentTr.length;i++){
    currentTr[i].style.display = displayStr;
  }
}
function tutorialAttendanceWalkInCheck(currentForm){
  var attendees = new Array();
  for(var i = 0;i < currentForm.length;i++){
    if(currentForm.elements[i].name == "studNumA"){
      if((currentForm.elements[i].value == "")&&(currentForm.elements[i + 1].value == "")){
        i++;
        continue;
      }
      else{
        if(currentForm.elements[i].value == ""){
          alert("error: incomplete student number");
          currentForm.elements[i].select();
          return false;
        }
        if(currentForm.elements[i + 1].value == ""){
          alert("error: incomplete student number");
          currentForm.elements[i + 1].select();
          return false;
        }
        var re = /\d\d\d\d/;
        if(currentForm.elements[i].value.search(re) == -1){
          alert("error: invalid student number");
          currentForm.elements[i].select();
          return false;
        }
        var re = /\d\d\d\d\d/;
        if(currentForm.elements[i + 1].value.search(re) == -1){
          alert("error: invalid student number");
          currentForm.elements[i + 1].select();
          return false;
        }
        attendees[attendees.length] = currentForm.elements[i].value + "-" + currentForm.elements[i + 1].value;
      }
      i++;
    }
  }
  if(attendees.length == 0){
    return false;
  }
  currentForm.attendeesStr.value = attendees.join(",");
  return true;
}
function tutorialAttendeesConfirm(currentForm, studNum, toDo){
  switch(toDo){
    case "absent":
      currentForm.studentNumberToMarkAsAbsent.value = studNum;
      currentForm.submit();
      break;
    case "present":
      currentForm.studentNumberToMarkAsPresent.value = studNum;
      currentForm.submit();
      break;
    case "remove":
      if(confirm("message: you are about to remove student " + studNum + " from the ATTENDEES table.\n" + tabS + "Do you want to continue?")){
        currentForm.studentNumberToRemoveFromAttendance.value = studNum;
        currentForm.submit();
      }
      else{
        return false;
      }
      break;
    default:
      break;
  }
}
function tutorialScheduleSortJs(col){
  if(document.tutorialScheduleSortForm.column.value == col){
    if(document.tutorialScheduleSortForm.direction.value == "ASC"){
      document.tutorialScheduleSortForm.direction.value = "DESC";
    }
    else{
      document.tutorialScheduleSortForm.direction.value = "ASC";
    }
  }
  else{
    document.tutorialScheduleSortForm.column.value = col;
    document.tutorialScheduleSortForm.direction.value = "DESC";
  }
  document.tutorialScheduleSortForm.submit();
}
function availableSubjectSortJs(col){
  if(document.availableSubjectSortForm.column.value == col){
    if(document.availableSubjectSortForm.direction.value == "ASC"){
      document.availableSubjectSortForm.direction.value = "DESC";
    }
    else{
      document.availableSubjectSortForm.direction.value = "ASC";
    }
  }
  else{
    document.availableSubjectSortForm.column.value = col;
    document.availableSubjectSortForm.direction.value = "DESC";
  }
  document.availableSubjectSortForm.submit();
}
function availableTopicSortJs(col){
  if(document.availableTopicSortForm.column.value == col){
    if(document.availableTopicSortForm.direction.value == "ASC"){
      document.availableTopicSortForm.direction.value = "DESC";
    }
    else{
      document.availableTopicSortForm.direction.value = "ASC";
    }
  }
  else{
    document.availableTopicSortForm.column.value = col;
    document.availableTopicSortForm.direction.value = "DESC";
  }
  document.availableTopicSortForm.submit();
}
function subjectFormCheck(currentForm){
  if(currentForm.subjName.value.length == 0){
    alert("error: please assign a subject name.");
    currentForm.subjName.select();
    return false;
  }
  if(currentForm.subjDescription.value.length == 0){
    alert("error: please assign a subject description.");
    currentForm.subjDescription.select();
    return false;
  }
  return true;
}
function topicFormCheck(currentForm){
  if(currentForm.subjCurrent.value == ""){
    alert("error: please select a subject.");
    document.loginForm.subjCurrent.focus();
    return false;
  }
  if(currentForm.subjName.value.length == 0){
    alert("error: please assign a topic name.");
    currentForm.subjName.select();
    return false;
  }
  if(currentForm.deptNum.value == "please select"){
    alert("error: please select a departmental number.");
    currentForm.deptNum.focus();
    return false;
  }
  return true;
}
function addQuestionJs(currentForm){
  if(currentForm.topicCurrent.value == "Select"){
    alert("error: please select a topic.");
    currentForm.topicCurrent.focus();
    return false;
  }
  if(currentForm.author.value.length == 0){
    alert("error: please supply an author.");
    currentForm.author.focus();
    return false;
  }
  return true;
}
function questionFilesJs(currentForm){
  var validExtension = new Array(
    'bmp',
    'jpg',
    'jpeg',
    'gif',
    'png',
    'swf'
  );
  fuploadArray = currentForm.fupload.value.split(".");
  for(var i = 0;i < validExtension.length;i++){
    if(fuploadArray[fuploadArray.length - 1].toLowerCase() == validExtension[i].toLowerCase()){
      return true;
    }
  }
  return false;
}
function newWindowOpener(openPage) {
  var myDate = new Date();
  eval("var sub = window.open('" + openPage + "','sub_" + myDate.getTime() + "','HEIGHT=" + screen.height + ",WIDTH=" + screen.width +
",status,scrollbars');");
}
function showUploadTemplateForm(){
  document.getElementById("uploadTemplateTable").style.display = "";
}
```

G. STUDENT

student.php

```
<?php

session_start();
require_once('../toes.inc.php');
require_once('student_Fcns.php');
if($firstVisit == "true"){
  $errorMessage = "";
}
$username;
$password;
if($Logout == '1'){
  session_unregister("username");
  session_unregister("password");
  session_unregister("hasLoggedIn");
  session_unregister("errorMessage");
  session_unregister("userScript");
  session_unset();
  session_destroy();
  $Logout = 0;
  $hasLoggedIn = 0;
  $errorMessage = "";
  $returnToHomepage = true;
}
if(($Login)&&($Logout != '1')){
  authorized_User();
  session_register("hasLoggedIn");
  header("Location: " . 'http://' . $_SERVER["HTTP_HOST"] . $_SERVER["PHP_SELF"]);
}
if(($_SESSION["hasLoggedIn"] == '1')&&($_SESSION["userScript"] == 'student.php')){
  if($activeNav == ""){
    $activeNav = "My Tutorial";
  }
  print_Top_Nav();
  print_Banner();
  print_Nav();
  print_Tab();
  print_Body();
  print_Footer();

}
else{
  if($hasLoggedIn == '2'){
    //echo "$errorMessage";
    //echo "<br>";
  }
  display_Login_Form();
}
//////////////////////////////////////////////////////////
function print_Top_Nav(){
  global $activeNav;
  global $activeTab;
  print("<html>");
  print("<head>");
  print("<title>STUDENT Module</title>");
  echo "<SCRIPT LANGUAGE='JavaScript' SRC='student_JavaScript.js'></SCRIPT>";
  printNoscript();
  print("<link rel='stylesheet' type='text/css' href='student_Style.css'/>");
  print("</head>");
  print("<body onLoad=\"window_Onload('$activeNav', '$activeTab')\">");
  print("<div>");
  print("<ul class='topnav'>");
  print("<li><a href='/custhelp.php?statpos=topnav'>Help</a></li>");
  print("<li class='lastli'><a href='?Logout=1'>Log Out</a></li>");
  print("</ul>");
  print("</div>");
  print("<br>");
}
//////////////////////////////////////////////////////////
function print_Banner(){
  global $username;
  echo "<div class='banner'>";
  echo "<table>";
  echo "<tr><td height='100px' width='382px' background='/toes/files/pics/toes_logo.jpg'></td>";
  echo "<td height='100px' width='200px' background='/toes/files/pics/main-page_logos_upm_lrc.gif'></td>";
  echo "<td height='100px' width='382px' background='/toes/files/pics/student.gif' align='center' valign='bottom' style='padding-
bottom:10px;'><font style='vertical-align:text-bottom;' size='4px' color='#808080'>$username</font></td>";
  echo "</tr></table>";
  echo "</div>";
}
//////////////////////////////////////////////////////////
function print_Nav(){
  global $activeNav;
  global $activeTab;
  print("<div id='nav'><div><ul>");
  if($activeNav == 'My Tutorial')
    print("<li class='navselected'>");
  else
    print("<li>");
  print("<a href='?activeNav=My Tutorial&activeTab='>My Tutorial</a></li>");
  if($activeNav == 'My Exam')
    print("<li class='navselected'>");
  else
    print("<li>");
  print("<a href='?activeNav=My Exam&activeTab='>My Exam</a></li>");
  if($activeNav == 'My Account')
    print("<li class='navselected'>");
  else
    print("<li class='lastli'>");
  print("<a href='?activeNav=My Account&activeTab='>My Account</a></li>");
  print("&nbsp");
  print("</ul>");
  print("</div></div>");
  echo "<div style='background-color:FFFFFF;font-size:75%;'>&nbsp;</div>";
}
//////////////////////////////////////////////////////////
function print_Tab(){
  global $activeNav;
  global $activeTab;

  print("<div id='content'>");
  print("<ul class='tabs'>");

  switch($activeNav){
    case 'My Tutorial':
      if($activeTab == ''){
        $activeTab = 'Tutorial Schedule';
      }
      if($activeTab == 'Tutorial Schedule')
        print("<li class='tabselected'>Tutorial Schedule</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Tutorial Schedule'>Tutorial Schedule</a></li>");
      if($activeTab == 'Tutorial Request')
        print("<li class='tabselected'>Tutorial Request</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Tutorial Request'>Tutorial Request</a></li>");
      if($activeTab == 'Tutorial Attendance')
        print("<li class='tabselected'>Tutorial Attendance</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Tutorial Attendance'>Tutorial Attendance</a></li>");
      if($activeTab == 'Peer Schedule')
        print("<li class='tabselected'>Peer Schedule</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Peer Schedule'>Peer Schedule</a></li>");
      if($activeTab == 'Faculty Schedule')
        print("<li class='tabselected'>Faculty Schedule</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Faculty Schedule'>Faculty Schedule</a></li>");
      break;
    case 'My Exam':
      if($activeTab == ''){
        $activeTab = 'Exam Schedule';
      }
      if($activeTab == 'Exam Schedule')
        print("<li class='tabselected'>Exam Schedule</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Exam Schedule'>Exam Schedule</a></li>");
      if($activeTab == 'Take Exam')
        print("<li class='tabselected'>Take Exam</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Take Exam'>Take Exam</a></li>");
      if($activeTab == 'Exam Results')
        print("<li class='tabselected'>Exam Results</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Exam Results'>Exam Results</a></li>");
      break;
    case 'My Account':
      if($activeTab == ''){
        $activeTab = 'View My Account';
      }
      if($activeTab == 'View My Account')
        print("<li class='tabselected'>View My Account</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=View My Account'>View My Account</a></li>");
      if($activeTab == 'Change Password')
        print("<li class='tabselected'>Change Password</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Change Password'>Change Password</a></li>");
      break;
    default:
      break;
  }
  print("</ul>");

}
//////////////////////////////////////////////////////////
function print_Body(){
  print("<div class='content'>");
  print("<div class='inside'>");

  print_Function();

  print("</div>");
  print("</div>");
```

```
}
//////////////////////////////////////////////////////////
function print_Function(){
  global $activeNav;
  global $activeTab;
  global $examEditFromBrowse;

  switch($activeNav){
    case 'My Tutorial':
      switch($activeTab){
        case 'Tutorial Schedule':
          manage_My_Tutorial();
          break;
        case 'Tutorial Request':
          manage_My_Tutorial_Request();
          break;
        case 'Tutorial Attendance':
          manage_My_Tutorial_Attendance();
          break;
        case 'Peer Schedule':
          display_Tutor_Schedule();
          break;
        case 'Faculty Schedule':
          display_Tutor_Schedule();
          break;
        default:
          print("Please select from the tabbed-menu!");
          break;
      }
      break;
    case 'My Exam':
      switch($activeTab){
        case 'Exam Schedule':
          view_Exam_Schedule();
          break;
        case 'Take Exam':
          take_Exam();
          break;
        case 'Exam Results':
          exam_Result();
          break;
        default:
          print("Please select from the tabbed-menu!");
          break;
      }
      break;
    case 'My Account':
      switch($activeTab){
        case 'View My Account':
          manage_My_Account();
          break;
        case 'Change Password':
          manage_Password();
          break;
        default:
          print("Please select from the tabbed-menu!");
          break;
      }
      break;
    default:
      print("Please select from the menu!");
      break;
  }
}
//////////////////////////////////////////////////////////
function print_Footer(){
  print("<div>");
  print("<div id='footer'>");
  print(" <div>University of the Philippines Manila, Learning Resource Center's</div>");
  print(" <div>Tutorial and Online Examination System (TOES)</div>");
  print(" <div>Copyright © 2006</div>");
  print("</div>");
  print("<div style='width:780px'>&nbsp;</div>");
  print("</div>");
  print("</div>");
  echo "<div style='background-color:#008000'>&nbsp;</div>";
  print("</body>");
  print("</html>");
}
//////////////////////////////////////////////////////////
function toHtml($htmlLine){
  return (str_replace("\"","\\\"",$htmlLine));
}
//////////////////////////////////////////////////////////
function authorized_User(){
  global $username;
  global $password;
  global $errorMessage;
  global $hasLoggedIn;
  global $userScript;

  connect_Db();
  $query = "SELECT * FROM student where student_number='$username' and password='$password' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_array($result);

  if(($username != NULL)&&($password != NULL)&&($myrow[student_number] == $username)&&($myrow[password] == $password)&&!(($myrow[status] ==
"inactive")||($myrow[status] == "suspended"))){
    $hasLoggedIn=1;
    session_register("hasLoggedIn");
    session_register("username");
    session_register("password");
    $userScript= 'student.php';
    session_register("userScript");
  }
  else{
    if(($username == NULL)||($password == NULL)){
      $errorMessage = "error: Please enter your Student Number and password!";
    }
    else{
      if($myrow[status] == "inactive"){
        //echo "[status=inactive]";
        $errorMessage = "message: Sorry your account is temporarily INACTIVE please visit LRC to REACTIVATE it.";
      }
      elseif($myrow[status] == "suspended"){
        //echo "[status=suspended]";
        $errorMessage = "message: TOES SUSPENDED your account for not attending your enlisted tutorial. Please visit LRC to RESUME your
account.";
      }
      else{
        $errorMessage = "error: Invalid Student Number or password!";
      }
    }
    session_register("errorMessage");
    $hasLoggedIn=2;
    session_register("hasLoggedIn");
  }

}
```

```
//////////////////////////////////////////////////////////
function display_Login_Form(){
  global $username;
  global $password;
  global $hasLoggedIn;
  global $Logout;
  global $errorMessage;
  global $returnToHomepage;

  echo "<html style='background-image:url(\"/toes/files/pics/toes_logo_userLogin.jpg\");'>";
  echo "<head>";
  echo "<title>STUDENT Login Page</title>";
  echo "<SCRIPT LANGUAGE='JavaScript' SRC='student_JavaScript.js'></SCRIPT>";
  echo "</head>";
  if($returnToHomepage){
    echo "<body onLoad='window.location=\"/toes/\"'>";
  }
  else{
    echo "<body onLoad='animateUsingToesColors(\"toesHomeLink\")'>";
  }
  echo "<table width='100%' height='100%' border='0' cellpadding='0' cellspacing='0'>";
  echo "<tr><td valign='middle' align='center'>";
  echo "<table align='center' border='0' cellpadding='0' cellspacing='0' >";
  echo "<tr><td align='right' bgcolor='#0000FF'><b><a id='toesHomeLink' href='/toes/' style='color:white;text-decoration:none;'>back to TOES
home page</a></b></td></tr>";
  echo "<tr><td><a href='/toes/index.php' title='home'><img src='/toes/files/pics/toes.gif' style='border: 0 none;'/></a></td></tr>";
  echo "<tr><td bgcolor='#0000FF'><img src='/toes/files/pics/student_o.gif'/></td></tr>";
  echo "<tr><td bgcolor='#0000FF'>&nbsp;</td></tr>";
  echo "<tr><td align='center' bgcolor='#0000FF'>";
  //echo "[username=$username][password=$password][hasLoggedIn=$hasLoggedIn][Logout=$Logout][userScript=$userScript]";
  print("<table bgcolor='#c0c0c0'>");
  print("<form name='loginForm' method='post' action='$PHP_SELF' onSubmit='return loginFormCheck(this)'>");
  if($errorMessage != ""){
    echo "<tr><td colspan='2' width='350px'>$errorMessage</td></tr>";
  }
  print("<tr><td>Student #:</td><td>");
  echo "<input type='text' name='studNumA' maxLength='4' size='4'/>&nbsp;-&nbsp;";
  echo "<input type='text' name='studNumB' maxLength='5' size='5'/>";
  echo "<input type='hidden' name='username' value=''></td></tr>";
  print("<tr><td>Password:</td><td><input type='password' name='password' maxLength='16' size='16'></td></tr>");
  print("<tr><td colspan='2' align='center'><input type='submit' name='Login' value='Login'></td></tr>");
  print("</form>");
  print("</table>");
  echo "</td></tr>";
  echo "<tr><td bgcolor='#0000FF'>&nbsp;</td></tr>";
  echo "</td></tr></table>";
  echo "</body>";
  echo "</html>";
}
//////////////////////////////////////////////////////////
function refresh_Page($location){
  header("Location: $location");
}
//////////////////////////////////////////////////////////
function connect_Db() {
    //$dbuser = '';
    //$dbpword = '';
    //$dbhost = 'localhost';
    //$dbname = 'eav';
    //$db_connection = mysql_connect ($dbhost, $dbuser, $dbpword);
  //mysql_select_db ($dbname);
  $db = mysql_connect("localhost", "");
  mysql_select_db("toes",$db);
}
//////////////////////////////////////////////////////////
?>
```

student _Fcns.php

```
<?php
//////////////////////////////////////////////////////////
function manage_My_Tutorial_Request(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  if(($newTutorialRequestSubmit == 'submit')&&($submitMode == 'clickingSubmitButton')){
    connect_Db();
    $requestDate = date("Y-m-d H:i:s", time());
    $topicString = join(",", $topic);
    $prefTime = $prefTimeFrom.'-'.$prefTimeTo;
    $query = "SELECT tutorial_id FROM tutorial WHERE tutor_id='$tutor' AND subject='$subject' AND topic='$topicString' AND time='$prefTime' AND
date='$prefDate' ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) == 0){
      $query = "SELECT request_id FROM request WHERE subject='$subject' AND topic='$topicString' AND preferredDay='$prefDate' AND
preferredTime='$prefTime' AND preferredTutor='$tutor' AND student_number='$username'";
      $result = mysql_query($query);
      if(mysql_num_rows($result) == 0){
        $nextId = get_Next_Id('request_id','request');
        $query = "INSERT INTO request VALUES ('$nextId', '$username', '$subject', '$topicString', '$tutor', '$prefDate', '$prefTime',
'$requestDate')";
        $result = mysql_query($query);
        echo "message: the specified tutorial request was successfully added to the 'My Tutorial Request' table.<br><br>";
      }
      else{
        echo "error: the specified tutorial request is already found in the 'My Tutorial Request' table.<br><br>";
      }
    }
    else{
      //a 'Tutorial Schedule' already exists...enlist the student automatically if he/she is not yet enlisted...
      $myrow = mysql_fetch_row($result);
      $query = "SELECT student_number FROM enlistment WHERE tutorial_id='$myrow[0]' AND student_number='$username' ";
      $result = mysql_query($query);
      if(mysql_num_rows($result) > 0){
        echo "error: you are already enlisted in a 'Tutorial Schedule' similar to your request.<br><br>";
      }
      else{
        $tempTutorialId = $myrow[0];
        $query = "SELECT MAX(priorityNumber) FROM enlistment WHERE tutorial_id='$tempTutorialId' ";
        $result = mysql_query($query);
        $myrow = mysql_fetch_row($result);
        if($myrow[0] == 0){
          $myrow[0]++;
        }
        $query = "INSERT INTO enlistment VALUES ('$username', '$tempTutorialId', '".($myrow[0] + 1)."') ";
        $result = mysql_query($query);
        echo "message: you were automatically enlisted in a 'Tutorial Schedule' similar to your request. You may click on the 'Tutorial
schedule' tab to view it.<br><br>";
      }
    }
  }
  if(($addTutorialRequest == 'create new tutorial request')||($submitMode == 'eventListener')){
    echo "<form name='addTutorialRequestForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' onSubmit='return
checkNewTutorialRequestDetails(this)' style='display:inline'>";
    echo "<table border='1'>";
    echo "<tr><td colspan='2' align='center'>New Tutorial Request</td></tr>";
    echo "<tr><td>Subject</td><td>";
    echo "<select name='subject' onChange='return newTutorialRequestSubject(this.form)'>";
    if(!isset($subject)){
      echo "<option>Please select the subject</option>";
    }
    connect_Db();
    $query = "SELECT subject_id, subjectName FROM subject ORDER BY `subjectName` ASC";
    $result = mysql_query($query);
    while($myrow = mysql_fetch_row($result)){
      echo "<option";
      if((isset($subject))&&($myrow[0] == $subject)){
        echo " selected='selected'";
      }
      echo " value='$myrow[0]' label='$myrow[1]'>$myrow[1]</option>";
    }
    echo "</select>";
    echo "</td></tr>";
    echo "<tr><td>Topic</td><td>";
    $deptNumString = array ("first departmental", "second departmental", "third departmental", "fourth departmental", "fifth departmental",
"sixth departmental", "seventh departmental");
    $query = "SELECT topic_id, topicName, deptNum FROM topic WHERE subject_id='$subject' ORDER BY `topicName` ASC";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      echo "<table id='addTutorialRequestFormTopicTable' border='0'>";
      foreach($deptNumString AS $deptNumStringElem){
        $query = "SELECT topic_id, topicName, deptNum FROM topic WHERE subject_id='$subject' AND deptNum='$deptNumStringElem' ORDER BY
`topicName` ASC";
        $result = mysql_query($query);
        if(mysql_num_rows($result) > 0){
          echo "<tr><td>$deptNumStringElem</td></tr>";
          while($myrow = mysql_fetch_row($result)){
            if(isset($topic)){
              if(in_array($myrow[0], $topic)){
                echo "<tr><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type='checkbox' name='topic[]' value='$myrow[0]'
checked='checked'/>$myrow[1]</td></tr>";
              }
              else{
                echo "<tr><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type='checkbox' name='topic[]' value='$myrow[0]' />$myrow[1]</td></tr>";
              }
            }
            else{
              echo "<tr><td>&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;<input type='checkbox' name='topic[]' value='$myrow[0]' />$myrow[1]</td></tr>";
            }
          }
        }
      }
      echo "</table>";
    }
    else{
      echo "No topics found.";
    }
    echo "</td></tr>";
    if(isset($subject)){
      $query = "SELECT DISTINCT(tutor.tutor_id), CONCAT(tutor.firstName, ' ', tutor.middleName, ' ', tutor.lastName) AS fullName,
IF(tutor.tutorType='p','peer','faculty') FROM tutor, tutor_schedule WHERE tutor.tutor_id=tutor_schedule.tutor_id AND tutor_schedule.prefDay
LIKE '%$weekDaysArrayElem%' AND (tutor.tutoredSubject LIKE '$subject' OR tutor.tutoredSubject LIKE '%,$subject,%' OR tutor.tutoredSubject LIKE
'%,$subject' OR tutor.tutoredSubject LIKE '$subject,%')";
      $result = mysql_query($query);
      if(mysql_num_rows($result) > 0){
        echo "<tr><td>Tutor</td><td>";
        echo "<select name='tutor' onChange='return newTutorialRequestSubject(this.form)' >";
        while($myrow = mysql_fetch_row($result)){
          if(!isset($tutor)){
            $tutor = $myrow[0];
          }
          if($tutor == $myrow[0]){
            echo "<option value='$myrow[0]' selected='selected'>$myrow[1] ($myrow[2])</option>";
          }
          else{
            echo "<option value='$myrow[0]'>$myrow[1] ($myrow[2])</option>";
          }
        }
        echo "</select>";
        echo "</td></tr>";
      }
      else{
        echo "<tr><td>Tutor</td><td>Sorry no available tutor</td></tr>";
      }
    }
    else{
      echo "<tr><td>Tutor</td><td>Sorry no available tutor</td></tr>";
    }
    $query = "SELECT DISTINCT(tutor.tutor_id) FROM tutor, tutor_schedule WHERE tutor.tutor_id='$tutor' AND
tutor.tutor_id=tutor_schedule.tutor_id AND (tutor.tutoredSubject LIKE '$subject' OR tutor.tutoredSubject LIKE '%,$subject,%' OR
tutor.tutoredSubject LIKE '%,$subject') ";
    $result = mysql_query($query);
    if((mysql_num_rows($result) > 0)&&(isset($subject))){
      for($i = 0;$myrow = mysql_fetch_row($result);$i++){
        if($i == 0){
          $tutorDayTimeQuerySubstr = $tutorDayTimeQuerySubstr."tutor_id='$myrow[0]'";
        }
        else{
          $tutorDayTimeQuerySubstr = $tutorDayTimeQuerySubstr." OR tutor_id='$myrow[0]'";
        }
      }
      $weekDaysArray = array('Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday');
      foreach($weekDaysArray as $weekDaysArrayElem){
        $query = "SELECT DISTINCT(prefTime) FROM tutor_schedule WHERE (".$tutorDayTimeQuerySubstr.") AND prefDay LIKE '%$weekDaysArrayElem%'
ORDER BY prefTime ASC";
        $result = mysql_query($query);
        while($myrow = mysql_fetch_row($result)){
          $availableTimeArray[] = $myrow[0];
        }
        if(count($availableTimeArray) > 0){
          echo "<input type='hidden' name='".$weekDaysArrayElem."H"."' value='".join(",", $availableTimeArray)."'>";
        }
        else{
          echo "<input type='hidden' name='".$weekDaysArrayElem."H"."' value=''>";
        }
        unset($availableTimeArray);
      }
      echo "<tr><td>Preferred Day</td><td>";
      echo "<select name='prefDay' onChange='return newTutorialRequestPrefDay()'><option></option></select><br>";
      //echo "<button name='prefDayPrev' onclick='displayDayInDateFormat(\"prev\")'>&#8592</button>";
      echo "<input type='button' name='prefDayPrev' onclick='displayDayInDateFormat(\"prev\")' value='&#8592'/>";
      echo "<input name='prefDateDisplay' type='text' align='center' readonly='readonly' style='text-align:center;'/>";
      echo "<input type='hidden' name='prefDate' value=''>";
      echo "<input type='hidden' name='dateModifierCounter' value='0'>";
      //echo "<button name='prefDayNext' onclick='displayDayInDateFormat(\"next\")'>&#8594</button>";
      echo "<input type='button' name='prefDayNext' onclick='displayDayInDateFormat(\"next\")' value='&#8594'/>";
      echo "</td></tr>";
      echo "<tr><td>Preferred Time</td><td>";
      echo "<select name='prefTimeFrom' onChange='return verifyPrefTime()'><option></option></select>&nbsp;&nbsp;-&nbsp;&nbsp;";
      echo "<select name='prefTimeTo' onChange='return verifyPrefTime()'><option></option></select>";
      echo "</td></tr>";
    }
    else{
      echo "<tr><td>Preferred Day</td><td>sorry no available day</td></tr>";
      echo "<tr><td>Preferred Time</td><td>sorry no available time</td></tr>";
    }

    $query = "SELECT request.request_id, subject.subjectName, request.topic, request.preferredDay, request.preferredTime, request.requestDate,
request.subject FROM subject, request WHERE request.student_number='$username' AND subject.subject_id=request.subject GROUP BY request.subject,
request.topic, request.preferredDay, request.preferredTime ORDER BY subject.subjectName ";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      while($myrow = mysql_fetch_row($result)){
        $myTutorialRequestArray[] = $myrow[6].$myrow[2].$myrow[3].$myrow[4];
      }
    }
    if(isset($myTutorialRequestArray)){
      echo "<input type='hidden' name='myTutorialRequestString' value='".implode("[*]", $myTutorialRequestArray)."'>";
    }
    else{
      echo "<input type='hidden' name='myTutorialRequestString' value=''>";
    }
    echo "<input type='hidden' name='submitMode' value='clickingSubmitButton'>";
    if(isset($subject)){
      $disablerStr = "";
    }
    else{
      $disablerStr = "DISABLED";
    }
    echo "<tr><td colspan='2' align='center'><input type='submit' name='newTutorialRequestSubmit' value='submit' $disablerStr/></td></tr>";
    echo "</form>";
    echo "</table>";
  }
  else{
    if($requestIdToCancelH != ''){
      connect_Db();
      $query = "DELETE FROM request WHERE request_id='$requestIdToCancelH'";
      $result = mysql_query($query);
      echo "message: the specified request was successfully cancelled.<br><br>";
    }
    if($requestIdToJoinH != ''){
      connect_Db();
      $query = "SELECT subject, topic, preferredDay, preferredTime, preferredTutor FROM request WHERE request_id='$requestIdToJoinH'";
      $result = mysql_query($query);
      if(mysql_num_rows($result) > 0){
        //do not tolerate duplication...
        $queryA = "SELECT r.request_id FROM request AS r LEFT JOIN request AS j ON (r.subject=j.subject AND r.topic=j.topic AND
r.preferredDay=j.preferredDay AND r.preferredTime=j.preferredTime AND r.preferredTutor=j.preferredTutor) WHERE j.request_id='$requestIdToJoinH'
AND r.student_number='$username'";
        $resultA = mysql_query($queryA);
        if(mysql_num_rows($resultA) == 0){
          $myrow = mysql_fetch_row($result);
          $nextId = get_Next_Id('request_id','request');
          $requestDate = date("Y-m-d H:i:s", time());
          $query = "INSERT INTO request (request_id, student_number, subject, topic, preferredTutor, preferredDay, preferredTime, requestDate)
VALUES ('$nextId', '$username', '$myrow[0]', '$myrow[1]', '$myrow[4]', '$myrow[2]', '$myrow[3]', '$requestDate')";
          $result = mysql_query($query);
          echo "message: the specified tutorial request was successfully added to the 'My Tutorial Request' table.<br><br>";
        }
        else{
          echo "error: the specified tutorial request is already found in the 'My Tutorial Request' table.<br><br>";
        }
      }
      else{
        echo "error: the request that you were about to join is now missing. There are two possible scenarios that might have caused
this:<br>";
        echo $tabS."1. the original author of the request CANCELLED it. Try to CREATE a new tutorial request in the 'Tutorial Request'
tab.<br>";
        echo $tabS."2. the administrator APPROVED the request. Please check the 'Available Tutorial Schedules' in the 'Tutor Schedule'
tab.<br><br>";
      }
    }
    echo "<button name='showHideRemindersButton' onClick='return showHideReminders(this)'>show reminders</button>";
    echo "<br><span id='remindersSpan' style='font-size:75%;display:none;'>";
    echo "<br> Important reminders:";
    echo "<ol>";
    echo "<li>TOES makes sure that all 'Tutorial Requests' are requested at least TWO DAYS ahead of the 'Preferred Day'.</li>";
    echo "<li>It is YOUR sole responsibility to follow up the development of your requests.</li>";
    echo "<li>In case the 'Preferred Tutor' is NOT AVAILABLE on the 'Preferred Day' the LRC will choose another tutor who is AVAILABLE. In some
rare cases when no tutor is available LRC has no choice but to DISAPPROVE the request.</li>";
    echo "<li>An APPROVED 'Tutorial Request' will automatically be given a 'Tutorial Schedule' and all students who requested it will
automatically be enlisted.</li>";
    echo "<li>The LRC may DISAPPROVE your 'Tutorial Request' due to unavailable resources (i.e. tutor availability). A DISAPPROVED 'Tutorial
Request' will be automatically deleted after being displayed for the very first time. It will be shown in the 'My Tutorial Request' table
marked as DISAPPROVED and colored RED.</li>";
    echo "<li>A 'Tutorial Request' EXPIRES when the 'Preferred Day' matches the current date. An EXPIRED 'Tutorial Request' will be
automatically deleted after being displayed for the very first time. It will be shown in the 'My Tutorial Request' table marked as EXPIRED and
colored RED.</li>";
    echo "</ol>";
    echo "</span>";

    echo "<br><table width='100%'>";
    echo "<tr><td align='center' bgcolor='#D3F2D3'>My Tutorial Requests</td></tr>";
    echo "</table>";
    connect_Db();
    $query = "SELECT request.request_id, subject.subjectName, request.topic, request.preferredDay, request.preferredTime, request.requestDate,
request.subject, CONCAT(tutor.firstName, ' ', tutor.middleName, ' ', tutor.lastName), IF(request.preferredDay<=CURDATE(),'expired','unexpired')
FROM subject, request, tutor WHERE request.preferredTutor=tutor.tutor_id AND request.student_number='$username' AND
subject.subject_id=request.subject GROUP BY request.subject, request.topic, request.preferredDay, request.preferredTime ORDER BY
subject.subjectName ";
    $result = mysql_query($query);
    $numberOfMyRequest = mysql_num_rows($result);
    if($numberOfMyRequest > 0){
      echo "<div style='height:auto; width:100%; overflow:scroll;'>";
      echo "<table id='myTutorialRequestTable' border='1' width='100%'>";
      echo "<form name='cancelTutorialRequestForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
      echo "<tr><td></td><td align='center'>Subject</td><td align='center'>Topic</td><td align='center'>Preferred Tutor</td><td
align='center'>Preferred Day</td><td align='center'>Preferred Time</td><td align='center'>Date Requested<br>year-mo-day hr-min-sec</td></tr>";
      while($myrow = mysql_fetch_row($result)){
        $topicArray = explode(",", $myrow[2]);
        if($myrow[8] == "expired"){
          echo "<tr style='background-color:#FF8080;'><td align='center'>";
          echo "<font style='font-size:75%;'>EXPIRED</font>";
        }
        elseif($myrow[0] == "0"){
          echo "<tr style='background-color:#FF8080;'><td align='center'>";
          echo "<font style='font-size:75%;'>DISAPPROVED</font>";
        }
        else{
          echo "<tr><td align='center'>";
          echo "<button id='buttonToLink' name='cancel' onClick='return sendRequestIdToCancel($myrow[0])' onMouseOver='return
cursorForButtonToLink(this)'>cancel</button>";
        }
        echo "</td>";
        echo "<td>$myrow[1]</td><td>";
        foreach($topicArray AS $topicArrayElem){
          $queryA = "SELECT topicName FROM topic WHERE topic_id='$topicArrayElem' ";
          $resultA = mysql_query($queryA);
          $myrowA = mysql_fetch_row($resultA);
          echo "$myrowA[0]<br>";
        }
        echo
"</td><td>$myrow[7]</td><td>".reformatDateForDisplay($myrow[3])."</td><td>".reformatTimeForDisplay($myrow[4])."</td><td>$myrow[5]</td></tr>";
        $myTutorialRequestArray[] = $myrow[6].$myrow[2].$myrow[3].$myrow[4];
        //delete EXPIRED and DISAPPROVED tutorial request
        if(($myrow[0] == "0")||($myrow[8] == "expired")){
          $queryA = "DELETE FROM request WHERE request_id='$myrow[0]' ";
          $resultA = mysql_query($queryA);
          $numberOfMyRequest--;
        }
      }
      echo "<input type='hidden' name='requestIdToCancelH' value=''/>";
      echo "</form>";
      echo "</table>";
      echo "</div>";
    }
    else{
      echo "<table width='100%'>";
      echo "<tr><td align='center'>no records</td></tr>";
      echo "</table>";
    }
    echo "<br><table width='100%'>";
    echo "<tr><td align='center' bgcolor='#D3F2D3'>Tutorial Requests From Other Students</td></tr>";
    echo "</table>";
    $query = "SELECT request.request_id, subject.subjectName, request.topic, request.preferredDay, request.preferredTime, request.requestDate,
count(*), request.subject, CONCAT(tutor.firstName, ' ', tutor.middleName, ' ', tutor.lastName) FROM subject, request, tutor WHERE
request.preferredTutor=tutor.tutor_id AND request.student_number!='$username' AND subject.subject_id=request.subject AND request.request_id > 0
AND request.preferredDay > CURDATE() GROUP BY request.subject, request.topic, request.preferredDay, request.preferredTime ORDER BY
subject.subjectName ASC ";
    $result = mysql_query($query);
    $numOftutorialRequestFromOthersDisplayed = 0;
    while($myrow = mysql_fetch_row($result)){
      $sameAsMyTutorialRequest = 0;
      if(isset($myTutorialRequestArray)){
        foreach($myTutorialRequestArray AS $myTutorialRequestArrayElem){
          if($myTutorialRequestArrayElem == $myrow[7].$myrow[2].$myrow[3].$myrow[4]){
            $sameAsMyTutorialRequest = 1;
            continue;
          }
        }
      }
      if($sameAsMyTutorialRequest != 1){
        if($numOftutorialRequestFromOthersDisplayed == 0){
          echo "<div style='height:auto; width:100%; overflow:scroll;'>";
          echo "<table id='tutorialRequestOtherTable' border='1' width='100%'>";
          echo "<form name='joinTutorialRequestForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
          echo "<tr><td></td><td align='center'>Subject</td><td align='center'>Topic</td><td align='center'>Preferred Tutor</td><td
align='center'>Preferred Day</td><td align='center'>Preferred Time</td><td align='center'>Date Requested<br>year-mo-day hr-min-sec</td><td
align='center'>Quantity<br>of requests</td></tr>";
          if($numberOfMyRequest >= 3){
            $joinButtonStr = "<button id='buttonToLink' name='join' onClick='alert(\"Sorry only 3 tutorial requests are allowed per student\")'
onMouseOver='return cursorForButtonToLink(this)'>join</button>";
          }
          else{
            $joinButtonStr = "<button id='buttonToLink' name='join' onClick='return sendRequestIdToJoin($myrow[0])' onMouseOver='return
cursorForButtonToLink(this)'>join</button>";
          }
        }
        $topicArray = explode(",", $myrow[2]);
        echo "<tr><td align='center'>";
        if($numberOfMyRequest >= 3){
          echo "<button id='buttonToLink' name='join' onClick='alert(\"Sorry only 3 tutorial requests are allowed per student\")'
onMouseOver='return cursorForButtonToLink(this)'>join</button>";
        }
        else{
          echo "<button id='buttonToLink' name='join' onClick='return sendRequestIdToJoin($myrow[0])' onMouseOver='return
cursorForButtonToLink(this)'>join</button>";
        }
        echo "</td>";
        echo "<td>$myrow[1]</td><td>";
        foreach($topicArray AS $topicArrayElem){
          $queryA = "SELECT topicName FROM topic WHERE topic_id='$topicArrayElem' ";
          $resultA = mysql_query($queryA);
          $myrowA = mysql_fetch_row($resultA);
          echo "$myrowA[0]<br>";
        }
        echo
"</td><td>$myrow[8]</td><td>".reformatDateForDisplay($myrow[3])."</td><td>".reformatTimeForDisplay($myrow[4])."</td><td>$myrow[5]</td><td
align='center'>$myrow[6]</td></tr>";
        $numOftutorialRequestFromOthersDisplayed++;
      }
    }
    if($numOftutorialRequestFromOthersDisplayed == 0){
      echo "<table width='100%'>";
      echo "<tr><td align='center'>no records</td></tr>";
      echo "</table>";
    }
    else{
      echo "<input type='hidden' name='requestIdToJoinH' value=''/>";
      echo "</form>";
      echo "</table>";
      echo "</div>";
    }
    echo "<form name='addTutorialRequestForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
    if($numberOfMyRequest >= 3){
      echo "<button onClick='alert(\"Sorry only 3 tutorial requests are allowed per student\")'>create new tutorial request</button>";
    }
    else{
      echo "<input type='submit' name='addTutorialRequest' value='create new tutorial request' />";
    }
    echo "</form>";
  }
}
/////////////////////////////////////////////////////////
function reformatTimeForDisplay($time){
  $timeArray = explode("-", $time);
  $index = 0;
  foreach($timeArray AS $timeArrayElem){
    $timeExt = "AM";
    $timeArrayElemArray = explode(":", $timeArrayElem);
    if(substr($timeArrayElemArray[0], 0, 1) == "0"){
      $timeArrayElemArray[0] = substr($timeArrayElemArray[0], 1, 1);
    }
    if($timeArrayElemArray[0] > 11){
      $timeExt = 'PM';
    }
    if($timeArrayElemArray[0] > 12){
      $timeArrayElemArray[0] = $timeArrayElemArray[0] - 12;
    }
    $timeArray[$index] = implode(":", $timeArrayElemArray)." ".$timeExt;
    $index++;
  }
  return implode("-", $timeArray);
}
/////////////////////////////////////////////////////////
function manage_My_Tutorial(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  if($tutorialIdToEnlistH != ''){
    connect_Db();
    //check if TUTORIAL SCHEDULE is flagged as CANCELLED...
    $queryA = "SELECT student_number FROM enlistment WHERE priorityNumber='0' AND tutorial_id='$tutorialIdToEnlistH' LIMIT 0, 1 ";
    $resultA = mysql_query($queryA);
    if(mysql_num_rows($resultA) > 0){
      echo "message: sorry but the TUTORIAL SCHEDULE you are enlisting was CANCELLED earlier.<br><br>";
    }
    else{
      //avoid duplication...
      $query = "SELECT student_number FROM enlistment WHERE student_number='$username' AND tutorial_id='$tutorialIdToEnlistH' ";
      $result = mysql_query($query);
      if(mysql_num_rows($result) == 0){
        $query = "SELECT MAX(priorityNumber) FROM enlistment WHERE tutorial_id='$tutorialIdToEnlistH' ";
        $result = mysql_query($query);
        $myrow = mysql_fetch_row($result);
        if($myrow[0] == 0){
          $myrow[0]++;
        }
        $query = "INSERT INTO enlistment VALUES ('$username','$tutorialIdToEnlistH', '".($myrow[0] + 1)."') ";
        $result = mysql_query($query);
        echo "message: you are now enlisted in the tutorial that you specified earlier.<br><br>";
      }
    }
  }
  if($tutorialIdToDelistH != ''){
    connect_Db();
    $query = "DELETE FROM enlistment WHERE student_number='$username' AND tutorial_id='$tutorialIdToDelistH' ";
    $result = mysql_query($query);
    echo "message: your enlistment in the specified 'Tutorial Schedule' was successfully cancelled.<br><br>";
  }
  echo "<button name='showHideRemindersButton' onClick='return showHideReminders(this)'>show reminders</button>";
  echo "<br><span id='remindersSpan' style='font-size:75%;display:none;'>";
  echo "<br>Tutorial reminders:";
  echo "<ol>";
  echo "<li>Be ON TIME, don't keep your tutor waiting for you.</li>";
  echo "<li>If you have to CANCEL your appointment, please INFORM US A DAY before your schedule so that we can inform the tutor immediately. A
student who fail to show up on the scheduled date will be marked as ABSENT and his/her TOES account will be suspended. We are doing this so
that we can make the most out of our time and resources.</li>";
  echo "<li>READ AND STUDY your lessons before attending the tutorial.</li>";
  echo "<li>Bring modules/textbook/workbook which can be used as references during the tutorial; paper, pen, scientific calculator...etc</li>";
  echo "</ol>";
  echo "Enlistment reminders:";
  echo "<ol>";
  echo "<li>IMPORTANT! It is your sole responsibility to track the status of your ENLISTMENTS.</li>";
  echo "<li>Ideally a tutorial schedule accepts a MAXIMUM of $maxTutorialEnlistees students. In some rare occasions when the number of
enlistees exceeds this limit the excess students' 'Priority Listing' will be marked as 'WAIT LISTED' while the tutorial schedule's status will
be marked as 'FULL'. If you happen to be marked as 'WAIT LISTED' please contact the ADMINISTRATOR so that he/she may prepare actions to
accomodate you better. Most of the time a similar 'Tutorial Schedule' will be created and will be handled by a different tutor.</li>";
  echo "<li>The ENLISTMENT is based on a FIRST-COME-FIRST-SERVE (FCFS) basis. You may view the PRIORITY TABLE to get a better idea.</li>";
  echo "<li>In some rare occasions the LRC may CANCEL a TUTORIAL SCHEDULE. If you happen to be enlisted in that TUTORIAL you will be notified
through the 'My Enlisted Tutorials' table. CANCELLED TUTORIAL SCHEDULES are colored RED and marked as CANCELLED.</li>";
  echo "</ol>";
  echo "</span>";

  echo "<br><table width='100%'>";
  echo "<tr><td align='center' bgcolor='#D3F2D3'>My Enlisted Tutorials</td></tr>";
  echo "</table>";
  connect_Db();
  $query = "SELECT subject.subjectName, tutorial.topic, tutorial.time, tutorial.date, CONCAT(tutor.firstName, ' ', tutor.middleName, ' ',
tutor.lastName) AS tutorFullName, tutor.deptCourse, tutor.tutorType, tutorial.tutorial_id, enlistment.priorityNumber FROM enlistment, subject,
tutor, tutorial WHERE tutor.tutor_id=tutorial.tutor_id AND tutorial.subject=subject.subject_id AND tutorial.tutorial_id=enlistment.tutorial_id
AND enlistment.student_number='$username' ";
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    echo "<div style='height:auto; width:100%; overflow:scroll;'>";
    echo "<form name='delistAvailableTutorialForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' style='display:inline;'
>";
    echo "<table id='tutorScheduleTable' border='1' width='100%'>";
    $myEnlistedTutorialTableColumnNameArray = array('', 'Priority Listing', 'Subject', 'Topic', 'Time', 'Date', 'Tutor', 'Course/Department',
'Priority Table');
    echo "<tr>";
    foreach($myEnlistedTutorialTableColumnNameArray AS $myEnlistedTutorialTableColumnNameArrayElem){
      echo "<td align='center'>$myEnlistedTutorialTableColumnNameArrayElem</td>";
    }
    echo "</tr>";
    while($myrow = mysql_fetch_row($result)){
      //detect if PRIORITY or WAIT LISTED
      $pn = 0;
      $queryA = "SELECT student_number FROM enlistment WHERE tutorial_id='$myrow[7]' ORDER BY priorityNumber ASC ";
      $resultA = mysql_query($queryA);
      $total = mysql_num_rows($resultA);
      $studentNumberFound = false;
      while($myrowA = mysql_fetch_row($resultA)){
        $pn++;
        if($myrowA[0] == "$username"){
          $studentNumberFound = true;
          break;
        }
      }
      //notify student if cancelled...
      if($myrow[8] == "0"){
        echo "<tr style='background-color=#FF8080;'>";
        echo "<td align='center'><font style='font-size:75%;'>CANCELLED</font></td>";
      }
      else{
        //if(!$studentNumberFound){
        if($pn > $maxTutorialEnlistees){
          echo "<tr style='background-color=#FFFF80;'>";
        }
        else{
          echo "<tr>";
        }
        echo "<td><button id='buttonToLink' onCLick='return sendTutorialIdToDelist($myrow[7])' onMouseOver='return
cursorForButtonToLink(this)'>cancel</button></td>";
      }
      //if(!$studentNumberFound){
      if($pn > $maxTutorialEnlistees){
        echo "<td align='center'>WAIT LISTED";
      }
      else{
        echo "<td align='center'>PRIORITY";
      }
      echo "</td>";
      echo "<td>$myrow[0]</td>";
      echo "<td>";
      foreach(explode(",", $myrow[1]) AS $topicElem){
        $queryA = "SELECT topicName FROM topic WHERE topic_id='$topicElem' ";
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        echo "$myrowA[0]<br>";
      }
      echo "</td>";
      echo "<td>".reformatTimeForDisplay($myrow[2])."</td>";
      echo "<td>".reformatDateForDisplay($myrow[3])."</td>";
      echo "<td>$myrow[4]</td>";
      echo "<td>";
      if($myrow[6] == "p"){
        echo "(peer)&nbsp;";
        $queryA = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrow[5]' ";
      }
      else{
        echo "(faculty)&nbsp;";
        $queryA = "SELECT departmentName FROM upm_departments WHERE department_id='$myrow[5]' ";
      }
      $resultA = mysql_query($queryA);
      $myrowA = mysql_fetch_row($resultA);
      echo "$myrowA[0]<br>";
      echo "</td>";
      echo "<td align='center'>";
      echo "<a href='javascript:void openPriorityTable(\"$total\", \"$maxTutorialEnlistees\", \"$pn\")'>";
      echo "<font style='color:blue;font-size:75%;text-decoration:none;'>VIEW</font></a></td>";
      echo "</tr>";
      //delete the student enlistment after notifying the student...
      if($myrow[8] == "0"){
        $queryA = "SELECT COUNT(student_number) FROM enlistment WHERE tutorial_id='$myrow[7]' ";
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        if($myrowA[0] == 1){
          //delete the TUTORIAL SCHEDULE when the LAST enlisted student is notified...
          $queryA = "DELETE FROM tutorial WHERE tutorial_id='$myrow[7]' ";
          $resultA = mysql_query($queryA);
        }
        //delete student ENLISTMENT...
        $queryA = "DELETE FROM enlistment WHERE student_number='$username' AND tutorial_id='$myrow[7]' ";
        $resultA = mysql_query($queryA);
      }
    }
    echo "<input type='hidden' name='tutorialIdToDelistH' value='' />";
    echo "</form>";
    echo "</table>";
    echo "</div>";
  }
  else{
    echo "<table width='100%'>";
    echo "<tr><td align='center'>no records</td></tr>";
    echo "</table>";
  }

  echo "<br><table width='100%'>";
  echo "<tr><td align='center' bgcolor='#D3F2D3'>Available Tutorial Schedules</td></tr>";
  echo "</table>";
  $query = "SELECT s.subjectName, tt.topic, tt.time, tt.date, CONCAT(t.firstName, ' ', t.middleName, ' ', t.lastName) AS tutorFullName,
t.deptCourse, t.tutorType, tt.tutorial_id, a.student_number, COUNT(e.student_number) FROM subject AS s, tutor AS t, tutorial AS tt LEFT JOIN
attendance AS a ON (tt.tutorial_id=a.tutorial_id) LEFT JOIN enlistment AS e ON (tt.tutorial_id=e.tutorial_id) WHERE t.tutor_id=tt.tutor_id AND
tt.subject=s.subject_id GROUP BY tt.tutorial_id ";
  $result = mysql_query($query);
  $numOfNonEnlistedTutorial = 0;
  if(mysql_num_rows($result) > 0){
    while($myrow = mysql_fetch_row($result)){
      //check if ATTENDANCE is already signed
      if($myrow[8] != ""){
        continue;
      }
      //check if TUTORIAL SCHEDULE is flagged as CANCELLED...
      if($myrow[9] > 0){
        $queryA = "SELECT student_number FROM enlistment WHERE priorityNumber='0' AND tutorial_id='$myrow[7]' LIMIT 0, 1 ";
        $resultA = mysql_query($queryA);
        if(mysql_num_rows($resultA) > 0){
          continue;
        }
      }
      $queryA = "SELECT student_number FROM enlistment WHERE tutorial_id='$myrow[7]' AND student_number='$username' ";
      $resultA = mysql_query($queryA);
      if(mysql_num_rows($resultA) == 0){
        $numOfNonEnlistedTutorial++;
        if($numOfNonEnlistedTutorial == 1){
          echo "<div style='height:auto; width:100%; overflow:scroll;'>";
          echo "<table id='tutorScheduleTable' border='1' width='100%'>";
          echo "<form name='enlistAvailableTutorialForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
          $availableTutorialTableColumnNameArray = array('', 'Status', 'Subject', 'Topic', 'Time', 'Date', 'Tutor', 'Course/Department',
'Priority Table');
          echo "<tr>";
          foreach($availableTutorialTableColumnNameArray AS $availableTutorialTableColumnNameArrayElem){
            echo "<td align='center'>$availableTutorialTableColumnNameArrayElem</td>";
          }
        }
        if($myrow[9] >= $maxTutorialEnlistees){
          echo "<tr style='background-color=#FFFF80;'>";
        }
        else{
          echo "<tr>";
        }
        echo "<td><button id='buttonToLink' onCLick='return sendTutorialIdToEnlist($myrow[7])' onMouseOver='return
cursorForButtonToLink(this)'>enlist</button></td>";
        if($myrow[9] >= $maxTutorialEnlistees){
          echo "<td align='center'>FULL</td>";
        }
        else{
          echo "<td align='center'>OPEN</td>";
        }
        echo "<td>$myrow[0]</td>";
        echo "<td>";
        foreach(explode(",", $myrow[1]) AS $topicElem){
          $queryA = "SELECT topicName FROM topic WHERE topic_id='$topicElem' ";
          $resultA = mysql_query($queryA);
          $myrowA = mysql_fetch_row($resultA);
          echo "$myrowA[0]<br>";
        }
        echo "</td>";
        echo "<td>".reformatTimeForDisplay($myrow[2])."</td>";
        echo "<td>".reformatDateForDisplay($myrow[3])."</td>";
        echo "<td>$myrow[4]</td>";
        echo "<td>";
        if($myrow[6] == "p"){
          echo "(peer)&nbsp;";
          $queryA = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrow[5]' ";
        }
        else{
          echo "(faculty)&nbsp;";
          $queryA = "SELECT departmentName FROM upm_departments WHERE department_id='$myrow[5]' ";
        }
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        echo "$myrowA[0]<br>";
        echo "</td>";
        echo "<td align='center'>";
        echo "<a href='javascript:void openPriorityTable(\"$myrow[9]\", \"$maxTutorialEnlistees\", \"\")'>";
        echo "<font style='color:blue;font-size:75%;text-decoration:none;'>VIEW</font></a></td>";
        echo "</tr>";
      }
    }
    if($numOfNonEnlistedTutorial != 0){
      echo "</tr>";
      echo "<input type='hidden' name='tutorialIdToEnlistH' value='' />";
      echo "</form>";
      echo "</table>";
      echo "</div>";
    }
  }
  if($numOfNonEnlistedTutorial == 0){
    echo "<table width='100%'>";
    echo "<tr><td align='center'>no records</td></tr>";
    echo "</table>";
  }
}
//////////////////////////////////////////////////////////
function reformatDateForDisplay($date){
  $dateArray = explode("-", $date);
  $dateUnix = mktime("", "", "", $dateArray[1], $dateArray[2], $dateArray[0]);
  return date("l F j, Y", $dateUnix);
}
//////////////////////////////////////////////////////////
function view_Exam_Schedule(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  if((isset($batchScheduleIdToUnregisterH))&&($batchScheduleIdToUnregisterH != '')){
    connect_Db();
    $query = "SELECT authorization FROM registration WHERE batch_id='$batchScheduleIdToUnregisterH' AND student_number='$username' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    if($myrow[0] == "yes"){
      echo "message: the administrator has already authorized you to take the specified exam.<br><br>";
      echo "click here to take the exam";
    }
    else{
      $query = "DELETE FROM registration WHERE batch_id='$batchScheduleIdToUnregisterH' AND student_number='$username' ";
      $result = mysql_query($query);
      echo "message: your registration for the specified exam batch schedule was successfully removed.<br><br>";
    }
  }
  if((isset($batchScheduleIdToRegisterH))&&($batchScheduleIdToRegisterH != '')){
    connect_Db();
    $query = "SELECT accessibility FROM batch WHERE batch_id='$batchScheduleIdToRegisterH' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    if($myrow[0] == "open"){
      //avoid duplication of SUBJECT, DEPARTMENTALNUMBER, TERM, SY
      $queryA = "SELECT e.subject_id, e.deptNum, b.term, b.sy FROM batch AS b, exam AS e WHERE b.batch_id='$batchScheduleIdToRegisterH' AND
b.exam_id=e.exam_id";
      $resultA = mysql_query($queryA);
      $myrowA = mysql_fetch_row($resultA);
      $queryA = "SELECT r.batch_id FROM registration AS r, batch AS b, exam AS e WHERE r.student_number='$username' AND r.batch_id=b.batch_id
AND b.exam_id=e.exam_id AND e.subject_id='$myrowA[0]' AND e.deptNum='$myrowA[1]' AND b.term='$myrowA[2]' AND b.sy='$myrowA[3]' ";
      $resultA = mysql_query($queryA);
      if(mysql_num_rows($resultA) == 0){
        if(noOverlappingExamBatchSchedule($batchScheduleIdToRegisterH)){
          $query = "SELECT exam.allottedTime FROM exam, batch WHERE exam.exam_id=batch.exam_id AND batch.batch_id='$batchScheduleIdToRegisterH'
";
          $result = mysql_query($query);
          $myrow = mysql_fetch_row($result);
          $allottedTime = $myrow[0];
          /*
          $query = "SELECT availableSlots FROM batch WHERE batch_id='$batchScheduleIdToRegisterH' ";
          $result = mysql_query($query);
          $myrow = mysql_fetch_row($result);
          $availableSlots= $myrow[0];
          $query = "SELECT COUNT(batch_id) FROM registration WHERE batch_id='$batchScheduleIdToRegisterH' ";
          $result = mysql_query($query);
          $myrow = mysql_fetch_row($result);
          $takenSlots= $myrow[0];
          if($availableSlots - $takenSlots > 0){
          */
            $query = "INSERT INTO registration VALUES ('$batchScheduleIdToRegisterH', '$username', '".date("Y-m-d H:i:s", time())."',
'$allottedTime', 'online', 'waiting', 'no', 'none', '".date("Y-m-d H:i:s", time())."') ";
            $result = mysql_query($query);
            echo "message: your registration for the specified exam batch schedule was successfully recorded.<br><br>";
          /*
          }
          else{
            echo "error: sorry but another registrant took the remaning slot(s).<br><br>";
          }
          */
        }
      }
      else{
        //check if student already took the EXAM for this EXAM BATCH SCHEDULE...
        $myrowA = mysql_fetch_row($resultA);
        $queryA = "SELECT batch_id FROM answer WHERE student_number='$username' AND batch_id='$myrowA[0]' ";
        $resultA = mysql_query($queryA);
        if(mysql_num_rows($resultA) > 0){
          echo "error: sorry but our records shows that you are already registered in an EXAM BATCH SCHEDULE whose SUBJECT, DEPARTMENTAL
NUMBER, TERM AND SCHOOL YEAR is similar to the one you submitted.<br><br>";
        }
        else{
          echo "error: sorry but our records shows that you are already registered in an EXAM BATCH SCHEDULE whose SUBJECT, DEPARTMENTAL
NUMBER, TERM AND SCHOOL YEAR is similar to the one you submitted.<br><br>";
        }
      }
    }
    else{
      echo "error: sorry but the EXAM BATCH SCHEDULE [Batch Id = $batchScheduleIdToRegisterH] you are about to register is already
CLOSED.<br><br>";
    }
  }

  $subjectSaver = $subject;

  echo "<button name='showHideRemindersButton' onClick='return showHideReminders(this)'>show reminders</button>";
  echo "<br><span id='remindersSpan' style='font-size:75%;display:none;'>";
  echo "<br>Registration reminders (Please read thoroughly):";
  echo "<ol>";
  echo "<li>IMPORTANT! It is your sole responsibility to track the status of your REGISTRATION.</li>";
  echo "<li>Each EBS comes with a 'Remaining Slots' number. In real world this number reflects the quantity of available computers for that
EBS. If this number becomes 0 the EBS's status will be 'FULL' otherwise 'OPEN'. When a student registers a FULL EBS his/her 'Priority Listing'
will be marked as 'WAIT LISTED'. PRIORITY students are the ones with reserved SLOTS.</li>";
  echo "<li>We do not encourage registering in a FULL EBS because we can not guarantee if we can accomodate you. Your only HOPE here maybe
either when the number of computers is increased or when the registrants before you are ABSENT. If you insist feel free to gamble. </li>";
  echo "<li>The REGISTRATION is based on a FIRST-COME-FIRST-SERVE (FCFS) basis. You may view the PRIORITY TABLE to get a better idea.</li>";
  echo "<li>During the scheduled date of your REBS please be there by atleast $rebsWaitingPeriod minutes (WAITING PERIOD) before the 'Exam
Time'. The registration of any student who fail to show up during this WAITING PERIOD will be CANCELLED to give way to other registrants below
him/her in the FCFS order.</li>";
  echo "</ol>";
  echo "</span>";
  echo "<br>";
  displayBatchPerSubject('');
  $subject = $subjectSaver;
  echo "<br>";
  displayBatchPerSubject('', false);
}
//////////////////////////////////////////////////////////
function displayBatchPerSubject($batchSubject, $displayRegistered = true){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  connect_Db();
  echo "<table width='100%'>";
  echo "<tr>";
  if($batchSubject != ""){
    $query = "SELECT subjectName FROM subject WHERE subject_id='$batchSubject' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    echo "<td bgcolor='#D3F2D3'>$myrow[0]";
  }
  else{
    echo "<td align='center' bgcolor='#D3F2D3'>";
    if($displayRegistered){
      echo "Registered Exam Batch Schedules (REBS)";
    }
    else{
      echo "<form name='selectSubjectForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' style='display:inline;'>";
      echo "<select name='subject' onChange='this.form.submit();'>";
      //if(!isset($subject)){
        echo "<option value=''>all</option>";
      //}
      connect_Db();
      $query = "SELECT subject_id, subjectName FROM subject ORDER BY subjectName";
      $result = mysql_query($query);
      if(mysql_num_rows($result) > 0){
        while($myrow = mysql_fetch_row($result)){
          if($subject == $myrow[0]){
            echo "<option value='$myrow[0]' selected='selected'>$myrow[1]</option>";
          }
          else{
            echo "<option value='$myrow[0]' >$myrow[1]</option>";
          }
        }
      }
      echo "</select>";
      echo "</form>";
      echo "&nbsp;Exam Batch Schedules (EBS)";
    }
  }
  echo "</td></tr>";
  echo "</table>";
  $query = "SELECT (b.availableSlots - COUNT(r.student_number)), b.batch_id, b.date, b.examTime, b.discussionTime, s.subjectName, e.deptNum,
b.term, b.sy, b.availableSlots, CASE e.deptNum WHEN 'first departmental' THEN 1 WHEN 'second departmental' THEN 2 WHEN 'third departmental'
THEN 3 WHEN 'fourth departmental' THEN 4 WHEN 'fifth departmental' THEN 5 WHEN 'sixth departmental' THEN 6 WHEN 'seventh departmental' THEN 7
END AS deptNumInt FROM batch AS b, subject AS s, exam AS e LEFT JOIN registration AS r ON (b.batch_id=r.batch_id) WHERE
s.subject_id=e.subject_id AND b.exam_id=e.exam_id AND b.accessibility='open' ";
  if($displayRegistered){
    $query .= "AND r.student_number='$username' ";
  }
  if($batchSubject != ""){
    $query .= "AND e.subject_id='$batchSubject' ";
  }
  else{
    if((!$displayRegistered)&&($subject != "")){
      $query .= "AND e.subject_id='$subject' ";
    }
  }
  $query .= "GROUP BY b.batch_id ORDER BY b.sy ASC, b.term ASC, deptNumInt ASC, b.date ASC  ";
  //echo "[$query]";
  $result = mysql_query($query);
  $numOfBatchScheduleDisplayed = 0;
  if(mysql_num_rows($result) > 0){
    while($myrow = mysql_fetch_row($result)){
      //remove batch_id's with 'answer sheets'
      $queryAnswerSheets = "SELECT student_number FROM answer WHERE batch_id='$myrow[1]' LIMIT 1 ";
      $resultAnswerSheets = mysql_query($queryAnswerSheets);
      if(($activeTab == "Exam Schedule")&&(mysql_num_rows($resultAnswerSheets) > 0)){
        continue;
      }
      //check student's registration in the current batch_id
      $queryA = "SELECT authorization, registrationDate FROM registration WHERE batch_id='$myrow[1]' AND student_number='$username' ";
      $resultA = mysql_query($queryA);
      if(mysql_num_rows($resultA) > 0){
        if(!$displayRegistered){
          continue;
        }
        else{
          //check if student is about to take the exam...
          $myrowA = mysql_fetch_row($resultA);
          if(($myrowA[0] == "yes")&&($activeTab != "Take Exam")){
            continue;
          }
        }
      }
      $numOfBatchScheduleDisplayed++;
      if($numOfBatchScheduleDisplayed == 1){
        echo "<div style='height:auto; width:100%; overflow:scroll;'>";
        echo "<form name='editCancelBatchScheduleForm' action='?activeNav=$activeNav&activeTab=$activeTab&subject=$subject' method='POST'
style='display:inline;'>";
        echo "<table id='examBatchScheduleTable' border='1' width='100%'>";
        if($displayRegistered){
          $examBatchScheduleColumnNames = array('&nbsp;', 'Priority Listing', 'Batch Id', 'Date', 'Exam Time', 'Discussion Time', 'Subject',
'Departmental', 'Term', 'School Year', 'Remaining Slots', 'Priority Table');
        }
        else{
          $examBatchScheduleColumnNames = array('&nbsp;', 'Status', 'Batch Id', 'Date', 'Exam Time', 'Discussion Time', 'Subject',
'Departmental', 'Term', 'School Year', 'Remaining Slots', 'Priority Table');
        }
        echo "<tr>";
        for($i = 0;$i < count($examBatchScheduleColumnNames);$i++){
          echo "<td align='center'>$examBatchScheduleColumnNames[$i]</td>";
        }
        echo "</tr>";
      }
      $trBgColor = "";
      $statusMessage = "OPEN";
      if($displayRegistered){
        //determine if CANCELLED...
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        $currentRegisteredBatchIsCancelled = false;
        if($myrowA[1] == "0000-00-00 00:00:00"){
          $trBgColor = "bgcolor='#FF8080'";
          $currentRegisteredBatchIsCancelled = true;
        }
        else{
          //determine if WAIT LISTED...
          $queryB = "SELECT student_number FROM registration WHERE batch_id='$myrow[1]' ORDER BY registrationDate ASC ";
          $resultB = mysql_query($queryB);
          $pn = "0";
          $total = mysql_num_rows($resultB);
          while($myrowB = mysql_fetch_row($resultB)){
            if($myrowB[0] == $username){
              break;
            }
            $pn++;
          }
          if($pn > $myrow[9]){
            $trBgColor = "bgcolor='#FFFF80'";
            $statusMessage = "WAIT LISTED";
          }
          else{
            $statusMessage = "PRIORITY";
          }
        }
      }
      else{
        //determine if FULL...
        if($myrow[0] <= 0){
          $trBgColor = "bgcolor='#FFFF80'";
          $statusMessage = "FULL";
        }
      }
      echo "<tr $trBgColor>";
      echo "<td align='center'>";
      if(($currentRegisteredBatchIsCancelled)&&($displayRegistered)){
        echo "<font style='font-size:75%;'>CANCELLED</font>";
      }
      else{
        if(mysql_num_rows($resultA) > 0){
          $resultA = mysql_query($queryA);
          $myrowA = mysql_fetch_row($resultA);
          if(($myrowA[0] == "yes")&&($activeTab == "Take Exam")){
            echo "<input type='button' onClick='return openExam(\"/toes/exam/questionnaire.php?operationMode=take
exam&batch_id=$myrow[1]&student_number=$username\", \"$myrow[1]\")' value='take exam' />";
          }
          else{
            if($activeTab == "Take Exam"){
              echo "<input type='button' value='take exam' disabled='disabled'/>";
            }
            else{
              echo "<input type='button' id='buttonToLink' onClick='return setBatchScheduleToUnregister(this.form, $myrow[1])'
onMouseOver='return cursorForButtonToLink(this)' value='unregister' />";
            }
          }
        }
        else{
          //check if BATCH is not a duplicate of the student's registered exam...
          $queryA = "SELECT e.subject_id, e.deptNum, b.term, b.sy FROM batch AS b, exam AS e WHERE b.batch_id='$myrow[1]' AND
b.exam_id=e.exam_id";
          $resultA = mysql_query($queryA);
          $myrowA = mysql_fetch_row($resultA);
          $queryA = "SELECT r.batch_id FROM registration AS r, batch AS b, exam AS e WHERE r.student_number='$username' AND
r.batch_id=b.batch_id AND b.exam_id=e.exam_id AND e.subject_id='$myrowA[0]' AND e.deptNum='$myrowA[1]' AND b.term='$myrowA[2]' AND
b.sy='$myrowA[3]' ";
          $resultA = mysql_query($queryA);
          $setBatchScheduleToRegisterDisable = "";
          if(mysql_num_rows($resultA) > 0){
            $setBatchScheduleToRegisterDisable = "disabled='disabled'";
          }
          //$setBatchScheduleToRegisterDisable = "";
          echo "<input type='button' id='buttonToLink' onClick='return setBatchScheduleToRegister(this.form, $myrow[1], $myrow[0])'
onMouseOver='return cursorForButtonToLink(this)' value=' register ' $setBatchScheduleToRegisterDisable/>";
        }
      }
      echo "</td>";
      echo "<td align='center'><font style='font-size:75%;text-decoration:none;'>$statusMessage</font></td>";
      echo "<td align='center'>$myrow[1]</td>";
      echo "<td align='center'>".reformatDateForDisplay($myrow[2])."</td>";
      echo "<td align='center'>".reformatTimeForDisplay($myrow[3])."</td>";
      echo "<td align='center'>".reformatTimeForDisplay($myrow[4])."</td>";
      echo "<td align='center'>$myrow[5]</td>";
      echo "<td align='center'>$myrow[6]</td>";
      echo "<td align='center'>$myrow[7]</td>";
      echo "<td align='center'>$myrow[8]</td>";
      echo "<td align='center'>";
      if($displayRegistered){
        if($myrow[9] - $total > 0){
          echo $myrow[9] - $total;
        }
        else{
          echo "0";
        }
      }
      else{
        if($myrow[0] > 0){
          echo "$myrow[0]";
        }
        else{
          echo "0";
        }
      }
      echo "</td>";
      echo "<td align='center'>";
      if($displayRegistered){
        echo "<a href='javascript:void openPriorityTable(\"$total\", \"$myrow[9]\", \"$pn\")'>";
      }
      else{
        echo "<a href='javascript:void openPriorityTable(\"".($myrow[9] - $myrow[0])."\", \"$myrow[9]\", \"\")'>";
      }
      echo "<font style='color:blue;font-size:75%;text-decoration:none;'>VIEW</font></a></td>";
      echo "</tr>";
    }
    if($subject != ""){
      echo "<input type='hidden' name='subject' value='$subject'/>";
    }
    if($numOfBatchScheduleDisplayed > 0){
      echo "<input type='hidden' name='batchScheduleIdToUnregisterH' value=''/>";
      echo "<input type='hidden' name='batchScheduleIdToRegisterH' value=''/>";
      echo "</form>";
      echo "</table>";
      echo "</div>";
    }
  }
  if($numOfBatchScheduleDisplayed == 0){
    echo "<table width='100%'>";
    echo "<tr><td align='center'>no records</td></tr>";
    echo "</table>";
  }
}
////////////////////////////////////////////////////////////
function noOverlappingExamBatchSchedule($batchScheduleIdToRegister){
  global $username;
  connect_Db();
  $query = "SELECT b.date, b.examTime, b.batch_id FROM batch AS b, registration AS r WHERE b.batch_id=r.batch_id AND b.accessibility='open' AND
r.status='waiting' AND r.student_number='$username' ";
  $result = mysql_query($query);
  $queryA = "SELECT date, examTime FROM batch WHERE batch_id='$batchScheduleIdToRegister' ";
  $resultA = mysql_query($queryA);
  $myrowA = mysql_fetch_row($resultA);
  while($myrow = mysql_fetch_row($result)){
    //check for possible overlapping...
    if($myrow[0] == $myrowA[0]){
      if(timeOverlap($myrow[1], $myrowA[1])){
        echo "error: the 'exam time' of the EXAM BATCH SCHEDULE [batch id = $batchScheduleIdToRegister] that you are trying to register
overlaps with the 'exam time of another EXAM BATCH SCHEDULE [batch id = $myrow[2]].<br><br>";
        return false;
      }
    }
  }
  return true;
}
////////////////////////////////////////////////////////
function timeOverlap($timeA, $timeB){
  $timeArray[] = substr($timeA, 0, strpos($timeA, "-"));
  $timeArray[] = substr($timeA, strpos($timeA, "-") + 1);
  $timeArray[] = substr($timeB, 0, strpos($timeB, "-"));
  $timeArray[] = substr($timeB, strpos($timeB, "-") + 1);
  $tempTimeANameArray = array('a', 'b', 'c', 'd');
  for($i = 0;$i < count($tempTimeANameArray);$i++){
    $hrMin = explode(":", $timeArray[$i]);
    $$tempTimeANameArray[$i] = mktime($hrMin[0], $hrMin[1], 0);
  }
  if($a == $c){
    return true;
  }
  else{
    if($a < $c){
      if($b > $c){
        return true;
      }
      else{
        return false;
      }
    }
    else{
      if($a < $d){
        return true;
      }
      else{
        return false;
      }
    }
  }
}
////////////////////////////////////////////////////////
function displayExamDetailsAndBatch($examToDisplay, $batchScheduleToSingleOut = '', $authorization = ''){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  echo "<table id='examDetailAndBatchTable' width='100%' cellpadding='0' cellspacing='0'>";
  echo "<tr><td id='examScheduleDarkRow' align='center'>Exam Details</td></tr>";
  echo "<tr><td align='left'>";
  echo "<table id='examInfo' cellpadding='1' cellspacing='0'>";
  connect_Db();
  $query = "SELECT subject.subjectName, exam.description, exam.deptNum FROM exam, subject WHERE exam.subject_id=subject.subject_id AND
exam.exam_id='$examToDisplay' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  echo "<tr><td id='examInfoTdBottomTrue'>Exam Id</td><td id='examInfoTdBottomTrue'>$examToDisplay</td></tr>";
  echo "<tr><td id='examInfoTdBottomTrue'>Subject</td><td id='examInfoTdBottomTrue'>$myrow[0]</td></tr>";
  echo "<tr><td id='examInfoTdBottomTrue'>Description</td><td id='examInfoTdBottomTrue'>$myrow[1]</td></tr>";
  echo "<tr><td id='examInfoTdBottomFalse'>Departmental Number</td><td id='examInfoTdBottomFalse'>$myrow[2]</td></tr>";
  echo "</table>";
  echo "</td></tr>";
  echo "<tr><td id='examScheduleDarkRow' align='center' style='border-top:1px solid #008000;border-bottom:1px solid #008000;'>Batch
Schedule</td></tr>";
  //store the registered batch_id in array
  $query = "SELECT batch_id FROM registration WHERE student_number='$username' ";
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    while($myrow = mysql_fetch_row($result)){
      $studentRegisteredBatchArray[] = $myrow[0];
    }
  }
  //print batch records...
  if($batchScheduleToSingleOut != ""){
    $query = "SELECT * FROM batch WHERE exam_id='$examToDisplay' AND batch_id='$batchScheduleToSingleOut' ";
  }
  else{
    $query = "SELECT * FROM batch WHERE exam_id='$examToDisplay' ";
  }
  $result = mysql_query($query);
  $numOfDisplayedBatch = 0;
  while($myrow = mysql_fetch_row($result)){
    $queryA = "SELECT COUNT(student_number) FROM answer WHERE batch_id='$myrow[0]' ";
    $resultA = mysql_query($queryA);
    $myrowA = mysql_fetch_row($resultA);
    if($myrowA[0] == 0){
      $numOfDisplayedBatch++;
    }
    else{
      continue;
    }
    if($numOfDisplayedBatch == 1){
      echo "<tr><td align='center'>";
      echo "<br>";
      echo "<form name='editCancelBatchScheduleForm' action='?activeNav=$activeNav&activeTab=$activeTab&subject=$subject' method='POST'
style='display:inline;'>";
      echo "<table id='batchScheduleRecordTable' cellpadding='1' cellspacing='1'>";
      $batchColumnName = array('&nbsp;', 'batch id', 'date', 'exam time', 'discussion time', 'remaining slots', 'term', 'sy');
      echo "<tr>";
      for($i = 0;$i < count($batchColumnName);$i++){
        if(($i == 0)&&($addNewBatchButtonVisible)){
          echo "";
        }
        else{
          echo "<td align='center'>$batchColumnName[$i]</td>";
        }
      }
      echo "</tr>";
    }
    //count registrations for this batch
    $queryA = "SELECT COUNT(batch_id) FROM registration WHERE batch_id='$myrow[0]' ";
    $resultA = mysql_query($queryA);
    $myrowA = mysql_fetch_row($resultA);
    $remainingSlots = $myrow[5] - $myrowA[0];
    echo "<tr>";
    if(count($studentRegisteredBatchArray) > 0){
      if(in_array($myrow[0], $studentRegisteredBatchArray)){
        if($authorization == "yes"){
          echo "<td>";
          echo "<input type='button' onClick='return openExam(\"/toes/exam/questionnaire.php?operationMode=take
exam&batch_id=$myrow[0]&student_number=$username\", \"$myrow[0]\")' value='take exam' />";
          echo "</td>";
        }
        else{
          echo "<td align='center'><input type='button' id='buttonToLink' onClick='return setBatchScheduleToUnregister(this.form, $myrow[0])'
onMouseOver='return cursorForButtonToLink(this)' value='unregister' /></td>";
        }
      }
      else{
        //check if BATCH is not a duplicate of the student's registered exam...
        $queryA = "SELECT e.subject_id, e.deptNum, b.term, b.sy FROM batch AS b, exam AS e WHERE b.batch_id='$myrow[0]' AND
b.exam_id=e.exam_id";
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        $queryA = "SELECT r.batch_id FROM registration AS r, batch AS b, exam AS e WHERE r.student_number='$username' AND r.batch_id=b.batch_id
AND b.exam_id=e.exam_id AND e.subject_id='$myrowA[0]' AND e.deptNum='$myrowA[1]' AND b.term='$myrowA[2]' AND b.sy='$myrowA[3]' ";
        $resultA = mysql_query($queryA);
        $setBatchScheduleToRegisterDisable = "";
        if(mysql_num_rows($resultA) > 0){
          $setBatchScheduleToRegisterDisable = "disabled='disabled'";
        }
        $setBatchScheduleToRegisterDisable = "";
        echo "<td align='center'><input type='button' id='buttonToLink' onClick='return setBatchScheduleToRegister(this.form, $myrow[0],
$remainingSlots)' onMouseOver='return cursorForButtonToLink(this)' $setBatchScheduleToRegisterDisable value=' register ' /></td>";
      }
    }
    else{
      echo "<td align='center'><input type='button' id='buttonToLink' onClick='return setBatchScheduleToRegister(this.form, $myrow[0],
$remainingSlots)' onMouseOver='return cursorForButtonToLink(this)' value=' register ' /></td>";
    }
    echo "<td
align='center'>$myrow[0]</td><td>".reformatDateForDisplay($myrow[2])."</td><td>".reformatTimeForDisplay($myrow[3])."</td><td>".reformatTimeForD
isplay($myrow[4])."</td><td align='center'>$remainingSlots</td><td align='center'>$myrow[7]</td><td align='center'>$myrow[8]</td></tr>";
  }
  if($numOfDisplayedBatch > 0){
    echo "<input type='hidden' name='batchScheduleIdToUnregisterH' value=''/>";
    echo "<input type='hidden' name='batchScheduleIdToRegisterH' value=''/>";
    echo "</form>";
    echo "</table><br>";
    echo "</td></tr>";
  }
  else{
    echo "<tr><td align='center'>no records</td></tr>";
  }
  echo "</table>";
}
//////////////////////////////////////////////////////////
function take_Exam(){
  foreach($GLOBALS as $key=>$value){
    //print "\$GLOBALS[\"$key\"] == $value<br>";
    if ( ereg("[a-z]", $key[0],$array ) ){
      //print "\$GLOBALS[\"$key\"] == $value<br>";
      global $$key;
    }
  }
  connect_Db();
  if(($violation != "")&&($offense != "")){
    $query = "UPDATE registration SET status='$violation', offense='$offense' WHERE batch_id='$batchIdToBlock' AND student_number='$username'
";
    $result = mysql_query($query);
    echo "error: the EXAMINATION window was closed.<br><br>";
  }
  echo "<form name='administerBatchSchedule' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
  echo "<input type='hidden' name='batchIdToBlock' value=''/>";
  echo "<input type='hidden' name='violation' value=''/>";
  echo "<input type='hidden' name='offense' value=''/>";
  echo "<input type='submit' name='reload' value='reload this page'>";
  echo "</form>";
  //display important reminders when taking the exam...
  echo "<table width='100%'>";
  echo "<tr><td align='center'>IMPORTANT GUIDELINES WHEN TAKING THE EXAM</td></tr>";
  echo "<tr><td>";
  echo "<span style='font-size:75%;'>";
  echo "<ol>";
  echo "<li>During the examination (that is when the 'EXAMINATION WINDOW' is displayed and the EXAM ITEMS are displayed) an examinee SHOULD NOT
close the 'STUDENT MODULE WINDOW' or the 'EXAMINATION WINDOW'. Closing either window is prohibited. Any examinee who violated this rule will be
BLOCKED from taking the exam. The examinee may close the 'EXAMINATION WINDOW' using the EXIT BUTTON found at the top right corner.</li>";
  echo "<li>During the examination (that is when the 'EXAMINATION WINDOW' is displayed and the EXAM ITEMS are displayed) an examinee SHOULD NOT
perform actions that would cause the 'EXAMINATION WINDOW' to lose focus. A window loses focus when a NEW window is brought on TOP of it (or
when a NEW window gains focus).";
  echo "<br>Please AVOID doing the following:";
  echo "<ul>";
  echo "<li>opening another application/program. i.e. opening 'Windows Explorer'</li>";
  echo "<li>pressing ALT-TAB</li>";
  echo "<li>inserting DISKETTES, CD-ROMS and FLASH DRIVES, adding additional hardware may trigger some 'HARDWARE DETECTION MESSAGES'</li>";
  echo "</ul>";
  echo "</li>";
  echo "<li>The keyboard diagram below displays the PROHIBITED KEYS colored in RED. Please refrain from using the indicated KEYS. Examinees who
are BLOCKED upon violating this rule should report to the attending ADMINISTRATOR.</li>";
  echo "<li>The resumption of the EXAMINATION of a VIOLATING examinee is based on the ADMINISTRATOR's discretion.</li>";
  echo "</ol>";
  echo "</span>";
  echo "</td></tr>";
  echo "</table>";
  echo "<br>";
  $query = "SELECT e.subject_id FROM batch AS b, registration AS r, exam AS e WHERE b.batch_id=r.batch_id AND b.exam_id=e.exam_id AND
r.student_number='$username' AND b.accessibility='open' ";
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    echo "<table width='100%'>";
    echo "<tr><td align='center'>LIST OF REGISTERED EXAM SCHEDULES</td></tr>";
    echo "</table>";
    while($myrow = mysql_fetch_row($result)){
      displayBatchPerSubject($myrow[0]);
      echo "<br>";
    }
  }
  else{
    echo "<table width='100%'>";
    echo "<tr><td align='center'>LIST OF REGISTERED EXAM SCHEDULES</td></tr>";
    echo "<tr><td align='center'>no record</td></tr>";
    echo "</table>";
  }
}
//////////////////////////////////////////////////////////
function manage_My_Account(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  connect_Db();
  if($studentAccountSubmit == "update"){
    $query = "UPDATE student SET mobilePhone='$mobilePhone', landPhone='$landPhone', email='$email' WHERE student_number='$username' ";
    $result = mysql_query($query);
    echo "message: the update was successfull.<br><br>";
  }
  $query = "SELECT * FROM student WHERE student_number='$username' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  echo "<form name='studentAccountForm' method='POST' action='' style='display:inline'>";
  echo "<table border='1'>";
  echo "<tr><td>student number</td><td>$myrow[0]</td></tr>";
  echo "<tr><td>name</td><td>$myrow[1] $myrow[2] $myrow[3]</td></tr>";
  echo "<tr><td>course</td><td>$myrow[4]</td></tr>";
  echo "<tr><td>college</td><td>$myrow[5]</td></tr>";
  echo "<tr><td>mobile phone</td><td><input type='text' name='mobilePhone' maxLength='15' size='15' value='$myrow[6]'/></td></tr>";
  echo "<tr><td>land phone</td><td><input type='text' name='landPhone' maxLength='15' size='15' value='$myrow[7]'/></td></tr>";
  echo "<tr><td>email</td><td><input type='text' name='email' value='$myrow[8]'/></td></tr>";
  echo  "<tr><td  colspan='2'  align='center'><input  type='submit'  name='studentAccountSubmit'  value='update'/><button  type='reset'  name='reset'
value='reset'>reset</button></td></tr>";
  echo "</form>";
  echo "</table>";
}
//////////////////////////////////////////////////////////
function manage_Password(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  if($studentPasswordSubmit == "change"){
    connect_Db();
    $query = "SELECT password FROM student WHERE student_number='$username' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    if($myrow[0] != $passwordOld){
      echo "error: the supplied 'old password' does not match the one stored in the database.<br><br>";
    }
    else{
      if($passwordNew != $passwordNewR){
        echo "error: the 'new password' and the 'retyped new password' does not match.<br><br>";
      }
      else{
        $query = "UPDATE student SET password='$passwordNew' WHERE student_number='$username' ";
        $result = mysql_query($query);
        echo "message: the 'new password' was successfully stored.<br><br>";
      }
    }
  }
  echo "<form name='studentPasswordForm' method='POST' action='' onSubmit='return studentPasswordCheck(this)' style='display:inline'>";
  echo "<table border='1'>";
  echo "<tr><td>old password</td><td><input type='password' name='passwordOld' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td>new password</td><td><input type='password' name='passwordNew' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td>retype new password</td><td><input type='password' name='passwordNewR' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td colspan='2' align='center'><input type='submit' name='studentPasswordSubmit' value='change'/></td></tr>";
  echo "</form>";
  echo "</table>";
}
//////////////////////////////////////////////////////////
function display_Tutor_Schedule(){
  global $activeTab;
  echo "<span id='tutorScheduleSpan'>";
  echo "<table id='tutorScheduleViewTable' border='1' cellpadding='2' cellspacing='1'>";
  $tableColumnName = array('Subject', 'Tutor', 'MON', 'TUE', 'WED', 'THU', 'FRI');
  $dayIndexArray = array("Monday"=>0, "Tuesday"=>1, "Wednesday"=>2, "Thursday"=>3, "Friday"=>4);
  echo "<tr>";
  for($i = 0;$i < count($tableColumnName);$i++){
    echo "<td align='center'>$tableColumnName[$i]</td>";
  }
  echo "</tr>";
  connect_Db();
  $query = "SELECT subject_id, subjectName FROM subject ORDER BY subjectName ";
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    while($myrow = mysql_fetch_row($result)){
      echo "<tr>";
      if($activeTab == "Peer Schedule"){
        $queryA  =  "SELECT  tutor_id,  CONCAT(firstName,  '  ',  middleName,  '  ',  lastName)  AS  fullname  FROM  tutor  WHERE  tutorType='p'  AND
(tutor.tutoredSubject  LIKE  '$myrow[0]'  OR  tutor.tutoredSubject  LIKE  '%,$myrow[0],%'  OR  tutor.tutoredSubject  LIKE  '%,$myrow[0]'  OR
tutor.tutoredSubject LIKE '$myrow[0],%') ORDER BY fullname ASC ";
      }
      else{
        $queryA  =  "SELECT  tutor_id,  CONCAT(firstName,  '  ',  middleName,  '  ',  lastName)  AS  fullname  FROM  tutor  WHERE  tutorType='f'  AND
(tutor.tutoredSubject  LIKE  '$myrow[0]'  OR  tutor.tutoredSubject  LIKE  '%,$myrow[0],%'  OR  tutor.tutoredSubject  LIKE  '%,$myrow[0]'  OR
tutor.tutoredSubject LIKE '$myrow[0],%') ORDER BY fullname ASC ";
      }
      $resultA = mysql_query($queryA);
      if(mysql_num_rows($resultA) > 0){
        echo "<td align='center' rowspan='".mysql_num_rows($resultA)."'>$myrow[1]</td>";
        $availableTutorCount = 0;
        while($myrowA = mysql_fetch_row($resultA)){
          if($availableTutorCount != 0){
            echo "<tr>";
          }
          $availableTutorCount++;
          echo "<td align='center'>$myrowA[1]</td>";
          $queryB = "SELECT prefDay, prefTime FROM tutor_schedule WHERE tutor_id='$myrowA[0]' ORDER BY prefTime ASC ";
          $resultB = mysql_query($queryB);
          if(mysql_num_rows($resultB) > 0){
            $intervalCount = 0;
            while($myrowB = mysql_fetch_row($resultB)){
              $tempArray = explode(",", $myrowB[0]);
              foreach($tempArray AS $tempArrayElem){
                $tempArrayIndex[] = $dayIndexArray[$tempArrayElem];
              }
              for($i = 0;$i < count($dayIndexArray);$i++){
                if(in_array($i, $tempArrayIndex)){
                  $weekSched[$i][$intervalCount] = reformatTimeForDisplay($myrowB[1]);
                }
                else{
                  $weekSched[$i][$intervalCount] = "&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;";
                }
              }
              unset($tempArray);
              unset($tempArrayIndex);
              $intervalCount++;
            }
            for($i = 0;$i < count($dayIndexArray);$i++){
              echo "<td align='center'>".implode("<BR>", $weekSched[$i])."</td>";
            }
            unset($weekSched);
          }
          else{
            echo "<td colspan='".(count($tableColumnName) - 2)."' align='center'>no schedule</td>";
          }
          echo "</tr>";
        }
      }
      else{
        echo "<td align='center'>$myrow[1]</td>";
        echo "<td align='center'>none available</td>";
        echo "<td>&nbsp;</td><td>&nbsp;</td><td>&nbsp;</td><td>&nbsp;</td><td>&nbsp;</td>";
      }
      echo "</tr>";
    }
  }
  else{
    echo "<tr><td colspan='".count($tableColumnName)."' align='center'>no subject records</td></tr>";
  }
  echo "</table>";
  echo "</span>";
}
//////////////////////////////////////////////////////////
function manage_My_Tutorial_Attendance(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  connect_Db();
  echo "<table width='100%'>";
  echo "<tr><td align='center' bgcolor='#D3F2D3'>My Tutorial Attendance</td></tr>";
  echo "</table>";
  $query = "SELECT subject.subjectName, tutorial.topic, tutorial.time, tutorial.date, CONCAT(tutor.firstName, ' ', tutor.middleName, ' ',
tutor.lastName) AS tutorFullName, tutor.deptCourse, tutor.tutorType, tutorial.tutorial_id FROM subject, tutor, tutorial, attendance WHERE
tutor.tutor_id=tutorial.tutor_id AND tutorial.tutorial_id=attendance.tutorial_id AND tutorial.subject=subject.subject_id AND
attendance.student_number='$username' ORDER BY tutorial.date DESC, tutorial.time DESC ";
  $result = mysql_query($query);
  $numOfNonEnlistedTutorial = 0;
  if(mysql_num_rows($result) > 0){
    while($myrow = mysql_fetch_row($result)){
      if($myrow[8] != ""){
        continue;
      }
      $queryA = "SELECT student_number FROM enlistment WHERE tutorial_id='$myrow[7]' AND student_number='$username' ";
      $resultA = mysql_query($queryA);
      if(mysql_num_rows($resultA) == 0){
        if($numOfNonEnlistedTutorial == 0){
          echo "<div style='height:auto; width:100%; overflow:scroll;'>";
          echo "<table id='tutorScheduleTable' border='1' width='100%'>";
          echo "<form name='enlistAvailableTutorialForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
          $availableTutorialTableColumnNameArray = array('Subject', 'Topic', 'Date', 'Time', 'Tutor', 'Course/Department');
          echo "<tr>";
          foreach($availableTutorialTableColumnNameArray AS $availableTutorialTableColumnNameArrayElem){
            echo "<td align='center'>$availableTutorialTableColumnNameArrayElem</td>";
          }
        }
        echo "<tr><td>$myrow[0]</td>";
        echo "<td>";
        foreach(explode(",", $myrow[1]) AS $topicElem){
          $queryA = "SELECT topicName FROM topic WHERE topic_id='$topicElem' ";
          $resultA = mysql_query($queryA);
          $myrowA = mysql_fetch_row($resultA);
          echo "$myrowA[0]<br>";
        }
        echo "</td>";
        echo "<td>".reformatDateForDisplay($myrow[3])."</td>";
        echo "<td>".reformatTimeForDisplay($myrow[2])."</td>";
        echo "<td>$myrow[4]</td>";
        echo "<td>";
        if($myrow[6] == "p"){
          echo "(peer)&nbsp;";
          $queryA = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrow[5]' ";
        }
        else{
          echo "(faculty)&nbsp;";
          $queryA = "SELECT departmentName FROM upm_departments WHERE department_id='$myrow[5]' ";
        }
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        echo "$myrowA[0]<br>";
        echo "</td></tr>";
        $numOfNonEnlistedTutorial++;
      }
    }
    if($numOfNonEnlistedTutorial != 0){
      echo "</tr>";
      echo "<input type='hidden' name='tutorialIdToEnlistH' value='' />";
      echo "</form>";
      echo "</table>";
      echo "</div>";
    }
  }
  if($numOfNonEnlistedTutorial == 0){
    echo "<table width='100%'>";
    echo "<tr><td align='center'>no records</td></tr>";
    echo "</table>";
  }
}
/////////////////////////////////////////////////////////
function exam_Result(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  connect_Db();
  if($batchIdResultToDisplay != ""){
    echo "<form name='examResult' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
    echo "<input type='submit' name='examResultSubmit' value='back'>";
    echo "</form>";
    $query = "SELECT b.batch_id, b.date, s.subjectName, e.description, e.deptNum FROM answer AS a, batch AS b, exam AS e, subject AS s WHERE
b.batch_id=a.batch_id AND b.accessibility='closed' AND a.student_number='$username' AND b.exam_id=e.exam_id AND e.subject_id=s.subject_id AND
b.batch_id='$batchIdResultToDisplay' ORDER BY b.date DESC";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    echo "<table border='1'>";
    echo "<tr><td colspan='2' align='center'>EXAM BATCH DETAILS</td></tr>";
    echo "<tr><td>batch id</td><td>$myrow[0]</td></tr>";
    echo "<tr><td>date</td><td>".reformatDateForDisplay($myrow[1])."</td></tr>";
    echo "<tr><td>exam subject</td><td>$myrow[2]</td></tr>";
    echo "<tr><td>exam description</td><td>$myrow[3]</td></tr>";
    echo "<tr><td>departmental number</td><td>$myrow[4]</td></tr>";
    echo "</table>";
    echo "<br>";
    echo "<table border='1'>";
    echo "<tr><td colspan='4' align='center'>GRADE REPORT</td></tr>";
    echo "<tr><td>&nbsp;</td><td align='center'>raw score</td><td align='center'>weight</td><td align='center'>weighted score</td></tr>";
    $query = "SELECT randomItem, answerString FROM answer WHERE batch_id='$batchIdResultToDisplay' AND student_number='$username' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $randomItemArray = explode(",", $myrow[0]);
    $answerStringArray = explode("-", $myrow[1]);
    for($i = 0;$i < count($randomItemArray);$i++){
      $query = "SELECT q.questionType, q.answer, e.pointAssigned FROM question AS q, exam_item AS e WHERE e.question_id=q.question_id And
q.question_id='$randomItemArray[$i]' ";
      $result = mysql_query($query);
      $myrow = mysql_fetch_row($result);
      if($myrow[0] != "matching type"){
        echo "<tr><td>question ".($i + 1)."</td><td align='center'>";
        if($myrow[1] == $answerStringArray[$i]){
          $rawScore = 1;
        }
        else{
          $rawScore = 0;
        }
        echo "$rawScore</td><td align='center'>$myrow[2]</td>";
        echo "<td align='center'>".($rawScore * $myrow[2])."</td></tr>";
        $rawScoreTotal += $rawScore;
        $weightTotal += $myrow[2];
        $weightedScore += $rawScore * $myrow[2];
      }
      else{
        $rawScore = 0;
        $tempArrayA = explode(",", $answerStringArray[$i]);
        $tempArrayB = explode(",", $myrow[1]);
        for($j = 0;$j < count($tempArrayA);$j++){
          if($tempArrayA[$j] == $tempArrayB[$j]){
            $rawScore++;
          }
        }
        $rawScore = $rawScore / count($tempArrayA);
        echo "<tr><td>question ".($i + 1)."</td><td align='center'>";
        echo "$rawScore</td><td align='center'>$myrow[2]</td>";
        echo "<td align='center'>".($rawScore * $myrow[2])."</td></tr>";
        $rawScoreTotal += $rawScore;
        $weightTotal += $myrow[2];
        $weightedScore += $rawScore * $myrow[2];
      }
    }
    echo "<tr><td align='right'>TOTAL</td><td align='center'>$rawScoreTotal</td><td align='center'>$weightTotal</td><td
align='center'>$weightedScore</td></tr>";
    echo "</table>";
  }
  else{
    echo "<table width='100%' >";
    echo "<tr><td align='center' bgcolor='#D3F2D3'>My Past Exam(s)</td></tr>";
    echo "</table>";
    //$query = "SELECT b.batch_id, b.date, s.subjectName, e.description, e.deptNum FROM answer AS a, batch AS b, exam AS e, subject AS s WHERE
b.batch_id=a.batch_id AND b.accessibility='closed' AND a.student_number='$username' AND b.exam_id=e.exam_id AND e.subject_id=s.subject_id ORDER
BY b.date DESC";
    $query = "SELECT a.score, b.date, s.subjectName, e.description, e.deptNum FROM answer AS a, batch AS b, exam AS e, subject AS s WHERE
b.batch_id=a.batch_id AND b.accessibility='closed' AND a.student_number='$username' AND b.exam_id=e.exam_id AND e.subject_id=s.subject_id ORDER
BY b.date DESC";
    $result = mysql_query($query);
    if(mysql_num_rows($result) > 0){
      echo "<div style='height:auto; width:100%; overflow:scroll;'>";
      echo "<table id='myPastExamTable' width='100%' border='1'>";
      echo "<form name='batchIdResultToDisplayForm' action='?activeNav=$activeNav&activeTab=$activeTab' method='POST' >";
      //$myPastExamTableColumnNameArray = array('', 'batch id', 'date', 'exam subject', 'exam description', 'departmental number');
      $myPastExamTableColumnNameArray = array('score', 'date', 'exam subject', 'exam description', 'departmental number');
      echo "<tr>";
      foreach($myPastExamTableColumnNameArray AS $myPastExamTableColumnNameArrayElem){
        echo "<td align='center'>$myPastExamTableColumnNameArrayElem</td>";
      }
      echo "</tr>";
      while($myrow = mysql_fetch_row($result)){
        echo "<tr>";
        //echo "<td align='center'>";
        //echo "<a href='javascript:void setBatchIdResultToDisplay(\"$myrow[0]\")' style='color:blue;'>view</a>";
        //echo "</td>";
        echo "<td align='center'>$myrow[0]</td>";
        echo "<td>".reformatDateForDisplay($myrow[1])."</td>";
        echo "<td>$myrow[2]</td>";
        echo "<td>$myrow[3]</td>";
        echo "<td>$myrow[4]</td>";
        echo "</tr>";
      }
      echo "<input type='hidden' name='batchIdResultToDisplay' value='' />";
      echo "</form>";
      echo "</table>";
      echo "</div>";
    }
    else{
      echo "<table width='100%'>";
      echo "<tr><td align='center'>no records</td></tr>";
      echo "</table>";
    }
  }
}
//////////////////////////////////////////////////////////
//////////////////////////////////////////////////////////
function get_next_id($id, $table){
  $previous = 0;
  $current = 0;
  connect_Db();
  $query = "SELECT $id FROM $table ORDER BY $id";
  $result = mysql_query($query);
  while($myrow = mysql_fetch_row($result)){
    $current = $myrow[0];
    if($current-$previous > 1){
      return $previous+1;
    }
    $previous = $current;
  }
  return $current+1;
}
//////////////////////////////////////////////////////////

?>
```

student _Javascript.php

```
var optWindow = null;
var windowDisplayTimer = 0;


var animateUsingToesColorsIndex = 0;
var animateUsingToesColorsInterval = 0;
var animateUsingToesColorsElement = "";
function animateUsingToesColors(elementId){
  if(animateUsingToesColorsElement == ""){
    animateUsingToesColorsElement = elementId
  }
  var secs = 0;
  var color = "white";
  if(animateUsingToesColorsInterval){
    clearInterval(animateUsingToesColorsInterval);
  }
  animateUsingToesColorsIndex++;
  animateUsingToesColorsIndex = animateUsingToesColorsIndex % 9;
  switch(animateUsingToesColorsIndex){
    case 1:
      color = "blue";
      secs = 1000;
      break;
    case 2:
      color = "red";
      secs = 1000;
      break;
    case 3:
      color = "green";
      secs = 1000;
      break;
    case 4:
      color = "yellow";
      secs = 1000;
      break;
    case 5:
      color = "blue";
      secs = 500;
      break;
    case 6:
      color = "red";
      secs = 500;
      break;
    case 7:
      color = "green";
      secs = 500;
      break;
    case 8:
      color = "yellow";
      secs = 500;
      break;
    default:
      color = "white";
      secs = 1;
      break;
  }
  document.getElementById(animateUsingToesColorsElement).style.color = color;
  animateUsingToesColorsInterval = setInterval(animateUsingToesColors, secs);
}
/*******************************************************************************************************/
var popupExam = null;
var intervalID = 0;
var exitClearance = 0;
function openExam(examUrl, batch_id){
  if( !popupExam || popupExam.closed ){
    eval("popupExam = window.open('" + examUrl + "','popupExam','WIDTH=" + screen.width + ",HEIGHT=" + screen.height + "');");
    intervalID = setInterval( notifyExamWindow, 1 );
    document.administerBatchSchedule.batchIdToBlock.value = batch_id;
    document.cookie = 'batchIdToBlock=' + batch_id + '';
    exitClearance = 0;
  }
  else{
    popupExam.focus();
  }
}
function runSetIntervalFromPopup(){
  intervalID = setInterval( notifyExamWindow, 1 );
}
function bringExamToFront(examWindowRef){
  examWindowRef.focus();
}
function notifyExamWindow(){
  if(popupExam.closed){
    if(exitClearance == 0){
      popupExam = null;
      if(document.administerBatchSchedule.batchIdToBlock.value == ""){
        //this fixes firefox issues with the 'batchIdToBlock' turning into NULL...
        document.administerBatchSchedule.batchIdToBlock.value = getCookie("batchIdToBlock");
      }
      document.administerBatchSchedule.violation.value = "blocked";
      document.administerBatchSchedule.offense.value = "TOES blocked you because the EXAMINATION window was closed.";
      //alert("The EXAM window was closed!");
      document.administerBatchSchedule.submit();
    }
    if(intervalID){
      clearInterval(intervalID);
      intervalID = 0;
    }
  }
}
function getCookie(cookieName){
  var cookieStr = document.cookie;
  var cookieArray = cookieStr.split(";");
  for(var i = 0;i < cookieArray.length;i++){
    var tempArray = cookieArray[i].split("=");
    if(tempArray[0] == cookieName){
      return tempArray[1];
    }
  }
  return "";
}
/*******************************************************************************************************/
function loginFormCheck(currentForm){
  if((currentForm.studNumA.value == "")&&(currentForm.studNumB.value == "")){
    alert("error: please include your student number");
    return false;
  }
  if((currentForm.studNumA.value == "")||(currentForm.studNumB.value == "")){
    alert("error: please complete your student number");
    return false;
  }
  var re = /\d\d\d\d/;
  if(currentForm.studNumA.value.search(re) == -1){
    alert("error: invalid student number");
    currentForm.studNumA.select();
    return false;
  }
  var re = /\d\d\d\d\d/;
  if(currentForm.studNumB.value.search(re) == -1){
    alert("error: invalid student number");
    currentForm.studNumB.select();
    return false;
  }
  if(currentForm.password.value == ""){
    alert("error: please include your password");
    return false;
  }
  currentForm.username.value = currentForm.studNumA.value + "-" + currentForm.studNumB.value;
  return true;
}
function newTutorialRequestSubject(currentForm){
  currentForm.submitMode.value = "eventListener";
  currentForm.submit();
}
function highlightSystemMessages(){
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'error:', '<br><br>', '#000000', '#FF8080');
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'message:', '<br><br>', '#000000', '#80FF80');
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'warning:', '<br><br>', '#000000', '#FFFF80');
}
function highlightMessage(bodyText, searchTermA, searchTermB, textColor, bgColor){
  var highlightStartTag = "<font style='color:" + textColor + "; background-color:" + bgColor + ";line-height:1.1;'>";
  var highlightEndTag = "</font>";

  var newText = "";
  var i = -1;
  var j = -1;
  var lcBodyText = bodyText.toLowerCase();
  while(bodyText.length > 0){
    i = bodyText.indexOf(searchTermA, i+1);
    if(i < 0){
      newText += bodyText;
      bodyText = "";
    }
    else{
      // skip anything inside an HTML tag
      if(bodyText.lastIndexOf(">", i) >= bodyText.lastIndexOf("<", i)){
        // skip anything inside a <script> block
        if(lcBodyText.lastIndexOf("/script>", i) >= lcBodyText.lastIndexOf("<script", i)){
          //search for the closing term of the system message...
          j = lcBodyText.indexOf(searchTermB, i + searchTermA.length);
          if(j > 0){
            newText += bodyText.substring(0, i) + highlightStartTag + bodyText.substr(i, j - i) + highlightEndTag + bodyText.substr(j,
searchTermB.length);
            bodyText = bodyText.substr(j + searchTermB.length);
            j = -1;
          }
          else{
            newText += bodyText.substring(0, i) + bodyText.substr(i, searchTermA.length);
            bodyText = bodyText.substr(i + searchTermA.length);
          }
          lcBodyText = bodyText.toLowerCase();
          i = -1;
        }
      }
    }
  }
  return newText;
}
function window_Onload(activeNav, activeTab){
  highlightSystemMessages();
  if( top != self){
    top.location = location;
  }
  switch(activeNav){
    case 'My Tutorial':
      var newTutorialRequestSubmitBool = new Boolean(0);
      var addTutorialRequestBool = new Boolean(0);
      if(document.addTutorialRequestForm != null){
        for(var i = 0;i < document.addTutorialRequestForm.length;i++){
          if(document.addTutorialRequestForm.elements[i].value == 'submit'){
            newTutorialRequestSubmitBool = Boolean(1);
          }
          if(document.addTutorialRequestForm.elements[i].value == 'create new tutorial request'){
            addTutorialRequestBool = Boolean(1);
          }
        }
      }
      if((activeTab == 'Tutorial Request')&&(newTutorialRequestSubmitBool)&&(document.addTutorialRequestForm.MondayH != null)){
        var weekDayArray = new Array("Monday", "Tuesday", "Wednesday", "Thursday", "Friday");
        dayTimeArray = new Array(5);
        dayTimeArray[0] = document.addTutorialRequestForm.MondayH.value;
        dayTimeArray[1] = document.addTutorialRequestForm.TuesdayH.value;
        dayTimeArray[2] = document.addTutorialRequestForm.WednesdayH.value;
        dayTimeArray[3] = document.addTutorialRequestForm.ThursdayH.value;
        dayTimeArray[4] = document.addTutorialRequestForm.FridayH.value;
        document.addTutorialRequestForm.prefDay.options.length = 0;
        var optionIndex = 0;
        for(var i = 0;i < dayTimeArray.length;i++){
          if(dayTimeArray[i] != ''){
            document.addTutorialRequestForm.prefDay.options[optionIndex] = new Option(weekDayArray[i], weekDayArray[i]);
            optionIndex++;
          }
        }
        newTutorialRequestPrefDay();
      }
      break;
    default:
      break;
  }
}
function newTutorialRequestPrefDay(){
  document.addTutorialRequestForm.prefTimeFrom.options.length = 0;
  document.addTutorialRequestForm.prefTimeTo.options.length = 0;
  dayTimeArray = new Array();
  dayTimeArray.Monday = document.addTutorialRequestForm.MondayH.value;
  dayTimeArray.Tuesday = document.addTutorialRequestForm.TuesdayH.value;
  dayTimeArray.Wednesday = document.addTutorialRequestForm.WednesdayH.value;
  dayTimeArray.Thursday = document.addTutorialRequestForm.ThursdayH.value;
  dayTimeArray.Friday = document.addTutorialRequestForm.FridayH.value;
  var prefTimeArray =
dayTimeArray[document.addTutorialRequestForm.prefDay.options[document.addTutorialRequestForm.prefDay.selectedIndex].value].split(",");

  var lowest = "";
  var highest = "";
  for(var i = 0;i < prefTimeArray.length;i++){
    //alert(prefTimeArray[i]);
    var prefTimeArrayElem = prefTimeArray[i].split("-");
    if((lowest == "")&&(highest == "")){
      lowest = prefTimeArrayElem[0];
      highest = prefTimeArrayElem[1];
    }
    else{
      //get lowest
      var timeA = prefTimeArrayElem[0].split(":");
      if(parseInt(timeA[0], 10) < parseInt(lowest.substring(0, lowest.indexOf(":")), 10)){
        lowest = prefTimeArrayElem[0];
      }
      if((parseInt(timeA[0], 10) == parseInt(lowest.substring(0, lowest.indexOf(":")), 10))&&(parseInt(timeA[1], 10) <
parseInt(lowest.substring(lowest.indexOf(":")+1), 10))){
        lowest = prefTimeArrayElem[0];
      }
      //get highest
      var timeB = prefTimeArrayElem[1].split(":");
      if(parseInt(timeB[0], 10) > parseInt(highest.substring(0, highest.indexOf(":")), 10)){
        highest = prefTimeArrayElem[1];
      }
      if((parseInt(timeB[0], 10) == parseInt(highest.substring(0, highest.indexOf(":")), 10))&&(parseInt(timeB[1], 10) >
parseInt(highest.substring(highest.indexOf(":")+1), 10))){
        highest = prefTimeArrayElem[1];
      }
    }
  }
  //alert("["+lowest+"]["+highest+"]");

  timeValArray = new Array();
  var timeValCurrent = lowest;
  timeValArray[timeValArray.length] = lowest;
  while(timeValCurrent != highest){
    //add 30 mins
    if((parseInt(timeValCurrent.substring(timeValCurrent.indexOf(":")+1), 10) + 30) == 60){
      timeValCurrent = eval(parseInt(timeValCurrent.substring(0, timeValCurrent.indexOf(":")), 10) + 1) + ":00";
    }
    else{
      timeValCurrent = timeValCurrent.substring(0, timeValCurrent.indexOf(":")) + ":30";
    }
    timeValArray[timeValArray.length] = timeValCurrent;
    //alert(timeValCurrent);
  }
  for(var i = 0;i < timeValArray.length;i++){
    if(i != timeValArray.length - 1){
      document.addTutorialRequestForm.prefTimeFrom.options[document.addTutorialRequestForm.prefTimeFrom.options.length] = new
Option(timeConvertForDisplay(timeValArray[i]), timeValArray[i]);
    }
    if(i != 0){
      document.addTutorialRequestForm.prefTimeTo.options[document.addTutorialRequestForm.prefTimeTo.options.length] = new
Option(timeConvertForDisplay(timeValArray[i]), timeValArray[i]);
    }
  }
  displayDayInDateFormat();
}
function timeConvertForDisplay(time){
  var timeArray = time.split("-");
  for(var i = 0;i < timeArray.length;i++){
    timeExt = 'AM';
    var timeArrayTemp = timeArray[i].split(":");
    if(timeArrayTemp[0].substring(0,1) == "0"){
      timeArrayTemp[0] = timeArrayTemp[0].substring(1,2);
    }
    if(timeArrayTemp[0] > 11){
      timeExt = 'PM';
    }
    if(timeArrayTemp[0] > 12){
      timeArrayTemp[0] = timeArrayTemp[0] - 12;
    }
    timeArray[i] = timeArrayTemp.join(":") + " " + timeExt;
  }
  return timeArray.join("-");
}
function sendRequestIdToCancel(requestIdToCancel){
  if(confirm("Are you sure you want to cancel this request?")){
    document.cancelTutorialRequestForm.requestIdToCancelH.value = requestIdToCancel;
    document.cancelTutorialRequestForm.submit();
  }
}
function sendRequestIdToJoin(requestIdToJoin){
  if(confirm("Are you sure you want to join this request?")){
    document.joinTutorialRequestForm.requestIdToJoinH.value = requestIdToJoin;
    document.joinTutorialRequestForm.submit();
  }
}
function displayDayInDateFormat(dateModifier){
  dayNameToNum = new Array();
  dayNameToNum["Monday"] = 1;
  dayNameToNum["Tuesday"] = 2;
  dayNameToNum["Wednesday"] = 3;
  dayNameToNum["Thursday"] = 4;
  dayNameToNum["Friday"] = 5;
  dayNumToName = new Array();
  dayNumToName[1] = "Monday";
  dayNumToName[2] = "Tuesday";
  dayNumToName[3] = "Wednesday";
  dayNumToName[4] = "Thursday";
  dayNumToName[5] = "Friday";
  switch(dateModifier){
    case 'prev':
      var prefDate = new Date();
      var prefDateArray = document.addTutorialRequestForm.prefDate.value.split("-");
      prefDate.setYear(parseInt(prefDateArray[0],10));
      prefDate.setMonth(parseInt(prefDateArray[1],10)-1);
      prefDate.setDate(parseInt(prefDateArray[2])-7);
      document.addTutorialRequestForm.dateModifierCounter.value    =    (parseInt(document.addTutorialRequestForm.dateModifierCounter.value)    -
1).toString();
      if(document.addTutorialRequestForm.dateModifierCounter.value == "0"){
        document.addTutorialRequestForm.prefDayPrev.style.display = 'none';
      }
      else{
        document.addTutorialRequestForm.prefDayPrev.style.display = '';
      }
      break;
    case 'next':
      var prefDate = new Date();
      var prefDateArray = document.addTutorialRequestForm.prefDate.value.split("-");
      prefDate.setYear(parseInt(prefDateArray[0],10));
      prefDate.setMonth(parseInt(prefDateArray[1],10)-1);
      prefDate.setDate(parseInt(prefDateArray[2])+7);
      document.addTutorialRequestForm.dateModifierCounter.value    =    (parseInt(document.addTutorialRequestForm.dateModifierCounter.value)    +
1).toString();
      if(document.addTutorialRequestForm.dateModifierCounter.value == "0"){
        document.addTutorialRequestForm.prefDayPrev.style.display = 'none';
      }
      else{
        document.addTutorialRequestForm.prefDayPrev.style.display = '';
      }
      break;
    default:
      var prefDate = new Date();
      var dayToday = prefDate.getDay();
      var prefDay = dayNameToNum[document.addTutorialRequestForm.prefDay[document.addTutorialRequestForm.prefDay.selectedIndex].text];
      //ensure 2 day preparation before the prefDay, exclude Saturdays and Sundays
      for(var i = 0;i < 3;i++){
        prefDate.setDate(prefDate.getDate()+1);
        if((prefDate.getDay() == 6)||(prefDate.getDay() == 0)){
          i--;
        }
      }
      while(prefDate.getDay() != prefDay){
        prefDate.setDate(prefDate.getDate()+1);
      }
      document.addTutorialRequestForm.prefDayPrev.style.display = 'none';
      break;
  }
  document.addTutorialRequestForm.prefDateDisplay.value    =    prefDate.toLocaleDateString().substring(prefDate.toLocaleDateString().indexOf(",
")+2);
  var myDate;
  myDate = prefDate.getFullYear();
  if(prefDate.getMonth()+1 < 10){
    myDate = myDate+"-0"+(prefDate.getMonth()+1);
  }
  else{
    myDate = myDate+"-"+(prefDate.getMonth()+1);
  }
  if(prefDate.getDate()+1 < 10){
    myDate = myDate+"-0"+prefDate.getDate();
  }
  else{
    myDate = myDate+"-"+prefDate.getDate();
  }
  document.addTutorialRequestForm.prefDate.value = myDate;
  //get the request expiry date
}
function checkNewTutorialRequestDetails(currentForm){
  var newTutorialRequestBool = new Boolean(1);
  var myTutorialRequestArray = document.addTutorialRequestForm.myTutorialRequestString.value.split("[*]");
  var tutorialRequestToSubmit = document.addTutorialRequestForm.subject.value;
  var topicArray = new Array();
  //var topicArrayLength = 0;
  for(var i = 0;i < document.addTutorialRequestForm.elements.length;i++){
    if(document.addTutorialRequestForm.elements[i].name == "topic[]"){
      if(document.addTutorialRequestForm.elements[i].checked){
        topicArray[topicArray.length] = parseInt(document.addTutorialRequestForm.elements[i].value);
        //topicArrayLength++
      }
    }
  }
  if(topicArray.length > 0){
    tutorialRequestToSubmit = tutorialRequestToSubmit + "" + topicArray.join(",");
  }
  tutorialRequestToSubmit = tutorialRequestToSubmit + document.addTutorialRequestForm.prefDate.value;
  tutorialRequestToSubmit = tutorialRequestToSubmit + document.addTutorialRequestForm.prefTimeFrom.value + "-" +
document.addTutorialRequestForm.prefTimeTo.value;
  for(var i = 0;i < myTutorialRequestArray.length;i++){
    if(myTutorialRequestArray[i] == tutorialRequestToSubmit){
      alert("error: You already requested this");
      newTutorialRequestBool = Boolean(0);
    }
  }
  if((newTutorialRequestBool)&&(verifyPrefTime())&&(verifyATopicIsSelected())){
    //document.addTutorialRequestForm.submit();
    return true;
  }
  else{
    return false;
  }
}
function verifyATopicIsSelected(){
  var currentForm = document.addTutorialRequestForm;
  for(var i = 0;i < currentForm.elements.length;i++){
    if(currentForm.elements[i].name == 'topic[]'){
      if(currentForm.elements[i].checked){
        return true;
      }
    }
  }
  alert("error: please choose atleast one topic");
  return false;
}
function verifyPrefTime(){
  var timeFrom = document.addTutorialRequestForm.prefTimeFrom.value;
  var timeTo = document.addTutorialRequestForm.prefTimeTo.value;
  if(!((parseInt(timeFrom.substring(0, timeFrom.indexOf(":"))) < parseInt(timeTo.substring(0,
timeTo.indexOf(":"))))||((parseInt(timeFrom.substring(0, timeFrom.indexOf(":"))) == parseInt(timeTo.substring(0,
timeTo.indexOf(":"))))&&(parseInt(timeFrom.substring(timeFrom.indexOf(":")+1)) < parseInt(timeTo.substring(timeTo.indexOf(":")+1)))))){
    alert("error:\n\tInvalid time interval!");
    return false;
  }
  dayTimeArray = new Array();
  dayTimeArray.Monday = document.addTutorialRequestForm.MondayH.value;
  dayTimeArray.Tuesday = document.addTutorialRequestForm.TuesdayH.value;
  dayTimeArray.Wednesday = document.addTutorialRequestForm.WednesdayH.value;
  dayTimeArray.Thursday = document.addTutorialRequestForm.ThursdayH.value;
  dayTimeArray.Friday = document.addTutorialRequestForm.FridayH.value;
  var prefTimeArray  = new Array();
  var cannotBeCombined = true;
  var prefTimeTemp =
dayTimeArray[document.addTutorialRequestForm.prefDay.options[document.addTutorialRequestForm.prefDay.selectedIndex].value].split(",");
  for(var i = 0;i < prefTimeTemp.length;i++){
    for(var j = 0;j < prefTimeArray.length;j++){
      if(prefTimeArray[j].substring(prefTimeArray[j].indexOf("-")+1) == prefTimeTemp[i].substring(0, prefTimeTemp[i].indexOf("-"))){
        prefTimeArray[j] = prefTimeArray[j].substring(0, prefTimeArray[j].indexOf("-")) + "-" +
prefTimeTemp[i].substring(prefTimeTemp[i].indexOf("-")+1);
        cannotBeCombined = false;
        break;
      }
    }
    if(cannotBeCombined){
      prefTimeArray[prefTimeArray.length] = prefTimeTemp[i];
    }
  }
  for(var i = 0;i < prefTimeArray.length;i++){
    var timeVal = prefTimeArray[i].split("-");
    var upperLess = false;
    var lowerMore = false;
    if(parseInt(timeTo.substring(0, timeTo.indexOf(":")), 10) < parseInt(timeVal[1].substring(0, timeVal[1].indexOf(":")), 10)){
      upperLess = true;
      //alert("passed upper");
    }
    if((parseInt(timeTo.substring(0, timeTo.indexOf(":")), 10) == parseInt(timeVal[1].substring(0, timeVal[1].indexOf(":")),
10))&&(parseInt(timeTo.substring(timeTo.indexOf(":")+1), 10) <= parseInt(timeVal[1].substring(timeVal[1].indexOf(":")+1), 10))){
      upperLess = true;
      //alert("passed upper");
    }
    if(parseInt(timeFrom.substring(0, timeFrom.indexOf(":")), 10) > parseInt(timeVal[0].substring(0, timeVal[0].indexOf(":")), 10)){
      lowerMore = true;
      //alert("passed lower");
    }
    if((parseInt(timeFrom.substring(0, timeFrom.indexOf(":")), 10) == parseInt(timeVal[0].substring(0, timeVal[0].indexOf(":")),
10))&&(parseInt(timeFrom.substring(timeFrom.indexOf(":")+1), 10) >= parseInt(timeVal[0].substring(timeVal[0].indexOf(":")+1), 10))){
      lowerMore = true;
      //alert("passed lower");
    }
    if((upperLess)&&(lowerMore)){
      break;
    }
    else{
      if(i == prefTimeArray.length - 1){
        var errorText = "error\n\n";
        errorText = errorText + "Please make sure that your preferred time\nis within one of these time intervals:\n";
        for(var j = 0;j < prefTimeArray.length;j++){
          errorText = errorText + "\n\t" + timeConvertForDisplay(prefTimeArray[j]);
        }
        alert(errorText);
        return false;
      }
    }
  }
  return true;
}
function sendTutorialIdToEnlist(tutorialIdToEnlist){
  document.enlistAvailableTutorialForm.tutorialIdToEnlistH.value = tutorialIdToEnlist;
  document.enlistAvailableTutorialForm.submit();
}
function sendTutorialIdToDelist(tutorialIdToDelist){
  if(confirm("You are about to cancel your enlistment from a 'Tutorial Schedlue'\ndo you want to continue?")){
    document.delistAvailableTutorialForm.tutorialIdToDelistH.value = tutorialIdToDelist;
    document.delistAvailableTutorialForm.submit();
  }
  else{
    return true;
  }
}
function cursorForButtonToLink(currentElement){
  currentElement.style.cursor = "hand";
}
function setBatchScheduleToRegister(currentForm, batchScheduleIdToRegister, remainingSlots){
  if(remainingSlots > 0){
    currentForm.batchScheduleIdToRegisterH.value = batchScheduleIdToRegister;
    currentForm.submit();
  }
  else{
    if(confirm("The EXAM BATCH SCHEDULE you are registering is already full.\nDo you want to continue?")){
      currentForm.batchScheduleIdToRegisterH.value = batchScheduleIdToRegister;
      currentForm.submit();
    }
  }
}
```

```
function setBatchScheduleToUnregister(currentForm, batchScheduleIdToUnregister){
  currentForm.batchScheduleIdToUnregisterH.value = batchScheduleIdToUnregister;
  currentForm.submit();
}
function studentPasswordCheck(currentForm){
  if(currentForm.passwordNew.value.length < 8){
    alert("error: please use passwords of length 8 or more");
    currentForm.passwordNew.select();
    return false;
  }
  if(currentForm.passwordNewR.value.length < 8){
    alert("error: please use passwords of length 8 or more");
    currentForm.passwordNewR.select();
    return false;
  }
}
function setBatchIdResultToDisplay(batchId){
  document.batchIdResultToDisplayForm.batchIdResultToDisplay.value = batchId;
  document.batchIdResultToDisplayForm.submit();
}
function openPriorityTable(total, priority, pn){
  eval("optWindow = window.open('/toes/optPage.php?total=" + total + "&priority=" + priority + "&pn=" + pn + "','optWindow','WIDTH=" + (300)  +
",HEIGHT=" + (screen.height * .5) + ",status,scrollbars');");
  keepWindowOnTOp(optWindow);
}
function keepWindowOnTOp(){
  optWindow.focus();
  windowDisplayTimer = setTimeout("keepWindowOnTopA()", 1);
}
function keepWindowOnTopA(){
  if(windowDisplayTimer){
    clearTimeout(windowDisplayTimer);
  }
  if(optWindow != null){
    optWindow.focus();
    windowDisplayTimer = setTimeout("keepWindowOnTopA()", 1);
  }
}
function showHideReminders(currentElement){
  if(currentElement.value == "show reminders"){
    currentElement.value = "hide reminders";
    document.getElementById("remindersSpan").style.display = "";
  }
  else{
    currentElement.value = "show reminders";
    document.getElementById("remindersSpan").style.display = "none";
  }
}
```

H. TUTOR

tutor.php

```
<?php
session_start();
require_once('../toes.inc.php');
require_once('tutor_fcns.php');
if($firstVisit == "true"){
  $errorMessage = "";
}
$username;
$password;
if($Logout == '1'){
  session_unregister("username");
  session_unregister("password");
  session_unregister("hasLoggedIn");
  session_unregister("errorMessage");
  session_unregister("userScript");
  $Logout = 0;
  $hasLoggedIn = 0;
  $errorMessage = "";
  $returnToHomepage = true;
}
if(($Login)&&($Logout != '1')){
  authorized_User();
  session_register("hasLoggedIn");
  header("Location: " . 'http://' . $_SERVER["HTTP_HOST"] . $_SERVER["PHP_SELF"]);
}
if(($_SESSION["hasLoggedIn"] == '1')&&($_SESSION["userScript"] == 'tutor.php')){
  if($activeNav == ""){
    $activeNav = "My Schedule";
  }
  print_Top_Nav();
  print_Banner();
  print_Nav();
  print_Tab();
  print_Body();
  print_Footer();
}
else{
  if($hasLoggedIn == '2'){
    //echo "$errorMessage";
    //echo "<br>";
  }
  display_Login_Form();
}
/////////////////////////////////////////////////////////
function print_Top_Nav(){
  print("<html>");
  print("<head>");
  print("<title>TUTOR Module</title>");
  echo "<SCRIPT LANGUAGE='JavaScript' SRC='tutor_JavaScript.js'></SCRIPT>";
  print("<link rel='stylesheet' type='text/css' href='tutor_Style.css'/>");
  print("</head>");
  print("<body onLoad=\"window_Onload('$activeNav', '$activeTab')\">");

  print("<div>");
  print("<ul class='topnav'>");
  print("<li><a href='/custhelp.php?statpos=topnav'>Help</a></li>");
  print("<li class='lastli'><a href='?Logout=1'>Log Out</a></li>");
  print("</ul>");
  print("</div>");
  print("<br>");
}
/////////////////////////////////////////////////////////
function print_Banner(){
  global $username;
  echo "<div class='banner'>";
  echo "<table>";
  echo "<tr><td height='100px' width='382px' background='/toes/files/pics/toes_logo.jpg'></td>";
  echo "<td height='100px' width='200px' background='/toes/files/pics/main-page_logos_upm_lrc.gif'></td>";
  echo "<td height='100px' width='382px' background='/toes/files/pics/tutor.gif' align='center' valign='bottom' style='padding-
bottom:10px;'><font style='vertical-align:text-bottom;' size='4px' color='#808080'>$username</font></td>";
  echo "</tr></table>";
  echo "</div>";
}
//////////////////////////////////////////////////////////
function print_Nav(){
  global $activeNav;
  global $activeTab;
  print("<div id='nav'><div><ul>");
  if($activeNav == 'My Schedule')
    print("<li class='navselected'>");
  else
    print("<li>");
  print("<a href='?activeNav=My Schedule&activeTab='>My Schedule</a></li>");
  if($activeNav == 'My Account')
    print("<li class='navselected'>");
  else
    print("<li class='lastli'>");
  print("<a href='?activeNav=My Account&activeTab='>My Account</a></li>");
  print("&nbsp");
  print("</ul>");
  print("</div></div>");
  //print("<br>");
  echo "<div style='background-color:FFFFFF;font-size:75%;'>&nbsp;</div>";
}
//////////////////////////////////////////////////////////
function print_Tab(){
  global $activeNav;
  global $activeTab;

  print("<div id='content'>");
  print("<ul class='tabs'>");

  switch($activeNav){
    case 'My Schedule':
      if($activeTab == ''){
        $activeTab = 'My Tutorials';
      }
      if($activeTab == 'My Tutorials')
        print("<li class='tabselected'>My Tutorials</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=My Tutorials'>My Tutorials</a></li>");
      if($activeTab == 'My Subjects')
        print("<li class='tabselected'>My Subjects</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=My Subjects'>My Subjects</a></li>");
      if($activeTab == 'My Freetime')
        print("<li class='tabselected'>My Freetime</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=My Freetime'>My Freetime</a></li>");
      break;
    case 'My Account':
      if($activeTab == ''){
        $activeTab = 'View My Account';
      }
      if($activeTab == 'View My Account')
        print("<li class='tabselected'>View My Account</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=View My Account'>View My Account</a></li>");
      if($activeTab == 'Change Password')
        print("<li class='tabselected'>Change Password</li>");
      else
        print("<li><a href='?activeNav=$activeNav&activeTab=Change Password'>Change Password</a></li>");
      break;
    default:
      break;
  }
  print("</ul>");

}
//////////////////////////////////////////////////////////
function print_Body(){
  print("<div class='content'>");
  print("<div class='inside'>");
  //print("<div class='insidebody'>");

  print_Function();

  //print("</div>");
  print("</div>");
  print("</div>");
}
//////////////////////////////////////////////////////////
function print_Function(){
  global $activeNav;
  global $activeTab;
  if($activeNav == ''){
    print("Please select from the menu!");
  }
  else{
    switch($activeTab){
      case 'My Tutorials':
        view_My_Tutorials();
        break;
      case 'My Subjects':
        manage_Tutored_Subjects();
        break;
      case 'My Freetime':
        manage_Tutor_Schedule();
        break;
      case 'View My Account':
        view_Account();
        break;
      case 'Change Password':
        manage_Password();
        break;
      default:
        print("Please select from the tabbed-menu!");
        break;
    }
  }
}
//////////////////////////////////////////////////////////
function print_Footer(){
  print("<div>");
  print("<div id='footer'>");
  print(" <div>University of the Philippines Manila, Learning Resource Center's</div>");
  print(" <div>Tutorial and Online Examination System (TOES)</div>");
  print(" <div>Copyright © 2006</div>");
  print("</div>");
  print("<div style='width:780px'>&nbsp;</div>");
  print("</div>");
  print("</div>");
  echo "<div style='background-color:#008000'>&nbsp;</div>";
  print("</body>");
  print("</html>");
}
```

```
//////////////////////////////////////////////////////////
function toHtml($htmlLine){
  return (str_replace("\"","\\\"",$htmlLine));
}
//////////////////////////////////////////////////////////
function authorized_User(){
  global $username;
  global $password;
  global $errorMessage;
  global $hasLoggedIn;
  global $userScript;

  connect_Db();
  $query = "SELECT * FROM tutor where username='$username' and password='$password' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_array($result);

  if(($username != NULL)&&($password != NULL)&&($myrow[username] == $username)&&($myrow[password] == $password)){
    $hasLoggedIn=1;
    session_register("hasLoggedIn");
    session_register("username");
    session_register("password");
    $userScript= 'tutor.php';
    session_register("userScript");
  }
  else{
    if(($username == NULL)||($password == NULL)){
      $errorMessage = "error: Please enter your username and password!";
    }
    else{
      $errorMessage = "error: Invalid username or password!";
    }

    session_register("errorMessage");
    $hasLoggedIn=2;
    session_register("hasLoggedIn");
  }
}
//////////////////////////////////////////////////////////
function display_Login_Form(){
  global $username;
  global $password;
  global $hasLoggedIn;
  global $Logout;
  global $errorMessage;
  global $returnToHomepage;

  echo "<html style='background-image:url(\"/toes/files/pics/toes_logo_userLogin.jpg\");'>";
  echo "<head>";
  echo "<title>TUTOR Login Page</title>";
  echo "<SCRIPT LANGUAGE='JavaScript' SRC='tutor_JavaScript.js'></SCRIPT>";
  echo "</head>";
  if($returnToHomepage){
    echo "<body onLoad='window.location=\"/toes/\"'>";
  }
  else{
    echo "<body onLoad='animateUsingToesColors(\"toesHomeLink\")'>";
  }
  echo "<table width='100%' height='100%' border='0' cellpadding='0' cellspacing='0'>";
  echo "<tr><td valign='middle' align='center'>";
  echo "<table align='center' border='0' cellpadding='0' cellspacing='0' >";
  echo "<tr><td align='right' bgcolor='#FF0000'><b><a id='toesHomeLink' href='/toes/' style='color:white;text-decoration:none;'>back to TOES
home page</a></b></td></tr>";
  echo "<tr><td><a href='/toes/index.php' title='home'><img src='/toes/files/pics/toes.gif' style='border: 0 none;'/></a></td></tr>";
  echo "<tr><td bgcolor='#FF0000'><img src='/toes/files/pics/tutor_o.gif'/></td></tr>";
  echo "<tr><td bgcolor='#FF0000'>&nbsp;</td></tr>";
  echo "<tr><td align='center' bgcolor='#FF0000'>";
  //echo "[username=$username][password=$password][hasLoggedIn=$hasLoggedIn][Logout=$Logout][userScript=$userScript]";
  print("<table bgcolor='#c0c0c0'>");
  print("<form name='loginForm' method='post' action='$PHP_SELF' onSubmit='return loginFormCheck(this)'>");
  if($errorMessage != ""){
    echo "<tr><td colspan='2'>$errorMessage</td></tr>";
  }
  echo "<tr><td>Username:</td><td><input type='text' name='username' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td>Password:</td><td><input type='password' name='password' maxLength='16' size='16'></td></tr>";
  print("<tr><td colspan='2' align='center'><input type='submit' name='Login' value='Login'></td></tr>");
  print("</form>");
  print("</table>");
  echo "</td></tr>";
  echo "<tr><td bgcolor='#FF0000'>&nbsp;</td></tr>";
  echo "</td></tr></table>";
  echo "</body>";
  echo "</html>";
}
//////////////////////////////////////////////////////////
function refresh_Page($location){
  header("Location: $location");
}
//////////////////////////////////////////////////////////
function connect_Db() {
    //$dbuser = '';
    //$dbpword = '';
    //$dbhost = 'localhost';
    //$dbname = 'eav';
    //$db_connection = mysql_connect ($dbhost, $dbuser, $dbpword);
  //mysql_select_db ($dbname);
  $db = mysql_connect("localhost", "");
  mysql_select_db("toes",$db);
}
//////////////////////////////////////////////////////////
?>
```

tutor_Fcns.php

```
<?php
//////////////////////////////////////////////////////////
function view_Account(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }

  connect_Db();
  if($tutorAccountSubmit == "update"){
    $query = "UPDATE tutor SET mobilePhone='$mobilePhone', landPhone='$landPhone', email='$email' WHERE username='$username' AND
password='$password' ";
    $result = mysql_query($query);
    echo "message: the update was successfull.<br><br>";
  }
  $query = "SELECT * FROM tutor where username='$username' and password='$password' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  echo "<table border='1'>";
  echo "<form name='tutorAccountForm' method='POST' action='' >";
  echo "<tr><td>name</td><td>$myrow[1] $myrow[2] $myrow[3]</td></tr>";
  echo "<tr><td>birthday</td><td>$myrow[4]</td></tr>";
  echo "<tr><td>mobile phone</td><td><input type='text' name='mobilePhone' maxLength='15' size='15' value='$myrow[7]'/></td></tr>";
  echo "<tr><td>land phone</td><td><input type='text' name='landPhone' maxLength='15' size='15' value='$myrow[8]'/></td></tr>";
  echo "<tr><td>email</td><td><input type='text' name='email' value='$myrow[9]'/></td></tr>";
  if($myrow[10] == "f"){
    $queryA = "SELECT departmentName FROM upm_departments WHERE department_id='$myrow[11]' ";
    $resultA = mysql_query($queryA);
    $myrowA = mysql_fetch_row($resultA);
    echo "<tr><td>department</td><td>$myrowA[0]</td></tr>";
  }
  else{
    $queryA = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrow[11]' ";
    $resultA = mysql_query($queryA);
    $myrowA = mysql_fetch_row($resultA);
    echo "<tr><td>course</td><td>$myrowA[0]</td></tr>";
  }
  echo  "<tr><td  colspan='2'  align='center'><input  type='submit'  name='tutorAccountSubmit'  value='update'/><button  type='reset'  name='reset'
value='reset'>reset</button></td></tr>";
  echo "<form>";
  echo "</table>";
}
//////////////////////////////////////////////////////////
function manage_Password(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  if($tutorPasswordSubmit == "change"){
    connect_Db();
    if($password != $passwordOld){
      echo "error: the supplied 'old password' does not match the one stored in the database.<br><br>";
    }
    else{
      if($passwordNew != $passwordNewR){
        echo "error: the 'new password' and the 'retyped new password' does not match.<br><br>";
      }
      else{
        $query = "UPDATE tutor SET password='$passwordNew', username='$usernameNew' WHERE username='$username' AND password='$password' ";
        $result = mysql_query($query);
        if($username != $usernameNew){
          echo "message: the 'new username' was successfully stored.<br><br>";
        }
        echo "message: the 'new password' was successfully stored.<br><br>";
        $username = $usernameNew;
        $password = $passwordNew;
        session_register("username");
        session_register("password");
      }
    }
  }
  echo "<table border='1'>";
  echo "<form name='tutorPasswordForm' method='POST' action='' onSubmit='return tutorPasswordCheck(this)'>";
  echo "<tr><td>username</td><td><input type='text' name='usernameNew' maxLength='16' size='16' value='$username'/></td></tr>";
  echo "<tr><td>old password</td><td><input type='password' name='passwordOld' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td>new password</td><td><input type='password' name='passwordNew' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td>retype new password</td><td><input type='password' name='passwordNewR' maxLength='16' size='16'/></td></tr>";
  echo "<tr><td colspan='2' align='center'><input type='submit' name='tutorPasswordSubmit' value='change'/></td></tr>";
  echo "</form>";
  echo "</table>";
}
//////////////////////////////////////////////////////////
function manage_Tutored_Subjects(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  connect_Db();
  if($editTutorTutoredSubjects == 'save'){
    $tutoredSubjStr = implode(',',$tutoredSubj);
    $query = "UPDATE tutor SET tutoredSubject='$tutoredSubjStr' WHERE username='$username' AND password='$password' ";
    $result = mysql_query($query);
    echo "message: the tutored subject list was successfully updated.<br><br>";
  }
  if(!isset($tutoredSubj)){
    $query = "SELECT tutoredSubject FROM tutor WHERE username='$username' AND password='$password' ";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    if($myrow[0] != ""){
      $tutoredSubj = explode(",", $myrow[0]);
    }
    else{
      unset($tutoredSubj);
    }
  }
  echo "<table style='border-bottom:0px;' border='1' width='50%'>";
  echo "<form name='editTutorScheduleSubjects' action='' method='POST' >";
  echo "<tr><td colspan='2' align='center'>My Tutored Subjects</td></tr></table>";
  echo "<div style='height:200px; width:50%; overflow:auto;'>";
  echo "<table style='border-top:0px; border-bottom:0px;' border='1' width='100%'>";
  $query = "SELECT * FROM subject ORDER BY subjectName";
  $result = mysql_query($query);
  echo "<tr><td></td><td align='center'>Subject name</td><td align='center'>Subject description</td></tr>";
  while($myrow = mysql_fetch_row($result)){
    $isCheckedPreviously = 0;
    if(isset($tutoredSubj)){
      if(in_array($myrow[0], $tutoredSubj)){
        $isCheckedPreviously = 1;
      }
    }
    if($isCheckedPreviously == 1){
      echo                "<tr><td><input                type='checkbox'                name='tutoredSubj[]'                value='$myrow[0]'
checked='checked'/></td><td>$myrow[1]</td><td>$myrow[2]</td></tr>";
    }
    else{
      echo "<tr><td><input type='checkbox' name='tutoredSubj[]' value='$myrow[0]'/></td><td>$myrow[1]</td><td>$myrow[2]</td></tr>";
    }
  }
  echo "</table>";
  echo "</div>";
  echo "<table border='1' width='50%'><tr><td align='center'><input type='submit' name='editTutorTutoredSubjects' value='save'></tr></table>";
  echo "</form>";
}
//////////////////////////////////////////////////////////
function manage_Tutor_Schedule(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  connect_DB();
  $query = "SELECT tutor_id FROM tutor WHERE username='$username' AND password='$password' ";
  $result = mysql_query($query);
  $myrow = mysql_fetch_row($result);
  $tutor_id = $myrow[0];
  if($editTutorTimeSchedule == 'edit'){
    $query = "SELECT * FROM tutor_schedule WHERE tutorSchedule_id='$tutorSchedule_id'";
    $result = mysql_query($query);
    $myrow = mysql_fetch_row($result);
    $tutorSchedule_id = $myrow[0];
    $prefTimeArray = explode("-", $myrow[3]);
    $prefTimeFrom = $prefTimeArray[0];
    $prefTimeTo = $prefTimeArray[1];
    $day = explode(",", $myrow[2]);
  }
  if($editTutorTimeSchedule == 'delete'){
    connect_Db();
    $query = "DELETE from tutor_schedule WHERE tutorSchedule_id='$tutorSchedule_id'";
    $result = mysql_query($query);
    unset($day);
    unset($tutorSchedule_id);
    unset($prefTimeFrom);
    unset($prefTimeTo);
    echo "message: the old timeslot was successfully deleted!<br><br>";
  }
  if(($editTutorTimeSchedule == 'add')||($editTutorTimeSchedule == 'apply changes')){
    //check if new OR edited time conflicts with existing ones
    connect_Db();
    $noConflictFound = true;
    $a = str_replace(":", "", $prefTimeFrom);
    $b = str_replace(":", "", $prefTimeTo);
    if($a >= $b){
      echo "error: invalid time interval [$prefTimeFrom-$prefTimeTo].<br><br>";
      $noConflictFound = false;
    }
    else{
      for($i = 0;$i < count($day);$i++){
        if(isset($tutorSchedule_id)){
          $query = "SELECT prefTime FROM tutor_schedule WHERE prefDay LIKE '%$day[$i]%' AND tutor_id='$tutor_id' AND
tutorSchedule_id!='$tutorSchedule_id' ";
        }
        else{
          $query = "SELECT prefTime FROM tutor_schedule WHERE prefDay LIKE '%$day[$i]%' AND tutor_id='$tutor_id' ";
        }
        $result = mysql_query($query);
        while($myrow = mysql_fetch_row($result)){
          $tempArray = explode("-", $myrow[0]);
          $c = str_replace(":", "", $tempArray[0]);
          $d = str_replace(":", "", $tempArray[1]);
          unset($tempArray);
          if((($c < $a)&&($a < $d))||(($c < $b)&&($b < $d))||(($a < $c)&&($c < $b))||(($a < $d)&&($d < $b))||(($a == $c)&&($b == $d))){
            echo "error: the timeslot [$prefTimeFrom-$prefTimeTo $day[$i]] conflicts with an existing one.<br><br>";
            $noConflictFound = false;
            break;
          }
        }
        if(!$noConflictFound){
          break;
        }
      }
    }
    if($noConflictFound){
      if(count($day) == 0){
        echo "message: the day attribute in the submitted timeslot was missing.<br><br>";
      }
      else{
        $prefDay = implode(",", $day);
        $prefTime = $prefTimeFrom.'-'.$prefTimeTo;
        if((isset($tutorSchedule_id))&&($tutorSchedule_id != "")){
          $query = "UPDATE tutor_schedule SET tutor_id='$tutor_id', prefDay='$prefDay', prefTime='$prefTime' WHERE
tutorSchedule_id='$tutorSchedule_id'";
          $result = mysql_query($query);
          echo "message: the old timeslot was successfully edited!<br><br>";
        }
        else{
          $nextId = get_Next_Id('tutorSchedule_id','tutor_schedule');
          $query = "INSERT INTO tutor_schedule VALUES ('$nextId', '$tutor_id', '$prefDay', '$prefTime')";
          $result = mysql_query($query);
          echo "message: the new timeslot was successfully added!<br><br>";
        }
      }
    }
    $prefTimeFrom = "";
    $prefTimeTo = "";
    unset($day);
    unset($tutorSchedule_id);
  }
  $dayNameArray = array('Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday');
  echo "<table border='1' >";
  echo "<form name='editTutorScheduleSubjects' action='' method='POST' >";
  echo "<input type='hidden' name='tutorSchedule_id' value='$tutorSchedule_id'/>";
  echo "<tr><td align='center' colspan='".(3 + count($dayNameArray))."'>Timeslots</td></tr>";
  echo "<tr><td></td><td align='center'>Time</td>";
  foreach($dayNameArray AS $dayNameArrayElem){
    echo "<td align='center'>$dayNameArrayElem</td>";
  }
  echo "</tr>";
  $query = "SELECT * FROM tutor_schedule WHERE tutor_id='$tutor_id' ORDER BY prefTime ";
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    while($myrow = mysql_fetch_row($result)){
      echo "<tr><td>";
      if($tutorSchedule_id == $myrow[0]){
        echo "*edit";
      }
      else{
        echo "<a href='javascript:void editTutorScheduleSubjectsJs(\"edit\", \"$myrow[0]\")'>edit</a>";
      }
      echo "&nbsp";
      echo "<a href='javascript:void editTutorScheduleSubjectsJs(\"delete\", \"$myrow[0]\")'>delete</a>";
      echo "</td>";
      $tempTimeStr = getTimeslotDisplay($myrow[3]);
      echo "<td>$tempTimeStr</td>";
      $tempArray = explode(",", $myrow[2]);
      foreach($dayNameArray AS $dayNameArrayElem){
        if(in_array($dayNameArrayElem, $tempArray)){
          echo "<td align='center'>+</td>";
        }
        else{
          echo "<td align='center'>&nbsp;</td>";
        }
      }
    }
  }
  else{
    echo "<tr><td colspan='".(3 + count($dayNameArray))."' align='center'>no records</td></tr>";
  }
  if(isset($tutorSchedule_id)){
    echo "<tr><td colspan='".(3 + count($dayNameArray))."' id='tdWhiteBg' align='center'>* currently being edited</td></tr>";
  }
  else{
    echo "<tr><td colspan='".(3 + count($dayNameArray))."' id='tdWhiteBg' align='center'>&nbsp</td></tr>";
  }
  echo "<tr><td>Time</td><td colspan='".(2 + count($dayNameArray))."'>from&nbsp";
  echo "<select name='prefTimeFrom'>";
  $timeDisplayMod = 'AM';
  for($i = 8;$i < 18;$i++){
    if($i > 11){
      $timeDisplayMod = 'PM';
    }
    if($i > 12){
      $timeDisplayFixed = $i - 12;
    }
    else{
      $timeDisplayFixed = $i;
    }
    $timeVal = $i.':00';
    if(strlen($timeVal) == 4){
      $timeVal = '0'.$timeVal;
    }
    $timeDisplay = $timeDisplayFixed.':00';
    if($prefTimeFrom == $timeVal){
      echo "<option value='$timeVal' selected='selected'>$timeDisplay $timeDisplayMod</option>";
    }
    else{
      echo "<option value='$timeVal'>$timeDisplay $timeDisplayMod</option>";
    }
    $timeVal = $i.':30';
    if(strlen($timeVal) == 4){
      $timeVal = '0'.$timeVal;
    }
    $timeDisplay = $timeDisplayFixed.':30';
    if($prefTimeFrom == $timeVal){
      echo "<option value='$timeVal' selected='selected'>$timeDisplay $timeDisplayMod</option>";
    }
    else{
      echo "<option value='$timeVal'>$timeDisplay $timeDisplayMod</option>";
    }
  }
  echo "</select>";

  echo "&nbspto&nbsp";
  echo "<select name='prefTimeTo'>";
  $timeDisplayMod = 'AM';
  for($i = 8;$i < 18;$i++){
    if($i > 11){
      $timeDisplayMod = 'PM';
    }
    if($i > 12){
      $timeDisplayFixed = $i - 12;
    }
    else{
      $timeDisplayFixed = $i;
    }
    $timeVal = $i.':00';
    if(strlen($timeVal) == 4){
      $timeVal = '0'.$timeVal;
    }
    $timeDisplay = $timeDisplayFixed.':00';
    if($prefTimeTo == $timeVal){
      echo "<option value='$timeVal' selected='selected'>$timeDisplay $timeDisplayMod</option>";
    }
    else{
      echo "<option value='$timeVal'>$timeDisplay $timeDisplayMod</option>";
    }
    $timeVal = $i.':30';
    if(strlen($timeVal) == 4){
      $timeVal = '0'.$timeVal;
    }
    $timeDisplay = $timeDisplayFixed.':30';
    if($prefTimeTo == $timeVal){
      echo "<option value='$timeVal' selected='selected'>$timeDisplay $timeDisplayMod</option>";
    }
    else{
      echo "<option value='$timeVal'>$timeDisplay $timeDisplayMod</option>";
    }
  }
  echo "</select>";
  echo "</td></tr>";
  echo "<tr><td>Day</td><td colspan='".(2 + count($dayNameArray))."'>";
  $dayNameArray = array('Monday', 'Tuesday', 'Wednesday', 'Thursday', 'Friday');
  foreach($dayNameArray as $dayNameElem){
    $isCheckedPreviously = 0;
    if(isset($day)){
      foreach($day as $dayElem){
        if($dayNameElem == $dayElem){
          $isCheckedPreviously = 1;
          break;
        }
      }
    }
    if($isCheckedPreviously == 1){
      echo "<input type='checkbox' name='day[]' value='$dayNameElem' checked='checked'/>$dayNameElem";
    }
    else{
      echo "<input type='checkbox' name='day[]' value='$dayNameElem'/>$dayNameElem";
    }
  }
  echo "</td></tr>";
  if($editTutorTimeSchedule == 'edit'){
    echo  "<tr><td  colspan='".(3  +  count($dayNameArray))."'  align='center'><input  type='submit'  name='editTutorTimeSchedule'  value='apply
changes'>";
    echo "<button type='reset' name='reset' value='reset'>reset</button></td></tr>";
  }
  else{
    echo    "<tr><td    colspan='".(3    +    count($dayNameArray))."'    align='center'><input    type='submit'    name='editTutorTimeSchedule'
value='add'></td></tr>";
  }
  echo "</form>";
  echo "</table>";
}
/////////////////////////////////////////////////////////
function getTimeslotDisplay($timeslot){
  $timeslotArray = explode("-", $timeslot);
  $timeslotArrayL = explode(":", $timeslotArray[0]);
  if($timeslotArrayL[0] > 11){
    $timeslotArrayL[1] = $timeslotArrayL[1].'PM';
  }
  else{
    $timeslotArrayL[1] = $timeslotArrayL[1].'AM';
  }
  if($timeslotArrayL[0] > 12){
    $timeslotArrayL[0] = $timeslotArrayL[0] - 12;
  }
  $timeslotArrayR = explode(":", $timeslotArray[1]);
  if($timeslotArrayR[0] > 11){
    $timeslotArrayR[1] = $timeslotArrayR[1].'PM';
  }
  else{
    $timeslotArrayR[1] = $timeslotArrayR[1].'AM';
  }
  if($timeslotArrayR[0] > 12){
    $timeslotArrayR[0] = $timeslotArrayR[0] - 12;
  }
  $timeslotArray[0] = implode(":", $timeslotArrayL);
  $timeslotArray[1] = implode(":", $timeslotArrayR);
  if(strlen($timeslotArray[0]) == 6){
    $timeslotArray[0] = '0'.$timeslotArray[0];
  }
  if(strlen($timeslotArray[1]) == 6){
    $timeslotArray[1] = '0'.$timeslotArray[1];
  }
  return implode("-", $timeslotArray);
}
//////////////////////////////////////////////////////////
function view_My_Tutorials(){
  foreach($GLOBALS as $key=>$value){
    if ( ereg("[a-z]", $key[0],$array ) ){
      global $$key;
    }
  }
  echo "<table width='100%'>";
  echo "<tr><td align='center'>Current Tutorial Schedules</td></tr>";
  echo "</table>";
  connect_Db();
  $query = "SELECT DISTINCT(tutorial.tutorial_id), subject.subjectName, tutorial.topic, tutorial.date, tutorial.time, CONCAT(tutor.firstName, '
', tutor.middleName, ' ', tutor.lastName) AS tutorFullname, tutor.tutorType, tutor.deptCourse, a.student_number FROM subject, tutor, tutorial
LEFT JOIN attendance AS a ON (tutorial.tutorial_id=a.tutorial_id) WHERE tutorial.tutor_id=tutor.tutor_id AND
tutorial.subject=subject.subject_id AND tutor.username='$username' AND tutor.password='$password' ";
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    $currentTutorialCount = 0;
    while($myrow = mysql_fetch_row($result)){
      if($myrow[8] != ""){
        continue;
      }
      $currentTutorialCount++;
      if($currentTutorialCount == 1){
        echo "<div style='height:auto; width:100%; overflow:scroll;'>";
        $tutorialSchedulesTableColumnNames = array('Subject', 'Topic', 'Date', 'Time', 'Tutor', 'Course/Department');
        echo "<table id='tutorScheduleTable' width='100%' border='1'>";
        echo "<tr>";
        foreach($tutorialSchedulesTableColumnNames AS $tutorialSchedulesTableColumnNamesElem){
          echo "<td align='center'>$tutorialSchedulesTableColumnNamesElem</td>";
        }
        echo "</tr>";
      }
      echo "<tr><td>$myrow[1]</td>";
      echo "<td>";
      foreach(explode(",", $myrow[2]) AS $topicArrayElem){
        $queryA = "SELECT topicName FROM topic WHERE topic_id='$topicArrayElem' ";
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        echo "$myrowA[0]<br>";
      }
      echo "</td>";
      echo "<td>".reformatDateForDisplay($myrow[3])."</td>";
      echo "<td>".reformatTimeForDisplay($myrow[4])."</td>";
      echo "<td>$myrow[5]</td>";
      echo "<td>";
      if($myrow[6] == 'p'){
        echo "peer:<br>";
        $queryA = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrow[7]' ";
      }
      else{
        echo "faculty:<br>";
        $queryA = "SELECT departmentName FROM upm_departments WHERE department_id='$myrow[7]' ";
      }
      $resultA = mysql_query($queryA);
      $myrowA = mysql_fetch_row($resultA);
      echo "$myrowA[0]";
      echo "</td></tr>";
    }
    if($currentTutorialCount != 0){
      echo "</table>";
      echo "</div>";
    }
    else{
      echo "<table width='100%'>";
      echo "<tr><td align='center'>no records</td></tr>";
      echo "</table>";
    }
  }
  else{
    echo "<table width='100%'>";
    echo "<tr><td align='center'>no records</td></tr>";
    echo "</table>";
  }

  echo "<br>";
  echo "<table width='100%'>";
  echo "<tr><td align='center'>Previous Tutorial Schedules</td></tr>";
  echo "</table>";
  connect_Db();
  $query = "SELECT DISTINCT(tutorial.tutorial_id), subject.subjectName, tutorial.topic, tutorial.date, tutorial.time, CONCAT(tutor.firstName, '
', tutor.middleName, ' ', tutor.lastName) AS tutorFullname, tutor.tutorType, tutor.deptCourse FROM subject, tutor, tutorial LEFT JOIN
attendance AS a ON (tutorial.tutorial_id=a.tutorial_id) WHERE a.tutorial_id!='null' AND tutorial.tutor_id=tutor.tutor_id AND
tutorial.subject=subject.subject_id AND tutor.username='$username' AND tutor.password='$password' ";
  $result = mysql_query($query);
  if(mysql_num_rows($result) > 0){
    echo "<div style='height:auto; width:100%; overflow:scroll;'>";
    $tutorialSchedulesTableColumnNames = array('attendees', 'Subject', 'Topic', 'Date', 'Time', 'Tutor', 'Course/Department');
    echo "<table id='tutorScheduleTable' width='100%' border='1'>";
    echo "<tr>";
    foreach($tutorialSchedulesTableColumnNames AS $tutorialSchedulesTableColumnNamesElem){
      echo "<td align='center'>$tutorialSchedulesTableColumnNamesElem</td>";
    }
    echo "</tr>";
    while($myrow = mysql_fetch_row($result)){
      $queryA = "SELECT student_number FROM attendance WHERE tutorial_id='$myrow[0]' ";
      $resultA = mysql_query($queryA);
      echo "<tr><td align='center'>".mysql_num_rows($resultA)."</td>";
      echo "<td>$myrow[1]</td>";
      echo "<td>";
      foreach(explode(",", $myrow[2]) AS $topicArrayElem){
        $queryA = "SELECT topicName FROM topic WHERE topic_id='$topicArrayElem' ";
        $resultA = mysql_query($queryA);
        $myrowA = mysql_fetch_row($resultA);
        echo "$myrowA[0]<br>";
      }
      echo "</td>";
      echo "<td>".reformatDateForDisplay($myrow[3])."</td>";
      echo "<td>".reformatTimeForDisplay($myrow[4])."</td>";
      echo "<td>$myrow[5]</td>";
      echo "<td>";
      if($myrow[6] == 'p'){
        echo "peer:<br>";
        $queryA = "SELECT degreeProgramName FROM degree_programs WHERE degreeProgram_id='$myrow[7]' ";
      }
      else{
        echo "faculty:<br>";
        $queryA = "SELECT departmentName FROM upm_departments WHERE department_id='$myrow[7]' ";
      }
      $resultA = mysql_query($queryA);
      $myrowA = mysql_fetch_row($resultA);
      echo "$myrowA[0]";
      echo "</td></tr>";
    }
    echo "</table>";
    echo "</div>";
  }
  else{
    echo "<table width='100%'>";
    echo "<tr><td align='center'>no records</td></tr>";
    echo "</table>";
  }
}
//////////////////////////////////////////////////////////
function reformatDateForDisplay($date){
  $dateArray = explode("-", $date);
  $dateUnix = mktime("", "", "", $dateArray[1], $dateArray[2], $dateArray[0]);
  return date("l F j, Y", $dateUnix);
}
//////////////////////////////////////////////////////////
function reformatTimeForDisplay($time){
  $timeArray = explode("-", $time);
  $index = 0;
  foreach($timeArray AS $timeArrayElem){
    //fileter seconds if it exists...
    if(strlen($timeArrayElem) == 8){
      $s = ":".substr($timeArrayElem, 6);
      $timeArrayElem = substr($timeArrayElem, 0, 5);
    }
    $timeExt = "AM";
    $timeArrayElemArray = explode(":", $timeArrayElem);
    if(substr($timeArrayElemArray[0], 0, 1) == "0"){
      $timeArrayElemArray[0] = substr($timeArrayElemArray[0], 1, 1);
    }
    if($timeArrayElemArray[0] > 11){
      $timeExt = 'PM';
    }
    if($timeArrayElemArray[0] > 12){
      $timeArrayElemArray[0] = $timeArrayElemArray[0] - 12;
    }
    $timeArray[$index] = implode(":", $timeArrayElemArray)."$s ".$timeExt;
    $index++;
  }
  return implode("-", $timeArray);
}
//////////////////////////////////////////////////////////
function get_next_id($id, $table){
  $previous = 0;
  $current = 0;
  connect_Db();
  $query = "SELECT $id FROM $table ORDER BY $id";
  $result = mysql_query($query);
  while($myrow = mysql_fetch_row($result)){
    $current = $myrow[0];
    if($current-$previous > 1){
      return $previous+1;
    }
    $previous = $current;
  }
  return $current+1;
}
?>
```

tutor_Javascript.php

```
var animateUsingToesColorsIndex = 0;
var animateUsingToesColorsInterval = 0;
var animateUsingToesColorsElement = "";
function animateUsingToesColors(elementId){
  if(animateUsingToesColorsElement == ""){
    animateUsingToesColorsElement = elementId
  }
  var secs = 0;
  var color = "white";
  if(animateUsingToesColorsInterval){
    clearInterval(animateUsingToesColorsInterval);
  }
  animateUsingToesColorsIndex++;
  animateUsingToesColorsIndex = animateUsingToesColorsIndex % 9;
  switch(animateUsingToesColorsIndex){
    case 1:
      color = "blue";
      secs = 1000;
      break;
    case 2:
      color = "red";
      secs = 1000;
      break;
    case 3:
      color = "green";
      secs = 1000;
      break;
    case 4:
      color = "yellow";
      secs = 1000;
      break;
    case 5:
      color = "blue";
      secs = 500;
      break;
    case 6:
      color = "red";
      secs = 500;
      break;
    case 7:
      color = "green";
      secs = 500;
      break;
    case 8:
      color = "yellow";
      secs = 500;
      break;
    default:
      color = "white";
      secs = 1;
      break;
  }
  document.getElementById(animateUsingToesColorsElement).style.color = color;
  animateUsingToesColorsInterval = setInterval(animateUsingToesColors, secs);
}
function loginFormCheck(currentForm){
  if(currentForm.username.value == ""){
    alert("error: please include your username");
    return false;
  }
  if(currentForm.password.value == ""){
    alert("error: please include your password");
    return false;
  }
  return true;
}
function tutorPasswordCheck(currentForm){
  if(currentForm.passwordNew.value.length < 8){
    alert("error: please use passwords of length 8 or more");
    currentForm.passwordNew.select();
    return false;
  }
  if(currentForm.passwordNewR.value.length < 8){
    alert("error: please use passwords of length 8 or more");
    currentForm.passwordNewR.select();
    return false;
  }
  return true;
}
function highlightSystemMessages(){
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'error:', '<br><br>', '#000000', '#FF8080');
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'message:', '<br><br>', '#000000', '#80FF80');
  document.body.innerHTML = highlightMessage(document.body.innerHTML, 'warning:', '<br><br>', '#000000', '#FFFF80');
}
function highlightMessage(bodyText, searchTermA, searchTermB, textColor, bgColor){
  var highlightStartTag = "<font style='color:" + textColor + "; background-color:" + bgColor + ";line-height:1.1;'>";
  var highlightEndTag = "</font>";

  var newText = "";
  var i = -1;
  var j = -1;
  var lcBodyText = bodyText.toLowerCase();
  while(bodyText.length > 0){
    i = bodyText.indexOf(searchTermA, i+1);
    if(i < 0){
      newText += bodyText;
      bodyText = "";
    }
    else{
      // skip anything inside an HTML tag
      if(bodyText.lastIndexOf(">", i) >= bodyText.lastIndexOf("<", i)){
        // skip anything inside a <script> block
        if(lcBodyText.lastIndexOf("/script>", i) >= lcBodyText.lastIndexOf("<script", i)){
          //search for the closing term of the system message...
          j = lcBodyText.indexOf(searchTermB, i + searchTermA.length);
          if(j > 0){
            newText += bodyText.substring(0, i) + highlightStartTag + bodyText.substr(i, j - i) + highlightEndTag + bodyText.substr(j,
searchTermB.length);
            bodyText = bodyText.substr(j + searchTermB.length);
            j = -1;
          }
          else{
            newText += bodyText.substring(0, i) + bodyText.substr(i, searchTermA.length);
            bodyText = bodyText.substr(i + searchTermA.length);
          }
          lcBodyText = bodyText.toLowerCase();
          i = -1;
        }
      }
    }
  }
  return newText;
}
function window_Onload(activeNav, activeTab){
  highlightSystemMessages();
  if( top != self){
    top.location = location;
  }
}
function editTutorScheduleSubjectsJs(submitValue, id){
  document.editTutorScheduleSubjects.tutorSchedule_id.value = id;
  document.editTutorScheduleSubjects.editTutorTimeSchedule.value = submitValue;
  document.editTutorScheduleSubjects.editTutorTimeSchedule.click();
}
```

XI. ACKNOWLEDGEMENT

Ang proyektong ito ay produkto ng aking sariling dugo at pawis, kasama na ang suporta at pagkalinga ng aking mga magulang, kapuso!, kapamilya, kaibigan, at mga kakilala. Taos puso akong nagpapasalamat sa mga sumusunod:

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to the rest of my blockmates – sa ComSci boys: Dante, Marcus, Owel, Harby, Mike, Harold, Jreyman, Alain, Jed, Patrick, Ralph, Erwin, Jason, Vjohn, James, Ryan, Jr, at Jaypee. Syempre pati ang mga ComSci ladies: Shayne, Ice, Roselle, Josie, Mara, Karla, BH, Joehanna, Em, Karen, Julie, Daisy Liit, Daisy Laki, Cheza. Thank you for being there! Good luck sa ating lahat.

Internet – salamat sa hindi mabilang na impormasyong iyong naibahagi sa pagsasakatuparan ng aking projecto. Lalo ka na Google!

Mek – salamat at hanggang sa huling sandali kasama pa rin kita sa aking pagtakbo. Salamat at hindi ka sumuko kahit ilang beses tayong nabigo (at nagoverheat). Hmmm medyo napagiiwanan ka na hayaan mo upgrade tayo next time!

to my pets at home - kay miming, bebang, bitoy, oski, osang, at sa mga creepy crawlers! kakarelieve talaga ng stress whenever I see you guys around! Salamat Mother Nature, I hope madagdagan pa ang nature tripping activities ko in the future. Also (to the reader) please help preserve Mother Nature.