

University of the Philippines Manila
College of Arts and Sciences
Department of Physical Sciences and Mathematics

**Mobile Application:
Informative Camera (MAICAM)
for COA and ANSA-EAP**

A Special Problem in Partial Fulfillment
Of the Requirements for the Degree of
Bachelor of Science in Computer Science

Submitted by:

Jaimelyn P. Maico

June 2016

Permission is given for the following people to have access to this SP:

| | |
|--|-----|
| Available to the general public | Yes |
| Available only after consultation with author/SP adviser | No |
| Available only to those bound by confidentiality agreement | No |

ACCEPTANCE SHEET

The Special Problem entitled "Mobile Application: Informative Camera (Maicam) for COA and ANSA-EAP" prepared and submitted by Jaimelyn P. Maico in partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science has been examined and is recommended for acceptance.

Perlita E. Gasmen, M.S. (candidate)
Adviser

| EXAMINERS: | Approved | Disapproved |
|--|-----------------|--------------------|
| 1. Gregorio B. Baes, Ph.D. (candidate) | <hr/> | <hr/> |
| 2. Avegail D. Carpio, M.S. | <hr/> | <hr/> |
| 3. Richard Bryann L. Chua, Ph.D. (candidate) | <hr/> | <hr/> |
| 4. Ma. Sheila A. Magboo, M.S. | <hr/> | <hr/> |
| 5. Vincent Peter C. Magboo, M.D., M.S. | <hr/> | <hr/> |

Accepted and approved as partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science.

Ma. Sheila A. Magboo, M.S.

Unit Head
Mathematical and Computing Sciences Unit
Department of Physical Sciences
And Mathematics

Marcelina B. Lirazan, Ph.D.

Chair
Department of Physical Sciences
and Mathematics

Alex C. Gonzaga, Ph.D., Dr. Eng'g

Dean
College of Arts and Sciences

Abstract

Mobile Application: Informative Camera (MAICAM) is a camera application that provides a way to secure basic information such as date, time, and geographical coordinates of the pictures by stamping it directly in the picture with a QR Code. The pictures are utilized in the creation of reports submitted in the web component of MAICAM. The web component is an information system that manages projects and their corresponding audit reports.

Keywords: camera application, qrcode, geotagging, google maps, information system

Contents

| | | |
|------|-------------------------------------|----|
| I. | Introduction | |
| a. | Background of the Study | 1 |
| b. | Statement of the Problem | 2 |
| c. | Objectives of the Study | 2 |
| d. | Significance of the Project | 5 |
| e. | Scope and Limitation | 6 |
| II. | Review of Related Literature | 7 |
| III. | Theoretical Framework | |
| a. | ANSA-EAP | 12 |
| b. | Commission on Audit | 12 |
| c. | Geotagging | 13 |
| d. | Quick Response Code (QR Code) | 13 |
| e. | Augmented Reality | 14 |
| f. | Android Application | 14 |
| g. | Database Management System | 14 |
| IV. | Design and Implementation | |
| a. | Context Diagram | 15 |
| b. | Use-Case Diagram | 16 |
| c. | Entity-Relationship Model | 17 |
| d. | Technical Architecture | 20 |
| V. | Results | 22 |
| VI. | Discussion..... | 41 |

| | |
|-----------------------------|-----|
| VII. Conclusion..... | 44 |
| VIII. Recommendations | 45 |
| IX. Bibliography | 46 |
| X. Appendix..... | 47 |
| XI. Acknowledgement | 135 |

I. Introduction

A. Background of the Study

Public funds are being spent on numerous projects like road developments, drainage enhancements, construction of buildings and other infrastructure projects. To implement such projects, the government conducts bidding of contractors as its project implementer. In order to ensure that the contractor is delivering value to the money of the government, they send reports about the progress of the project since the payment is usually done by phase. When the government accepts the report to be valid, the contractor will receive the payment for that certain progress. [1].

The task of Commission on Audit (COA) is to guarantee that the public resources are used effectively and without anomalies [2]. They inspect records of government projects and conduct further investigations if necessary to verify if the budget allotted and used are acceptable. However, inspection reports are conducted after all the transactions have been made. Transfers of money have been completed between the contractor and the public official responsible for the project. Until the auditing of a project occurs, there is no way for concerned citizens and groups to know if the project expenditures are acceptable.

Affiliated Network for Social Accountability in East Asia and the Pacific (ANSA-EAP) is a non-profit organization that aims to connect citizens and government to improve governance. (1) Under their project Citizen Participatory Project, in partnership with COA, citizens are encouraged in monitoring projects of the government.

In order to equip this vision, a mobile application is proposed that enables citizens to produce geotagged and stamped pictures which can be used to validate reports of contractors of a project. An information system will be made available to view government projects and to facilitate report submissions. This will enhance the overall transparency, accountability and citizen participatory in the public audit process.

B. Statement of the Problem

A tool to aid citizen participation in the auditing process through report submission is not yet available. In order to avoid exploitation of infrastructure projects of the government through false reports of contractors, it is encouraged for the citizens to be engaged in monitoring on-going projects by taking pictures. Compilation of pictures can be used as progress measure of a project. It can also serve as evidence in auditing and validating reports. Hence, it is important to protect the authenticity and validity of the pictures.

C. Objectives of the Study

The main objective of the study is to develop a camera application and an information system to be used for the collection of citizen audit reports.

The mobile application aims to produce pictures embedded with geographical coordinates and stamped with information and a QR code based on location. The mobile application includes the following sections:

1. Camera
 - a. Access camera augmented with the following information:
 - i. Date and Time
 - ii. Altitude, Longitude and Latitude
 - iii. QR Code
 - b. Produce pictures with stamped
 - i. Date and Time
 - ii. Altitude, Longitude and Latitude
 - iii. QR Code
 - c. Produce pictures with embedded geographical information.
2. QR Code Generator
3. Gallery – collection of pictures taken using the camera
4. GPS Location
 - a. View current geographical coordinates
 - b. View location name
 - c. View location in map
5. Camera Setting
 - a. Focus
 - b. Shutter sound

A web component is made available to manage infrastructure projects of the government and reports of the citizen auditors.

1. Admin

- a. Login/Logout
 - b. Manage Projects
 - a. Add project
 - b. Edit project
 - c. View projects in list
 - d. View projects in map
 - c. Manage Reports
 - a. Create report
 - b. View reports in list
 - c. View reports in map
 - d. Approve/Remove reports submitted by citizen auditors
 - d. Manage Accounts
 - a. Add accounts
 - b. Edit accounts
 - c. Delete accounts
2. Citizen Auditors
- a. Login/Logout
 - b. View projects in map and in list
 - c. Manage report
 - a. Create report
 - b. Delete own report
 - c. View reports in map and in list
 - d. Manage own profile

- a. Edit info
 - b. Change password
3. Public
- a. View reports in map and in list
 - b. View projects in map and in list
 - c. Comment on projects
- D. Significance of the Project
- In an effort to bring citizens and Commission on Audit (COA) together, this project will serve as a tool to strengthen citizen participatory in the public audit process. The project focuses on enhancing transparency of the government projects and deterring any form of corruption. This mobile application will encourage citizens to be involved in monitoring government projects and bring awareness on where the public funds go.

When conducting inspection reports, COA auditors use different external mobile applications found in Google Play such as Geocam and other camera applications. The proposed mobile application will be used as a replacement to these applications. Information on the pictures such as date, time and geographical information are important aspects of the produced pictures because it serves as an instant validation of the pictures. These pictures can speed up the process of auditing of the projects.

E. Scope and Limitation

The scopes and limitations of the proposed system involve the following:

- a. Application as a citizen auditor is done outside the system.
- b. The admin is authorized personnel of Commission on Audit.
- c. The owner of a project is only one and the project is non-transferable.
- d. The government projects involved are infrastructure projects.
- e. The Citizen Auditors have a power given by the Commission on Audit to take pictures of the projects and monitor.
- f. The mobile application will not require login and can stand on its own.

II. Review of Related Literature

Most phones today can detect its location through their built-in GPS. With this, pictures and videos can store information in their metadata about their location when they were taken. These media are considered to be "geotagged" materials. Adding geographical information on different materials such as pictures, videos, articles and even tweets has been an easy task with our present technology.

One of the advantages of geotagged materials is that they can be located in a map and visually present large amount of data. Location information was used in a search engine called JournalMap to improve literature searches [4]. JournalMap uses not only specific keywords but also research locations and physical sites to determine scientific papers of interest. The articles are geotagged and can be viewed in a world map which provides a way to visualize how extensive a specific location has been studied. This project is particularly helpful when dealing with environmental literatures.

In another study, the researchers gathered geotagged photos from photo sharing sites and analyze it in a digital globe such as Google Earth [5]. They visualized and analysed spatial distribution of geotagged photography in Budapest to know the places most visited by tourists and correlate it with the impact of urban developments.

Geotagged photographs in Flickr served as evidences to justify the need for improved surface water quality for recreational benefits. [6] The use of the photographs was supported by [7] which suggested that crowd-sourced information can serve as a reliable alternative for empirical visits. The location information of the pictures and the location origin of the user were carefully considered in the study.

An advantage of geotagged photos over the regular ones is the presence of a context. A photo with geographical information answers not only what is, but also when and where is. In Crime Science Journal, geotagging was proposed to be a novel, inexpensive tool in crime research [8]. Several crime studies gathered data from criminal events, the environment where the crime took place, and timing. Geotagged photographs record these data effectively without user intervention. The researcher piloted two case studies to observe the strengths and weaknesses of geotagging as a primary tool in data collection. After all the field work, the paper concluded that gathering data with geotagged photos can answer substantive research questions and make it so in a short period of time.

Geotagging of photographs is also proposed as a potential tool for data collection in student fieldwork. [9] In a short case study presented in the paper, the students found geotagging to be easy and convenient in collecting data. It enhanced the quantity of data collected and enabled the students to use basic mapping. The paper highlights the potential of geotagging as cost-effective tool if student-owned mobile devices would be utilized.

However, geotagging has its own disadvantages. In terms of personal use of geotagging, other people may use their knowledge of a user's location to do criminal acts. [10] Since several social networking sites Like Facebook and Twitter offer a way to incorporate location in user posts, it is now easier for the predators to track their victims and attack when opportunity comes. Adding location in personal pictures and posts is not harmful per se but it must be done cautiously.

Location information stored in metadata of geotagged photos can easily be extracted and edited using any exif extractor such as ExifTool. Because of this, data sabotaging is a possibility when dealing with geotagged photos in critical situations such as presenting them as evidence and in fieldwork [8]. Also, metadata can be stripped off easily such as when uploading pictures in Facebook. Data integrity of geotagged photos could easily be tampered as a result.

On the other hand, Quick Response Code or QR Code has been increasingly popular today. It is a two-dimensional barcode which holds information up to 7,809 characters in a smaller printout that is readable from any direction.

QR Code integration in medical equipment repair management has been found to be efficient and economical [11]. The researchers used various applications of QR Code technology to facilitate repairs of equipment in a hospital. The results have shown that the use of QR Codes ensures that the facility or equipment engineers receive correct information and this allows earlier returns of equipment.

Adoption of QR Code in the shopping process of major retail stores was proposed in [12]Main goal of the intervention was to provide adequate information on displayed products such as available sizes, colors, number of stocks, price and floor locations. A system prototype was developed and tested. The researchers encoded QR Codes for every product which holds a uniform resource locator (URL). These URLs link the QR Code scanner to an online catalogue of the store where information of the products can be viewed. The results of the study suggested that the system proposed provides efficient shopping experience since users can immediately access real time information about a product by simply scanning a code through their mobile phones.

Augmented Reality (AR) is also being used in various applications to provide information and improve user experience. [13]Augmented Reality enhances users' perception by supplementing virtual objects and information in the same space as their surroundings. In touring, AR was used to create "situated documentaries" on historic events and a reconstruction of a cultural heritage site in Greece. Satellite navigations and

heads-up displays for pilots were also powered with AR. In the field of medicine, glasses for nurses and doctors that could provide information real time were developed. AR was also being used in providing overlays of ultrasound, CT and MR scans.

III. Theoretical Framework

A. Commission on Audit (COA)

The Commission on Audit is the Supreme Audit Institution of the Philippines. The Philippine Constitution mandated the Commission on Audit to examine and audit all accounts pertaining to the revenues and expenditures of the government. The Commission on Audit has an exclusive authority to define the scope of its audit and establish techniques to fulfill its task. (12)

B. ANSA-EAP

Affiliated Network for Social Accountability in East Asia and the Pacific (ANSA-EAP) is a non-stock, non-profit corporation registered in the Philippines. It was founded in July 2007 as a program of Ateneo School of Government, with support from the World Bank's Development Grant Facility from 2007 to 2011. It is now incorporated with five founding trustees from East Asia and Pacific. (1)

The core purpose of ANSA-EAP is to help improve governance by engaging the citizens and government in monitoring the use of public funds. Projects across the EAP involve participatory planning, budget monitoring, expenditure tracking and community score cards to name a few.

One of the ongoing projects of ANSA-EAP in the Philippines is the Citizen Participatory Audit (CPA). It aims to bring the citizens and the Commission on Audit

together in the audit process. The Commission on Audit opens up to citizen participation and fully support the project.

C. Geotagging

Geotagging is the process of adding geographical information to various media such as photos and videos. Because smart phones have built-in Global Positioning System (GPS), most photos and videos have geographical coordinates of the location where they were taken saved in their metadata. These media are considered to be *geotagged*.

Geotagging uses GPS most of the time to record location data but it can also be done manually using online and desktop applications such as *Geotag* from <http://geotag.sourceforge.net/>.

With geographical information available, geotagged media can be positioned in a map precisely. This allows user to view their pictures with respect to the location it was taken.

D. Quick Response Code or QR Code

QR Code is a two-dimensional barcode which holds information efficiently in a smaller medium compared to the usual barcodes. A QR code is capable of holding information up to 7,089 characters which is much larger compared to the 20-digit storage of the conventional barcodes. The produced printout of QR code is readable from any direction. It can also tolerate minimal damage or dirt. (14)

QR codes are used in a lot of ways including traceability, inventory management, inspection, process management, data entry and others which improves a great deal in the way we store and access information.

E. Augmented Reality

Augmented reality is the integration of digital information such as sounds, videos, music or GPS input with the real-time view of an environment. It aims to improve the experience of the user in viewing the reality and it assists by providing information such as location relative to the present moment.

F. Android Application

Android application is an application that runs in an Android operating system for mobile phones. Applications are developed using the Android Software Development kit that includes debugger, software libraries, emulator and other development tools. These applications are written in Java programming language which has a complete access to Android APIs.

G. Database Management System

A Database Management System (DBMS) is a system that handles the creation and management of databases. It is used to systematically create, retrieve, update and manage data. DBMS serves as an interface which allows easy access of organized data for its end users. (15)

IV. Design and Implementation

A. Context Diagram

Figure 1 shows the high level view of MAICAM. The mobile application is a stand-alone camera application that requires no registration to use. Users of the application can produce geotagged pictures with stamped information.

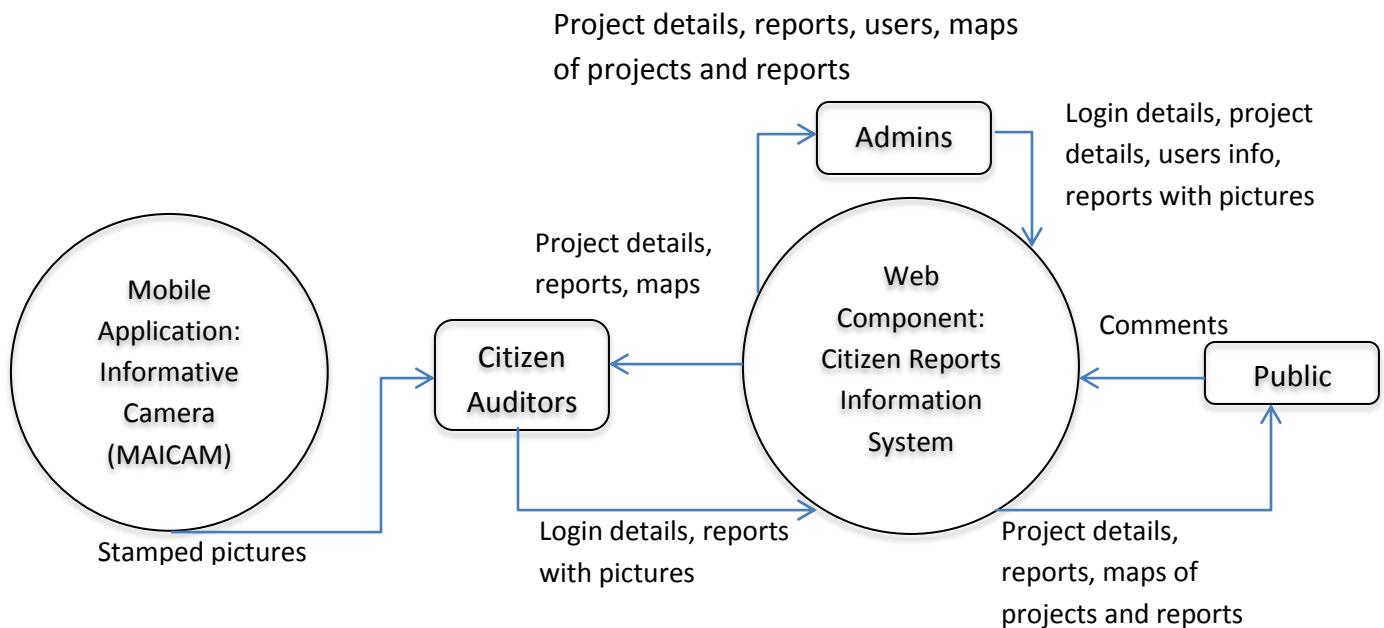


Figure 1. Context Diagram of MAICAM

The web component of MAICAM has three external entities: citizen auditors, admins and the public. The public is allowed to view the list of projects and their corresponding reports submitted by the citizen auditors. Maps are also provided by the system to visually present the list of projects and reports. The public can add comments on projects as a response to submitted reports. The citizen auditors, on the other hand, are registered users. Their main task is to add reports on projects posted in the system. The reports must include pictures taken from MAICAM. The admins are the users who post

projects. They are also capable of adding users to the system. The admins are responsible for the approval process of the reports.

B. Use-Case Diagram

The mobile application is a stand-alone application that can be used by any user. With the mobile application, the user can use the camera, generate a QR Code, detect current location and view pictures taken in a gallery. Fig 2 shows the use cases for MAICAM – mobile app.

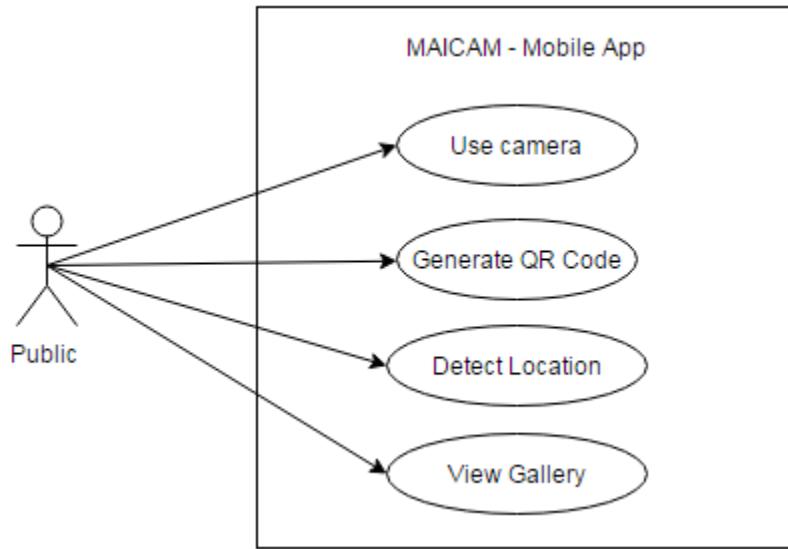


Figure 2. MAICAM – Mobile App Use Case Diagram

The web component of MAICAM has 3 actors as shown in Fig 3. The public is an actor with no user credentials. An unregistered user can view details and maps of projects and their corresponding reports. The citizen auditor, a registered user, can submit reports about a certain project. She/he can also view and edit her/his user

account. All use cases of MAICAM- Web Component are accessible to the admin. The admin can manage projects, reports and accounts.

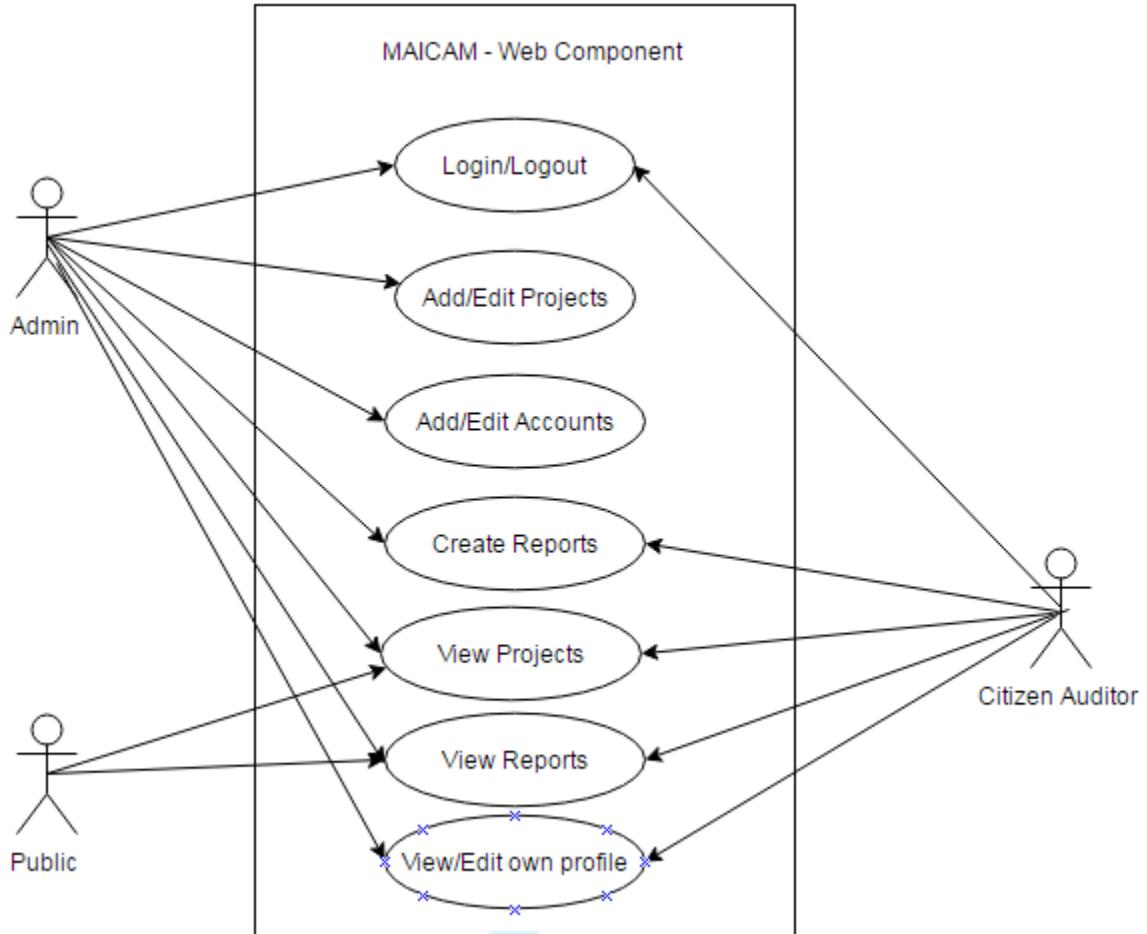


Figure 3. MAICAM – Web Component Use Case Diagram

C. Entity-Relationship Model

Figure 4 shows the Entity-Relationship Diagram of the web component of MAICAM. A project is allowed to have many reports, but a report can only have one (1) project. A report references images, objectives and personnel_present tables. The users create reports and projects.

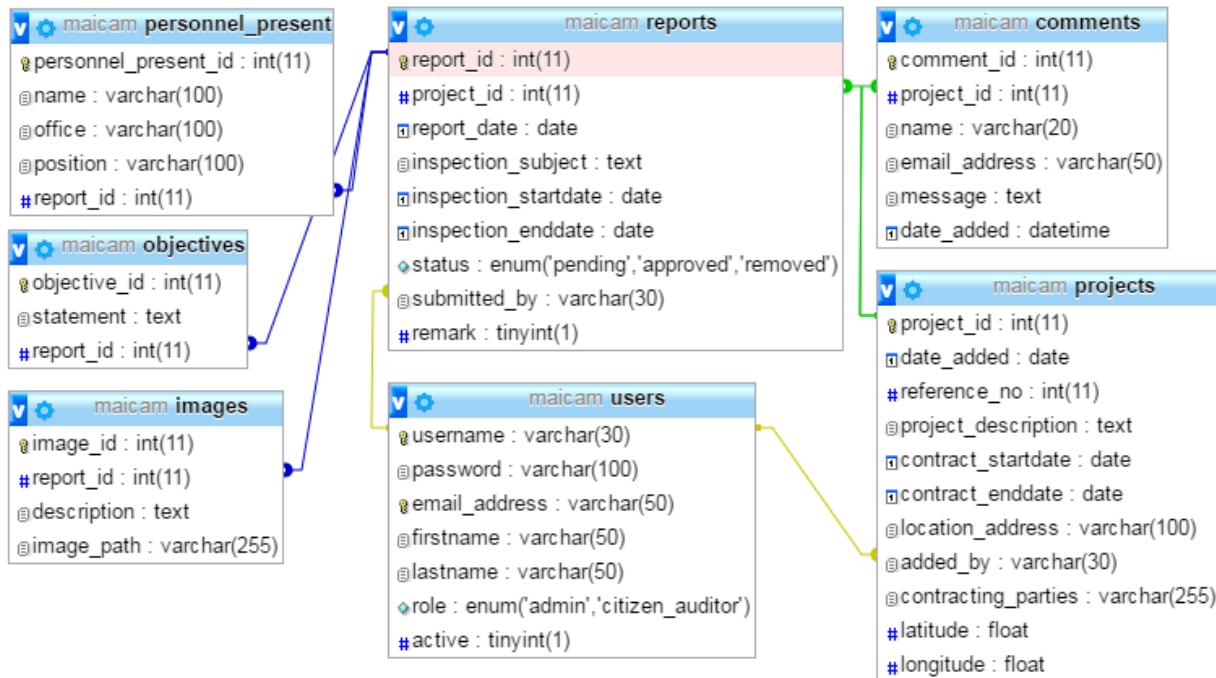


Figure 4. Database for MAICAM - Web Application

The mobile application, on the other hand, uses local phone storage to save its images.

D. Data Dictionary

| Field | Type | Description |
|----------------------|--------------|---|
| Project_id (Primary) | Int(11) | Primary key; Unique identifier for Projects table |
| Date_added | date | Date of project submission |
| Reference_no | Int(11) | Reference no of the project |
| Project_description | text | Title/Description of the project |
| Contract_startdate | date | Start date of contract |
| Contract_enddate | Date | End date of contract |
| Location_address | Varchar(100) | Location address of the project |
| Added_by | Varchar(30) | Creator of the project |

| | | |
|---------------------|--------------|----------------------|
| | | (admin) |
| Contracting_parties | Varchar(255) | Contracting parties |
| latitude | float | Location's latitude |
| longitude | float | Location's longitude |

Table 1. Projects Table

| Field | Type | Description |
|----------------------|--|--|
| Report_id (primary) | Int(11) | Primary key; unique identifier for Reports table |
| Project_id | Int(11) | Id of the project being reported |
| Report_date | Date | Date of the report submission |
| Inspection_subject | text | Subject of the inspection |
| Inspection_startdate | date | Start date of the inspection |
| Inspection_enddate | date | End date of the inspection |
| status | Enum('pending', 'approved', 'removed') | Status of the report |
| Submitted_by | Varchar(30) | The user who submitted the report |
| remark | Tinyint(1) | Overall impression of the report |

Table 2. Reports Table

| Field | Type | Description |
|-------------------|--------------|--|
| Image_id(primary) | Int(11) | Primary key; unique identifier of Images table |
| Report_id | Int(11) | Id of the report associated with the image |
| description | text | Description of the image |
| Image_path | Varchar(255) | Path of the image |

Table 3. Images Table

| Field | Type | Description |
|---------------------------|---------|--|
| Objective_id(primary key) | Int(11) | Primary key; unique identifier of the Objectives table |
| statement | text | Objective statement |
| Report_id | Int(11) | Id of the report associated with the objective |

Table 4. Objectives Table

| Field | Type | Description |
|-------------------------------|--------------|---|
| Personnel_present_id(primary) | Int(11) | Primary key; unique identifier of the Personnel_Present Table |
| name | Varchar(100) | Name of the personnel |
| office | Varchar(100) | Office of the personnel |
| position | Varchar(100) | Position of the personnel |
| Report_id | Int(11) | Id of the report associated with the personnel |

Table 5. Personnel_present Table

| Field | Type | Description |
|---------------------|-------------|--|
| Comment_id(Primary) | Int(11) | Primary key; unique identifier of the Comments Table |
| Project_id | Int(11) | Id of the project associated with the comment |
| name | Varchar(20) | Name of the commenter |
| Email_address | Varchar(50) | Email address of the commenter |
| message | text | Message/Comment |
| Date_added | datetime | Date the comment is sent |

Table 6. Comments Table

| Field | Type | Description |
|-----------------------|----------------------------------|--|
| Username(primary key) | Varchar(30) | Username of the user; unique identifier of the Users Table |
| password | Varchar(100) | password |
| Email_address | Varchar(50) | Email address |
| firstname | Varchar(50) | First name |
| lastname | Varchar(50) | Last name |
| role | Enum('admin', 'citizen_auditor') | role |
| active | Tinyint(1) | Active or inactive |

Table 7. Users Table

E. Technical Architecture

The mobile application will be implemented using the Android Studio. It will run on mobile phones with Android 2.2 or higher versions.

The following languages will be used to create the web component.

1. PHP
2. HTML
3. MySQL

Minimum system requirements for the web component are the following.

Server

1. 1GHz processor
2. 1GB RAM
3. 2GB available disk space
4. Reliable internet connection

Client

1. 1GHz processor
2. 512MB RAM
3. 350MB available disk space
4. Reliable internet connection

V. Results

The mobile application aims to produce pictures embedded with geographical coordinates and stamped with information and a QR code based on location. The following are the screenshots of the produced mobile application in a Nexus Tablet.

1. Camera



Figure 5. Camera Interface

2. QR Code Generator



Figure 6. QR Code generator

3. Gallery – collection of pictures taken using the camera



Figure 7. Gallery

4. GPS Location (Home Screen)

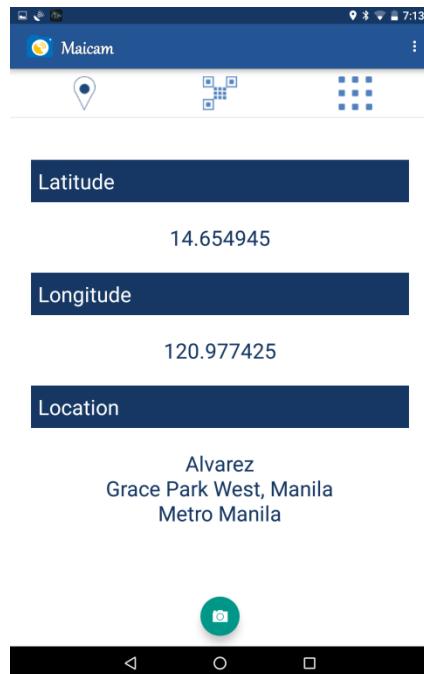


Figure 8. Location Info

A web component is created to manage projects of the government and reports of the citizen auditors.

1. Admin

a. Login/Logout

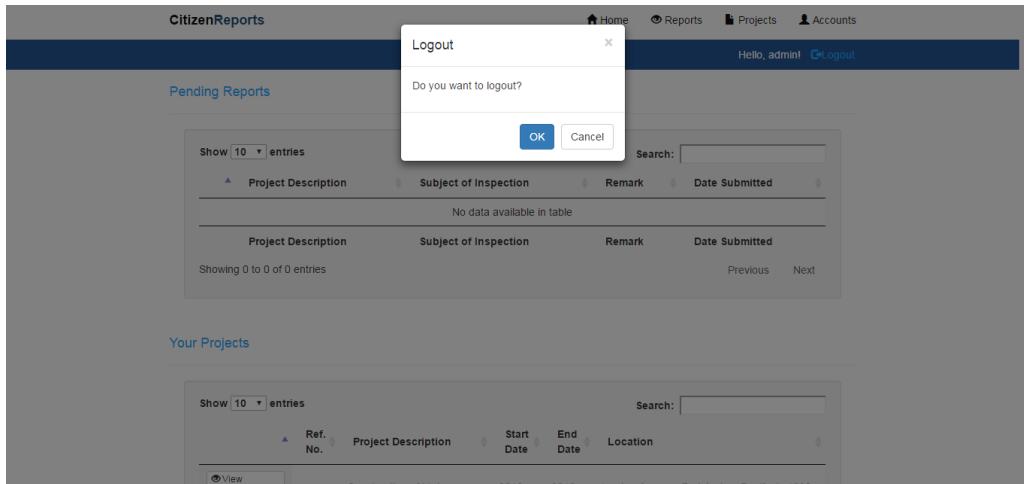


Figure 9. Logout

b. Manage Projects

| Projects | | | | | |
|---|--------------------------------------|------------|------------|--|---|
| <input type="button" value="View"/> <input type="button" value="Edit"/> <input checked="" type="button" value="Create Report"/> | | | | | |
| <input type="button" value="View"/> <input type="button" value="Edit"/> <input checked="" type="button" value="Create Report"/> | | | | | |
| Ref. No. | Project Description | Start Date | End Date | Location | |
| 1000 | Construction of Main NAMRIA Building | 2016-02-01 | 2016-05-01 | Lawton Avenue, Fort Andres Bonifacio 1638 Taguig City, Philippines | <input type="button" value="View"/> <input type="button" value="Edit"/> <input checked="" type="button" value="Create Report"/> |
| 1005 | Construction of Schools | 2016-05-13 | 2016-05-20 | Lacson Extension, Santa Cruz, Manila, Metro Manila | <input type="button" value="View"/> <input type="button" value="Edit"/> <input checked="" type="button" value="Create Report"/> |
| 1234 | Construction of RH 115 | 2016-03-01 | 2016-04-30 | 586 Padre Faura St., Ermita Manila | <input type="button" value="View"/> <input type="button" value="Edit"/> <input checked="" type="button" value="Create Report"/> |
| 1001 | Farm-to-Market Roads | 2015-01-10 | 2016-01-01 | Cebu City | <input type="button" value="View"/> <input checked="" type="button" value="Create Report"/> |
| 1002 | Road repairs | 2016-02-10 | 2016-05-02 | Baguio City | <input type="button" value="View"/> <input checked="" type="button" value="Create Report"/> |

Figure 10. Project Tab

Add a Project

| | | |
|------------------------|---------------------------------|---|
| Reference No. | <input type="text"/> | |
| Project Description | <input type="text"/> | |
| Contracting Party | <input type="text"/> | |
| Contract Date | <input type="text"/> mm/dd/yyyy | <input type="text"/> End Date: mm/dd/yyyy |
| Location Address | <input type="text"/> | |
| Geographic Coordinates | <input type="text"/> Latitude: | <input type="text"/> Longitude: |

Figure 11. Add a project

CitizenReports

Home Reports Projects Accounts
Hello, admin! Logout March 28, 2016

Edit Project

| | | |
|------------------------|---|---|
| Reference No. | <input type="text"/> 1005 | |
| Project Description | <input type="text"/> Construction of Schools | |
| Contracting Party | <input type="text"/> Party 101 | |
| Contract Date | <input type="text"/> Start Date: 05/13/2016 | <input type="text"/> End Date: 05/20/2016 |
| Location Address | <input type="text"/> Lacson Extension, Santa Cruz, Manila, Metro Manila | |
| Geographic Coordinates | <input type="text"/> | |

Figure 12. Edit a project

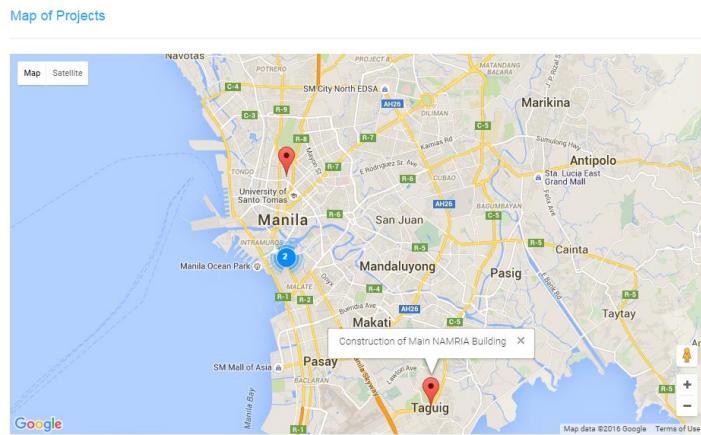


Figure 13. View projects in map

c. Manage Reports

The screenshot shows the CitizenReports application interface. At the top, there is a navigation bar with links for Home, Reports, Projects, and Accounts. A user session is indicated as "Hello, admin! Logout". Below the navigation bar, the main content area is titled "All Reports". It features a table with two rows of data, each representing a report entry. The columns in the table are Report No., Project Description, Subject of inspection, Remark, Date Submitted, and Submitted by. The first row shows "Construction of Schools" with "2nd Phase Completion" as the subject, "Positive" as the remark, "2016-05-25" as the date submitted, and "jaimelyn.maico" as the submitter. The second row shows "Construction of Main NAMRIA Building" with "100% Accomplishments" as the subject, "Negative" as the remark, "2016-05-25" as the date submitted, and "admin" as the submitter. Below the table, there is a pagination control showing "Showing 1 to 2 of 2 entries" and buttons for "Previous", "1", and "Next". At the bottom of the page, there is a link labeled "Map of Reports".

Figure 14. Reports Tab showing all reports and its map

The screenshot shows the CitizenReports application interface. At the top, there is a navigation bar with links for Home, Reports, Projects, and Accounts. A user session is indicated as "Hello, admin! Logout". Below the navigation bar, the main content area is titled "Project Information". It contains several input fields: "Reference No." with value "1000", "Project Description" with value "Construction of Main NAMRIA Building", "Contracting Party" with value "ABC Construction", and "Contract Date" with start date "02/01/2016" and end date "05/01/2016". Below this section, there is another title "Inspection Details".

Figure 15.a Create report

Inspection Details

Subject

Objectives
 +

Date
Start Date: mm/dd/yyyy End Date: mm/dd/yyyy

Personnel Present During Inspection
Name: Office: Position: +

Ground Control Point

Location Address
 Lawton Avenue, Fort Andres Bonifacio 1638 Taguig City, Philippines

Geographic Coordinates
Latitude: 14.5176 Longitude: 121.051

Figure 15.b Create report

Ground Control Point

Location Address
 Lawton Avenue, Fort Andres Bonifacio 1638 Taguig City, Philippines

Geographic Coordinates
Latitude: 14.5176 Longitude: 121.051

Travel Description and Landmarks

Upload images relevant to your project inspection

No file chosen
 Add image description

+ Upload another picture

Figure 15.c Create report

Travel Description and Landmarks

Upload Images relevant to your project inspection

No file chosen

No file chosen

[- Remove](#)

[+ Upload another picture](#)

Report's Overall Impression: Positive Negative

Figure 15.d Create report

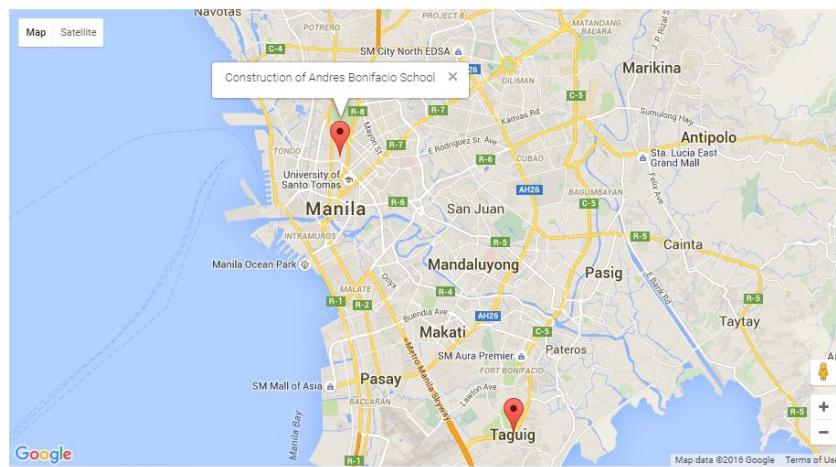


Figure 16. Map of reports

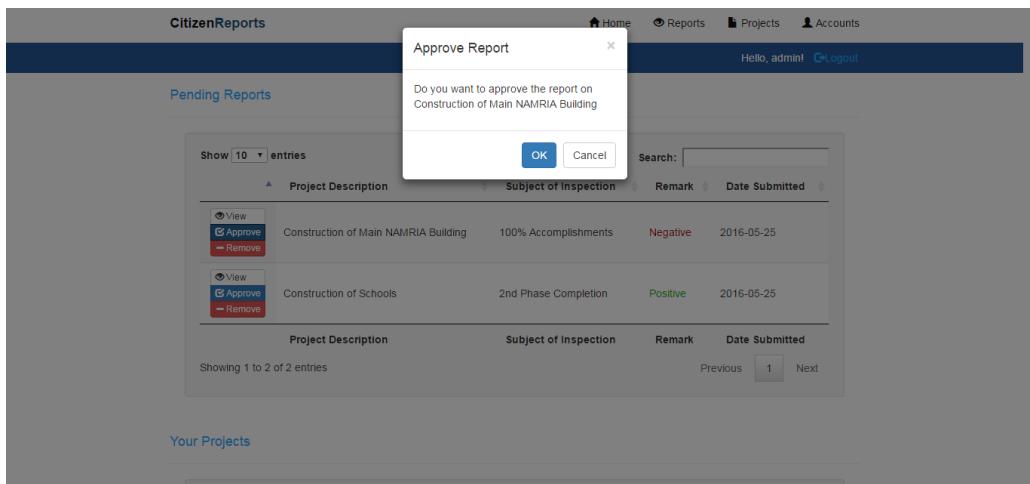


Figure 17. Approve/Remove report

d. Manage Accounts

| Users | | | | | | |
|--|------------|------------|--------------------------|----------------|-----------------|---|
| Show 10 entries <input type="button" value="Search:"/> First Name Last Name Email Username Role Active | | | | | | |
| <input checked="" type="checkbox"/> Edit | Jaimee | Maicelyn | jaimelyn_20@yahoo.com | admin | admin | 1 |
| <input checked="" type="checkbox"/> Edit | Christiane | Maico | chris.maico@gmail.com | chris | citizen_auditor | 1 |
| <input checked="" type="checkbox"/> Edit | Colito | Maico | colito.maico@gmail.com | colito | admin | 0 |
| <input checked="" type="checkbox"/> Edit | Jaimee | Maico | jaimelyn.20@gmail.com | jaimelyn.maico | citizen_auditor | 1 |
| <input checked="" type="checkbox"/> Edit | Larisse | Almiranez | larisse.almi@yahoo.com | larisseanne | citizen_auditor | 1 |
| <input checked="" type="checkbox"/> Edit | Lei | Dadivodadi | lei.dadivodadi@yahoo.com | lei | citizen_auditor | 1 |
| <input checked="" type="checkbox"/> Edit | Perl | Gasmen | perl.gasmen@yahoo.com | perl | admin | 1 |

Figure 18. Accounts Tab

The screenshot shows a modal dialog titled "Create User" with the message: "Do you want to submit new user account?". Below the dialog is a form for adding a user with fields: First Name (Jaira), Last Name (Cicat), Email (jaira.cicat@gmail.com), Username (jcicat), and Role (Citizen Auditor). At the bottom is a "Create User" button.

Figure 19. Add accounts

The screenshot shows a user interface for editing a user account. At the top right, it says "Hello, admin! [Logout](#)". Below that, the title "Edit User" is displayed. The form contains the following fields:

- Username:** admin
- First Name:** Jaimee
- Last Name:** Maicolyn
- Role:** Admin
- Active:** Active Inactive

At the bottom right of the form is a blue "Save Changes" button.

Figure 20. Edit user

The screenshot shows a table of users with columns: First Name, Last Name, Email, Username, Role, and Active. A modal dialog box titled "Delete" is open over the table, asking "Delete user with username: jcicat". It has "OK" and "Cancel" buttons. The table data is as follows:

| First Name | Last Name | Email | Username | Role | Active |
|------------|------------|------------------------|-----------------|-----------------|--------|
| Jaimee | Maico | | admin | 1 | |
| Christiane | Maico | | citizen_auditor | 1 | |
| Colito | Maico | colito.maico@gmail.com | colito | admin | 0 |
| Jaimee | Maico | jaimelyn.20@gmail.com | jaimelyn.maico | citizen_auditor | 1 |
| Jaira | Cicat | jaira.cicat@gmail.com | jcicat | citizen_auditor | 1 |
| Larisse | Almiranez | larisse.almi@yahoo.com | larisseanne | citizen_auditor | 1 |
| Lei | Dadivodadi | lei.dadivo@yahoo.com | lei | citizen_auditor | 1 |
| Perl | Gasmen | perl.gasmens@yahoo.com | peri | admin | 1 |

Figure 21. Delete User

Home Page of an admin

The screenshot shows the CitizenReports home page for an administrator. At the top, there is a navigation bar with links for Home, Reports, Projects, Accounts, and a logout button. Below the navigation bar, the page displays two main sections: "Pending Reports" and "Your Projects".

Pending Reports:

| Pending Reports | | | | |
|--|--------------------------------------|-----------------------|----------|----------------|
| Show 10 entries <input type="text" value="Search:"/> | | | | |
| | Project Description | Subject of inspection | Remark | Date Submitted |
| View | Construction of Main NAMRIA Building | 100% Accomplishments | Negative | 2016-05-25 |
| View | Construction of Schools | 2nd Phase Completion | Positive | 2016-05-25 |

Showing 1 to 2 of 2 entries

Your Projects:

| Your Projects | | | | |
|--|--------------------------------------|------------|------------|--|
| Show 10 entries <input type="text" value="Search:"/> | | | | |
| Ref. No. | Project Description | Start Date | End Date | Location |
| 1000 | Construction of Main NAMRIA Building | 2016-02-01 | 2016-05-01 | Lawton Avenue, Fort Andres Bonifacio 1638 Taguig City, Philippines |
| 1005 | Construction of Schools | 2016-05-13 | 2016-05-20 | Lacson Extension, Santa Cruz, Manila, Metro Manila |
| 1234 | Construction of RH 115 | 2016-03-01 | 2016-04-30 | 586 Padre Faura St., Ermita Manila |

Showing 1 to 3 of 3 entries

Figure 22.a Home Page of admin

The screenshot shows the CitizenReports home page for an administrator. At the top, there is a navigation bar with links for Home, Reports, Projects, Accounts, and a logout button. Below the navigation bar, the page displays two main sections: "Your Projects" and "Your Reports".

Your Projects:

| Your Projects | | | | |
|--|--------------------------------------|------------|------------|--|
| Show 10 entries <input type="text" value="Search:"/> | | | | |
| Ref. No. | Project Description | Start Date | End Date | Location |
| 1000 | Construction of Main NAMRIA Building | 2016-02-01 | 2016-05-01 | Lawton Avenue, Fort Andres Bonifacio 1638 Taguig City, Philippines |
| 1005 | Construction of Schools | 2016-05-13 | 2016-05-20 | Lacson Extension, Santa Cruz, Manila, Metro Manila |
| 1234 | Construction of RH 115 | 2016-03-01 | 2016-04-30 | 586 Padre Faura St., Ermita Manila |

Showing 1 to 3 of 3 entries

Your Reports:

| Your Reports | | | | |
|--|---------------------|------------|----------|----------|
| Show 10 entries <input type="text" value="Search:"/> | | | | |
| | Project Description | Start Date | End Date | Location |

Figure 22.b Home Page of admin

The screenshot displays two tables of reports. The top table is titled 'Your Reports' and shows a single entry:

| Ref. No. | Project Description | Start Date | End Date | Location |
|----------|------------------------|------------|------------|------------------------------------|
| 1234 | Construction of RH 115 | 2016-03-01 | 2016-04-30 | 586 Padre Faura St., Ermita Manila |

Below this table, it says 'Showing 1 to 3 of 3 entries' and has navigation buttons for 'Previous', '1', and 'Next'.

The bottom table is titled 'Your Reports' and shows one entry:

| Project Description | Subject of Inspection | Remark | Date Submitted | Status |
|--------------------------------------|-----------------------|----------|----------------|---------|
| Construction of Main NAMRIA Building | 100% Accomplishments | Negative | 2016-05-25 | pending |

Below this table, it says 'Showing 1 to 1 of 1 entries' and has navigation buttons for 'Previous', '1', and 'Next'.

Figure 22.c Home Page of admin

2. Citizen Auditors

a. Login/Logout

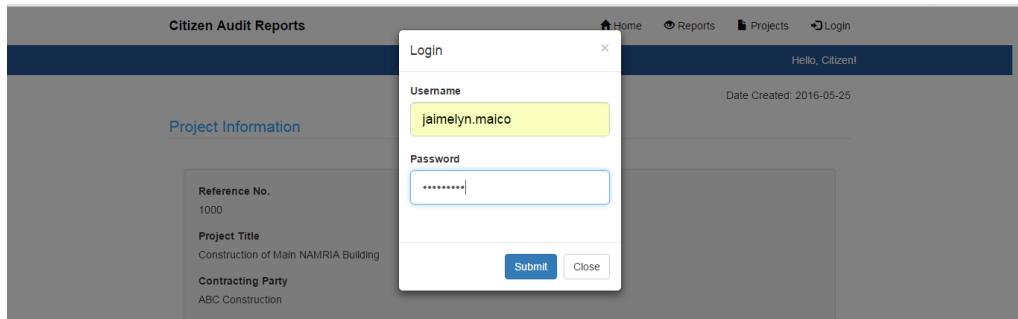


Figure 23. Login

| CitizenReports | | Home | Reports | Projects | Profile | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|-----------------------|----------------|----------------|---------|---------|---------|---------|-----------------------|-----------------------|--------|----------------|--------|----------------------|---|----------------------|----------|------------|------------------------|--------------|----------------------|----------|------------|--|---------------------|-----------------------|--------|----------------|--|--|--|--|--------|
| Hello, jaimelyn.maicol Logout | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Your Reports | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Show 10</th> <th>entries</th> <th>Search:</th> </tr> <tr> <th>▲ Project Description</th> <th>Subject of Inspection</th> <th>Remark</th> <th>Date Submitted</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>View</td> <td>Construction of Andres Bonifacio School</td> <td>2nd Phase Completion</td> <td>Positive</td> <td>2016-05-25</td> </tr> <tr> <td>Delete</td> <td>Road repairs</td> <td>1st Phase Completion</td> <td>Positive</td> <td>2016-05-25</td> </tr> <tr> <td></td> <td>Project Description</td> <td>Subject of Inspection</td> <td>Remark</td> <td>Date Submitted</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>Status</td> </tr> </tbody> </table> | | | | | | Show 10 | entries | Search: | ▲ Project Description | Subject of Inspection | Remark | Date Submitted | Status | View | Construction of Andres Bonifacio School | 2nd Phase Completion | Positive | 2016-05-25 | Delete | Road repairs | 1st Phase Completion | Positive | 2016-05-25 | | Project Description | Subject of Inspection | Remark | Date Submitted | | | | | Status |
| Show 10 | entries | Search: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▲ Project Description | Subject of Inspection | Remark | Date Submitted | Status | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| View | Construction of Andres Bonifacio School | 2nd Phase Completion | Positive | 2016-05-25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delete | Road repairs | 1st Phase Completion | Positive | 2016-05-25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Project Description | Subject of Inspection | Remark | Date Submitted | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | Status | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Showing 1 to 2 of 2 entries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Previous 1 Next | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Figure 24. Home Page of a citizen auditor

b. View projects in map and in list

| CitizenReports | | Home | Reports | Projects | Profile | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---------------------|------------|--|----------|---------|---------|---------|------------|---------------------|------------|----------|----------|----------------------|---|------------|------------|--|-------------------------------|---------------------------|------------|------------|-----------|----------------------|-------------------|------------|------------|-------------|-------------------------------|------------------------------|------------|------------|--|----------------------|-----------------------------|------------|------------|------------------------------------|-------------------------------|----------|---------------------|------------|----------|----------|
| Hello, jaimelyn.maicol Logout | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| All Projects | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Show 10</th> <th>entries</th> <th>Search:</th> </tr> <tr> <th>▲ Ref. No.</th> <th>Project Description</th> <th>Start Date</th> <th>End Date</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td>View</td> <td>1000 Construction of Main NAMRIA Building</td> <td>2016-02-01</td> <td>2016-05-01</td> <td>Lawton Avenue, Fort Andres Bonifacio 1638 Taguig City, Philippines</td> </tr> <tr> <td>Create Report</td> <td>1001 Farm-to-Market Roads</td> <td>2015-01-10</td> <td>2016-01-01</td> <td>Cebu City</td> </tr> <tr> <td>View</td> <td>1002 Road repairs</td> <td>2016-02-10</td> <td>2016-05-02</td> <td>Baguio City</td> </tr> <tr> <td>Create Report</td> <td>1005 Construction of Schools</td> <td>2016-05-13</td> <td>2016-05-20</td> <td>Lacson Extension, Santa Cruz, Manila, Metro Manila</td> </tr> <tr> <td>View</td> <td>1234 Construction of RH 115</td> <td>2016-03-01</td> <td>2016-04-30</td> <td>586 Padre Faura St., Ermita Manila</td> </tr> <tr> <td>Create Report</td> <td>Ref. No.</td> <td>Project Description</td> <td>Start Date</td> <td>End Date</td> <td>Location</td> </tr> </tbody> </table> | | | | | | Show 10 | entries | Search: | ▲ Ref. No. | Project Description | Start Date | End Date | Location | View | 1000 Construction of Main NAMRIA Building | 2016-02-01 | 2016-05-01 | Lawton Avenue, Fort Andres Bonifacio 1638 Taguig City, Philippines | Create Report | 1001 Farm-to-Market Roads | 2015-01-10 | 2016-01-01 | Cebu City | View | 1002 Road repairs | 2016-02-10 | 2016-05-02 | Baguio City | Create Report | 1005 Construction of Schools | 2016-05-13 | 2016-05-20 | Lacson Extension, Santa Cruz, Manila, Metro Manila | View | 1234 Construction of RH 115 | 2016-03-01 | 2016-04-30 | 586 Padre Faura St., Ermita Manila | Create Report | Ref. No. | Project Description | Start Date | End Date | Location |
| Show 10 | entries | Search: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ▲ Ref. No. | Project Description | Start Date | End Date | Location | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| View | 1000 Construction of Main NAMRIA Building | 2016-02-01 | 2016-05-01 | Lawton Avenue, Fort Andres Bonifacio 1638 Taguig City, Philippines | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Create Report | 1001 Farm-to-Market Roads | 2015-01-10 | 2016-01-01 | Cebu City | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| View | 1002 Road repairs | 2016-02-10 | 2016-05-02 | Baguio City | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Create Report | 1005 Construction of Schools | 2016-05-13 | 2016-05-20 | Lacson Extension, Santa Cruz, Manila, Metro Manila | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| View | 1234 Construction of RH 115 | 2016-03-01 | 2016-04-30 | 586 Padre Faura St., Ermita Manila | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Create Report | Ref. No. | Project Description | Start Date | End Date | Location | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Figure 25. View Projects

Map of Projects

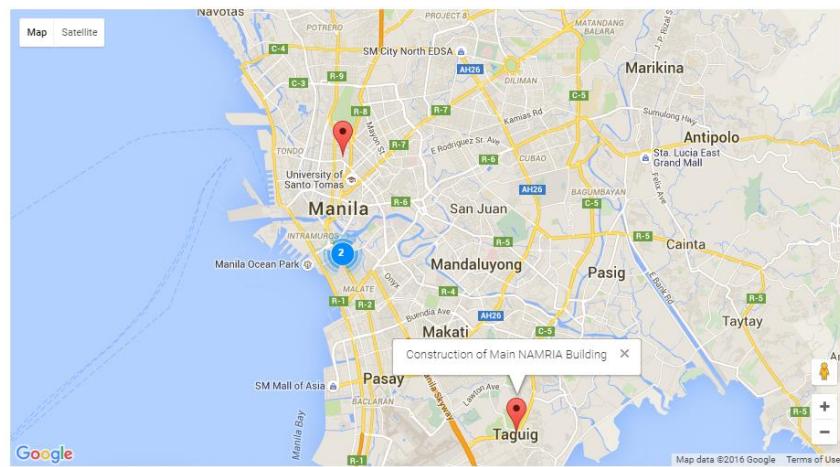


Figure 26. Map of Projects

CitizenReports

Home Reports Projects Profile Hello, jaimelyn.maicol Logout Date Created: 2016-05-25

Project Information

Reference No.
1000

Project Title
Construction of Main NAMRIA Building

Contracting Party
ABC Construction

Contract Date
Start Date: 2016-02-01 End Date: 2016-05-01

Ground Control Point

Address

Figure 27.a View a project

Reports

| Show 10 entries | | | | | Search: |
|----------------------|-------------------------|----------|----------------|--------------|---------|
| | ▲ Subject of inspection | Remark | Date Submitted | Submitted by | |
| View | 100% Accomplishments | Negative | 2016-05-25 | admin | |
| | Subject of inspection | Remark | Date Submitted | Submitted by | |

Showing 1 to 1 of 1 entries

Previous 1 Next

Comments

Paolo Maico wrote:
I believe the project is not yet complete?
2016-06-01 20:26:14

Figure 27.b View a project

c. Manage report

- Create report (same as the admin)
- Delete own report (same as the admin)
- View reports in map and in list

CitizenReports

Home Reports Projects Profile Hello, jaimelyn.maico [Logout](#)

All Reports

| Show 10 entries | | | | | | Search: |
|----------------------|---|-----------------------|----------|----------------|----------------|---------|
| Report No. | ▲ Project Description | Subject of Inspection | Remark | Date Submitted | Submitted by | |
| View | Construction of Andres Bonifacio School | 2nd Phase Completion | Positive | 2016-05-25 | jaimelyn.maico | |
| View | Construction of Main NAMRIA Building | 100% Accomplishments | Negative | 2016-05-25 | admin | |
| | Project Description | Subject of Inspection | Remark | Date Submitted | Submitted by | |

Showing 1 to 2 of 2 entries

Previous 1 Next

Map of Reports

Figure 28 All reports and map of reports

The screenshot shows a web-based application interface. At the top, there is a navigation bar with links for Home, Reports, Projects, and Profile. A blue header bar displays the user's name, "Hello, jaimelyn.maico", and a Logout button. Below the header, a message "Date Created: 2016-05-25" is visible. The main content area is titled "Project Information". Inside this section, there is a box containing project details:

| | |
|----------------------------|---|
| Reference No. | 1000 |
| Project Description | Construction of Main NAMRIA Building |
| Contracting Party | ABC Construction |
| Contract Date | Start Date: 2016-02-01 End Date: 2016-05-01 |

Inspection Details

Figure 29.a View a report: Project Information

Inspection Details

Subject
100% Accomplishments

Objectives
To validate the existence of the reported accomplishments
To validate compliance of reported accomplishments with the approved plans and specifications
To check issues and concerns regarding the new project

Date
Start Date: 2016-05-02 End Date: 2016-05-03

Personnel Present During Inspection

| Name | Office | Position |
|----------------|-----------|-----------------|
| Gladys Selosa | ANSA-EAP | Citizen Auditor |
| Jaimelyn Maico | UP Manila | Citizen Auditor |

Ground Control Point

Figure 29.b View a report: Inspection Details and Ground Control Point

Travel Description and Landmarks



Some tiles are starting to break already.



The lights are okay. Whiteboards are placed alternately since the room doesn't have enough space for them.



Computers are working. They are being used by the students for presentations, lectures, coding exams, etc.

Figure 29.c View a report : Gallery Grid

Travel Description and Landmarks



Figure 29.d View a report : Gallery List

d. Manage own profile

The screenshot shows the 'Your Profile' section of the CitizenReports application. At the top, there's a navigation bar with links for Home, Reports, Projects, and Profile. The Profile link is highlighted. Below the navigation, a blue header bar displays the greeting 'Hello, jaimeyn.maico!' and a 'Logout' button. The main content area is titled 'Your Profile' and contains several input fields for user information:

- Username:** jaimeyn.maico
- First Name:** Jaimee
- Last Name:** Maico
- Email:** jaimeyn.20@gmail.com
- Change Password:** Fields for Current Password and New Password.

Figure 30. Edit Profile

3. Public

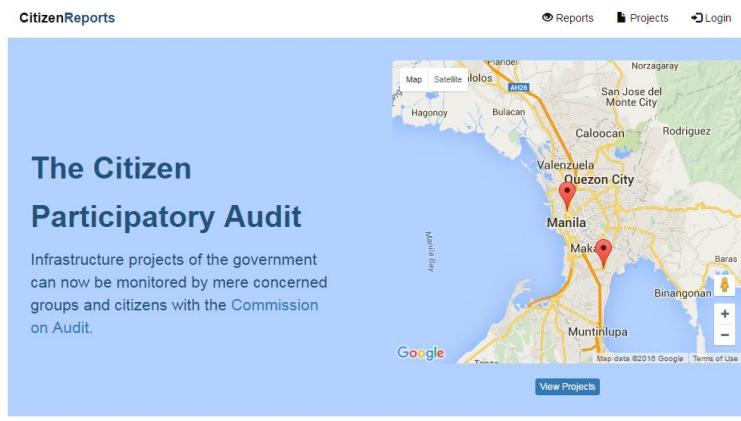


Figure 31. Home Page

a. View reports in map and in list

Citizen Audit Reports

Home Reports Projects Login

Hello, Citizen!

All Reports

| Show 10 entries | | | | | Search: |
|-----------------|---|-----------------------|----------|----------------|---------|
| Report No. | Project Description | Subject of Inspection | Remark | Date Submitted | |
| [View] | Construction of Andres Bonifacio School | 2nd Phase Completion | Positive | 2016-05-25 | |
| [View] | Construction of Main NAMRIA Building | 100% Accomplishments | Negative | 2016-05-25 | |

Report No. Project Description Subject of Inspection Remark Date Submitted

Showing 1 to 2 of 2 entries Previous 1 Next

Map of Reports

Figure 32. All Reports

b. View projects in map and in list

Citizen Audit Reports

Home Reports Projects Login

Hello, Citizen!

All Projects

| Show 10 entries | | | | | Search: |
|-----------------|--------------------------------------|------------|------------|--|---------|
| Ref. No. | Project Description | Start Date | End Date | Location | |
| [View] 1000 | Construction of Main NAMRIA Building | 2016-02-01 | 2016-05-01 | Lawton Avenue, Fort Andres Bonifacio 1638 Taguig City, Philippines | |
| [View] 1001 | Farm-to-Market Roads | 2015-01-10 | 2016-01-01 | Cebu City | |
| [View] 1002 | Road repairs | 2016-02-10 | 2016-05-02 | Baguio City | |
| [View] 1005 | Construction of Schools | 2016-05-13 | 2016-05-20 | Lacson Extension, Santa Cruz, Manila, Metro Manila | |
| [View] 1234 | Construction of RH 115 | 2016-03-01 | 2016-04-30 | 586 Padre Faura St., Ermita Manila | |

Figure 33. All Projects

Map of Projects

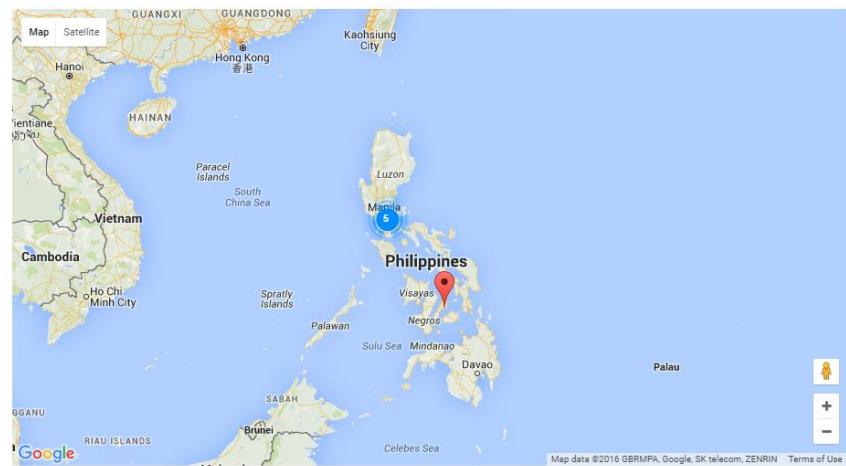


Figure 34. Map of Projects

c. Comment on projects

Showing 1 to 1 of 1 entries

Comments

Leave a comment

Name

Email

Your Message

Post only the concerns you have about the project.

Paolo Maico wrote:
I believe the project is not yet complete?
2016-06-01 20:26:14

Figure 35. Comments on projects

VI. Discussion

The main functionality of the mobile application is to take a picture and stamp it with information such as location, date, time and a QR Code. In order to achieve this, the mobile application showcases three other components aside from the camera itself.

1. Location

The location section listens to GPS signal for the updates of location. It displays the geographical coordinates, latitude and longitude, of the current location it detects. The section also provides the location name if internet connection is available. In cases where GPS signal is weak and cannot detect location, the camera will not be available.

2. QR Code Generator

The QR Code Generator records the geographical coordinates of the current location in QR Code. The user must manually click the button to generate a QR Code for the current location. Without the QR Code, camera will not be permitted to use.

3. Camera

The camera is augmented with information fetched from the location section and QR Code generator. When the user takes a picture, the information will be stamped in the captures photo. The surface of the camera can be used to force a focus when clicked.

4. Gallery

After the photos are taken, it can be viewed in the gallery of the mobile application. When a thumbnail is clicked, a larger view of the image is displayed. The user can also view the other pictures by swiping.

The web application presented is an information system that provides a way to view the projects of the government, specifically, infrastructure projects and to submit reports about the progress of these projects. The system caters three (3) users: public, citizen auditor and system administration.

1. Public

The public's home page showcases a map of official reports of the Citizen Auditors. The public can click the markers and view details of a specific report. The Reports section also provides a listed view of reports for faster search and retrieval of a specific report. It also includes a map of reports in a larger section. The Projects section for the public users lists all of the projects posted and a corresponding map.

2. Citizen Auditor

The Citizen Auditors main task is to provide reports for the posted projects. Citizen auditors can view all projects and their details as well. Additionally, citizen auditors can view other user's reports and their details. They can delete their own report as well. The Citizen Auditors can view and edit their own profile.

3. Admin

The admin manages project posting and report approval. He/She oversees if a report is valid by cross verifying QR Codes present in the reports and location of a project. The admin owns only the projects he/she has posted. Other admins' projects will not be accessible to him/her. In addition, the admins are responsible also for adding user accounts to the system.

VII. Conclusion

The Mobile Application: Informative Camera (MAICAM) and the web application (Citizen Audit Reports) can serve as a tool to enlighten the citizens about infrastructure projects of the government and engage them in the overall auditing process of Commission on Audit. MAICAM provides a way to secure basic information such as date, time, and geographical coordinates of the pictures by stamping it directly in the picture. The compilation of the reports on different projects can aid in avoiding exploitation of public funds allotted for the infrastructure projects.

VIII. Recommendations

Mobile Application: Informative Camera offers a way to secure basic information by stamping them directly on the picture. This is particularly useful against metadata corruption or incorrect information. However, this method is not secure against tampering in purpose. Although the QR Code serves as a cross-verification tool to ensure that the picture is not tampered, the image can still be duplicated and altered. It is therefore recommended to add another layer of security to the image such as adding unique code to the QR Code to avoid duplication.

The web application is yet a simple information system that manages posting of projects and submission of reports. It is recommended to add a complete messaging functionality between the Citizen Auditors and admins. Notification functionality about red flag alerts can also greatly improve the system.

IX. Bibliography

1. **Selosa, Gladys.** *Government Projects*. July 15, 2015.
2. ANSA-EAP. [Online] [Cited: November 15, 2015.] <http://www.ansa-eap.com>.
3. *Using location information to improve literature searches*. **Perry, A.** 9, s.l. : Agricultural Research, 2014, Agricultural Research, Vol. 62, pp. 19-20.
4. *Where do tourists go? Visualizing and analysing the spatial distribution of geotagged photography*. **Kádár, B., & Gede, M.** 48, 2013, *Cartographica: The International Journal for Geographic Information and Geovisualization*, Vol. 2, pp. 78-88.
5. *Recreational demand for clean water: evidence from geotagged photographs by visitors to lakes*. **Keeler, Bonnie L., et al.** 2015.
6. *Using social media to quantify nature-based tourism and recreation*. **Wood, S. A., Guerry, A. D., Silver, J. M., & Lacayo, M.** 2013, *Scientific reports*, Vol. 3.
7. *Geotagged photos: a useful tool for criminological research?* **Lemieux, A. M.** 1, 2015, *Crime Science*, Vol. 4, pp. 1-11.
8. *Geotagging photographs in student fieldwork*. **Welsh, K. E., et al., et al.** 3, 2012, *ournal of Geography in Higher Education*, Vol. 36, pp. 469-480.
9. *Geotagging Where Cyberspace Comes to Your Place*. **Valli, C. and Hannay, P.** 2010, *Security and Management*, pp. 627-632.
10. *Applying qr code technology to facilitate hospital medical equipment repair management*. **Chu, L. C., Lee, C. L. and Wu, C. J.** December 2012, In *Control Engineering and Communication Technology (ICCECT)*, pp. 856-859.
11. *Enhancing User Experience using Mobile QR-Code Application*. **Wara, A. A. and Dugga, S.** 6, 2014, *International Journal of Computer and Information Technology*, Vol. 3, pp. 1310-1315.
12. *A survey of augmented reality technologies, applications and limitations*. **Van Krevelen, D. W. F. and Poelman, R.** 2, 2010, *International Journal of Virtual Reality*, Vol. 9, p. 1.
13. *Commission on Audit*. [Online] [Cited: November 15, 2015.] <http://www.coa.gov.ph>.
14. *QR Code*. [Online] [Cited: November 15, 2015.] <http://www.qrcode.com>.
15. *SearchSQLServer*. [Online] [Cited: May 27, 2016.] <http://searchsqlserver.techtarget.com/definition/database-management-system>.

X. Appendix

A. Inspection Report

Republic of the Philippines
 Commission on Audit
 Special Services Sector
TECHNICAL SERVICES OFFICE
 Quezon City

INSPECTION REPORT FOR INFRASTRUCTURE PROJECT

Date of report: February 18, 2015

| Reference no. 021815 | | | |
|--|---|----------------------------------|------------------|
| Project description | Inspection of Newly Constructed Main NAMRIA Building | | |
| Location | Lawton Avenue, Fort Andres Bonifacio 1638 Taguig City, Philippines (As shown in the approved location plan) | | |
| Contracting parties | ABC Construction | | |
| Contract date | 27 December 2014 | Contract time | 60 calendar days |
| Effectivity date | 3 January 2015 | Expiry date | 2 March 2015 |
| Subject of inspection | 100% Work Accomplishment | | |
| Objectives of inspection | 1. To validate the existence of the reported accomplishments 2. To validate compliance of reported accomplishments with the approved plans and specifications 3. To check issues and concerns regarding the new project | | |
| Date of Inspection | February 17 - 18, 2015 | | |
| Persons/Personnel present during the inspection | Name | Position/Designation /Office | Signature |
| | Gladys Selosa | Citizen Auditor ANSA-EAP | |
| | | | |
| GROUND CONTROL POINT | | | |
| Island: Luzon | Province: NCR | City: Taguig City | |
| Barangay: | Others: | | |
| Geographic coordinates | $\phi = 14^{\circ}32'6.51"N$ | $\lambda = 121^{\circ}2'27.09"E$ | |
| Travel description and landmarks | | | |

Figure 36. Inspection Report Form

B. Source Code

For Android Application

```

AndroidManifest.xml
<?xml version="1.0" encoding="utf-8"?>
<manifest
    xmlns:android="http://schemas.android.com/apk/res
    /android"
        package="com.project.maico.maicam" >
    <uses-permission
        android:name="android.permission.ACCESS_COARSE_L
        OCATION" />
    <uses-permission
        android:name="android.permission.ACCESS_FINE_LOCA
        TION" />
    </uses-permission>
    <uses-permission
        android:name="android.permission.CAMERA" />
    <uses-feature
        android:name="android.hardware.camera" />
    <uses-feature
        android:name="android.hardware.camera.autofocus"
        />
    </uses-permission>
    <uses-permission
        android:name="android.permission.READ_EXTERNAL_ST
        ORAGE" />
    <uses-permission
        android:name="android.permission.WRITE_EXTERNAL_S
        TORAGE" />
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:theme="@style/AppTheme" >
        <activity
            android:name=".MainActivity"
            android:label="@string/app_name"

        android:screenOrientation="portrait" >
            <intent-filter>
                <action
                    android:name="android.intent.action.MAIN" />
                <category
                    android:name="android.intent.category.LAUNCHER"
                    />
            </intent-filter>
        </activity>
        <activity
            android:name=".DetailActivity"

        android:label="@string/title_activity_gallery_det
        ail"

        android:parentActivityName=".MainActivity" >
            <meta-data
                android:name="android.support.PARENT_ACTIVITY"
                android:value="com.project.maico.maicam.MainActiv
                ity" />
        </activity>
        <activity
            android:name=".CameraActivity"

```

```

        android:label="@string/title_activity_camera"
        android:parentActivityName=".MainActivity" >
            <meta-data
                android:name="android.support.PARENT_ACTIVITY"
                android:value="com.project.maico.maicam.MainActiv
                ity" />
        </activity>
        <service
            android:name=".MainUtil.FetchAddressIntentService
            "
                android:exported="false" />
    </application>
</manifest>

CameraActivity.java

package com.project.maico.maicam;

import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.view.Menu;
import android.view.MenuItem;

public class CameraActivity extends
AppCompatActivity {

    @Override
    protected void onCreate(Bundle
    savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_camera);
        setTitle("Camera");
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu)
    {
        // Inflate the menu; this adds items to
        the action bar if it is present.
        getMenuInflater().inflate(R.menu.menu_camera,
        menu);
        return true;
    }

    @Override
    public boolean onOptionsItemSelected(MenuItem item)
    {
        // Handle action bar item clicks here.
        // The action bar will
        // automatically handle clicks on the
        Home/Up button, so long
        // as you specify a parent activity in
        AndroidManifest.xml.
        int id = item.getItemId();

        //noinspection SimplifiableIfStatement
        if (id == R.id.action_settings) {
            return true;
        }
    }
}

```

```

        return super.onOptionsItemSelected(item);
    }

}

CameraFragment.java

package com.project.maico.maicam;

import android.app.Activity;
import android.content.BroadcastReceiver;
import android.content.Context;
import android.content.Intent;
import android.content.IntentFilter;
import android.graphics.Bitmap;
import android.graphics.BitmapFactory;
import android.graphics.Canvas;
import android.hardware.Camera;
import android.hardware.SensorManager;
import android.location.Location;
import android.location.LocationListener;
import android.location.LocationManager;
import android.media.ExifInterface;
import android.os.Bundle;
import android.os.Environment;
import android.support.v4.app.Fragment;
import android.util.Log;
import android.view.LayoutInflater;
import android.view.MotionEvent;
import android.view.OrientationEventListener;
import android.view.SurfaceHolder;
import android.view.SurfaceView;
import android.view.View;
import android.view.ViewGroup;
import android.widget.Button;
import android.widget.FrameLayout;
import android.widget.ImageView;
import android.widget.RelativeLayout;
import android.widget.TextView;
import android.widget.Toast;

import java.io.File;
import java.io.FileNotFoundException;
import java.io.FileOutputStream;
import java.io.IOException;
import java.text.SimpleDateFormat;
import java.util.Date;

public class CameraFragment extends Fragment {

    private static final String LOG_TAG =
    CameraFragment.class.getSimpleName();
    private static Activity myContext;
    private static Camera mCamera;
    private static SurfaceHolder mHolder;
    private static CameraPreview mPreview;
    private static Canvas mCanvas;

    private static final int MEDIA_TYPE_IMAGE =
    1;
    private static final int MEDIA_TYPE_VIDEO =
    2;

    //Saving images
    private static final Bitmap.CompressFormat
    DEFAULT_COMPRESS_FORMAT =
    Bitmap.CompressFormat.JPEG;

```

```

    private static final int
    DEFAULT_COMPRESS_QUALITY = 70;

    //Orientation
    private static final int PORTRAIT_90 = 90;
    private static OrientationEventListener
    mOrientationEventListener;
    private static int mImageOrientation = 90;
    private static String orient = "portrait";

    private static RelativeLayout sensorLayout;

    //Date-time change listener
    private final DateChangeReceiver
    mDateChangeReceiver = new DateChangeReceiver();

    //Camera Overlay
    protected TextView mLatitudeLongitudeText;
    protected TextView mAltitudeText;
    protected TextView mDateText;
    protected TextView mTimeText;
    protected ImageView mQRCode;

    //flash setting
    private Boolean hasFlash;
    private Boolean flashToggle = false;

    //Location listener
    private static final long LOCATION_MINTIME =
    2000;
    private static final float
    LOCATION_MINDISTANCE = 10;

    protected Location currentLocation;
    private static double longitude;
    private static double latitude;
    private static double altitude;

    private final LocationListener
    locationListener = new LocationListener(){

        @Override
        public void onLocationChanged(Location
        location) {
            Toast.makeText(myContext, "Location
            changed", Toast.LENGTH_SHORT).show();
            //update current location
            currentLocation = location;

            mLatitudeLongitudeText.setText(String.format("%f,
            %f", location.getLatitude(),
            location.getLongitude()));

            mAltitudeText.setText(String.format("Altitude: %f
            m", location.getAltitude()));

            //mLatitudeLongitudeText.setText(utility.convertT
            oDMS(location.getLatitude(),
            location.getLongitude()));
        }

        @Override
        public void onStatusChanged(String
        provider, int status, Bundle extras) {
    }
}

```

```

@Override
public void onProviderEnabled(String provider) {
}

@Override
public void onProviderDisabled(String provider) {
}

public CameraFragment() {

}

@Override
public void onAttach(Activity activity) {
    super.onAttach(activity);
    myContext = activity;
}

@Override
public View onCreateView(LayoutInflater inflater, ViewGroup container,
                        Bundle savedInstanceState) {
    // Inflate the layout for this fragment
    View view =
inflater.inflate(R.layout.fragment_camera,
container, false);

    //Create camera
    mCamera = getCameraInstance();

    //Create preview view
    mPreview = new CameraPreview(myContext,
mCamera);
    FrameLayout preview = (FrameLayout)
view.findViewById(R.id.camera_preview);
    preview.addView(mPreview);

    //Camera Overlay TextViews
    mLatitudeLongitudeText = (TextView)
view.findViewById((R.id.latitude_longitudeText));
    mAltitudeText = (TextView)
view.findViewById(R.id.altitudeText);
    mDateText= (TextView)
view.findViewById(R.id.dateText);
    mTimeText = (TextView)
view.findViewById(R.id.timeText);
    //QRCode image
    mQRCode = (ImageView)
view.findViewById(R.id.qrcodeImage);

    //initialize Camera Overlay

    mQRCode.setImageBitmap(QRFragment.bitmapQRCode);
    mDateText.setText(String.format(new
SimpleDateFormat("MM/dd/yyyy").format(new
Date())));
    mTimeText.setText(String.format(new
SimpleDateFormat("h:mm aa").format(new Date())));
}

@Override
public void onProviderEnabled(String provider) {
}

@Override
public void onProviderDisabled(String provider) {
}

public CameraFragment() {

}

@Override
public void onAttach(Activity activity) {
    super.onAttach(activity);
    myContext = activity;
}

@Override
public View onCreateView(LayoutInflater inflater, ViewGroup container,
                        Bundle savedInstanceState) {
    // Inflate the layout for this fragment
    View view =
inflater.inflate(R.layout.fragment_camera,
container, false);

    //Create camera
    mCamera = getCameraInstance();

    //Create preview view
    mPreview = new CameraPreview(myContext,
mCamera);
    FrameLayout preview = (FrameLayout)
view.findViewById(R.id.camera_preview);
    preview.addView(mPreview);

    //Camera Overlay TextViews
    mLatitudeLongitudeText = (TextView)
view.findViewById((R.id.latitude_longitudeText));
    mAltitudeText = (TextView)
view.findViewById(R.id.altitudeText);
    mDateText= (TextView)
view.findViewById(R.id.dateText);
    mTimeText = (TextView)
view.findViewById(R.id.timeText);
    //QRCode image
    mQRCode = (ImageView)
view.findViewById(R.id.qrcodeImage);

    //initialize Camera Overlay

    mQRCode.setImageBitmap(QRFragment.bitmapQRCode);
    mDateText.setText(String.format(new
SimpleDateFormat("MM/dd/yyyy").format(new
Date())));
    mTimeText.setText(String.format(new
SimpleDateFormat("h:mm aa").format(new Date())));

}

//Setup location manager
LocationManager lm = (LocationManager)
myContext.getSystemService(Context.LOCATION_SERVICE);
Location location =
lm.getLastKnownLocation(LocationManager.GPS_PROVIDER);
if(location!=null){
    currentLocation = location;

mLatitudeLongitudeText.setText(String.format("%f",
%f", location.getLatitude(),
location.getLongitude()));

//mLatitudeLongitudeText.setText(utility.convertT
oDMS(location.getLatitude(),
location.getLongitude()));

mAltitudeText.setText(String.format("Altitude:
%.2f", location.getAltitude()));
} else{
    Toast.makeText(myContext,"No location
detected. Make sure location is enabled on the
device.",Toast.LENGTH_LONG).show();
}

lm.requestLocationUpdates(LocationManager.GPS_PROVIDER,
LOCATION_MINTIME, LOCATION_MINDISTANCE,
locationListener);

sensorLayout = (RelativeLayout)
view.findViewById(R.id.sensor_data_layout);
if(sensorLayout==null){
    Log.d("MaicamDebug", "Sensorlayout is
null");
} else{
    Log.d("MaicamDebug", "Sensorlayout:
Not null");
}

sensorLayout.bringToFront();

sensorLayout.setDrawingCacheEnabled(true);

//add listener
Button captureButton = (Button)
view.findViewById(R.id.button_capture);
captureButton.setOnClickListener(new
View.OnClickListener() {

    @Override
    public void onClick(View v) {
        //set image orientation
        Camera.Parameters param =
mCamera.getParameters();

param.setRotation(mImageOrientation);
        mCamera.setParameters(param);
        Log.d(LOG_TAG, "parameters are
set");

        //build drawing cache
        sensorLayout.buildDrawingCache();

        //get image from camera
    }
});
}

```

```

//          mCamera.autoFocus(new
Camera.AutoFocusCallback(){
//
//          @Override
//          public void
onAutoFocus(boolean success, Camera camera) {
//                  if(success){
//mCamera.takePicture(mShutterCallback, null,
mPictureCallback);
//                  }
//                  }
//          });
}

mCamera.takePicture(mShutterCallback, null,
mPictureCallback);
}
});

return view;
}

@Override
public void onViewCreated(View view, Bundle
savedInstanceState) {
    final View cameraView = view;
    super.onViewCreated(view,
savedInstanceState);

//Detect orientation via Sensor
mOrientationEventListener = new
OrientationEventListener(myContext,
SensorManager.SENSOR_DELAY_NORMAL) {
    @Override
    public void onOrientationChanged(int
orientation) {
        String lastOrient = orient;
        /*
        if(orientation >= 45 &&
orientation<135){
            degrees = 180;
            orient = "landscape";
        }else if(orientation >= 135 &&
orientation<225){
            degrees = 270;
            orient = "portrait";
        }else if(orientation >= 225 &&
orientation<315){
            degrees = 0;
            orient = "landscape";
        }*/
        //TODO: Adjust values for faster
detection, +-range will do
        if(Math.round(orientation)==90){
            mImageOrientation = 180;
            orient = "landscape";
        }else
if(Math.round(orientation)==180){
            mImageOrientation = 270;
            orient = "portrait";
        }else
if(Math.round(orientation)==270){
            mImageOrientation = 0;
            orient = "landscape";
        }else
if(Math.round(orientation)==0){

mImageOrientation = 90;
orient = "portrait";
}
}

if(lastOrient!=orient){
    RelativeLayout relLayout =
(RelativeLayout)
cameraView.findViewById(R.id.sensor_data_layout);
    if(relLayout==null) {
        int w =
relLayout.getWidth();
        int h =
relLayout.getHeight();

        if (orient ==
"landscape") {
            relLayout.setRotation(90.0f);
            relLayout.setTranslationX((w - h) / 2);
            relLayout.setTranslationY((h - w) / 2);
        } else {
            relLayout.setRotation(0f);
            relLayout.setTranslationX(0f);
            relLayout.setTranslationY(0f);
        }
    }

    ViewGroup.LayoutParams lp
= relLayout.getLayoutParams();
    lp.height = w;
    lp.width = h;

    relLayout.requestLayout();
}
}

if(mOrientationEventListener.canDetectOrientation
()){
    Log.d(LOG_TAG, "can detect
orientation");
    mOrientationEventListener.enable();
} else{
    Log.d(LOG_TAG,"cannot detect
orientation");
    mOrientationEventListener.disable();
}

/**
 * Access primary camera
 */
public static Camera getCameraInstance(){
    Camera c = null;
    try{
        c = Camera.open();
        Log.d(LOG_TAG,"Camera is open.");
    }catch(Exception e){
        //camera is not available
    }
}

```

```

        Log.d(LOG_TAG, "Camera is not
available. " + e.getMessage());
    }
    return c;
}

/**
 * Create a preview class: SurfaceView -
displays the live image data
*/
public class CameraPreview extends
SurfaceView
    implements SurfaceHolder.Callback{

    public CameraPreview(Context context,
Camera camera) {
        super(context);
        mCamera = camera;

        //autofocus
        setFocusable(true);
        setFocusableInTouchMode(true);

        //install a SurfaceHolder.Callback so
we get notified
        //when the underlying surface is
created and destroyed
        mHolder = getHolder();
        mHolder.addCallback(this);
        //deprecated but required on Android
versions prior to 3.0

mHolder.setType(SurfaceHolder.SURFACE_TYPE_PUSH_BUFFERS);
    }

    @Override
    public void surfaceCreated(SurfaceHolder
holder) {
        //surface created, now tell the
camera where to draw preview
        try {
            if(mCamera == null){
                mCamera =
getCameraInstance();
            }
        }

mCamera.setDisplayOrientation(PORTRAIT_90);

mCamera.setPreviewDisplay(holder);
        mCamera.startPreview();
    }catch(IOException e){
        Log.d(LOG_TAG, "Error setting
camera preview: " + e.getMessage());
    }
}

@Override
public void surfaceChanged(SurfaceHolder
holder, int format, int width, int height) {
    //if preview can change or rotate,
take care these events here
    if(mHolder.getSurface() == null){
        return;
    }
    //stop preview before making changes
    try{
        mCamera.stopPreview();
    }catch (Exception e){
        //tried to stop a non-existent
preview
    }
}

//set preview size and make any
resize, rotate or
//reformatting changes here

//start preview with new settings
try{
    //setCameraDisplayOrientation(getActivity(),0,mCa
mera);
    if (mCamera == null){
        mCamera =
getCameraInstance();
    }

mCamera.setDisplayOrientation(PORTRAIT_90);

mCamera.setPreviewDisplay(mHolder);
    mCamera.startPreview();

//           mCamera.autoFocus(null);
} catch (IOException e) {
    Log.d(LOG_TAG, "Error starting
camera preview: " +
+ e.getMessage());
}

}

@Override
public void
surfaceDestroyed(SurfaceHolder holder) {
    //empty, release camera preview in
your activity
    releaseCamera();
}

}

@Override
public boolean onTouchEvent(MotionEvent
event) {
    if(flashToggle) {
        Camera.Parameters param =
mCamera.getParameters();

param.setFlashMode(Camera.Parameters.FLASH_MODE_O
FF);
        mCamera.setParameters(param);
        mCamera.startPreview();
        mCamera.autoFocus(null);

        Camera.Parameters param1 =
mCamera.getParameters();

param1.setFlashMode(Camera.Parameters.FLASH_MODE_
ON);
        mCamera.setParameters(param1);
        mCamera.startPreview();

    }else{
        mCamera.autoFocus(null);
    }
}
}

```

```

        }
        return false;
    //    return super.onTouchEvent(event);
    }

    private Camera.ShutterCallback
mShutterCallback = new Camera.ShutterCallback() {
    public void onShutter() {
        //default sound
    }
};

/***
 * Setup listeners for Capture
 */
private Camera.PictureCallback
mPictureCallback = new Camera.PictureCallback() {
    @Override
    public void onPictureTaken(byte[] data,
Camera camera) {
        BitmapFactory.Options options = new
BitmapFactory.Options();
        options.inMutable = true;
        Bitmap bitmapRaw =
BitmapFactory.decodeByteArray(data, 0,
data.length, options);

        //overlay bitmap
        Bitmap bitmapLayout =
Bitmap.createScaledBitmap(sensorLayout.getDrawing
Cache(), bitmapRaw.getWidth(),
bitmapRaw.getHeight(), true);

        mCanvas = new Canvas(bitmapRaw);
        mCanvas.drawBitmap(bitmapLayout, 0,
0, null);

        bitmapLayout.recycle();

        File pictureFile =
getOutputMediaFile(MEDIA_TYPE_IMAGE);
        if (pictureFile == null) {
            Log.d(LOG_TAG, "Error creating
media file");
            return;
        }
        try {
            FileOutputStream fos = new
FileOutputStream(pictureFile);
            //drawing of image into file

bitmapRaw.compress(DEFAULT_COMPRESS_FORMAT,
DEFAULT_COMPRESS_QUALITY, fos);
            fos.close();

            bitmapRaw.recycle();

            if(currentLocation !=null) {
                //exif data: location not set
                ExifInterface exif = new
ExifInterface(pictureFile.getAbsolutePath());
                String latLetter =
(currentLocation.getLatitude() > 0) ? "N" : "S";
                String lonLetter =
(currentLocation.getLongitude() > 0) ? "E" : "W";
                //set latitude
                exif.setAttribute(ExifInterface.TAG_GPS_LATITUDE,
Utility.gpsExif(currentLocation.getLatitude()));

                exif.setAttribute(ExifInterface.TAG_GPS_LATITUDE_
REF, latLetter);
                //set longitude
                exif.setAttribute(ExifInterface.TAG_GPS_LONGITUDE
,
Utility.gpsExif(currentLocation.getLongitude()));

                exif.setAttribute(ExifInterface.TAG_GPS_LONGITUDE_
REF, lonLetter);
                //set altitude
                // TODO: 5/8/2016 change to
altitude
                exif.setAttribute(ExifInterface.TAG_GPS_ALTITUDE,
String.format("%f",
currentLocation.getAltitude()));
                //save changes in exif
                exif.saveAttributes();
            }
        } catch (FileNotFoundException e) {
            Log.d(LOG_TAG, "File not found: " +
e.getMessage());
        } catch (IOException e) {
            Log.d(LOG_TAG, "Error accessing
file: " + e.getMessage());
        }
        Toast.makeText(myContext, "Picture
Saved : " + pictureFile.getAbsolutePath(),
Toast.LENGTH_LONG).show();

        refreshCamera();
    }
};

@Override
public void onPause(){
    super.onPause();

    //releaseMediaRecorder
    releaseCamera();

    //unregister receiver
    try {
        myContext.unregisterReceiver(mDateChangeReceiver)
;
        }catch(IllegalArgumentException e){
            if(e.getMessage().contains("Receiver
not registered")){
                //ignore this exception. This is
a known bug and is exactly what is desired.
            }else{
                throw e;
            }
        }
    }
}

```

```

@Override
public void onResume(){
    super.onResume();

myContext.registerReceiver(mDateChangeReceiver,
new IntentFilter(Intent.ACTION_TIME_TICK));

}

/***
 * release camera, set camera to null
 */
private void releaseCamera(){
    if(mCamera!=null){
        mCamera.release();
        mCamera=null;
    }
}

/***
 * refresh camera after a shot
 */
private void refreshCamera() {
    if (mHolder.getSurface() == null) {
        return;
    }
    try {
        mCamera.stopPreview();
    }catch (Exception e) {}

    try {
        mCamera.setPreviewDisplay(mHolder);
        mCamera.startPreview();
    } catch (Exception e) {}
}

/***
 * Create a File for saving an image or video
 */
private File getOutputMediaFile(int type){
    //File mediaStorageDir = new
File(Environment.getExternalStoragePublicDirectory(
y(Environment.DIRECTORY_PICTURES), "Maicam"));
    //not working in samsung android 4.3
    //File mediaStorageDir = new
File(getActivity().getExternalFilesDir(null).getPath());
    File mediaStorageDir = new
File(Environment.getExternalStorageDirectory(),"M
aicamImages");
    //images persist after app is uninstalled

    //create storage directory
    if(!mediaStorageDir.exists()){
        if(!mediaStorageDir.mkdirs()){
            Log.d(LOG_TAG," failed to create
directory");
            return null;
        }
    }

    Log.d(LOG_TAG, "External Storage
Directory: " + mediaStorageDir.getPath());

    //create file name
    String timeStamp = new
SimpleDateFormat("yyyyMMdd_HHmmss").format(new
Date());
}

File mediaFile;
if(type == MEDIA_TYPE_IMAGE){
    mediaFile = new
File(mediaStorageDir.getPath() + File.separator +
"IMG_" + timeStamp + ".jpg");
} else if(type == MEDIA_TYPE_VIDEO){
    mediaFile = new
File(mediaStorageDir.getPath() + File.separator +
"VID_" + timeStamp + ".mp4");
} else{
    return null;
}
return mediaFile;
}

public class DateChangeReceiver extends
BroadcastReceiver {
    private final String LOG_TAG =
DateChangeReceiver.class.getSimpleName();

@Override
public void onReceive(Context context,
Intent intent) {
    //To do when time changes by a minute
    String time = String.format(new
SimpleDateFormat("h:mm aa").format(new Date()));

    mTimeText.setText(time);
    if(time.equals("12:00 AM")){
        mDateText.setText(String.format(new
SimpleDateFormat("MM/dd/yyyy").format(new
Date())));
    }
}

//how to upload in my repo
//2nd try
}

}

DetailActivity.java
package com.project.maico.maicam;

import android.os.Build;
import android.os.Bundle;
import android.support.v4.app.Fragment;
import android.support.v4.app.FragmentManager;
import
android.support.v4.app.FragmentStatePagerAdapter;
import android.support.v4.view.ViewPager;
import android.support.v7.app.AppCompatActivity;
import android.util.DisplayMetrics;
import android.util.Log;
import android.view.View;
import android.view.WindowManager;

import
com.project.maico.maicam.GalleryUtil.ImageLoader;
import
com.project.maico.maicam.GalleryUtil.ImageUtil;

import java.io.File;

public class DetailActivity extends
AppCompatActivity implements
View.OnClickListener{

```

```

    private static final String LOG_TAG =
DetailActivity.class.getSimpleName();

    private ImagePagerAdapter mAdapter;
    private ViewPager mPager;
    private ImageLoader mImageLoader;
    private static File[] files;

    //disk caching
    private static final String DISK_CACHE_SUBDIR
= "images";

    //memory caching
    private static final float CACHE_PERCENTAGE =
0.25f;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.detail_pager);

        //get files from maicam
        files =
ImageUtil.GetFilesFromMaicam(this);
        //Fetch screen height and width to use as
our max size when loading images
        //as this activity runs full screen

        final DisplayMetrics displayMetrics = new
DisplayMetrics();

getWindowManager().getDefaultDisplay().getMetrics
(displayMetrics);

        final int height =
displayMetrics.heightPixels;
        final int width =
displayMetrics.widthPixels;

        //Use half of the longest dimension to
resize our images
        final int longest = (height > width ?
height : width)/2;

        //Set ImageLoader to load and cache our
images
        mImageLoader = new ImageLoader(this,
longest, longest, CACHE_PERCENTAGE,
DISK_CACHE_SUBDIR, null);

        //Set up ViewPager and backing adapter
        mAdapter = new
ImagePagerAdapter(getSupportFragmentManager(),
files.length);
        mPager = (ViewPager)
findViewById(R.id.pager);
        mPager.setAdapter(mAdapter);
        //mPager.setPageMargin((int)
getResources().getDimension(R.dimen.margin));
        mPager.setOffscreenPageLimit(2);

        //Set up activity to go full screen

getWindow().addFlags(WindowManager.LayoutParams.F
LAG_FULLSCREEN);

```

```

        if(Build.VERSION.SDK_INT >=
Build.VERSION_CODES.HONEYCOMB) {
            final
            android.support.v7.app.ActionBar actionBar =
getSupportActionBar();

//actionBar.setDisplayShowTitleEnabled(true);

//actionBar.setDisplayHomeAsUpEnabled(true);

/*mPager.setOnSystemUiVisibilityChangeListener(
new
View.OnSystemUiVisibilityChangeListener(){

    @Override
    public void
onSystemUiVisibilityChange(int visibility) {
        if((visibility &
View.SYSTEM_UI_FLAG_LOW_PROFILE) != 0){
            actionBar.hide();
            Log.d(LOG_TAG,
"hide");
        }else{
            actionBar.show();
            Log.d(LOG_TAG,
"show");
        }
    }
);*/
            //Start low profile mode and hide
            actionBar

mPager.setSystemUiVisibility(View.SYSTEM_UI_FLAG_
LOW_PROFILE);
            actionBar.hide();
        }

        //Set the current item based on the extra
        //passed in to this activity
        final int extraCurrentItem =
getIntent().getIntExtra(com.project.maico.maicam.
DetailFragment.IMAGE_DATA_EXTRA, -1);

        if(extraCurrentItem != -1){

mPager.setCurrentItem(extraCurrentItem);
        }

        @Override
        public void onClick(View v) {
            final int vis =
mPager.getSystemUiVisibility();
            if((vis &
View.SYSTEM_UI_FLAG_LOW_PROFILE) != 0){

mPager.setSystemUiVisibility(View.SYSTEM_UI_FLAG_
VISIBLE);
            getSupportActionBar().show();
            Log.d(LOG_TAG, "flag visible");
        }else{

mPager.setSystemUiVisibility(View.SYSTEM_UI_FLAG_
LOW_PROFILE);
            getSupportActionBar().hide();
        }

```

```

        Log.d(LOG_TAG, "low profile");
    }

    /**
     * Called by the ViewPager child fragments to
     * load images via the one ImageLoader
     */
    public ImageLoader getImageLoader() {
        return mImageLoader;
    }

    private class ImagePagerAdapter extends
FragmentStatePagerAdapter{
        private final int mSize;

        public ImagePagerAdapter(FragmentManager
fm, int size) {
            super(fm);
            mSize = size;
        }

        @Override
        public Fragment getItem(int position) {
            return
com.project.maico.maicam.DetailFragment.newInstance(files[position].getAbsolutePath());
        }

        @Override
        public int getCount() {
            return mSize;
        }
    }
}

DetailFragment.java

package com.project.maico.maicam;

import android.app.Activity;
import android.os.Build;
import android.os.Bundle;
import android.support.v4.app.Fragment;
import android.util.Log;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;

import
com.project.maico.maicam.GalleryUtil.ImageLoader;

/**
 * A placeholder fragment containing a simple
view.
 */
public class DetailFragment extends Fragment {

    private static final String LOG_TAG =
DetailFragment.class.getSimpleName();
    private static Activity myContext;

    private ImageLoader mImageLoader;
    private ImageView mImageView;
    private String mFileName;
}

```

```

    public static final String IMAGE_DATA_EXTRA =
"extra_image_data";

    /**
     * Factory method to generate a new instance
of the fragment given an image number
     *
     * @param filename the filename of image to
load
     * @return A new instance of DetailFragment
with image number extras(?)
     */
    public static DetailFragment
newInstance(String filename){
        final DetailFragment f = new
DetailFragment();

        final Bundle args = new Bundle();
        args.putString(IMAGE_DATA_EXTRA,
filename);

        f.setArguments(args);
        Log.d(LOG_TAG,"new instance");
        return f;
    }

    /**
     * Empty constructor as per the Fragment
documentation
     */
    public DetailFragment() {
    }

    @Override
    public void onAttach(Activity activity) {
        super.onAttach(activity);
        myContext = activity;
    }

    /**
     * Populate image using the filename from
extras
     * @param savedInstanceState
     */
    @Override
    public void onCreate(Bundle
savedInstanceState) {
        super.onCreate(savedInstanceState);
    }

    /**
     * Set mImageView
     * @param inflator
     * @param container
     * @param savedInstanceState
     * @return
     */
    @Override
    public View onCreateView(LayoutInflater
inflater, ViewGroup container,
                           Bundle
savedInstanceState) {
        final View view =
inflater.inflate(R.layout.fragment_detail,
container, false);
}

```

```

        mImageView = (ImageView)
view.findViewById(R.id.imageView);
// TODO: set height and width of the image
// reqWidth = mImageView.getWidth();
// reqHeight = mImageView.getHeight();

        mFileName = getArguments() != null ?
(String) getArguments().get(IMAGE_DATA_EXTRA) :
null;

        Log.d(LOG_TAG, "OnCreateView in detail
fragment");

        mImageView.setScaleType(ImageView.ScaleType.CENTE
R_INSIDE);
//
imageView.setImageResource(R.drawable.image_place
holder);

        return view;
    }

    @Override
    public void onActivityCreated(Bundle
savedInstanceState) {
    super.onActivityCreated(savedInstanceState);

        //Use the parent activity to load the
image asynchronously into the ImageView
        //so a single cache can be used over all
pages in the ViewPager

    if(DetailActivity.class.getInstance(myContext)){
        mImageLoader =
((DetailActivity)myContext).getImageLoader();
        mImageLoader.loadBitmap(mFileName,
mImageView);
    }

        // Pass clicks on the ImageView to the
parent activity to handle

    if(View.OnClickListener.class.getInstance(myContex
t)&& Build.VERSION.SDK_INT>=
Build.VERSION_CODES.HONEYCOMB) {

        mImageView.setOnClickListener((View.OnClickListener)myContext);
    }
}

}

GalleryFragment.java
package com.project.maico.maicam;

import android.annotation.TargetApi;
import android.app.Activity;
import android.content.Context;
import android.content.Intent;
import android.graphics.Bitmap;
import android.graphics.BitmapFactory;
import android.os.Build;
import android.os.Bundle;
import android.support.annotation.Nullable;
import android.support.v4.app.Fragment;

```

```

import android.util.Log;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.view.ViewTreeObserver;
import android.widget.AdapterView;
import android.widget.BaseAdapter;
import android.widget.GridView;
import android.widget.ImageButton;
import android.widget.ImageView;

import
com.project.maico.maicam.GalleryUtil.ImageLoader;
import
com.project.maico.maicam.GalleryUtil.ImageUtil;

import java.io.File;

public class GalleryFragment extends Fragment
implements AdapterView.OnItemClickListener{
    private static String LOG_TAG =
GalleryFragment.class.getSimpleName();
    private static Activity myContext;

    private ImageAdapter mAdapter;
    private ImageLoader mImageLoader;
    private int mImageThumbSize;
    private int mImageThumbSpacing;

    private static File[] files;
    private static Bitmap mPlaceholderImage;

    //disk caching
    private static final String DISK_CACHE_SUBDIR
= "thumbnails";

    //memory caching
    private static final float CACHE_PERCENTAGE =
0.125f;

    //required empty constructor
    public GalleryFragment(){}
}

@Override
public void onCreate(Bundle
 savedInstanceState) {
    super.onCreate(savedInstanceState);

        //initialize values
        mImageThumbSize =
getResources().getDimensionPixelSize(R.dimen.imag
e_thumbnail_size);
        mImageThumbSpacing =
getResources().getDimensionPixelSize(R.dimen.imag
e_thumbnail_spacing);

        mPlaceholderImage =
BitmapFactory.decodeResource(getResources(),
R.drawable.image_placeholder);
    }

    @Nullable
    @Override
    public View onCreateView(LayoutInflater
inflater, ViewGroup container, Bundle
 savedInstanceState) {
        final View v =
inflater.inflate(R.layout.fragment_gallery,
container, false);

```

```

        final GridView gridView = (GridView)
v.findViewById(R.id.gridView);

        files =
ImageUtil.getFilesFromMaicam(myContext);

        mAdapter = new ImageAdapter(myContext);
gridView.setAdapter(mAdapter);
gridView.setOnItemClickListener(this);

        // This listener is used to get the final
width of the GridView and then calculate the
        // number of columns and the width of
each column. The width of each column is variable
        // as the GridView has
stretchMode=columnWidth. The column width is used
to set the height
        // of each view so we get nice square
thumbnails.

gridView.getViewTreeObserver().addOnGlobalLayoutL
istener(
        new
ViewTreeObserver.OnGlobalLayoutListener() {

@TargetApi(Build.VERSION_CODES.JELLY_BEAN)
        @Override
        public void onGlobalLayout()
{
        if
(mAdapter.getNumColumns() == 0) {

            final int numColumns
= (int) Math.floor(gridView.getWidth() /
(mImageThumbSize + mImageThumbSpacing));
            if (numColumns > 0) {
                final int
imageSize = (gridView.getWidth() / numColumns) -
mImageThumbSpacing;

mAdapter.setNumColumns(numColumns);

mAdapter.setItemHeight(imageSize); //square
thumbnails

                    //Update image
thumbnail size
                    mImageThumbSize =
imageSize;

                    if
(BuildConfig.DEBUG) {

Log.d(LOG_TAG, "onCreateView - numColumns set to
" + numColumns);
                }
                //not sure about
this

gridView.getViewTreeObserver()
.removeOnGlobalLayoutListener(this);

}
}
}
);
}

        mImageLoader= new ImageLoader(myContext,
mImageThumbSize, mImageThumbSize,
CACHE_PERCENTAGE, DISK_CACHE_SUBDIR,
mPlaceholderImage );

        return v;
    }

    @Override
    public void onItemClick(AdapterView<?>
parent, View view, int position, long id) {
        final Intent intent = new
Intent(myContext, DetailActivity.class);
        intent.putExtra
(com.project.maico.maicam.DetailFragment.IMAGE_DA
TA_EXTRA, (int) id);

        //TODO: make scale up animation
        startActivity(intent);
    }

    /**
     * Backing adapter for GridView
implementation of Gallery Fragment
     */
    private class ImageAdapter extends
BaseAdapter{
        private final Context mContext;
        private int mItemHeight = 0;
        private int mNumColumns = 0;
        private GridView.LayoutParams
mImageViewLayoutParams;

        public ImageAdapter(Context context){
            super();
            mContext = context;
            mImageViewLayoutParams = new
GridView.LayoutParams(ViewGroup.LayoutParams.MATCH_
PARENT, ViewGroup.LayoutParams.MATCH_PARENT);
        }

        @Override
        public int getCount() {
            return files.length;
        }

        @Override
        public File getItem(int position) {
            return files[position];
        }

        @Override
        public long getItemId(int position) {
            return position;
        }

        @Override
        public View getView(int position, View
convertView, ViewGroup parent) {
            ImageView imageView;

            //if convertView is not recycled,
initialize
            if(convertView == null) {
                imageView = new
ImageView(mContext);

imageView.setScaleType(ImageView.ScaleType.CENTER
_CROP);
            }
            mImageLoader.loadImage(files[position], imageView);
            return imageView;
        }
    }
}

```

```

        imageView.setLayoutParams(mImageViewLayoutParams);
    ;
    }else{
        imageView = (ImageView)
convertView;
    }

        //Check height matches our calculated
column width
        if(imageView.getLayoutParams().height
!= mItemHeight){

imageView.setLayoutParams(mImageViewLayoutParams)
;
    }
    Log.d(LOG_TAG,"get view for position:
" + position);

mImageLoader.loadBitmap(files[position].getAbsolu
tePath(), imageView);
    return imageView;
}

public void setNumColumns(int numColumns)
{
    mNumColumns = numColumns;
}

public int getNumColumns(){
    return mNumColumns;
}

public void setItemHeight(int height) {
    if(height == mItemHeight){
        return;
    }
    mItemHeight = height;
    mImageViewLayoutParams = new
GridView.LayoutParams(ViewGroup.LayoutParams.MATCH
_PARENT, mItemHeight);
    notifyDataSetChanged();
}
}

@Override
public void onAttach(Activity activity) {
    super.onAttach(activity);
    myContext = activity;
    ImageButton imageView = (ImageButton)
myContext.findViewById(R.id.galleryButton);

imageView.setImageResource(R.drawable.ic_galler
y_active);
}

@Override
public void onDetach() {
    ImageButton imageView = (ImageButton)
myContext.findViewById(R.id.galleryButton);

imageView.setImageResource(R.drawable.ic_galler
y);
    super.onDetach();
}
}

```

```

LocationFragment.java

package com.project.maico.maicam;

import android.app.Activity;
import android.content.Context;
import android.content.Intent;
import android.location.Geocoder;
import android.location.Location;
import android.location.LocationListener;
import android.location.LocationManager;
import android.os.Bundle;
import android.os.Handler;
import android.os.ResultReceiver;
import android.support.v4.app.Fragment;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageButton;
import android.widget.TextView;
import android.widget.Toast;

import
com.project.maico.maicam.MainUtil.Constants;
import
com.project.maico.maicam.MainUtil.FetchAddressInt
entService;

public class LocationFragment extends Fragment {
    private static final String LOG_TAG =
LocationFragment.class.getSimpleName();
    private static Activity myContext;

    private static TextView mLatitudeValue;
    private static TextView mLongitudeValue;
    private static TextView mLocationName;

    public Location mLastLocation;
    private AddressResultReceiver
mResultReceiver;

    //Location listener
    private static final long LOCATION_MINTIME =
2000;
    private static final float
LOCATION_MINDISTANCE = 10;

    private LocationListener locationListener;

    /*
    private final LocationListener
locationListener = new LocationListener(){

        @Override
        public void onLocationChanged(Location
location) {
            Toast.makeText(getActivity(),
"Location changed", Toast.LENGTH_SHORT).show();

            mLatitudeValue.setText(Utility.convertToDMS(locat
ion.getLatitude()));

            mLongitudeValue.setText(Utility.convertToDMS(loc
ation.getLongitude()));
            mLocationName.setText("google kung
pano kunin location name given the coordinates");
        }
    }

    @Override

```

```
public void onStatusChanged(String provider, int status, Bundle extras) {
}

@Override
public void onProviderEnabled(String provider) {

}

@Override
public void onProviderDisabled(String provider) {

};

/*
public LocationFragment() {
    // Required empty public constructor
}

@Override
public void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
}

@Override
public View onCreateView(LayoutInflater inflater, ViewGroup container,
                        Bundle savedInstanceState) {
    // Inflate the layout for this fragment
    View view =
inflater.inflate(R.layout.fragment_location,
container, false);

    //fetch location name
    mResultReceiver = new
AddressResultReceiver(new Handler());

    //TextViews
    mLatitudeValue = (TextView)
view.findViewById(R.id.latitudeValue);
    mLongitudeValue = (TextView)
view.findViewById(R.id.longitudeValue);
    mLocationName = (TextView)
view.findViewById(R.id.locationName);

    //Setup location manager
    LocationManager lm = (LocationManager)
myContext.getSystemService(Context.LOCATION_SERVICE);
    mLastLocation =
lm.getLastKnownLocation(LocationManager.GPS_PROVIDER);
    if(mLastLocation!=null){
//        mLatitudeValue.setText(Utility.convertToDMS(mLast
Location.getLatitude()));
//        mLongitudeValue.setText(Utility.convertToDMS(mLast
Location.getLongitude()));
    }
}

@Override
public void onAttach(Activity activity) {
    super.onAttach(activity);
    myContext = activity;
    ImageButton imageView = (ImageButton)
myContext.findViewById(R.id.locationButton);
    imageView.setImageResource(R.drawable.ic_locati
on_active);

    locationListener = new
LocationListener(){

        @Override
        public void
onLocationChanged(Location location) {
            mLastLocation = location;
            Toast.makeText(myContext,
"Location changed", Toast.LENGTH_SHORT).show();
            mLatitudeValue.setText(Float.toString((float)
mLastLocation.getLatitude()));
            mLongitudeValue.setText(Float.toString((float)
mLastLocation.getLongitude()));
            //mLocationName.setText("google
kung pano kunin location name given the
coordinates");
            if (!Geocoder.isPresent()) {

                mLocationName.setText(R.string.no_geocoder_availa
ble);
            }else{
                startIntentService();
            }
        }

        @Override
        public void
onProviderStatusChanged(String provider, int status) {
            if (status == LocationManager.PROVIDER_ENABLED) {
                startIntentService();
            }else{
                Toast.makeText(myContext,"No location
detected. Make sure location is enabled on the
device.",Toast.LENGTH_LONG).show();
            }
        }
    }

    lm.requestLocationUpdates(LocationManager.GPS_PRO
VIDER, LOCATION_MINTIME, LOCATION_MINDISTANCE,
locationListener);
}

return view;
}
}

@Override
public void onProviderEnabled(String provider) {
    super.onProviderEnabled(provider);
    if (!Geocoder.isPresent()) {
        mLocationName.setText(R.string.no_geocoder_availa
ble);
    }else{
        startIntentService();
    }
}

@Override
public void onProviderDisabled(String provider) {
    super.onProviderDisabled(provider);
    if (!Geocoder.isPresent()) {
        mLocationName.setText(R.string.no_geocoder_availa
ble);
    }else{
        startIntentService();
    }
}
```

```

        public void onStatusChanged(String
provider, int status, Bundle extras) {
            }

            @Override
            public void onProviderEnabled(String
provider) {
            }

            @Override
            public void onProviderDisabled(String
provider) {
            }

        };

    }

    @Override
    public void onDetach() {
        ImageButton(imageButton = (ImageButton)
myContext.findViewById(R.id.locationButton);

imageButton.setImageResource(R.drawable.ic_locati
on);
        super.onDetach();
    }

    protected void startIntentService() {
        Intent intent = new Intent(myContext,
FetchAddressIntentService.class);
        intent.putExtra(Constants.RECEIVER,
mResultReceiver);

intent.putExtra(Constants.LOCATION_DATA_EXTRA,
mLastLocation);
        myContext.startService(intent);
    }

    class AddressResultReceiver extends
ResultReceiver {
        public AddressResultReceiver(Handler
handler) {
            super(handler);
        }

        @Override
        protected void onReceiveResult(int
resultCode, Bundle resultData) {
            // Display the address string
            // or an error message sent from the
            intent service.

mLocationName.setText(resultData.getString(Consta
nts.RESULT_DATA_KEY));
        }
    }
}

>MainActivity.java
```

```

package com.project.maico.maicam;

import android.content.Context;
import android.content.Intent;
import android.location.Location;
import android.location.LocationManager;
import android.net.Uri;
import android.os.Bundle;
import android.support.design.widget.FloatingActionButto
n;
import android.support.v4.app.Fragment;
import
android.support.v4.app.FragmentTransaction;
import android.support.v7.app.AppCompatActivity;
import android.util.Log;
import android.view.Menu;
import android.view.MenuItem;
import android.view.View;
import android.widget.ImageButton;
import android.widget.Toast;

public class MainActivity extends
AppCompatActivity implements View.OnClickListener
{
    private final String LOG_TAG =
MainActivity.class.getSimpleName();

    @Override
    protected void onCreate(Bundle
savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        getSupportActionBar().setDisplayHomeAsUpEnabled(true);

        getSupportActionBar().setDisplayUseLogoEnabled(true);

        getSupportActionBar().setLogo(R.drawable.ic_logo)
;

        getSupportActionBar().setDisplayShowTitleEnabled(
false);

        Fragment defaultFragment = new
GalleryFragment();
        FragmentTransaction ft =
getSupportFragmentManager().beginTransaction();
        ft.add(R.id.main_fragment_container,
defaultFragment);
        ft.commit();

        FloatingActionButton fab =
(FloatingActionButton) findViewById(R.id.fabcam);
        fab.setOnClickListener(this);
        ImageButton locationButton =
(ImageButton) findViewById(R.id.locationButton);
        locationButton.setOnClickListener(this);
        ImageButton qrButton = (ImageButton)
findViewById(R.id.qrButton);
        qrButton.setOnClickListener(this);
        ImageButton galleryButton = (ImageButton)
findViewById(R.id.galleryButton);

```

```

        galleryButton.setOnClickListener(this);
    }

    @Override
    public boolean onCreateOptionsMenu(Menu menu)
    {
        // Inflate the menu; this adds items to
        // the action bar if it is present.

        getMenuInflater().inflate(R.menu.menu_main,
        menu);
        return true;
    }

    @Override
    public boolean onOptionsItemSelected(MenuItem item) {
        // Handle action bar item clicks here.
        // The action bar will
        // automatically handle clicks on the
        // Home/Up button, so long
        // as you specify a parent activity in
        // AndroidManifest.xml.
        int id = item.getItemId();

        //noinspection SimplifiableIfStatement
        if (id == R.id.action_settings) {
            return true;
        }else if(id == R.id.action_map){
            openLocation();
            return true;
        }

        return super.onOptionsItemSelected(item);
    }

    private void openLocation(){
        //Fragment locationFragment =
        (LocationFragment)
        getSupportFragmentManager().findFragmentByTag("lo
        cationFragmentTag");

        //Setup location manager
        LocationManager lm = (LocationManager)
        getSystemService(Context.LOCATION_SERVICE);
        Location location =
        lm.getLastKnownLocation(LocationManager.GPS_PROVI
        DER);
        if(location==null){
            Toast.makeText(this,"No location
            detected",Toast.LENGTH_LONG).show();
            return;
        }else{
            //use lat and longitude
            String lat =
            String.valueOf(location.getLatitude());
            //14.655044"; //latitude
            String longi =
            String.valueOf(location.getLongitude());
            //120.977299"; //longitude
            Uri geoLocation = Uri.parse("geo:" +
            lat + "," + longi);

            Intent intent = new
            Intent(Intent.ACTION_VIEW);
            intent.setData(geoLocation);
        }
    }

    if
    (intent.resolveActivity(getApplicationContext()) !=
    null) {
        startActivity(intent);
    } else {
        Log.d(LOG_TAG, "Couldn't call
        location, no receiving apps installed!");
    }
}

@Override
public void onClick(View v) {
    int id = v.getId();
    switch(id){
        case R.id.fabcam:
            LocationManager lm =
            (LocationManager)
            getSystemService(Context.LOCATION_SERVICE);
            Location location =
            lm.getLastKnownLocation(LocationManager.GPS_PROVI
            DER);
            //if(location==null){
            //    Toast.makeText(this,
            //    "Waiting for GPS signal...", Toast.LENGTH_SHORT).show();
            /*}else
            */if(QRFragment.bitmapQRCode==null){
                Toast.makeText(this, "Waiting
                for QR Code image, see the QR Code Tab",
                Toast.LENGTH_SHORT).show();
            }else {
                Intent intent = new
                Intent(this, CameraActivity.class);
                startActivity(intent);
                Log.d("MaicamDebug", "Camera
                Activity started");
            }
            break;
        case R.id.locationButton:
            Fragment f = new
            LocationFragment();
            FragmentTransaction ft =
            getSupportFragmentManager().beginTransaction();

            ft.replace(R.id.main_fragment_container, f,
            "locationFragmentTag");
            ft.commit();
            break;
        case R.id.galleryButton:
            Fragment f1 = new
            GalleryFragment();
            FragmentTransaction ft1 =
            getSupportFragmentManager().beginTransaction();

            ft1.replace(R.id.main_fragment_container, f1);
            ft1.commit();
            break;
        case R.id.qrButton:
            Fragment f2 = new QRFragment();
            FragmentTransaction ft2 =
            getSupportFragmentManager().beginTransaction();

            ft2.replace(R.id.main_fragment_container, f2);
            ft2.commit();
            break;
        default: break;
    }
}

```



```

        WindowManager manager =
((WindowManager)myContext.getSystemService(Context.WINDOW_SERVICE));
        Display display =
manager.getDefaultDisplay();
        Point point = new Point();
        display.getSize(point);
        int width = point.x;
        int height = point.y;
        int smallerDimension = width <
height ? width : height;
        smallerDimension =
smallerDimension * 3/4;

        Bundle bundle = new Bundle();
        bundle.putFloat("LAT",
latitudeFloat);
        bundle.putFloat("LONG",
longitudeFloat);

        QRCodeEncoder qrCodeEncoder = new
QRCodeEncoder("Maicam",
        bundle,
        Contents.Type.LOCATION,
BarcodeFormat.QR_CODE.toString(),
        smallerDimension);

        // A geographic location. Use as
follows:
        // Bundle bundle = new Bundle();
        // bundle.putFloat("LAT",
latitude);
        // bundle.putFloat("LONG",
longitude);
        //
intent.putExtra(Intents.Encode.DATA, bundle);

        //public static final String
LOCATION = "LOCATION_TYPE";

        try {
            bitmapQRCode =
qrCodeEncoder.encodeAsBitmap();
            //bitmapQRCode =
BitmapFactory.decodeResource(getResources(),
R.drawable.ic_qr);
            ImageView myImage =
(ImageView) view.findViewById(R.id.imageView1);
            myImage.setImageBitmap(bitmapQRCode);
        } catch (WriterException e) {
            e.printStackTrace();
        }
    });

    // Inflate the layout for this fragment
    return view;
}

@Override
public void onAttach(Activity activity) {
    super.onAttach(activity);
}

myContext = activity;
ImageButton(imageButton = (ImageButton)
myContext.findViewById(R.id.qrButton));

imageButton.setImageResource(R.drawable.ic_qr_act
ive);
}

@Override
public void onDetach() {
    ImageButton(imageButton = (ImageButton)
myContext.findViewById(R.id.qrButton));

imageButton.setImageResource(R.drawable.ic_qr);
    super.onDetach();
}

Utility.java

package com.project.maico.maicam;

/**
 * Created by Clover on 11/24/2015.
 */
public class Utility {

    public static String convertToDMS(double
latitude, double longitude){

        String latitudeLongitude = "";
        String latitudeText =
convertToDMS(latitude);
        String longitudeText =
convertToDMS(longitude);

        char latLetter = (latitude > 0) ? 'N' :
'S';
        char lonLetter = (longitude > 0) ? 'E' :
'W';

        return String.format("%s %c, %s %c",
latitudeText, latLetter, longitudeText,
lonLetter);
    }

    public static String convertToDMS(double
latlong){
        latlong = Math.abs(latlong);

        int degrees;
        int minutes;
        double seconds;
        double temp;

        //degrees
        degrees = (int)latlong;

        //minutes
        temp = latlong%degrees; //get the
decimal part of latitude
        temp = temp*60; //convert to minutes
        minutes = (int) temp; //get whole number
part of min

        //seconds
    }
}

```

```

        temp = temp%minutes; //get the decimal
    part of minutes
        seconds = temp*60; // convert to seconds

        return String.format("%d%d\'%.2f\"",
    degrees, minutes, seconds);
    }

    // returns a string required by ExifInterface
for gps coord
    public static String gpsExif(double latlong){
        int degrees;
        int minutes;
        double seconds;
        double temp;

        //degrees
        degrees = (int)latlong;

        //minutes
        temp = latlong%degrees; //get the decimal
    decimal part of latitude
        temp = temp*60; //convert to minutes
        minutes = (int) temp; //get whole number
    part of min

        //seconds
        temp = temp%minutes; //get the decimal
    part of minutes
        seconds = temp*60; // convert to seconds

        return String.format("%d/1,%d/1,%f/100",
    degrees, minutes, seconds*100);

    }
}

GalleryUtil package

AsyncDrawable.java
package com.project.maico.maicam.GalleryUtil;

import android.content.res.Resources;
import android.graphics.Bitmap;
import android.graphics.drawable.BitmapDrawable;

import java.lang.ref.WeakReference;

/**
 * Created by Clover on 11/14/2015.
 */
public class AsyncDrawable extends BitmapDrawable {
    private final
    WeakReference<ImageLoader.BitmapWorkerTask>
    bitmapWorkerTaskReference;

    public AsyncDrawable(Resources res, Bitmap
    bitmap, ImageLoader.BitmapWorkerTask task) {

        super(res, bitmap);
        bitmapWorkerTaskReference =
            new WeakReference<>(task);
    }

    public ImageLoader.BitmapWorkerTask
    getBitmapWorkerTask(){
        return bitmapWorkerTaskReference.get();
    }
}

    }

libcore/luni/src/main/java/libcore/io/DiskLruCach
e.java

ImageLoader.java
package com.project.maico.maicam.GalleryUtil;

import android.content.Context;
import android.graphics.Bitmap;
import android.graphics.drawable.Drawable;
import android.os.AsyncTask;
import android.util.Log;
import android.util.LruCache;
import android.widget.ImageView;

import com.project.maico.maicam.BuildConfig;

import java.io.File;
import java.io.FileDescriptor;
import java.io.FileInputStream;
import java.io.IOException;
import java.io.InputStream;
import java.io.OutputStream;
import java.lang.ref.WeakReference;

/***
 * Created by Clover on 12/1/2015.
 * This class handles the loading of images and
caching it to disk and memory.
 */
public class ImageLoader {
    private static final String LOG_TAG =
ImageLoader.class.getSimpleName();

    private Context mContext;

    //image size
    private int mReqHeight;
    private int mReqWidth;
    private Bitmap mPlaceholderImage;

    //memory caching
    private LruCache<String, Bitmap>
mMemoryCache;

    //disk caching
    private static final int DISK_CACHE_SIZE =
1024*1024*10; //10MB

    private DiskLruCache mDiskLruCache;
    private final Object mDiskCacheLock = new
Object();
    private boolean mDiskCacheStarting = true;

    //Writing images to disk
    private static final int DISK_CACHE_INDEX =
0;
    private static final Bitmap.CompressFormat
DEFAULT_COMPRESS_FORMAT =
Bitmap.CompressFormat.JPEG;
    private static final int
DEFAULT_COMPRESS_QUALITY = 70;

    public ImageLoader(Context context, int
width, int height, float cachePercentage, String
diskCacheSubdir, Bitmap placeHolderImage){
        mContext = context;
    }
}

```

```

        mReqHeight = height;
        mReqWidth = width;
        mPlaceholderImage = placeHolderImage;

        //Get maximum available VM memory, stored
        //in kilobytes as LruCache takes an integer in its
        //constructor
        final int maxMemory = (int)
        (Runtime.getRuntime().maxMemory()/1024);

        //set cache size
        final int cacheSize = (int)
        (maxMemory*cachePercentage);
        mMemoryCache = new LruCache<String,
        Bitmap>(cacheSize){
            @Override
            protected int sizeOf(String key,
            Bitmap bitmap) {
                //return super.sizeOf(key,
                value);
                //cache size will be measured in
                kbytes
                return
                bitmap.getByteCount()/1024;
            }
        };

        //initialize disk cache n background
        thread
        File cacheDir =
        ImageUtil.getDiskCacheDir(mContext,
        diskCacheSubdir);
        new
        InitDiskCacheTask().execute(cacheDir);

    }

    /**
     * Load bitmap in the background
     * @param imageKey
     * @param imageView
     */
    public void loadBitmap(String imageKey,
    ImageView imageView){
        final Bitmap bitmap =
        getBitmapFromMemCache(imageKey);

        if(bitmap!=null){
            imageView.setImageBitmap(bitmap);
            Log.d(LOG_TAG, "setbitmap from cache
done");
            Log.d(LOG_TAG, "-----");
        }else {
            if(cancelPotentialWork(imageKey,
            imageView)){
                final BitmapWorkerTask task = new
                BitmapWorkerTask(imageView);
                //create AsyncDrawable and bind
                it to the ImageView
                final AsyncDrawable asyncDrawable
                =
                new
                AsyncDrawable(mContext.getResources(),
                mPlaceholderImage, task);
                imageView.setImageDrawable(asyncDrawable);
            }
        }
    }

    /**
     * Checks associated task with current image
     * @param data
     * @param imageView
     * @return
     */
    public static boolean
    cancelPotentialWork(String data, ImageView
    imageView){
        final BitmapWorkerTask bitmapWorkerTask =
        getBitmapWorkerTask(imageView);
        if(bitmapWorkerTask != null){
            final String bitmapData =
            bitmapWorkerTask.data;
            //if bitmap is not yet set, or it
            differs from new data
            if(bitmapData == null|| bitmapData != data){
                bitmapWorkerTask.cancel(true);
            }
            //cancel previous task
            else{
                return false; //same work is
            already in progress
            }
        }
        return true; //No task is associated or
        existing task is cancelled
    }

    /**
     * Process bitmaps in a background thread
     * using AsyncTask
     */
    public class BitmapWorkerTask extends
    AsyncTask<String, Void, Bitmap> {
        private final WeakReference<ImageView>
        imageViewReference;
        private String data;

        public BitmapWorkerTask(ImageView
        imageView) {
            //use a weak reference to ensure the
            ImageView can be garbage collected
            imageViewReference = new
            WeakReference<>(imageView);
        }

        /**
         * Decode image in background
         * @param params
         * @return
         */
        @Override
        protected Bitmap doInBackground(String
        ... params) {
            data = params[0];
            Bitmap bitmap =
            getBitmapFromDiskCache(data);

            if(bitmap == null) { //not found in
            disk cache

```

```

        bitmap =
ImageUtil.decodeSampledBitmapFromFile(data,
mReqWidth, mReqHeight);
    }

    return bitmap;
}

@Override
protected void onPostExecute(Bitmap
bitmap) {
    if(isCancelled()){
        bitmap = null;
    }
    if(imageViewReference!=null &&
bitmap!=null){
        final ImageView imageView =
imageViewReference.get();
        final BitmapWorkerTask
bitmapWorkerTask =
getBitmapWorkerTask(imageView);
        if(this==bitmapWorkerTask &&
imageView!=null){

imageView.setImageBitmap(bitmap);
            //Add bitmap to cache
            addBitmapToCache(data,
bitmap);
            Log.d(LOG_TAG, "setbitmap
done");
            Log.d(LOG_TAG,"-----
-----");
        }
    }
}

/**
 * Helper method for cancelPotentialWork and
onPostExecute of BitmapWorkerTask.
 */
 * Returns the associated BitmapWorkerTask
associated with the ImageView
 * @param imageView
 * @return
 */
public static BitmapWorkerTask
getBitmapWorkerTask(ImageView imageView){
    if(imageView != null){
        final Drawable drawable =
imageView.getDrawable();
        if(drawable instanceof
AsyncDrawable){
            final AsyncDrawable asyncDrawable
= (AsyncDrawable) drawable;
            return
asyncDrawable.getBitmapWorkerTask();
        }
        return null;
    }
}

/**
 * Initialize Disk Cache
 */
class InitDiskCacheTask extends
AsyncTask<File, Void, Void>{
@Override
protected Void doInBackground(File...
params){
    synchronized(mDiskCacheLock){
        File cacheDir = params[0];
        try {
            mDiskLruCache =
DiskLruCache.open(cacheDir, 1, 1,
DISK_CACHE_SIZE);
            mDiskCacheStarting = false;
//finished initialization
            mDiskCacheLock.notifyAll();
//wake any waiting thread
        } catch (IOException e) {
            e.printStackTrace();
        }
    }
    return null;
}

/**
 * Adds bitmap to memory cache
 * @param data
 * @param bitmap
 */
public void addBitmapToCache(String data,
Bitmap bitmap){
    //Add to memory cache
    if(getBitmapFromMemCache(data) == null){
        mMemoryCache.put(data, bitmap);
    }
    //Add to disk cache
    synchronized (mDiskCacheLock) {
        // Add to disk cache
        if (mDiskLruCache != null) {
            final String key =
ImageUtil.hashKeyForDisk(data);
            OutputStream out = null;
            try {
                DiskLruCache.Snapshot
snapshot = mDiskLruCache.get(key);
                if (snapshot == null) {
                    final DiskLruCache.Editor
editor = mDiskLruCache.edit(key);
                    if (editor != null) {
                        out =
editor.newOutputStream(DISK_CACHE_INDEX);
                        bitmap.compress(
DEFAULT_COMPRESS_FORMAT,
DEFAULT_COMPRESS_QUALITY, out);
                        editor.commit();
                        out.close();
                    }
                } else {
                    snapshot.getInputStream(DISK_CACHE_INDEX).close()
                }
            } catch (final IOException e) {
                Log.e(LOG_TAG,
"addBitmapToCache - " + e);
            } catch (Exception e) {
                Log.e(LOG_TAG,
"addBitmapToCache - " + e);
            } finally {
                try {

```

```

        if (out != null) {
            out.close();
        }
    } catch (IOException e) {}
}
}

/**
 * Gets bitmap in memory cache using key
value
 * @param key
 * @return
 */
public Bitmap getBitmapFromMemCache(String
key){
    return mMemoryCache.get(key);
}

/**
 * Get from disk cache.
 *
 * @param data Unique identifier for which
item to get
 * @return The bitmap if found in cache, null
otherwise
 */
public Bitmap getBitmapFromDiskCache(String
data) {

//BEGIN_INCLUDE(get_bitmap_from_disk_cache)
    final String key =
ImageUtil.hashKeyForDisk(data);
    Bitmap bitmap = null;

    synchronized (mDiskCacheLock) {
        //wait while disk cache is started
from background
        while (mDiskCacheStarting) {
            try {
                mDiskCacheLock.wait();
            } catch (InterruptedException e)
        }
        if (mDiskLruCache != null) {
            InputStream inputStream = null;
            try {
                final DiskLruCache.Snapshot
snapshot = mDiskLruCache.get(key);
                if (snapshot != null) {
                    if (BuildConfig.DEBUG) {
                        Log.d(LOG_TAG, "Disk
cache hit");
                    }
                    inputStream =
snapshot.getInputStream(DISK_CACHE_INDEX);
                    if (inputStream != null)
{
                        FileDescriptor fd =
((FileInputStream) inputStream).getFD();
                        // Decode bitmap, but
we don't want to sample so give
                            // MAX_VALUE as the
target dimensions
                        bitmap =
ImageUtil.decodeSampledBitmapFromDescriptor(
                            fd,
                            Integer.MAX_VALUE, Integer.MAX_VALUE);
                    }
                } catch (final IOException e) {
                    Log.e(LOG_TAG,
"getBitmapFromDiskCache - " + e);
                } finally {
                    try {
                        if (inputStream != null)
                            inputStream.close();
                    } catch (IOException e) {}
                }
            }
            return bitmap;
        }
        //END_INCLUDE(get_bitmap_from_disk_cache)
    }
}

ImageUtil.java
package com.project.maico.maicam.GalleryUtil;

import android.content.Context;
import android.content.res.Resources;
import android.graphics.Bitmap;
import android.graphics.BitmapFactory;
import android.os.Environment;
import android.util.Log;

import java.io.File;
import java.io.FileDescriptor;
import java.io.FileFilter;
import java.security.MessageDigest;
import java.security.NoSuchAlgorithmException;
import java.util.Arrays;
import java.util.Collections;
import java.util.Comparator;

/**
 * Created by Clover on 11/14/2015.
 */
public class ImageUtil {
    public static Context mContext;

    public ImageUtil(Context context){
        mContext = context;
    }

    /**
     * Loading subsampled version of the full
image based on required width and height
     * @param options dimensions and type of
image data
     * @param reqWidth required width of image
     * @param reqHeight required height of image
     * @return inSampleSize
     */
    public static int calculateInSampleSize(
        BitmapFactory.Options options, int
reqWidth, int reqHeight){
        //raw height and width of image
        final int height = options.outHeight;

```

```

        final int width = options.outWidth;
        int inSampleSize = 1;

        if(height > reqHeight || width >
reqWidth){
            final int halfHeight = height/2;
            final int halfWidth = width/2;
            //calculate largest inSampleSize,
            (height and width) > requested
            while(halfHeight/inSampleSize >
reqHeight &&
                halfWidth/inSampleSize >
reqWidth){
                    inSampleSize *= 2;
                }
            return inSampleSize;
        }

        /**
         * Decode bitmap from a resource
         * @param res Resources
         * @param resId Resource id
         * @param reqWidth Required width
         * @param reqHeight Required height
         * @return Bitmap Sampled bitmap
         */
        public static Bitmap
decodeSampledBitmapFromResource(
        Resources res, int resId, int
reqWidth, int reqHeight){
        //Decode w/ inJustDecodeBounds = true to
check dimensions
        final BitmapFactory.Options options = new
BitmapFactory.Options();
        options.inJustDecodeBounds = true;
        BitmapFactory.decodeResource(res, resId,
options);

        //calculate inSampleSize
        options.inSampleSize =
calculateInSampleSize(options, reqWidth,
reqHeight);
        //Decode bitmap w/ in sampleSize set
        options.inJustDecodeBounds = false;
        return BitmapFactory.decodeResource(res,
resId, options);
    }

    public static Bitmap
decodeSampledBitmapFromFile(
        String filename, int reqWidth, int
reqHeight){
        //Decode w/ inJustDecodeBounds = true to
check dimensions
        final BitmapFactory.Options options = new
BitmapFactory.Options();
        options.inJustDecodeBounds = true;
        BitmapFactory.decodeFile(filename,
options);

        //calculate inSampleSize
        options.inSampleSize =
calculateInSampleSize(options, reqWidth,
reqHeight);
        //Decode bitmap w/ in sampleSize set
        options.inJustDecodeBounds = false;
        return BitmapFactory.decodeFile(filename,
options);
    }

    /**
     * Decode and sample down a bitmap from a
     file input stream to the requested width and
     height.
     *
     * @param fileDescriptor The file descriptor
     to read from
     * @param reqWidth The requested width of the
     resulting bitmap
     * @param reqHeight The requested height of
     the resulting bitmap
     * @return A bitmap sampled down from the
     original with the same aspect ratio and
     dimensions
     *          that are equal to or greater than
     the requested width and height
     */
    public static Bitmap
decodeSampledBitmapFromDescriptor(
        FileDescriptor fileDescriptor, int
reqWidth, int reqHeight) {

        // First decode with
        inJustDecodeBounds=true to check dimensions
        final BitmapFactory.Options options = new
BitmapFactory.Options();
        options.inJustDecodeBounds = true;

        BitmapFactory.decodeFileDescriptor(fileDescriptor
        , null, options);

        // Calculate inSampleSize
        options.inSampleSize =
calculateInSampleSize(options, reqWidth,
reqHeight);

        // Decode bitmap with inSampleSize set
        options.inJustDecodeBounds = false;

        return
BitmapFactory.decodeFileDescriptor(fileDescriptor
        , null, options);
    }

    public static File[]
getFilesFromMaicam(Context context){
        //String filepath =
Environment.getExternalStorageDirectory().getAbso
lutePath()+ File.separator + "Pictures/" +
"Beautiful Designs UI";
        File[] files = null;

        //String filepath =
context.getExternalFilesDir(null).getAbsolutePath
();
        File mediaStorageDir = new
File(Environment.getExternalStorageDirectory(),"M
aicamImages");
        // /storage/emulated/0/MaicamImages

        String filepath =
mediaStorageDir.getPath();
        Log.d("galleryfragment", "External
Storage Directory" + filepath );

        File currentDir = new File(filepath);
    }
}

```

```

        if(currentDir.isDirectory()) {
            files = currentDir.listFiles(new
FileFilter() {
                @Override
                public boolean accept(File
pathname) {
                    boolean allow =
pathname.toString().toLowerCase().endsWith(".jpg"
) ||
pathname.toString().toLowerCase().endsWith(".png"
);
                    return allow;
                }
            });
            for(File file:files){
                Log.d("imageutil","before sort" +
file.lastModified());
            }
            //sort files based on date created
            Arrays.sort(files, new
Comparator<File>() {
                @Override
                public int compare(File f1, File
f2) {
                    return
Long.valueOf(f1.lastModified()).compareTo(f2.last
Modified());
                }
            });
            for(File file:files){
                Log.d("imageutil","after normal
sort" + file.lastModified());
            }
            Arrays.sort(files,
Collections.reverseOrder());
            for(File file:files){
                Log.d("imageutil","after reverse
sort" + file.lastModified());
            }
        }
        if(files == null){
            files = new File[] {};
        };
    }

    return files;
}
/***
 *
 * @param context
 * @param uniqueName folder name
 * @return File directory for disk cache
*/
public static File getDiskCacheDir(Context
context, String uniqueName){
    final String cachePath =
Environment.MEDIA_MOUNTED.equals(Environment.getExternalStorageState())
|| !Environment.isExternalStorageRemovable() ?
context.getExternalCacheDir().getPath() :
context.getCacheDir().getPath();

    Log.d("gallery fragment", cachePath +
cachePath + File.separator + uniqueName);
    return new File(cachePath +
File.separator + uniqueName);
}

/**
 * Code from DisplayingBitmap
 * A hashing method that changes a string
 (like a URL) into a hash suitable for using as a
 * disk filename.
 */
public static String hashKeyForDisk(String
key) {
    String cacheKey;
    try {
        final MessageDigest mDigest =
MessageDigest.getInstance("MD5");
        mDigest.update(key.getBytes());
        cacheKey =
bytesToHexString(mDigest.digest());
    } catch (NoSuchAlgorithmException e) {
        cacheKey =
String.valueOf(key.hashCode());
    }
    return cacheKey;
}

private static String bytesToHexString(byte[]
bytes) {
    //
    http://stackoverflow.com/questions/332079
    StringBuilder sb = new StringBuilder();
    for (int i = 0; i < bytes.length; i++) {
        String hex = Integer.toHexString(0xFF
& bytes[i]);
        if (hex.length() == 1) {
            sb.append('0');
        }
        sb.append(hex);
    }
    return sb.toString();
}
}

RecyclingBitmapDrawable.java
package com.project.maico.maicam.GalleryUtil;
/*
 * Copyright (C) 2013 The Android Open Source
Project
 *
 * Licensed under the Apache License, Version 2.0
(the "License");
 * you may not use this file except in compliance
with the License.
 * You may obtain a copy of the License at
 *
 *      http://www.apache.org/licenses/LICENSE-
2.0
 *
 * Unless required by applicable law or agreed to
in writing, software

```

```

 * distributed under the License is distributed
on an "AS IS" BASIS,
 * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND,
either express or implied.
 * See the License for the specific language
governing permissions and
 * limitations under the License.
 */

import android.content.res.Resources;
import android.graphics.Bitmap;
import android.graphics.drawable.BitmapDrawable;
import android.util.Log;

import com.project.maico.maicam.BuildConfig;

/**
 * A BitmapDrawable that keeps track of whether
it is being displayed or cached.
 * When the drawable is no longer being displayed
or cached,
 * {@link android.graphics.Bitmap#recycle()}
recycle() will be called on this drawable's
bitmap.
 */
public class RecyclingBitmapDrawable extends
BitmapDrawable {

    static final String TAG =
"CountingBitmapDrawable";

    private int mCacheRefCount = 0;
    private int mDisplayRefCount = 0;

    private boolean mHasBeenDisplayed;

    public RecyclingBitmapDrawable(Resources res,
Bitmap bitmap) {
        super(res, bitmap);
    }

    /**
     * Notify the drawable that the displayed
state has changed. Internally a
 * count is kept so that the drawable knows
when it is no longer being
 * displayed.
 *
     * @param isDisplayed - Whether the drawable
is being displayed or not
    */
    public void setIsDisplayed(boolean
isDisplayed) {
        //BEGIN_INCLUDE(set_is_displayed)
        synchronized (this) {
            if (isDisplayed) {
                mDisplayRefCount++;
                mHasBeenDisplayed = true;
            } else {
                mDisplayRefCount--;
            }
        }
        // Check to see if recycle() can be
called
        checkState();
        //END_INCLUDE(set_is_displayed)
    }

    /**
     * Notify the drawable that the cache state
has changed. Internally a count
 * is kept so that the drawable knows when it
is no longer being cached.
     *
     * @param isCached - Whether the drawable is
being cached or not
    */
    public void setIsCached(boolean isCached) {
        //BEGIN_INCLUDE(set_is_cached)
        synchronized (this) {
            if (isCached) {
                mCacheRefCount++;
            } else {
                mCacheRefCount--;
            }
        }
        // Check to see if recycle() can be
called
        checkState();
        //END_INCLUDE(set_is_cached)
    }

    private synchronized void checkState() {
        //BEGIN_INCLUDE(check_state)
        // If the drawable cache and display ref
counts = 0, and this drawable
        // has been displayed, then recycle
        if (mCacheRefCount <= 0 &&
mDisplayRefCount <= 0 && mHasBeenDisplayed
            && hasValidBitmap()) {
            if (BuildConfig.DEBUG) {
                Log.d(TAG, "No longer being used
or cached so recycling.
" + toString());
            }
            getBitmap().recycle();
        }
        //END_INCLUDE(check_state)
    }

    private synchronized boolean hasValidBitmap()
{
    Bitmap bitmap = getBitmap();
    return bitmap != null &&
!bitmap.isRecycled();
}

MainUtil package

Constants.java

package com.project.maico.maicam.MainUtil;

/**
 * Created by Clover on 5/10/2016.
 */
public final class Constants {
    public static final int SUCCESS_RESULT = 0;
    public static final int FAILURE_RESULT = 1;
    public static final String PACKAGE_NAME =
        "com.project.maico.maicam.MainUtil";
    public static final String RECEIVER =
PACKAGE_NAME + ".RECEIVER";
}

```

```

    public static final String RESULT_DATA_KEY=
PACKAGE_NAME + ".RESULT_DATA_KEY";
    public static final String
LOCATION_DATA_EXTRA= PACKAGE_NAME +
".LOCATION_DATA_EXTRA";
}

FetchAddressIntentService.java
package com.project.maico.maicam.MainUtil;

import android.app.IntentService;
import android.content.Intent;
import android.location.Address;
import android.location.Geocoder;
import android.location.Location;
import android.os.Bundle;
import android.os.ResultReceiver;
import android.text.TextUtils;
import android.util.Log;

import com.project.maico.maicam.R;

import java.io.IOException;
import java.util.ArrayList;
import java.util.List;
import java.util.Locale;

/**
 * Created by Clover on 5/10/2016.
 * Address lookup Service: reverse geocoding
 */
public class FetchAddressIntentService extends
IntentService {
    private static final String LOG_TAG =
FetchAddressIntentService.class.getSimpleName();
    protected ResultReceiver mReceiver;

    /**
     * Creates an IntentService. Invoked by your
     * subclass's constructor.
     *
     * @param name Used to name the worker
     * thread, important only for debugging.
     */
    public FetchAddressIntentService(String name)
{
    super(name);
}

    public FetchAddressIntentService() {
super(FetchAddressIntentService.class.getSimpleName());
}

    private void deliverResultToReceiver(int
resultCode, String message) {
        Bundle bundle = new Bundle();

bundle.putString(Constants.RESULT_DATA_KEY,
message);
        mReceiver.send(resultCode, bundle);
    }

    @Override
    protected void onHandleIntent(Intent intent)
{
    String errorMessage = "";
    mReceiver =
intent.getParcelableExtra(Constants.RECEIVER);

    // Check if receiver was properly
    registered.
    if (mReceiver == null) {
        Log.wtf(LOG_TAG, "No receiver
received. There is nowhere to send the
results.");
        return;
    }

    //      // Get the location passed to this
    service through an extra.
    //      Location location =
    intent.getParcelableExtra(Constants.LOCATION_DATA
_EXTRA);
    //
    //      // Make sure that the location data was
    really sent over through an extra. If it wasn't,
    //      // send an error error message and
    return.
    //      if (location == null) {
    //          errorMessage =
    getString(R.string.no_location_data_provided);
    //          Log.wtf(TAG, errorMessage);
    //
    deliverResultToReceiver(Constants.FAILURE_RESULT,
errorMessage);
    //      return;
    //      }

    // Get the location passed to this
    service through an extra.
    Location location =
    intent.getParcelableExtra(
        Constants.LOCATION_DATA_EXTRA);

    //localized to user's geographic region
    Geocoder geocoder = new Geocoder(this,
    Locale.getDefault());

    //get an address
    List<Address> addresses = null;
    try {
        addresses = geocoder.getFromLocation(
            location.getLatitude(),
            location.getLongitude(),
            // In this sample, get just a
single address.
            1);
    } catch (IOException e) {
        //e.printStackTrace();
        // Catch network or other I/O
problems.
        errorMessage =
getString(R.string.service_not_available);
        Log.e(LOG_TAG, errorMessage, e);
    }catch (IllegalArgumentException
illegalArgumentException) {
        // Catch invalid latitude or
longitude values.
        errorMessage =
getString(R.string.invalid_lat_long_used);
        Log.e(LOG_TAG, errorMessage + " . " +
"Latitude = " +
location.getLatitude() +
", Longitude = " +

```

```

        location.getLongitude(),
illegalArgumentException);
}

// Handle case where no address was
found.
if (addresses == null || addresses.size()
== 0) {
    if (errorMessage.isEmpty()) {
        errorMessage =
getString(R.string.no_address_found);
        Log.e(LOG_TAG, errorMessage);
    }
}

deliverResultToReceiver(Constants.FAILURE_RESULT,
errorMessage);
} else {
    Address address = addresses.get(0);
    ArrayList<String> addressFragments =
new ArrayList<String>();

    // Fetch the address lines using
getAddressLine,
    // join them, and send them to the
thread.
    for(int i = 0; i <
address.getMaxAddressLineIndex(); i++) {

addressFragments.add(address.getAddressLine(i));
}
Log.i(LOG_TAG,
getString(R.string.address_found));

deliverResultToReceiver(Constants.SUCCESS_RESULT,
TextUtils.join(System.getProperty("line.separator"),
" ", addressFragments));

//TextUtils.join(System.getProperty("line.separator"),
" ", addressFragments)

    }
}

QRCode Package
Contents.java

package com.project.maico.maicam.QRCode;

import android.provider.ContactsContract;

/**
 * Copied from
http://www.mysamplecode.com/2012/09/android-
generate-qr-code-using-zxing.html
 */
public final class Contents {
    private Contents() {
    }

    public static final class Type {
        // Plain text. Use Intent.putExtra(DATA,
string). This can be used for URLs too, but
string
        // must include "http://" or "https://".
        public static final String TEXT =
"TEXT_TYPE";

        // An email type. Use
Intent.putExtra(DATA, string) where string is the
email address.
        public static final String EMAIL =
"EMAIL_TYPE";

        // Use Intent.putExtra(DATA, string)
where string is the phone number to call.
        public static final String PHONE =
"PHONE_TYPE";

        // An SMS type. Use Intent.putExtra(DATA,
string) where string is the number to SMS.
        public static final String SMS =
"SMS_TYPE";

        // A contact. Send a request to encode
it as follows:
        // <p/>
        // import android.provider.Contacts;
        // <p/>
        // Intent intent = new
Intent(Intents.Encode.ACTION);
intent.putExtra(Intents.Encode.TYPE,
        // CONTACT); Bundle bundle = new
Bundle();
bundle.putString(Contacts.Intents.Insert.NAME,
        // "Jenny");
bundle.putString(Contacts.Intents.Insert.PHONE,
"8675309");
        //
bundle.putString(Contacts.Intents.Insert.EMAIL,
"jenny@the80s.com");
        //
bundle.putString(Contacts.Intents.Insert.POSTAL,
"123 Fake St. San Francisco, CA 94102");
        // intent.putExtra(Intents.Encode.DATA,
bundle);

        public static final String CONTACT =
"CONTACT_TYPE";
    }

    // A geographic location. Use as follows:
    // Bundle bundle = new Bundle();
    // bundle.putFloat("LAT", latitude);
    // bundle.putFloat("LONG", longitude);
    // intent.putExtra(Intents.Encode.DATA,
bundle);

    public static final String LOCATION =
"LOCATION_TYPE";

    private Type() {
    }

    public static final String URL_KEY =
"URL_KEY";

    public static final String NOTE_KEY =
"NOTE_KEY";
}

```

```

    // When using Type.CONTACT, these arrays
    provide the keys for adding or retrieving
    multiple
    // phone numbers and addresses.
    public static final String[] PHONE_KEYS = {

        ContactsContract.Intents.Insert.PHONE,
        ContactsContract.Intents.Insert.SECONDARY_PHONE,

        ContactsContract.Intents.Insert.TERTIARY_PHONE
    };

    public static final String[] PHONE_TYPE_KEYS
    = {

        ContactsContract.Intents.Insert.PHONE_TYPE,
        ContactsContract.Intents.Insert.SECONDARY_PHONE_T
        YPE,
        ContactsContract.Intents.Insert.TERTIARY_PHONE_TY
        PE
    };

    public static final String[] EMAIL_KEYS = {

        ContactsContract.Intents.Insert.EMAIL,
        ContactsContract.Intents.Insert.SECONDARY_EMAIL,
        ContactsContract.Intents.Insert.TERTIARY_EMAIL
    };

    public static final String[] EMAIL_TYPE_KEYS
    = {

        ContactsContract.Intents.Insert.EMAIL_TYPE,
        ContactsContract.Intents.Insert.SECONDARY_EMAIL_T
        YPE,
        ContactsContract.Intents.Insert.TERTIARY_EMAIL_TY
        PE
    };
}

QRCodeEncoder.java
package com.project.maico.maicam.QRCode;

import android.graphics.Bitmap;
import android.os.Bundle;
import android.provider.ContactsContract;
import android.telephony.PhoneNumberUtils;

import com.google.zxing.BarcodeFormat;
import com.google.zxing.EncodeHintType;
import com.google.zxing.MultiFormatWriter;
import com.google.zxing.WriterException;
import com.google.zxing.common.BitMatrix;

import java.util.Collection;
import java.util.EnumMap;
import java.util.HashSet;
import java.util.Map;

/**
 * Copied from
 * http://www.mysamplecode.com/2012/09/android-
 * generate-qr-code-using-zxing.html
 */

```

```

public final class QRCodeEncoder {
    private static final int WHITE = 0xFFFFFFFF;
    private static final int BLACK = 0xFF000000;

    private int dimension = Integer.MIN_VALUE;
    private String contents = null;
    private String displayContents = null;
    private String title = null;
    private BarcodeFormat format = null;
    private boolean encoded = false;

    public QRCodeEncoder(String data, Bundle
    bundle, String type, String format, int
    dimension) {
        this.dimension = dimension;
        encoded = encodeContents(data, bundle,
        type, format);
    }

    public String getContents() {
        return contents;
    }

    public String getDisplayContents() {
        return displayContents;
    }

    public String getTitle() {
        return title;
    }

    private boolean encodeContents(String data,
    Bundle bundle, String type, String formatString)
    {
        // Default to QR_CODE if no format given.
        format = null;
        if (formatString != null) {
            try {
                format =
BarcodeFormat.valueOf(formatString);
            } catch (IllegalArgumentException
iae) {
                // Ignore it then
            }
        }
        if (format == null || format ==
BarcodeFormat.QR_CODE) {
            this.format = BarcodeFormat.QR_CODE;
            encodeQRCodeContents(data, bundle,
            type);
        } else if (data != null && data.length() > 0) {
            contents = data;
            displayContents = data;
            title = "Text";
        }
        return contents != null &&
contents.length() > 0;
    }

    private void encodeQRCodeContents(String
    data, Bundle bundle, String type) {
        if (type.equals(Contents.Type.TEXT)) {
            if (data != null && data.length() >
0) {
                contents = data;
                displayContents = data;
                title = "Text";
            }
        }
    }
}

```

```

        }
    } else if
(type.equals(Contents.Type.EMAIL)) {
    data = trim(data);
    if (data != null) {
        contents = "mailto:" + data;
        displayContents = data;
        title = "E-Mail";
    }
} else if
(type.equals(Contents.Type.PHONE)) {
    data = trim(data);
    if (data != null) {
        contents = "tel:" + data;
        displayContents =
PhoneNumberUtils.formatNumber(data);
        title = "Phone";
    }
} else if
(type.equals(Contents.Type.SMS)) {
    data = trim(data);
    if (data != null) {
        contents = "sms:" + data;
        displayContents =
PhoneNumberUtils.formatNumber(data);
        title = "SMS";
    }
} else if
(type.equals(Contents.Type.CONTACT)) {
    if (bundle != null) {
        StringBuilder newContents = new
StringBuilder(100);
        StringBuilder newDisplayContents
= new StringBuilder(100);

        newContents.append("MECARD:");

        String name =
trim(bundle.getString(ContactsContract.Intents.In
sert.NAME));
        if (name != null) {

newContents.append("N:").append(escapeMECARD(name
)).append(';');

newDisplayContents.append(name);
    }

        String address =
trim(bundle.getString(ContactsContract.Intents.In
sert.POSTAL));
        if (address != null) {

newContents.append("ADR:").append(escapeMECARD(ad
dress)).append(';');

newDisplayContents.append('\n').append(address);
    }

        Collection<String> uniquePhones =
new HashSet<String>(Contents.PHONE_KEYS.length);
        for (int x = 0; x <
Contents.PHONE_KEYS.length; x++) {
            String phone =
trim(bundle.getString(Contents.PHONE_KEYS[x]));
            if (phone != null) {
                uniquePhones.add(phone);
            }
        }
    }

        for (String phone : uniquePhones)
{
    newContents.append("TEL:").append(escapeMECARD(ph
one)).append(';');

newDisplayContents.append('\n').append(PhoneNumbe
rUtils.formatNumber(phone));
}

        Collection<String> uniqueEmails =
new HashSet<String>(Contents.EMAIL_KEYS.length);
        for (int x = 0; x <
Contents.EMAIL_KEYS.length; x++) {
            String email =
trim(bundle.getString(Contents.EMAIL_KEYS[x]));
            if (email != null) {
                uniqueEmails.add(email);
            }
        }
        for (String email : uniqueEmails)
{

newContents.append("EMAIL:").append(escapeMECARD(
email)).append(';');

newDisplayContents.append('\n').append(email);
}

        String url =
trim(bundle.getString(Contents.URL_KEY));
        if (url != null) {
            // escapeMECARD(url) -> wrong
escape e.g. http://zxing.google.com

newContents.append("URL:").append(url).append('
');

newDisplayContents.append('\n').append(url);
}

        String note =
trim(bundle.getString(Contents.NOTE_KEY));
        if (note != null) {

newContents.append("NOTE:").append(escapeMECARD(n
ote)).append(';');

newDisplayContents.append('\n').append(note);
}

        // Make sure we've encoded at
least one field.
        if (newDisplayContents.length() >
0) {
            newContents.append(';');
            contents =
newContents.toString();
            displayContents =
newDisplayContents.toString();
            title = "Contact";
        } else {
            contents = null;
            displayContents = null;
        }
    }

} else if
(type.equals(Contents.Type.LOCATION)) {

```

```

        if (bundle != null) {
            // These must use
            // Bundle.getFloat(), not getDouble(), it's part of
            // the API.
            float latitude =
                bundle.getFloat("LAT", Float.MAX_VALUE);
            float longitude =
                bundle.getFloat("LONG", Float.MAX_VALUE);
            if (latitude != Float.MAX_VALUE) {
                contents = "geo:" + latitude
                + ',' + longitude;
                displayContents = latitude +
                "," + longitude;
                title = "Location";
            }
        }
    }

    public Bitmap encodeAsBitmap() throws
WriterException {
    if (!encoded) return null;

    Map<EncodeHintType, Object> hints = null;
    String encoding =
guessAppropriateEncoding(contents);
    if (encoding != null) {
        hints = new EnumMap<EncodeHintType,
Object>(EncodeHintType.class);

    hints.put(EncodeHintType.CHARACTER_SET,
encoding);
    }
    MultiFormatWriter writer = new
MultiFormatWriter();
    BitMatrix result =
writer.encode(contents, format, dimension,
dimension, hints);
    int width = result.getWidth();
    int height = result.getHeight();
    int[] pixels = new int[width * height];
    // All are 0, or black, by default
    for (int y = 0; y < height; y++) {
        int offset = y * width;
        for (int x = 0; x < width; x++) {
            pixels[offset + x] =
result.get(x, y) ? BLACK : WHITE;
        }
    }

    Bitmap bitmap =
Bitmap.createBitmap(width, height,
Bitmap.Config.ARGB_8888);
    bitmap.setPixels(pixels, 0, width, 0, 0,
width, height);
    return bitmap;
}

private static String
guessAppropriateEncoding(CharSequence contents) {
    // Very crude at the moment
    for (int i = 0; i < contents.length();
i++) {
        if (contents.charAt(i) > 0xFF) {
return "UTF-8"; }
        return null;
    }
}

```

```

private static String trim(String s) {
    if (s == null) { return null; }
    String result = s.trim();
    return result.length() == 0 ? null :
result;
}

private static String escapeMECARD(String
input) {
    if (input == null || (input.indexOf(':')
< 0 && input.indexOf(';') < 0)) { return input; }
    int length = input.length();
    StringBuilder result = new
StringBuilder(length);
    for (int i = 0; i < length; i++) {
        char c = input.charAt(i);
        if (c == ':' || c == ';') {
            result.append('\\');
        }
        result.append(c);
    }
    return result.toString();
}

Res files
Layout Folder
Activity_camera.xml
<fragment
xmlns:android="http://schemas.android.com/apk/res
/android"

xmlns:tools="http://schemas.android.com/tools"
android:id="@+id/fragment"

android:name="com.project.maico.maicam.CameraFrag
ment"
tools:layout="@layout/fragment_camera"
android:layout_width="match_parent"
        android:layout_height="match_parent" />

activity_main.xml

<LinearLayout
xmlns:android="http://schemas.android.com/apk/res
/android"
    android:orientation="vertical"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:background="@color/white">

<View style="@style/Divider"
    android:paddingBottom="20dp"/>

<LinearLayout
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:orientation="horizontal"
    android:gravity="center"
    android:padding="10dp">

<ImageButton
    android:layout_width="0dp"
    android:layout_weight="1"

```

```

        android:layout_height="wrap_content"
        android:src="@drawable/location_selector"
        android:id="@+id/locationButton"
        android:padding="0dp"
        android:background="@color/white"
    />

    <ImageButton
        android:layout_width="0dp"
        android:layout_weight="1"
        android:layout_height="wrap_content"
        android:src="@drawable/qr_selector"
        android:id="@+id/qrButton"
        android:padding="0dp"
        android:background="@color/white"
    />

    <ImageButton
        android:layout_width="0dp"
        android:layout_weight="1"
        android:layout_height="wrap_content"
        android:src="@drawable/gallery_selector"
        android:id="@+id/galleryButton"
        android:padding="0dp"
        android:background="@color/white"
    />

</LinearLayout>
<View style="@style/Divider"
    android:paddingBottom="16dp"/>

<RelativeLayout
    android:layout_width="wrap_content"
    android:layout_height="fill_parent">

    <FrameLayout
        android:layout_width="match_parent"
        android:layout_height="fill_parent"

    android:id="@+id/main_fragment_container">

        </FrameLayout>

<android.support.design.widget.FloatingActionButton
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/fabcam"
    android:src="@drawable/ic_camera"
    android:clickable="true"

    android:layout_alignParentBottom="true"

    android:layout_centerHorizontal="true"
    android:layout_marginBottom="15dp"
    />
</RelativeLayout>

</LinearLayout>
Detail_pager.xml

<?xml version="1.0" encoding="utf-8"?>

<android.support.v4.view.ViewPager
    xmlns:android="http://schemas.android.com/apk/res
    /android"
        android:id="@+id/pager"
        android:layout_width="fill_parent"
        android:layout_height="fill_parent"
    >

</android.support.v4.view.ViewPager>

Fragment_camera.xml
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res
    /android"
        xmlns:tools="http://schemas.android.com/tools"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        tools:context="com.project.maico.maicam.AccountFr
        agment"
        android:orientation="vertical">

    <FrameLayout
        android:layout_width="fill_parent"
        android:layout_height="fill_parent"
        android:id="@+id/camera_preview"
        android:layout_weight="1">
        <include
            android:id="@+id/sensor_data_layout"
            layout="@layout/sensor_layout" />
    </FrameLayout>

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:orientation="horizontal"
        android:layout_gravity="center">
        <Button
            android:layout_width="match_parent"
            android:layout_height="wrap_content"
            android:id="@+id/button_capture"
            android:text="Capture"
            android:padding="30dp"

            android:background="@color/maicam_dark_blue"
            android:textColor="#ffffff" />
        <!--<Button-->
        <!--
        android:layout_width="wrap_content"-->
        <!--
        android:layout_height="wrap_content"-->
        <!--android:id="@+id/flashButton"-->
        <!--android:text="flash"/>-->
    <!-- android:layout_gravity="center"/>-->
    </LinearLayout>

    </LinearLayout>

Fragment_detail.xml
<FrameLayout
    xmlns:android="http://schemas.android.com/apk/res
    /android"
        android:layout_width="fill_parent"
        android:layout_height="fill_parent"
        android:background="#000000">

        <ProgressBar
            android:layout_width="wrap_content"

```

```

        android:layout_height="wrap_content"
        style="?android:attr/progressBarStyleLarge"
            android:layout_gravity="center"/>

        <ImageView
            android:id="@+id/imageView"
            android:layout_width="fill_parent"
            android:layout_height="fill_parent"

        android:contentDescription="@string/imageview_des
        cription"
            android:layout_gravity="center"/>

    </FrameLayout>

Fragment_gallery.xml
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res
    /android"

    xmlns:tools="http://schemas.android.com/tools"
        android:layout_width="match_parent"
        android:layout_height="match_parent"

    tools:context="com.project.maico.maicam.GalleryFr
    agment"
        android:orientation="vertical">

        <GridView
            android:layout_width="fill_parent"
            android:layout_height="fill_parent"
            android:id="@+id/gridView"

        android:horizontalSpacing="@dimen/image_thumbnail
        _spacing"
            android:verticalSpacing="@dimen/image_thumbnail_s
            spacing"
                android:numColumns="auto_fit"

        android:columnWidth="@dimen/image_thumbnail_size"
            android:stretchMode="columnWidth"
            android:gravity="center"
        ></GridView>

    </LinearLayout>

Fragment_location.xml
<ScrollView

    xmlns:android="http://schemas.android.com/apk/res
    /android"

    xmlns:tools="http://schemas.android.com/tools"

    tools:context="com.project.maico.maicam.LocationF
    ragment"
        android:layout_width="fill_parent"
        android:layout_height="fill_parent">

    <LinearLayout
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        android:orientation="vertical"
        android:gravity="center"

```

```

        android:paddingTop="30dp"
    >

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="@string/latitudeLabel"
        android:textAllCaps="false"
        android:textSize="30dp"

        android:layout_gravity="center_horizontal"
        android:background="@color/maicam_dark_blue"
            android:textColor="#ffffffff"
            android:layout_margin="30dp"
            android:textAlignment="center"
            android:padding="10dp" />

    <TextView
        android:id="@+id/latitudeValue"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:gravity="center_horizontal"
        android:text="@string/latitudeValue"
        android:textSize="30dp"

        android:textColor="@color/maicam_dark_blue"
    />

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:paddingTop="20dp"
        android:text="@string/longitudeLabel"
        android:textAllCaps="false"
        android:textSize="30dp"

        android:layout_gravity="center_horizontal"
        android:background="@color/maicam_dark_blue"
            android:textColor="#ffffffff"
            android:layout_margin="30dp"
            android:textAlignment="center"
            android:padding="10dp" />

    <TextView
        android:id="@+id/longitudeValue"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:gravity="center_horizontal"
        android:text="@string/longitudeValue"
        android:textSize="30dp"

        android:textColor="@color/maicam_dark_blue"
    />

    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:paddingTop="40dp"
        android:text="@string/locationLabel"
        android:textSize="30dp"

        android:layout_gravity="center_horizontal"
        android:background="@color/maicam_dark_blue"
            android:textColor="#ffffffff"

```

```

        android:layout_margin="30dp"
        android:textAlignment="center"
        android:padding="10dp"
        />

    <TextView
        android:id="@+id/locationName"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:gravity="center_horizontal"
        android:text="@string/locationValue"
        android:textSize="30dp"

        android:textColor="@color/maicam_dark_blue"/>

</LinearLayout>
</ScrollView>

Fragment_qr.xml
<LinearLayout
    xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:orientation="vertical"
    tools:context="com.project.maico.maicam.QRFragmen
t">

    <Button
        android:id="@+id/button1"
        android:layout_margin="20dp"
        android:layout_width="fill_parent"
        android:layout_height="wrap_content"
        android:text="Generate QR Code"

        android:layout_gravity="center_horizontal"
        android:padding="20dp"

        android:background="@color/maicam_dark_blue"
        android:textColor="#ffffff" />

    <ImageView
        android:id="@+id/imageView1"
        android:paddingTop="20dp"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_gravity="center"/>

</LinearLayout>

Sensor_layout.xml
<?xml version="1.0" encoding="utf-8"?>
<RelativeLayout

    xmlns:android="http://schemas.android.com/apk/res
    /android"
    android:layout_width="match_parent"
    android:layout_height="match_parent"
    android:paddingTop="12dp"
    android:paddingBottom="8dp"
    android:paddingRight="10dp"
    android:paddingLeft="8dp"
    >

<TextView
    android:id="@+id/latitudeLongitudeText"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentTop="true"
    android:layout_centerHorizontal="true"
    android:paddingBottom="8dp"
    android:textColor="@color/white"/>

<TextView
    android:id="@+id/altitudeText"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"

    android:layout_below="@+id/latitudeLongitudeText"
    android:layout_centerHorizontal="true"
    android:textColor="@color/white"/>

<ImageView
    android:id="@+id/qrcodeImage"
    android:layout_width="125dp"
    android:layout_height="125dp"
    android:src="@drawable/image_placeholder"
    android:layout_alignParentBottom="true"
    />

<TextView
    android:id="@+id/dateText"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_alignParentBottom="true"
    android:layout_alignParentRight="true"
    android:textColor="@color/white"/>

<TextView
    android:id="@+id/timeText"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:layout_above="@+id/dateText"
    android:layout_alignParentRight="true"
    android:textColor="@color/white"/>

</RelativeLayout>

Values files

Colors.xml
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <color name="dark_gray">#323232</color>
    <color name="white">#ffffffff</color>
    <color name="maicam_blue">#235594</color>
    <color
        name="maicam_dark_blue">#163763</color>
    <color
        name="maicam_light_blue">#93F5F0</color>
</resources>

Dimens.xml
<resources>
    <!-- Default screen margins, per the Android
    Design guidelines. -->
    <dimen
        name="activity_horizontal_margin">16dp</dimen>
    <dimen
        name="activity_vertical_margin">16dp</dimen>

    <!-- Image size in Grid View -->

```

```

    <dimen
        name="image_thumbnail_size">150dp</dimen>
        <dimen
            name="image_thumbnail_spacing">1dp</dimen>
    </resources>

Strings.xml
<resources>
    <!--Camera Overlay -->
    <string name="latitudeLongitude">14°32'6"N,
    121°2'25"E </string>
    <string name="altitude">Altitude:
    262ft</string>
    <string name="timeOverlay">3:56pm</string>
    <string
        name="dateOverlay">11/29/2015</string>

    <!-- camera -->
    <string name="camera_error">This device
    doesn't support Camera2 API</string>
    <string name="request_permission">This sample
    needs camera permission.</string>
    <!--gallery fragment xml -->
    <!-- gayahin yung pag fetch ng info sa
    sunshine exif? -->

    <string name="buttonEditProfile">Edit
    Profile</string>

    <string name="app_name">Maicam</string>

    <string name="title_section1">Section
    1</string>
    <string name="title_section2">Section
    2</string>
    <string name="title_section3">Section
    3</string>

    <string name="hello_world">Hello
    world!</string>

    <!--Menu Items-->
    <string name="action_settings">About</string>
    <string name="action_map">Map
    Location</string>

    <string
        name="title_activity_camera_page">CameraPage</str
        ing>

    <string name="hello_blank_fragment">Hello
    blank fragment</string>
    <string
        name="title_activity_gallery_detail">GalleryDetai
    l</string>
    <string name="imageview_description">Image
    Thumbnail</string>
    <string
        name="title_activity_camera">CameraActivity</str
        ing>

    <!--Location xml -->
    <string
        name="latitudeLabel">Latitude</string>
    <string
        name="longitudeLabel">Longitude</string>
        <string name="latitudeValue">Looking for GPS
    signal</string>

```

```

        <string name="longitudeValue">Looking for GPS
    signal</string>
        <string
            name="locationLabel">Location</string>
            <string name="locationValue">No location
    found.</string>

        <!--in getting location name-->
        <string name="service_not_available">Service
    not available.</string>
        <string name="invalid_lat_long_used">Invalid
    latitude and longitude values.</string>
        <string name="no_address_found">No address
    found.</string>
        <string name="address_found">Address
    found.</string>
        <string name="no_geocoder_available">No
    geocoder available.</string>
</resources>

Styles.xml

<resources
    xmlns:tools="http://schemas.android.com/tools">

    <!--Base application theme -->
    <style name="AppTheme"
        parent="Theme.AppCompat.Light.DarkActionBar">
        <item
            name="colorPrimary">@color/maicam_blue</item>
        <item
            name="colorPrimaryDark">@color/maicam_dark_blue</
        item>
        <!--item
            name="colorButtonNormal">@color/white</item-->
    </style>

    <!--Main Activity Theme
    <item
        name="background">@color/maicam_blue</item>
        <item
            name="android:background">@color/maicam_blue</ite
        m>
        -->
    <style name="MaicamTheme" parent="AppTheme">
        <item
            name=" actionBarStyle">@style/ActionBar.Solid.Maic
        am.NoTitle</item>
    </style>

    <style name="ActionBar.Solid.Maicam.NoTitle"
        parent="@style/Widget.AppCompat.ActionBar">
        <item name="contentInsetStart">0dp</item>
        <!--item
            name="colorPrimary">@color/maicam_blue</item-->
    </style>

    <!-- horizontal line-->
    <style name="Divider">
        <item
            name="android:layout_width">match_parent</item>
        <item
            name="android:layout_height">1dp</item>
        <item
            name="android:background">?android:attr/listDivid
        er</item>
    </style>

```

```

<style name="PhotoGridLayout">
    <item
name="android:drawSelectorOnTop">true</item>
</style>
</resources>

For Web Application
Views files
Header_admin.php
<?php
defined('BASEPATH') OR exit('No direct script
access allowed');
?>
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="utf-8">
    <meta name="viewport"
content="width=device-width, initial-scale=1.0">

    <!--link the bootstrap-->
    <link rel="stylesheet" href="<?php echo
base_url("assets/css/bootstrap.css"); ?>"/>
    <link rel="stylesheet" href="<?php echo
base_url("assets/css/maicam-bootstrap.css");
?>"/>

    <!--Load jQuery libraries -->
    <script type="text/javascript" src="<?php
echo base_url("assets/js/bootstrap.js");
?>"></script>
    <script type="text/javascript" src="<?php echo
base_url("assets/js/jQuery-1.12.2.js");
?>"></script>

    <!-- navigation header -->
<nav class="navbar navbar-maicam navbar-static-
top" style="margin-bottom: 0px;">
    <div class="container-fluid center-container">
        <div class="navbar-header">
            <!-- toggle button -->
            <button type="button" class="navbar-toggle"
data-toggle="collapse" data-target="#myNavbar">
                <span class="icon-bar"></span>
                <span class="icon-bar"></span>
                <span class="icon-bar"></span>
            </button>
            <!-- end toggle button-->
            <a class="navbar-brand logo" href="#"><b>
Citizen<span style="color:
#23527c">Reports</span></b></a>
        </div>
        <!--collapsing menu -->
        <div class="collapse navbar-collapse"
id="myNavbar">
            <ul class="nav navbar-nav navbar-right">
                <li id="home_li"><a href="<?php echo
base_url(); ?>home"><span class="glyphicon
glyphicon-home"></span> Home</a></li>
                <!--     <li><a href="<?php //echo
base_url(); ?>home/create_report"><span

```

```

class="glyphicon glyphicon-plus"></span> Create
Report</a></li> -->
                <li id="reports_li"><a href="<?php echo
base_url(); ?>home/list_report"><span
class="glyphicon glyphicon-eye-open"></span>
Reports</a></li>
                <li id="projects_li"><a href="<?php echo
base_url(); ?>projects/"><span class=" glyphicon
glyphicon-file"></span> Projects</a></li>
                <li id="accounts_li"><a href="<?php echo
base_url(); ?>account/"><span class=" glyphicon
glyphicon-user"></span> Accounts</a></li>
            </ul>
        </div>
        <!-- end collapsing menu-->
    </div>
    </nav>
    <!-- end navigation header -->

    <!--colored box after navbar -->
    <div class="colored-box">
        <div class="center-container" style="text-
align: right;">
            Hello, <?php echo $this->session-
>userdata('username'); ?>! <a class="box-link"
logout-confirm="Do you want to logout?" href="<?php
echo base_url(); ?>login/logoutko/"><span
class="glyphicon glyphicon-log-
out"></span>Logout</a>
        </div>
    </div>

    <!-- Modal Delete-->
    <div id="logoutModal" class="modal fade"
role="dialog">
        <div class="modal-dialog modal-sm" >
            <!-- Modal content-->
            <div class="modal-content">
                <div class="modal-header">
                    <button type="button" class="close" data-
dismiss="modal">&times;</button>
                    <h4 class="modal-title">Logout</h4>
                </div>
                <div class="modal-body">
                    <!-- -->
                    <p id="modal_message"></p>
                    <!-- -->
                </div>
                <div class="modal-footer">
                    <a id="okButtonLogout" type="button"
class="btn btn-primary" >OK</a>
                    <button type="button" class="btn btn-
default" data-dismiss="modal">Cancel</button>
                </div>
            </div>
        </div>
        <!-- own script-->
        <script type="text/javascript">
            $(document).ready(function() {

```

```

        $('a[logout-
confirm]').click(function(){
    var href = $(this).attr('href');

$('#logoutModal').find('#modal_message').text($(this).attr('logout-confirm'));
    $('#okButtonLogout').attr('href', href);
    $('#logoutModal').modal('show');
    return false;
});

});

</script>

</head>
</html>

Header_user.php

<?php
defined('BASEPATH') OR exit('No direct script access allowed');
?>
<!DOCTYPE html>

<html lang="en">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">

        <!--link the bootstrap-->
        <link rel="stylesheet" href="<?php echo base_url("assets/css/bootstrap.css"); ?>"/>
        <link rel="stylesheet" href="<?php echo base_url("assets/css/maicam-bootstrap.css"); ?>"/>

        <!--Load jQuery libraries -->
        <script type="text/javascript" src="<?php echo base_url("assets/js/jquery-1.12.2.js"); ?>"></script>
        <script type="text/javascript" src="<?php echo base_url("assets/js/bootstrap.js"); ?>"></script>

        <script type="text/javascript" src="<?php echo base_url("assets/js/bootbox.min.js"); ?>"></script>

        <!-- navigation header -->
<nav class="navbar navbar-maicam navbar-static-top" style="margin-bottom: 0px;">
    <div class="container-fluid center-container">
        <div class="navbar-header">
            <!-- toggle button -->
            <button type="button" class="navbar-toggle" data-toggle="collapse" data-target="#myNavbar">
                <span class="icon-bar"></span>
                <span class="icon-bar"></span>
                <span class="icon-bar"></span>
            </button>
        <!-- end toggle button-->

```

```

        <a class="navbar-brand logo" href="#"><b>
Citizen<span style="color: #23527c">Reports</span></b></a>
</div>
<!--collapsing menu -->
<div class="collapse navbar-collapse" id="myNavbar">
    <ul class="nav navbar-nav navbar-right">
        <li id="home_li"><a href="<?php echo base_url(); ?>home"><span class="glyphicon glyphicon-home"></span> Home</a></li>
        <!-- <li><a href="<?php echo base_url(); ?>home/create_report"><span class="glyphicon glyphicon-plus"></span> Create Report</a></li> -->
        <li id="reports_li"><a href="<?php echo base_url(); ?>home/list_report"><span class="glyphicon glyphicon-eye-open"></span> Reports</a></li>
        <li id="projects_li"><a href="<?php echo base_url(); ?>projects/"><span class="glyphicon glyphicon-file"></span> Projects</a></li>
        <li id="accounts_li"><a href="<?php echo base_url(); ?>account/home_account/<?php echo $this->session->userdata('username'); ?>"><span class="glyphicon glyphicon-user"></span> Profile</a></li>
    </ul>
</div>
<!-- end collapsing menu-->
</div>
</nav>
<!-- end navigation header -->

<!--colored box after navbar -->
<div class="colored-box">
    <div class="center-container" style="text-align: right;">
        Hello, <?php echo $this->session->userdata('username'); ?>! <a class="box-link" href="<?php echo base_url(); ?>login/logoutko/"><span class="glyphicon glyphicon-log-out"></span>Logout</a>
    </div>
</div>

<!-- Modal Delete-->
<div id="logoutModal" class="modal fade" role="dialog">
    <div class="modal-dialog modal-sm" >
        <!-- Modal content-->
        <div class="modal-content">
            <div class="modal-header">
                <button type="button" class="close" data-dismiss="modal" data-target="#logoutModal">&times;</button>
                <h4 class="modal-title">Logout</h4>
            </div>
            <div class="modal-body">
                <!-- -->
                <p id="modal_message"></p>
                <!-- -->
            </div>

```

```

<div class="modal-footer">
    <a id="okButtonLogout" type="button"
    class="btn btn-primary" >OK</a>
    <button type="button" class="btn btn-
    default" data-dismiss="modal">Cancel</button>
</div>
</div>
</div>
<!-- own script-->
<script type="text/javascript">
    $(document).ready(function() {
        $('#logout-
        confirm').click(function(){
            var href = $(this).attr('href');

        $('#logoutModal').find('#modal_message').text($(t
        his).attr('logout-confirm'));
            $('#okButtonLogout').attr('href',
        href);
            $('#logoutModal').modal('show');
            return false;
        });
    });
</script>

</head>
</html>

Home_view.php
<?php
defined('BASEPATH') OR exit('No direct script
access allowed');
?>
<!DOCTYPE html>

<html lang="en">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-
width, initial-scale=1.0">
    <title>Home</title>

    <!--link the bootstrap-->
    <link rel="stylesheet" href="<?php echo
base_url("assets/css/bootstrap.css"); ?>"/>
    <link rel="stylesheet" href="<?php echo
base_url("assets/css/maicam-bootstrap.css");
?>"/>
    <link rel="stylesheet" href="<?php echo
base_url("assets/css/dataTables.css"); ?>"/>

    <style type="text/css">
        .btn-default:hover {
            color: #fff;
            background-color: #235594;
            border-color: #235594;
        }
    </style>
</head>
<body>
<?php
$reports = $yourReports->result();
$projects = $projectsYourReports;
if($this->session->userdata('role') ==
'admin'){
    $adminPower = true;
    //pending
    $pendingReports = $pending->result();
    $projectPending = $projectsPending;
    //projects
    $projectList = $yourProjects->result();
} else{
    $adminPower = false;
}
?>
<div class="container center-container">
<?php if($adminPower){?>
<div class="page-header" style="margin-top:
10px;">
    <h4>Pending Reports</h4>
</div>
<div class="well">
    <table id="pending" class="display"
cellspacing="0">
        <thead>
            <tr>
                <th></th>
                <th>Project Description</th>
                <th>Subject of Inspection</th>
                <th>Remark</th>
                <th>Date Submitted</th>
            </tr>
        </thead>
        <tbody>
            <?php
for($i=0;
$i<sizeof($pendingReports); $i++){?>
                <tr>
                    <td align="center">
                        <div class="btn-group-vertical">
                            <a style="text-align: left;" href="<?php
echo base_url(); ?>home/view_report/<?php
echo $pendingReports[$i]->report_id; ?>"><span
class="btn btn-default btn-xs"><span
class="glyphicon glyphicon-eye-open"></span> View</a>
                            <a style="text-align: left;" href="<?php
echo base_url(); ?>home/approve_report/<?php
echo $pendingReports[$i]->report_id; ?>"><span
class="btn btn-primary btn-xs"><span
class="glyphicon glyphicon-check"></span> Approve</a>
                            <a style="text-align: left;" href="<?php
echo base_url(); ?>home/remove_report/<?php
echo $pendingReports[$i]->report_id; ?>"><span
class="btn btn-danger btn-xs"><span
class="glyphicon glyphicon-remove"></span> Remove</a>
                        </div>
                    </td>
                </tr>
            <?php
}
            </tbody>
        </table>
    </div>
</div>
</body>
</?php

```

```

$pendingReports[$i]->report_id;?>" class="btn
btn-danger btn-xs">><span class="glyphicon
glyphicon-minus"></span> Remove</a>
</div>
</td>
<td><?php echo
$projectPending[$i]->row()->project_description;
?></td>
<td><?php echo
$pendingReports[$i]->inspection_subject;?></td>
<td><?php if($pendingReports[$i]-
>remark == '1'){
echo "<span
style='color:#00af00'>Positive</span>";
} else{
echo "<span
style='color:#af0000'>Negative</span>";
}

?></td>
<td><?php echo
$pendingReports[$i]->report_date; ?></td>
</tr>
<?php } ?>

</tbody>
<tfoot>
<tr>
<th></th>
<th>Project Description</th>
<th>Subject of Inspection</th>
<th>Remark</th>
<th>Date Submitted</th>
</tr>
</tfoot>
</table>
</div>

<br>

<div class="page-header" style="margin-top:
10px;">
<h4>Your Projects</h4>
</div>

<div class="well">
<table id="projects" class="display"
cellspacing="0" width="100%">
<thead>
<tr>
<th></th>
<th>Ref. No.</th>
<th>Project Description</th>
<th>Start Date</th>
<th>End Date</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<?php foreach ($projectList as $value):
?>
<tr>
<td><div class="btn-group-
vertical">
<a style="text-align:
left;" class="btn btn-default btn-xs" href="<?php
echo base_url();?>projects/view_project/<?php
echo $value->project_id;?>"><span
class="glyphicon glyphicon-eye-open"></span>
View</a>
<?php if($value->added_by
== $this->session->userdata('username')){ ?>
<a style="text-align:
left;" class="btn btn-default btn-xs" href="<?php
echo base_url();?>projects/edit_project/<?php
echo $value->project_id;?>"><span
class="glyphicon glyphicon-edit"></span> Edit</a>
<?php } ?>
<a class="btn btn-primary
btn-xs" href="<?php echo
base_url();?>home/create_report/<?php echo
$value->project_id;?>"><span class="glyphicon
glyphicon-pencil"></span> Create
Report</a>
</div>
</td>
<td><?php echo
$value->reference_no; ?></td>
<td><?php echo
$value->project_description;?></td>
<td><?php echo
$value->contract_startdate; ?></td>
<td><?php echo
$value->contract_enddate;?></td>
<td><?php echo
$value->location_address;?></td>
</tr>
<?php endforeach; ?>

</tbody>
<tfoot>
<tr>
<th></th>
<th>Ref. No.</th>
<th>Project Description</th>
<th>Start Date</th>
<th>End Date</th>
<th>Location</th>
</tr>
</tfoot>
</table>
</div>
<?php } ?>

<br>

<div class="page-header" style="margin-top:
10px;">
<h4>Your Reports</h4>
</div>
<div class="well">
<table id="reports" class="display"
cellspacing="0">
<thead>
<tr>
<th></th>
<th>Project Description</th>
<th>Subject of Inspection</th>

```

```

        <th>Remark</th>
        <th>Date Submitted</th>
        <th>Status</th>
    </tr>
</thead>
<tbody>

    <?php for($i=0; $i<sizeof($reports); $i++){?>
        <tr>
            <td align="center">
                <div class="btn-group-vertical">
                    <a style="text-align: left;" href=<?php echo base_url();?>home/view_report/<?php echo $reports[$i]->report_id;?>" type="button" class="btn btn-default btn-xs"><span class="glyphicon glyphicon-eye-open"></span> View</a>
                    <a style="text-align: left;" class="btn btn-danger btn-xs" delete- confirm="Delete report with project description: <?php echo $projects[$i]->row()->project_description;?>" href=<?php echo base_url();?>home/delete_report/<?php echo $reports[$i]->report_id;?>"><span class="glyphicon glyphicon-minus-sign"></span> Delete</a>
                </div>
            </td>
            <td><?php echo $projects[$i]->row()->project_description; ?></td>
            <td><?php echo $reports[$i]->inspection_subject;?></td>
            <td><?php
                if($reports[$i]->remark == '1'){
                    echo "<span style='color:#00af00'>Positive</span>";
                }else{
                    echo "<span style='color:#af0000'>Negative</span>";
                }
            ?></td>
            <td><?php echo $reports[$i]->report_date; ?></td>
            <td><?php echo $reports[$i]->status; ?></td>
        </tr>
    <?php } ?>

</tbody>
<tfoot>
    <tr>
        <th></th>
        <th>Project Description</th>
        <th>Subject of Inspection</th>
        <th>Remark</th>
        <th>Date Submitted</th>
        <th>Status</th>
    </tr>
</tfoot>
</table>
</div>
</div>

<footer class="footer">

```

```

</footer>

<!-- Modal Delete--&gt;
&lt;div id="deleteModal" class="modal fade" role="dialog"&gt;
    &lt;div class="modal-dialog modal-sm" &gt;
        &lt;!-- Modal content--&gt;
        &lt;div class="modal-content"&gt;
            &lt;div class="modal-header"&gt;
                &lt;button type="button" class="close" data-dismiss="modal">&times;</button>
            <div class="modal-title">Delete</div>
            <div class="modal-body">
                <!-- -->
                <p id="modal_message">Are you sure?</p>
                <!-- -->
            </div>
            <div class="modal-footer">
                <a id="okButtonDelete" type="button" class="btn btn-primary" >OK</a>
                <button type="button" class="btn btn-default" data-dismiss="modal">Cancel</button>
            </div>
        </div>
    </div>
</div>

<!-- Modal Approve--&gt;
&lt;div id="approveModal" class="modal fade" role="dialog"&gt;
    &lt;div class="modal-dialog modal-sm" &gt;
        &lt;!-- Modal content--&gt;
        &lt;div class="modal-content"&gt;
            &lt;div class="modal-header"&gt;
                &lt;button type="button" class="close" data-dismiss="modal">&times;</button>
            <div class="modal-title">Approve Report</div>
            <div class="modal-body">
                <!-- -->
                <p id="approve_message"></p>
                <!-- -->
            </div>
            <div class="modal-footer">
                <a id="okButtonApprove" type="button" class="btn btn-primary" >OK</a>
                <button type="button" class="btn btn-default" data-dismiss="modal">Cancel</button>
            </div>
        </div>
    </div>
</div>
```

```

        </div>

        <!-- Modal Remove--&gt;
        &lt;div id="removeModal" class="modal fade" role="dialog"&gt;
            &lt;div class="modal-dialog modal-sm" &gt;
                &lt;!-- Modal content--&gt;
                &lt;div class="modal-content"&gt;
                    &lt;div class="modal-header"&gt;
                        &lt;button type="button" class="close" data-dismiss="modal">&times;</button>
                        <h4 class="modal-title">Remove Report</h4>
                    </div>
                    <div class="modal-body">
                        <!-- -->
                        <p id="remove_message"></p>
                        <!-- -->
                    </div>
                    <div class="modal-footer">
                        <a id="okButtonRemove" type="button" class="btn btn-primary" >OK</a>
                        <button type="button" class="btn btn-default" data-dismiss="modal" >Cancel</button>
                    </div>
                </div>
            </div>
        </div>

        <!--Load jQuery libraries -->
        <script type="text/javascript" src="<?php echo base_url("assets/js/jquery-1.12.2.js"); ?>"></script>
        <script type="text/javascript" src="<?php echo base_url("assets/js/bootstrap.js"); ?>"></script>

        <script type="text/javascript" src="<?php echo base_url("assets/js/jquery.dataTables.min.js"); ?>"></script>

        <!-- own script-->
        <script type="text/javascript">
            $(function(){
                $('#pending').dataTable();
                $('#projects').dataTable();
                $('#reports').dataTable();
            });

            $(document).ready(function() {
                $('a[delete-confirm]').click(function(){
                    var href = $(this).attr('href');

                    $('#deleteModal').find('#modal_message').text($(this).attr('delete-confirm'));
                    $('#okButtonDelete').attr('href', href);
                    $('#deleteModal').modal('show');
                    return false;
                });
            });
        </script>
    
```

```

        $('a[approve-confirm]').click(function(){
            var href = $(this).attr('href');

            $('#approveModal').find('#approve_message').text($(this).attr('approve-confirm'));
            $('#okButtonApprove').attr('href', href);
            $('#approveModal').modal('show');
            return false;
        });

        $('a[remove-confirm]').click(function(){
            var href = $(this).attr('href');

            $('#removeModal').find('#remove_message').text($(this).attr('remove-confirm'));
            $('#okButtonRemove').attr('href', href);
            $('#removeModal').modal('show');
            return false;
        });
    
```

```

</body>
</html>

```

Account-views files

Add_user_view.php

```

<?php
defined('BASEPATH') OR exit('No direct script access allowed');
?>
<!DOCTYPE html>

<html lang="en">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <title>Create Report</title>

        <!--link the bootstrap-->
        <link rel="stylesheet" href="<?php echo base_url("assets/css/bootstrap.css"); ?>" />
        <link rel="stylesheet" href="<?php echo base_url("assets/css/maicam-bootstrap.css"); ?>" />

        <style type="text/css">
            .form-group {
                margin-top: 20px;
            }
        </style>
<script src="<?php echo base_url("assets/js/jquery-1.12.2.js"); ?>"></script>

```

```

<script src="<?php echo base_url("assets/js/bootstrap.js"); ?>"></script>

<script>
$(document).ready(function(){
    $('#accounts_li').addClass('active');
});

$(document).on('click', '.add-contract', function() {
    $('.contract-wrapper').append("<div class='contract-field'><input type='text' name='contracting_parties[]' class='form-control'><button type='button' class='btn btn-danger remove-contract'><span class='glyphicon glyphicon-minus'></span></button></div>");
});

$(document).on('click', '.remove-contract', function() {
    $('.testing').append("hello working naman <br>");
    $(this).parent('.contract-field').remove();
});

$(document).on('click', '.add-personnel', function() {
    $('.personnel-field').append("Name: <input type='text' class='form-control' name='name[]' /> Office: <input type='text' class='form-control' name='office[]' /> Position: <input type='text' class='form-control' name='position[]' /> ");
});

$(document).on('click', '.add-objective', function() {
    $('.objective-field').append("<input type='text' class='form-control' name='objective[]' /> ");
});

$(document).on('click', '.add-image', function() {
    $('.image-field').append("<input type='text' class='form-control' name='file_url[]' /> ");
});

</script>

</head>

<body>

<div class="container center-container">
    <form role="form" id="createUser" enctype="multipart/form-data" method="post" action="<?php echo base_url(); ?>account/submit_user">

        <fieldset class="form-group">

```

```

            <legend>Add a user</legend>
            <div class="well">
                <div class="form-group">
                    <label for="firstname">First Name</label>
                    <input type="text" class="form-control" name="firstname" />
                </div>
                <div class="form-group">
                    <label for="lastname">Last Name</label>
                    <input type="text" class="form-control" name="lastname" />
                </div>
                <div class="form-group">
                    <label for="email">Email</label>
                    <input type="email" class="form-control" name="email" />
                </div>
                <div class="form-group">
                    <label for="username">Username</label>
                    <input type="text" class="form-control" name="username" />
                </div>
                <div class="form-group">
                    <label for="role">Role</label>
                    <select class="c-select" name="role">
                        <option value="admin">Admin</option>
                        <option value="citizen_auditor">Citizen Auditor</option>
                    </select>
                </div>
                <div class="form-group">
                    <input type="hidden" name="active" value="1" checked>
                </div>
            </fieldset>
            <div class="form-group" style="text-align: center;">
                <button type="submit" id="confirmSubmit" class="btn btn-primary" formmethod="post" >Create User</button>
            </div>
        </div>
        <!-- Modal Submit-->
        <div id="submitModal" class="modal fade" role="dialog">
            <div class="modal-dialog modal-sm" >
                <!-- Modal content-->
                <div class="modal-content" >
                    <div class="modal-header" >
                        <button type="button" class="close" data-dismiss="modal" >&times;</button>
                    <h4 class="modal-title" >Create User</h4>
                    <div class="modal-body" >
                        <!-->
                        <p id="modal_message" >Do you want to submit new user account?</p>
                        <!-- -->
                    </div>
                </div>
            </div>
        </div>

```

```

<div class="modal-footer">
    <a id="okButtonSubmit" type="button" class="btn btn-primary" >OK</a>
    <button type="button" class="btn btn-default" data-dismiss="modal">Cancel</button>
</div>
</div>
</div>

<!--Load jQuery libraries -->
<script type="text/javascript" src="php echo base_url("assets/js/jquery-1.12.2.js"); ?&gt;"</script>
<script type="text/javascript" src="php echo base_url("assets/js/bootstrap.js"); ?&gt;"</script>

<script type="text/javascript">

$(document).ready(function() {
    $('#confirmSubmit').click(function(){

        $('#submitModal').modal('show');
        return false;
    });

    $('#okButtonSubmit').click(function(){

document.getElementById('createUser').submit();
    });
});
</script>

<footer class="footer">
    <div class="navbar navbar-default navbar-bottom">
        </div>
</footer>
</body>
</html>

Edit_profile.php
<?php
defined('BASEPATH') OR exit('No direct script
access allowed');
?>
<!DOCTYPE html>

<html lang="en">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-
width, initial-scale=1.0">
    <title>Create Report</title>

    <!--link the bootstrap-->
    <link rel="stylesheet" href="php echo base_url("assets/css/bootstrap.css"); ?&gt;"/&gt;

    &lt;style type="text/css"&gt;
        .form-group {
            margin-top: 20px;
        }
    &lt;/style&gt;
</pre

```

 .left-text{
 text-align: right;
 }
 .longText{
 width: 300px;
 }
</style>
<script src="php echo base_url("assets/js/jquery-1.12.2.js"); ?>"</script>
<script src="php echo base_url("assets/js/bootstrap.js"); ?>"</script>

<script type="text/javascript">
 $(document).ready(function(){
 $('#accounts_li').addClass('active');
 });
</script>
</head>

<body>

<?php
 $userinfo = $user->row();
?>

<div class="container center-container">
 <form role="form" enctype="multipart/form-
data">

 <fieldset class="form-group">
 <legend>Your Profile</legend>
 <div class="well">
 <div class="form-group">
 <label for="firstname">Username</label>
 <input type="text" readonly
class="form-control" name="username" value='<?php
echo $userinfo->username;?>'>
 </div>

 <div class="form-group">
 <label for="firstname">First
Name</label>
 <input type="text" class="form-control"
name="firstname" value='<?php echo $userinfo-
>firstname;?>'>
 </div>
 <div class="form-group">
 <label for="lastname">Last Name</label>
 <input type="text" class="form-control"
name="lastname" value='<?php echo $userinfo-
>lastname;?>'>
 </div>
 <div class="form-group">
 <label for="lastname">Email</label>
 <input type="email" class="form-
control" name="email" value='<?php echo
 userinfo->email_address;?>'>
 </div>

 <div class="form-group">
 <label for="password">Change
Password</label>
 <input type="password" style="margin-
bottom: 5px;" class="form-control"
name="current_password" placeholder="Current
Password">
 </div>

```


```

```

        <input type="password" style="margin-
bottom: 5px;" class="form-control"
name="password" placeholder="New Password">
        <input type="password" style="margin-
bottom: 5px;" class="form-control"
name="confirm_password" placeholder="Confirm
Password">
    </div>
</div>
</fieldset>

<div class="form-group" style="text-align:
center;">
    <button type="submit" class="btn btn-
primary" formmethod="post" formaction=<?php echo
base_url();?>account/save_profile>Save
changes</button>
</div>

</form>
</div>

<!--Load jQuery libraries -->
<script type="text/javascript" src=<?php echo
base_url("assets/js/bootstrap.js"); ?>></script>
<script type="text/javascript" src=<?php echo
base_url("assets/js/jquery-1.12.2.js");
?>></script>

<footer class="footer">
    <div class="navbar navbar-default navbar-
bottom">
    </div>
</footer>
</body>
</html>

Edit_user_view.php

<?php
defined('BASEPATH') OR exit('No direct script
access allowed');
?>
<!DOCTYPE html>

<html lang="en">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-
width, initial-scale=1.0">
    <title>Create Report</title>

    <!--link the bootstrap-->
    <link rel="stylesheet" href=<?php echo
base_url("assets/css/bootstrap.css"); ?>>/>
    <link rel="stylesheet" href=<?php echo
base_url("assets/css/maicam-bootstrap.css");
?>>/>

    <style type="text/css">
        .form-group {
            margin-top: 20px;
        }
        .left-text{
            text-align: right;
        }
    </style>

```

```

        .longText{
            width: 300px;
        }
    </style>
<script src=<?php echo
base_url("assets/js/jquery-1.12.2.js");
?>></script>
<script src=<?php echo
base_url("assets/js/bootstrap.js"); ?>></script>

<script type="text/javascript">
$(document).ready(function(){
    $('#accounts_li').addClass('active');
});
</script>
</head>

<body>

<?php
    $userinfo = $user->row();
?>

<div class="container center-container">
    <form role="form" enctype="multipart/form-
data">

<fieldset class="form-group">
    <legend>Edit User</legend>
    <div class="well">
        <div class="form-group">
            <label for="firstname">Username</label>
            <input type="text" readonly
class="form-control" name="username" value='<?php
echo $userinfo->username;?>'>
        </div>

        <div class="form-group">
            <label for="firstname">First
Name</label>
            <input type="text" class="form-control"
name="firstname" value='<?php echo $userinfo-
>firstname;?>'>
        </div>
        <div class="form-group">
            <label for="lastname">Last Name</label>
            <input type="text" class="form-control"
name="lastname" value='<?php echo $userinfo-
>lastname;?>'>
        </div>
        <div class="form-group">
            <label for="role">Role</label>
            <select class="form-control"
name="role">
                <?php
                    if($userinfo->role == "admin"){
                        echo "<option value='admin'>Admin</option>";
                        echo "<option value='citizen_auditor'>Citizen
Auditor</option>";
                    }else{
                        echo "<option value='admin'>Admin</option>";
                        echo "<option value='citizen_auditor'>Citizen
Auditor</option>";
                    }
                </select>
        </div>
    </div>
</div>

```

```

        }
    ?>
  </select>
</div>
<div class="form-group">
  <?php
    if($userinfo->active== "1"){
      echo "<input type='radio' name='active' value='1' checked>Active</input>";
      echo "<input type='radio' name='active' value='0' >Inactive</input>";
    }else{
      echo "<input type='radio' name='active' value='1' >Active</input>";
      echo "<input type='radio' name='active' value='0' checked>Inactive</input>";
    }
  ?>
</div>
</div>
</fieldset>

  <div class="form-group" style="text-align: center;">
    <button type="submit" class="btn btn-primary" formmethod="post" formaction="<?php echo base_url();?>account/save_changes">Save Changes</button>
  </div>
</form>
</div>

<!--Load jQuery libraries -->
<script type="text/javascript" src="<?php echo base_url("assets/js/jquery-1.12.2.js"); ?>"></script>
<script type="text/javascript" src="<?php echo base_url("assets/js/bootstrap.js"); ?>"></script>

<footer class="footer">
  <div class="navbar navbar-default navbar-bottom">
    </div>
</footer>
</body>
</html>

Manage_account_view.php
<?php
defined('BASEPATH') OR exit('No direct script access allowed');
?>
<!DOCTYPE html>

<html lang="en">

<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Home</title>
<!--link the bootstrap-->

  <link rel="stylesheet" href="<?php echo base_url("assets/css/bootstrap.css"); ?>">
  <link rel="stylesheet" href="<?php echo base_url("assets/css/maicam-bootstrap.css"); ?>">
  <link rel="stylesheet" href="<?php echo base_url("assets/css/dataTables.css"); ?>">

  <!--Load jQuery libraries -->
  <script type="text/javascript" src="<?php echo base_url("assets/js/jquery-1.12.2.js"); ?>"></script>
  <script type="text/javascript" src="<?php echo base_url("assets/js/bootstrap.js"); ?>"></script>
  <script type="text/javascript" src="<?php echo base_url("assets/js/jquery.dataTables.min.js"); ?>"></script>

  <!-- own script-->
<script type="text/javascript">
  $(document).ready(function(){
    $('#view_report_li').addClass('active');
  });
  $(function(){
    $("#example").dataTable();
  })
</script>

</head>
<body>

<?php
  $accounts = $users->result();
?>

<div class="container center-container">
  <div class="page-header" style="margin-top: 10px;">
    <h4><a href="<?php echo base_url();?>account/add_user"><span class="glyphicon glyphicon-plus"></span>Users</a></h4>
  </div>
  <table id="example" class="display">
    <thead>
      <tr>
        <th></th>
        <th>First Name</th>
        <th>Last Name</th>
        <th>Email</th>
        <th>Username</th>
        <th>Role</th>
        <th>Active</th>
      </tr>
    </thead>
    <tbody>
      <?php foreach ($accounts as $value): ?>
        <tr>
          <td>
            <div class="btn-group-vertical">
              <a style="text-align: left;" class="btn btn-default btn-xs" href="<?php echo base_url();?>account/edit_user/<?php echo

```

```

$value->username?"><span style="text-align:left;" class="btn btn-danger btn-xs" data-dismiss="modal">Delete</button></a>
        <a href="#" data-dismiss="modal">Cancel</button>
    </div>
</div>
</div>
</div>

<button type="button" class="btn btn-default" data-dismiss="modal">Cancel</button>
</div>
</div>
</div>
</div>

<div class="modal" id="deleteModal" role="dialog">
    <div class="modal-dialog modal-sm" style="width: 300px;">
        <!-- Modal content-->
        <div class="modal-content" style="border-radius: 10px;">
            <div class="modal-header" style="background-color: #f0f0f0; border-bottom: 1px solid #ccc; padding: 5px; text-align: center;">
                <button type="button" class="close" data-dismiss="modal">&times;
                <h4 class="modal-title" style="margin: 0;">Delete
            </div>
            <div class="modal-body" style="padding: 10px; text-align: center;">
                <!-- -->
                <p id="modal_message" style="margin: 0;">Are you sure?
                <!-- -->
            </div>
            <div class="modal-footer" style="background-color: #f0f0f0; border-top: 1px solid #ccc; padding: 5px; text-align: center;">
                <a href="#" id="okButtonDelete" style="color: inherit; font-weight: bold;">OK
            </div>
        </div>
    </div>
</div>

```

```
<script type="text/javascript">

$(document).on('click', '.add-contract', function() {
    $('.contract-wrapper').append("<div class='contract-field'><div class='row'><div class='col-xs-10'><input type='text' name='contracting_parties[]' class='form-control'></div><div class='col-xs-2'><button type='button' class='btn btn-danger remove-contract'><span class='glyphicon glyphicon-minus'></span></button></div></div></div>");
});

$(document).on('click', '.remove-contract', function() {
    $(this).parentsUntil('.contract-field').remove();
});

</script>

</head>

<body>

<div class="container center-container">
    <form role="form" enctype="multipart/form-data" id="createProject" action="<?php echo base_url();?>projects/add_project" method="post">
        <div class="form-control-static" style="text-align: right">
            <p> March 28, 2016
        </div>
        <fieldset class="form-group">
            <legend>Add a Project</legend>
            <div class="well">
                <div class="form-group">
                    <label for="reference_no">Reference No.</label>
                    <input type="number" class="form-control" name="refno">
                </div>
                <div class="form-group">
                    <label for="project_description">Project Description</label>
                    <input type="text" class="form-control" name="project_description">
                </div>
                <div class="form-group">
                    <label for="contracting_parties">Contracting Party</label>
                    <input type="text" class="form-control" name="contracting_parties" >
                </div>
                <div class="form-group">
                    <label for="contract_date">Contract Date</label>
                </div>
            </div>
        </fieldset>
    </form>
</div>


```

```
<div class="form-inline">
    <mark>Start Date:</mark><input type="date" name="start_contract_date">
    <mark>End Date:</mark><input type="date" name="end_contract_date">
</div>
<div class="form-group">
    <label for="location_address">Location Address</label>
    <input type="text" class="form-control" name="location_address">
</div>
<div class="form-group">
    <label for="coordinates">Geographic Coordinates</label>
    <div class="form-inline">
        Latitude: <input type="number" step="any" class="form-control" name="latitude" >
        Longitude: <input type="number" step="any" class="form-control" name="longitude" >
    </div>
</div>
</div>
</fieldset>

<div class="form-group" style="text-align:center;">
    <button type="submit" id="confirmSubmit" class="btn btn-primary" formenctype="multipart/form-data" formmethod="post" >Submit</button>
</div>
</form>
</div>

<!-- Modal Submit--&gt;
&lt;div id="submitModal" class="modal fade" role="dialog"&gt;
    &lt;div class="modal-dialog modal-sm" &gt;
        &lt;!-- Modal content--&gt;
        &lt;div class="modal-content"&gt;
            &lt;div class="modal-header"&gt;
                &lt;button type="button" class="close" data-dismiss="modal" &gt;&amp;times;&lt;/button&gt;
                &lt;h4 class="modal-title"&gt;Submit Project&lt;/h4&gt;
            &lt;/div&gt;
            &lt;div class="modal-body"&gt;
                &lt;!-- --&gt;
                &lt;p id="modal_message"&gt;Do you want to submit your project?&lt;/p&gt;
                &lt;!-- --&gt;
            &lt;/div&gt;
        &lt;div class="modal-footer"&gt;
            &lt;a id="okButtonSubmit" type="button" class="btn btn-primary" &gt;OK&lt;/a&gt;
            &lt;button type="button" class="btn btn-default" data-dismiss="modal" &gt;Cancel&lt;/button&gt;
        &lt;/div&gt;
    &lt;/div&gt;
&lt;/div&gt;</pre>
```

```

        </div>
    </div>
</div>

<!--Load jQuery libraries -->
    <script type="text/javascript" src=<?php echo base_url("assets/js/jquery-1.12.2.js"); ?>></script>
    <script type="text/javascript" src=<?php echo base_url("assets/js/bootstrap.js"); ?>></script>

<script type="text/javascript">
$(document).ready(function() {
    $('#confirmSubmit').click(function(){
        $('#submitModal').modal('show');
        return false;
    });

    $('#okButtonSubmit').click(function(){
        document.getElementById('createProject').submit();
    });
});
</script>
</body>

<footer class="footer">
    <div class="navbar navbar-default navbar-bottom">
        </div>
</footer>
</html>

Edit_project_view.php

<?php
defined('BASEPATH') OR exit('No direct script access allowed');
?>
<!DOCTYPE html>

<html lang="en">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
        <title>Create Report</title>
        <!--link the bootstrap-->
        <link rel="stylesheet" href=<?php echo base_url("assets/css/bootstrap.css"); ?>>/>
        <link rel="stylesheet" href=<?php echo base_url("assets/css/maicam-bootstrap.css"); ?>>/>

        <script src=<?php echo base_url("assets/js/jquery-1.12.2.js"); ?>></script>
        <script src=<?php echo base_url("assets/js/bootstrap.js"); ?>></script>

```

```

<script type="text/javascript">
$(document).on('click', '.add-contract', function() {
    $('.contract-wrapper').append("<div class='contract-field'><div class='row'><div class='col-xs-10'><input type='text' name='contracting_parties[]' class='form-control'></div><div class='col-xs-2'><button type='button' class='btn btn-danger remove-contract'><span class='glyphicon glyphicon-minus'></span></button></div></div></div>");
});

$(document).on('click', '.remove-contract', function() {
    $(this).parentsUntil('.contract-field').remove();
});

</script>

```

```

</head>
<body>
<?php
    $projectInfo = $project->row();
?>

<div class="container center-container">
    <form role="form" enctype="multipart/form-data">
        <div class="form-control-static" style="text-align: right">
            <p> March 28, 2016
        </div>
        <fieldset class="form-group">
            <legend>Edit Project</legend>
            <div class="well">
                <div class="form-group">
                    <label for="reference_no">Reference No.</label>
                    <input type="number" class="form-control" name="refno" value='<?php echo $projectInfo->reference_no;?>'>
                </div>
                <div class="form-group">
                    <label for="project_description">Project Description</label>
                    <input type="text" class="form-control" name="project_description" value='<?php echo $projectInfo->project_description;?>'>
                </div>
                <div class="form-group">
                    <label for="contracting_parties">Contracting Party</label>

```

```

        <input type="text" class="form-control" name="contracting_parties" value='<?php echo $projectInfo->contracting_parties;?>'>
    </div>
    <div class="form-group">
        <label for="contract_date">Contract Date</label>
        <div class="form-inline">
            <mark>Start Date:</mark><input type="date" class="form-control" name="start_contract_date" value='<?php echo $projectInfo->contract_startdate;?>'>
            <mark>End Date:</mark><input type="date" class="form-control" name="end_contract_date" value='<?php echo $projectInfo->contract_enddate;?>'>
        </div>
    </div>
    <div class="form-group">
        <label for="location_address">Location Address</label>
        <input type="text" class="form-control" name="location_address" value='<?php echo $projectInfo->location_address;?>'>
    </div>
    <input type="hidden" class="form-control" name="project_id" value='<?php echo $projectInfo->project_id;?>'>
    <div class="form-group">
        <label for="coordinates">Geographic Coordinates</label>
        <div class="form-inline">
            Latitude: <input type="number" step="any" class="form-control" name="latitude" value='<?php echo $projectInfo->latitude;?>'>
            Longitude: <input type="number" step="any" class="form-control" name="longitude" value='<?php echo $projectInfo->longitude;?>'>
        </div>
    </div>
    </div>
</fieldset>

<div class="form-group" style="text-align: center;">
    <button type="submit" class="btn btn-primary" formenctype="multipart/form-data" formmethod="post" formaction="<?php echo base_url();?>projects/save_changes">Save Changes</button>
</div>
</form>
</div>

<!--Load jQuery libraries -->
<script type="text/javascript" src="<?php echo base_url("assets/js/jquery-1.12.2.js"); ?>"></script>
<script type="text/javascript" src="<?php echo base_url("assets/js/bootstrap.js"); ?>"></script>

<footer class="footer">
    <div class="navbar navbar-default navbar-bottom">
    </div>
</footer>
```

```

</footer>
</body>
</html>
Manage_project_view.php

<?php
defined('BASEPATH') OR exit('No direct script access allowed');
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Home</title>
    <!--link the bootstrap-->
    <link rel="stylesheet" href="<?php echo base_url("assets/css/bootstrap.css"); ?>"/>
    <link rel="stylesheet" href="<?php echo base_url("assets/css/maicam-bootstrap.css"); ?>"/>
    <link rel="stylesheet" href="<?php echo base_url("assets/css/dataTables.css"); ?>"/>
    <style type="text/css">
        ul{
            list-style-type: none;
        }
    </style>
</head>
<body>

<?php
    $projects = $projects->result();
    // $locationId = array();
    // $latitude = array();
    // $longitude = array();
    for($i=0; $i<sizeof($projects); $i++){
        // $locationId[$i] = $location[$i]->location_id;
        $projectId[$i] = $projects[$i]->project_id;
        $projectTitles[$i] = $projects[$i]->project_description;
        $latitude[$i] = $projects[$i]->latitude;
        $longitude[$i] = $projects[$i]->longitude;
    }
    if($this->session->userdata('role') == 'admin'){
        $adminPower = true;
    }else{
        $adminPower = false;
    }
?>
```

```

<div class="container center-container">
    <div class="page-header" style="margin-top: 10px;">

        <?php
            if($adminPower){
                echo ' <h4><a href="'.base_url("projects/create_project") . '"><span class="glyphicon glyphicon-plus">Projects</a></h4>';
            }else{
                echo '<h4>All Projects</h4>';
            }
        ?>
    </div>
    <table id="projects" class="display" cellspacing="0" width="100%">
        <thead>
            <tr>
                <th></th>
                <th>Ref. No.</th>
                <th>Project Description</th>
                <th>Start Date</th>
                <th>End Date</th>
                <th>Location</th>
            </tr>
        </thead>
        <tbody>
            <?php foreach ($projects as $value): ?>
            <tr>
                <td>
                    <?php if($adminPower){ ?>
                    <div class="btn-group-
vertical">
                        <a style="text-align: left;" class="btn btn-default btn-xs" href="<?php echo base_url();?>projects/view_project/<?php echo $value->project_id;?>"><span class="glyphicon glyphicon-eye-open"></span> View</button></a>
                        <?php if($value->added_by == $this->session->userdata('username')){ ?>
                            <a style="text-align: left;" class="btn btn-default btn-xs" href="<?php echo base_url();?>projects/edit_project/<?php echo $value->project_id;?>"><span class="glyphicon glyphicon-edit"></span> Edit</button></a>
                        <?php }?>
                        <a class="btn btn-primary btn-xs" href="<?php echo base_url();?>home/create_report/<?php echo $value->project_id;?>"><span class="glyphicon glyphicon-pencil"></span> Create Report</button></a>
                    </div>
                <?php } else{ ?>

```

```

<div class="btn-group-
vertical">
    <a class="btn btn-default
btn-xs" href="<?php echo base_url();?>projects/view_project/<?php echo $value->project_id;?>"><span class="glyphicon glyphicon-eye-open"></span> View</button></a>
    <a class="btn btn-primary
btn-xs" href="<?php echo base_url();?>home/create_report/<?php echo $value->project_id;?>"><span class="glyphicon glyphicon-pencil"></span> Create Report</button></a>
</div>
<?php }?>

```

| | | | | | |
|-------|---|--|---|---|---|
| </td> | <td><?php echo \$value->reference_no; ?></td> | <td><?php echo \$value->project_description; ?></td> | <td><?php echo \$value->contract_startdate; ?></td> | <td><?php echo \$value->contract_enddate; ?></td> | <td><?php echo \$value->location_address; ?></td> |
| | | | | | |

<?php endforeach; ?>

```

</tbody>
<tfoot>
    <tr>
        <th></th>
        <th>Ref. No.</th>
        <th>Project Description</th>
        <th>Start Date</th>
        <th>End Date</th>
        <th>Location</th>
    </tr>
</tfoot>
</table>
</div>
<br><br>
<div class="container center-container">
    <div class="page-header" style="margin-top: 10px;">
        <h4>Map of Projects</h4>
    </div>
    <div id="googleMap" style="height:500px; background-color: #235594">
        <p style="text-align: right; color: #fff; padding: 10px;">Map of Projects
    </div>
    <br><br>
    <div class="alert alert-info">
        <p>Click the markers to view projects.</p>
    </div>

```

```

<footer class="footer">
    <div class="navbar navbar-default navbar-
bottom">
    </div>
</footer>

```

```

<!--Load jQuery libraries -->
<script type="text/javascript" src=<?php echo base_url("assets/js/bootstrap.js"); ?>></script>
<script type="text/javascript" src=<?php echo base_url("assets/js/jquery-1.12.2.js"); ?>></script>
<script type="text/javascript" src=<?php echo base_url("assets/js/jquery.dataTables.min.js"); ?>></script>
<script type="text/javascript" src=<?php echo base_url("assets/js/markerclusterer_compiled.js") ; ?>></script>
<script
src="https://maps.googleapis.com/maps/api/js?key=AIzaSyBtYXaXOZ6Wfktkucs_BD7LI1I4vGk0aeY"></script>

<!-- own script-->
<script type="text/javascript">
$(function(){
    $("#projects").dataTable();
})

</script>

<!-- generate map -->
<script type="text/javascript">
    function initialize(){
        var latitude      = <?php echo json_encode($latitude);?>;
        var longitude    = <?php echo json_encode($longitude);?>;
        var projectId    = <?php echo json_encode($projectId);?>;
        var projectTitles = <?php echo json_encode($projectTitles);?>

        var myCenter=new google.maps.LatLng(13.6218, 123.1948);

        var mapProp      = {center:myCenter,zoom:5,mapTypeId:google.maps.MapTypeId.ROADMAP};

        var map          = new google.maps.Map(document.getElementById("googleMap"), mapProp);

        var clusterStyles = [{{
            textColor: 'white',
            url: "<?php echo base_url();?>" +
"/assets/images/m1.png",
            height: 50,
            width: 50
        }},
        {
            textColor: 'white',
            url: "<?php echo base_url();?>" +
"/assets/images/m2.png",
            height: 50,
            width: 50
        },
        {
            textColor: 'white',
            url: "<?php echo base_url();?>" +
"/assets/images/m3.png",
            height: 50,
            width: 50
        }];
    }
</script>

```

```

        width: 50
    },
    {
        textColor: 'white',
        url: "<?php echo base_url();?>" +
"/assets/images/m4.png",
        height: 50,
        width: 50
    },
    {
        textColor: 'white',
        url: "<?php echo base_url();?>" +
"/assets/images/m5.png",
        height: 50,
        width: 50
    }
];

var infowindow      = new
google.maps.InfoWindow({
    content: ''
});

//array of markers
var markers = [];

for(i=0; i<latitude.length; i++){
    (function(i) {
        var marker      = new
google.maps.Marker({position:new
google.maps.LatLng(latitude[i], longitude[i])});
        var address    = "<?php echo base_url();?>" + "projects/view_project/" +
projectId[i];
        var contentString = projectTitles[i];

        google.maps.event.addListener(marker,'click',function() {
            window.location.href = address;
        });
        marker.addListener('mouseover',function() {
            infowindow.setContent(contentString);
            infowindow.open(map, this);
        });

        marker.addListener('mouseout',function() {
            infowindow.close();
        });

        markers.push(marker);
        //marker.setMap(map);
    })(i));
}

var mcOptions = {
    gridSize: 50,
    styles: clusterStyles,
    maxZoom: 15
};

```

```

        var markerCluster = new
MarkerClusterer(map, markers, mcOptions);
}
google.maps.event.addDomListener(window,
'load', initialize);
</script>

</body>
</html>

View_project_view.php
<?php
defined('BASEPATH') OR exit('No direct script
access allowed');
?>
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">
<meta name="viewport" content="width=device-
width, initial-scale=1.0">
<title>Create Report</title>

<!--link the bootstrap-->
<link rel="stylesheet" href="<?php echo
base_url("assets/css/bootstrap.css"); ?>"/>
<link rel="stylesheet" href="<?php echo
base_url("assets/css/maicam-bootstrap.css");
?>"/>
<link rel="stylesheet" href="<?php echo
base_url("assets/css/dataTables.css"); ?>"/>

<style type="text/css">

.left-text{
    text-align: right;
}
.replies{
    margin-left: 50px;
}

</style>

<style type="text/css">
    .btn-default:hover {
        color: #fff;
        background-color: #235594;
        border-color: #235594;
    }
</style>

</head>

<body>

<?php
$entry = $project->row();
$reports = $report->result();
$comments = $comment->result();
?>

<div class="container center-container">
    <form class="form-signin" role="form"
enctype="multipart/form-data">
        <div class="form-control-static left-text">
```

```

            <p> Date Created: <?php echo $entry-
>date_added; ?>
        </div>

        <fieldset class="form-group">
            <legend>Project Information</legend>
            <div class="well">
                <div class="form-group">
                    <label for="reference_no">Reference
No.</label>
                    <br><?php echo $entry-
>reference_no; ?>
                </div>
                <div class="form-group">
                    <label
for="project_description">Project Title</label>
                    <br><?php echo $entry-
>project_description; ?>
                </div>
                <div class="form-group">
                    <label
for="contracting_parties">Contracting
Party</label>
                    <br><?php echo $entry-
>contracting_parties; ?>
                    <?php
                        // foreach ($contractingParties as
$row) {
                            // echo "<br>" . $row-
>party_name;
                        // }
                    ?>
                </div>

                <div class="form-group">
                    <label for="contract_date">Contract
Date</label>
                    <div>
                        <mark>Start Date:</mark>
<span><?php echo $entry->contract_startdate;
?></span>
                        <mark>End Date:</mark><span><?php
echo $entry->contract_enddate; ?></span>
                    </div>
                    </div>
                </div>
            </fieldset>

            <fieldset class="form-group">
                <legend>Ground Control Point</legend>
                <div class="well">
                    <div class="form-group">
                        <label
for="province">Address</label>
                        <?php echo "<br>" . $entry-
>location_address; ?>
                    </div>
                    <div class="form-group">
                        <label for="coordinates">Geographic
Coordinates</label>
                        <div>
                            <mark>Latitude:</mark> <?php echo
$entry->latitude; ?>
```

```

        <mark>Longitude:</mark>      <?php
echo $entry->longitude;?>
        </div>
        </div>
        </div>

</fieldset>

<fieldset class="form-group">
    <legend>Reports</legend>
    <div class="well">
        <table id="reports" class="display"
cellspacing="0" width="100%">
            <thead>
                <tr>
                    <th></th>
                    <th>Subject of Inspection</th>
                    <th>Remark</th>
                    <th>Date Submitted</th>
                    <th>Submitted by</th>
                </tr>
            </thead>
            <tbody>
                <?php for($i=0; $i<sizeof($reports);
$i++){?>
                <tr>
                    <td align="center">
                        <a href="<?php echo
base_url();?>home/view_report/<?php echo
$reports[$i]->report_id;?>"><button type="button"
class="btn btn-default btn-xs"><span
class="glyphicon glyphicon-eye-open"></span>
View</button></a>
                    </td>
                    <td><?php echo $reports[$i]-
>inspection_subject;?></td>
                    <td><?php
                        if($reports[$i]->remark ==
'1'){
                            echo "<span
style='color:#00af00'>Positive</span>";
                        }else{
                            echo "<span
style='color:#af0000'>Negative</span>";
                        }
                    </td>
                    <td><?php echo $reports[$i]-
>report_date; ?></td>
                    <td><?php echo $reports[$i]-
>submitted_by; ?></td>
                </tr>
                <?php } ?>
            </tbody>
            <tfoot>
                <tr>
                    <th></th>
                    <th>Subject of Inspection</th>
                    <th>Remark</th>
                    <th>Date Submitted</th>
                    <th>Submitted by</th>
                </tr>
            </tfoot>
        </table>
    </div>
</fieldset>

```

```

        <br>

<fieldset>
    <legend>Comments</legend>

<!!--div class="panel panel-default small">
    <div class="panel-heading">Leave a
comment</div>
    <div class="panel-body">
        <form class="form-horizontal">
            <div class="form-group small">
                <input type="text"
placeholder="Name"></input>
            </div>
            <div class="form-group">
                <input type="email"
placeholder="Email"></input>
            </div>
            <div class="form-group">
                <textarea
row="3" name="message" placeholder="Your
Message"></textarea>
            </div>

            <button type="submit" onclick="return
confirm('Do you want to submit your comment?')"
class="btn btn-primary" formmethod="post"
formaction="<?php echo
base_url();?>publicpage/submit_comment/<?php echo
$entry->project_id; ?>">Submit</button>

        </form>
    </div>
</div-->
    <div class="well">
        <div id="view-comment" style="max-height:
300px; margin-left: 30px; margin-right: 30px;">
            <?php for($i=0; $i<sizeof($comments);
$i++) { ?>
                <b><?php echo $comments[$i]->name;
?></b> <i>wrote:</i> <br>
                <?php echo $comments[$i]->message;
?><br>
                <span
style="font-size: 13px;"><?php echo
$comments[$i]->date_added; ?></span>
            <hr style="margin-top: 5px; margin-
bottom: 5px;">
            <?php }?>
        </div>

        <?php
            if(sizeof($comments)==0){
                echo "<span class='text-muted'><i>No
comments yet.</i></span>";
            }
        ?>
    </div>
</fieldset>

```

```

        </form>
    </div>

<!--Load jQuery libraries -->
<script type="text/javascript" src="php echo base_url("assets/js/bootstrap.js"); ?&gt;"></script>
<script type="text/javascript" src="php echo base_url("assets/js/jquery-1.12.2.js"); ?&gt;"></script>
<script type="text/javascript" src="php echo base_url("assets/js/jquery.dataTables.min.js"); ?&gt;"></script>

<script type="text/javascript">
$(function(){
    $("#reports").dataTable();
});

</script>

<footer class="footer">
    <div class="navbar navbar-default navbar-bottom">
        </div>
</footer>
</body>

</html>

Public-views files

Create_report_public.php
<?php
defined('BASEPATH') OR exit('No direct script access allowed');
?>
<!DOCTYPE html>

<html lang="en">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Create Report</title>

    <!--link the bootstrap-->
    <link rel="stylesheet" href="php echo base_url("assets/css/bootstrap.css"); ?&gt;"/&gt;
    &lt;link rel="stylesheet" href="<?php echo base_url("assets/css/maicam-bootstrap.css"); ?&gt;"/&gt;

    &lt;style type="text/css"&gt;
        .form-group {
            margin-top: 20px;
        }
        .small-container {
            max-width: 660px;
            padding: 15px;
            margin: 0 auto;
        }
    &lt;/style&gt;
&lt;/head&gt;
&lt;body&gt;
    &lt;div class="container"&gt;
        &lt;div class="row"&gt;
            &lt;div class="col-md-6" style="border-right: 1px solid #ccc; padding-right: 10px; position: relative; height: 150px; overflow: hidden; background-color: #f9f9f9;"&gt;
                &lt;div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background: linear-gradient(0deg, transparent 50%, black 50%, transparent 100%); opacity: 0.5; z-index: 1; "&gt;&lt;/div&gt;
                &lt;div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); color: white; font-size: 1.5em; font-weight: bold; z-index: 2; "&gt;Upload Image&lt;/div&gt;
            &lt;/div&gt;
            &lt;div class="col-md-6" style="padding-left: 10px; position: relative; height: 150px; overflow: hidden; background-color: #f9f9f9;"&gt;
                &lt;div style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background: linear-gradient(0deg, transparent 50%, black 50%, transparent 100%); opacity: 0.5; z-index: 1; "&gt;&lt;/div&gt;
                &lt;div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); color: white; font-size: 1.5em; font-weight: bold; z-index: 2; "&gt;Upload Image&lt;/div&gt;
            &lt;/div&gt;
        &lt;/div&gt;
    &lt;/div&gt;
&lt;/body&gt;
</pre

```

.left-text{
 text-align: right;
}
.longText{
 width: 300px;
}

<script src="php echo base_url("assets/js/bootstrap.js"); ?>"></script>
<script src="php echo base_url("assets/js/jquery-1.12.2.js"); ?>"></script>

<script>
$(document).ready(function(){
 $('#create_report_li').addClass('active');
});

$(document).on('click', '.add-contract', function() {
 $('.contract-wrapper').append("<div class='contract-field'><input type='text' name='contracting_parties[]' class='form-control'><button type='button' class='btn btn-danger remove-contract'></button></div>");
});

$(document).on('click', '.remove-contract', function() {
 $('.testing').append("hello working naman
");
 $(this).parent('.contract-field').remove();
});

$(document).on('click', '.add-personnel', function() {
 $('.personnel-field').append("Name: <input type='text' class='form-control' name='name[]' /> Office: <input type='text' class='form-control' name='office[]' /> Position: <input type='text' class='form-control' name='position[]' /> ");
});

$(document).on('click', '.add-objective', function() {
 $('.objective-field').append("<input type='text' class='form-control' name='objective[]' /> ");
});

$(document).on('click', '.add-image', function() {
 $('.image-field').append("<input type='text' class='form-control' name='file_url[]' /> ");
});

</script>

```


```

```

</head>
<body>

    <div class="container">
        <form class="small-container" role="form"
        enctype="multipart/form-data">

            <fieldset class="form-group">
                <legend>Contact Information</legend>

                <div class="form-group">
                    <label for="firstname">First
                    Name</label>
                    <input type="text" class="form-control"
                    name="firstname">
                </div>
                <div class="form-group">
                    <label for="lastname">Last Name</label>
                    <input type="text" class="form-control"
                    name="lastname">
                </div>
                <div class="form-group">
                    <label for="email">Email</label>
                    <input type="email" class="form-
control" name="email">
                </div>
                <div class="form-group">
                    <label for="contact">Contact
                    Number</label>
                    <input type="number" class="form-
control" name="contact">
                </div>
            </fieldset>
            <fieldset class="form-group">
                <legend>Project Details</legend>

                <div class="form-group">
                    <label
                    for="project_description">Project
                    Title/Description</label>
                    <input type="text" class="form-control"
                    name="project_description">
                </div>
                <div class="form-group">
                    <label for="location_address">Location
                    Address</label>
                    <input type="text" class="form-control"
                    name="location_address">
                </div>
            </fieldset>
            <fieldset class="form-group">
                <legend>Your Concern</legend>
                <div class="form-group">
                    <label for="subject">Subject</label>
                    <input type="text" class="form-control"
                    name="subject">
                </div>
                <div class="form-group">
                    <label for="message">Message</label>
                    <textarea id="message" class="form-
control" rows="5" name="message"></textarea>
                </div>
            </fieldset>

            <div class="form-group">
                <button type="submit" onclick="return
                confirm('Do you want to submit your report?')"
                class="btn btn-primary" formmethod="post"
                formaction=<?php echo
                base_url();?>publicpage/submit_report">Submit</bu-
                tton>
            </div>
        </form>
    </div>
</body>

<footer class="footer">
    <div class="navbar navbar-default navbar-
    bottom">
        </div>
</footer>

</html>

```

Header_public.php

```

<?php
defined('BASEPATH') OR exit('No direct script
access allowed');
?>
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="utf-8">
    <meta name="viewport" content="width=device-
width, initial-scale=1.0">

    <script src="<?php echo
base_url("assets/js/bootstrap.js"); ?>"></script>
    <script src="<?php echo
base_url("assets/js/jquery-1.12.2.js"); ?>"></script>

    <!--link the bootstrap-->
    <link rel="stylesheet" href="<?php echo
base_url("assets/css/bootstrap.css"); ?>"/>
    <link rel="stylesheet" href="<?php echo
base_url("assets/css/maicam-bootstrap.css"); ?>"/>

    <!-- navigation header -->
    <nav class="navbar navbar-maicam navbar-static-
top" style="margin-bottom: 0px;">
        <div class="container-fluid center-container">
            <div class="navbar-header">
                <!-- toggle button -->
                <button type="button" class="navbar-toggle"
                data-toggle="collapse" data-target="#myNavbar">
                    <span class="icon-bar"></span>
                    <span class="icon-bar"></span>
                    <span class="icon-bar"></span>
                </button>
                <!-- end toggle button-->

```

```

        <a class="navbar-brand logo" href="#"><b>Citizen Audit Reports</b></a>
        </div>
        <!--collapsing menu -->
        <div class="collapse navbar-collapse" id="myNavbar">
            <ul class="nav navbar-nav">
                </ul>
                <ul class="nav navbar-nav navbar-right">
                    <li id="home_li"><a href="php echo base_url();?&gt;publicpage"&gt;&lt;span class="glyphicon glyphicon-home"&gt;&lt;/span&gt; Home&lt;/a&gt;&lt;/li&gt;

                    &lt;li id="view_report_li"&gt;&lt;a href="<?php echo base_url();?&gt;publicpage/list_report"&gt;&lt;span class="glyphicon glyphicon-eye-open"&gt;&lt;/span&gt; Reports&lt;/a&gt;&lt;/li&gt;
                        &lt;li id="projects_li"&gt;&lt;a href="<?php echo base_url();?&gt;publicpage/list_project"&gt;&lt;span class="glyphicon glyphicon-file"&gt;&lt;/span&gt; Projects&lt;/a&gt;&lt;/li&gt;
                            &lt;li&gt;&lt;a data-toggle="modal" data-target="#myModal"&gt;&lt;span class="glyphicon glyphicon-log-in"&gt;&lt;/span&gt; Login&lt;/a&gt;&lt;/li&gt;
                        &lt;/ul&gt;
                    &lt;/div&gt;
                    &lt;!-- end collapsing menu--&gt;
                &lt;/div&gt;
                &lt;/nav&gt;
            &lt;!-- end navigation header --&gt;

            &lt;!--colored box after navbar --&gt;
            &lt;div class="colored-box"&gt;
                &lt;div class="center-container" style="text-align: right"&gt;
                    Hello, Citizen!
                    &lt;!-- &lt;div style="float: right"&gt; Hello, Citizen!&lt;/div&gt; --&gt;
                    &lt;!--
                    &lt;a href="javascript:window.history.go(-1);"&gt;&lt;span class="glyphicon glyphicon-arrow-left"&gt;&lt;/span&gt; Back&lt;/a&gt; --&gt;
                &lt;/div&gt;
            &lt;/div&gt;

            &lt;!-- Modal Login--&gt;
            &lt;div id="myModal" class="modal fade" role="dialog"&gt;
                &lt;div class="modal-dialog modal-sm" &gt;
                    &lt;!-- Modal content--&gt;
                    &lt;div class="modal-content"&gt;
                        &lt;div class="modal-header"&gt;
                            &lt;button type="button" class="close" data-dismiss="modal"&times;</button>
                            <h4 class="modal-title">Login</h4>
                        </div>
                        <div class="modal-body">
                            <!-->
                            <form class="form-signin" role="form" action="php echo base_url();?&gt;login/process" method="post"&gt;
                                &lt;div class="form-group"&gt;
                                    &lt;label for="nameField"&gt;Username&lt;/label&gt;
                                    &lt;input type="text" name="username" class="form-control input-lg" id="inputlg" &gt;&lt;br&gt;
                                    &lt;label for="pwd"&gt;Password&lt;/label&gt;
                                    &lt;input type="password" name="password" class="form-control input-lg" id="inputlg"&gt;&lt;br&gt;
                                &lt;/div&gt;
                            &lt;/form&gt;
                        &lt;/div&gt;
                    &lt;/div&gt;
                &lt;/div&gt;
            &lt;!-- end modal--&gt;
        &lt;/div&gt;
    &lt;/div&gt;
</pre

```

```

<title>Home</title>
<!--link the bootstrap-->
<link rel="stylesheet" href="<?php echo base_url("assets/css/bootstrap.css"); ?>"/>
<link rel="stylesheet" href="<?php echo base_url("assets/css/maicam-bootstrap.css"); ?>"/>
<style type="text/css">
.colbox {
    margin-left: 0px;
    margin-right: 0px;
}
.form-group {
    margin-top: 20px;
}
.center-button{
    text-align: center;
}

</style>

</head>

<body>
<!-- navigation header -->
<nav class="navbar navbar-maicam navbar-static-top" style="margin-bottom: 0px; ">
<div class="container-fluid center-container">
<div class="navbar-header">
    <!-- toggle button -->
    <button type="button" class="navbar-toggle" data-toggle="collapse" data-target="#myNavbar">
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
        <span class="icon-bar"></span>
    </button>
    <!-- end toggle button-->
    <!-- <a class="navbar-brand" style="padding-left: 0px;" href="#">Citizen Audit Reports</a> -->
    <a class="navbar-brand logo" style="padding-left: 0px;" href="#">Citizen<span style="color: #23527c">Reports</span></b></a>
</div>
<!--collapsing menu -->
<div class="collapse navbar-collapse" id="myNavbar">
    <ul class="nav navbar-nav">
    </ul>
    <ul class="nav navbar-nav navbar-right">
        <li><a href="<?php echo base_url();?>publicpage/list_report"><span class="glyphicon glyphicon-eye-open"></span> Reports</a></li>
        <li id="projects_li"><a href="<?php echo base_url();?>publicpage/list_project"><span class=" glyphicon glyphicon-file"></span> Projects</a></li>
    </ul>
</div>
<!-- end collapsing menu-->
</div>
</nav>
<!-- end navigation header -->

<!-- Modal Login-->
<div id="myModal" class="modal fade" role="dialog">
<div class="modal-dialog modal-sm" >
    <!-- Modal content-->
    <div class="modal-content">
        <div class="modal-header">
            <button type="button" class="close" data-dismiss="modal">&times;</button>
            <h4 class="modal-title">Login</h4>
        </div>
        <div class="modal-body">
            <!-- form-signin -->
            <form class="form-signin" role="form" action="<?php echo base_url();?>login/process" method="post">
                <div class="form-group">
                    <label for="nameField">Username</label>
                    <input type="text" name="username" class="form-control input-lg" id="inputlg" ><br>
                    <label for="pwd">Password</label>
                    <input type="password" name="password" class="form-control input-lg" id="inputlg" ><br>
                </div>
                <div class="checkbox">
                    <?php echo $this->session->flashdata('msg'); ?>
                <!-- -->
                </div>
                <div class="modal-footer">
                    <input type="submit" name="login_submit" id="login_submit" value="Submit" class="btn btn-primary" class="form-control">
                    </form>
                    <button type="button" class="btn btn-default" data-dismiss="modal">Close</button>
                </div>
            </div>
            <div class="center-container">
                <div class="row" style="height:500px; background-color: #B3D1FF; ">
                    <div class="col-md-6 jumbotron" style="background-color: #B3D1FF; height: 500px; ">
                </div>
            </div>
        </div>
    </div>
</div>

```

```

padding: 30px; padding-top: 150px; padding-right:
60px;">
    <h2 style="font-size: 40px; color:
#23527c; margin:0px;"><b>The Citizen</b><br>
    <h2 style="font-size: 40px; color:
#23527c; margin:0px;">Participatory
Audit</b></h2><br>
    <p style="color:
#23527c">Infrastructure projects of the
government can now be monitored by mere concerned
groups and citizens with the <a
href="http://www.coa.gov.ph">Commission on
Audit.</a></p>
    </div>
    <div class="col-md-6" style="background-
color: #B3D1FF;">
        <!-- google map container-->
        <div data-toggle="tooltip" title="Click
the marker on the map to view a report."
id="googleMap" style="height:400px; background-
color: #fff; margin-top:30px; ">
            <p style="text-align: right; color:
#23527c; padding: 10px;">Map of Reports
        </div>

        <div class="center-button">
            <a style="margin:20px;" href="<?php
echo base_url();?>publicpage/list_project"
class="center-button btn btn-primary btn-xs">View
Projects</a>
        </div>
    </div>
</div>

<div class="container">
    <div class="center-button">
        <p><br>
        <p><abbr title=" Infrastructure and
other projects of the government can be audited
by mere concerned groups and citizens!">Be a
citizen auditor.</abbr></p>
        <p>
    </div>
</div>

<!--Load jQuery libraries -->
<script type="text/javascript" src="<?php echo
base_url("assets/js/jquery-1.12.2.js");
?>"></script>
<script type="text/javascript" src="<?php echo
base_url("assets/js/bootstrap.js"); ?>"></script>

<!-- google map js-->
<script
src="https://maps.googleapis.com/maps/api/js?key=
AIzaSyBtYXaXOZ6Wfktkucs_BD7LI1I4vGk0aeY"></script
>
<script type="text/javascript" src="<?php echo
base_url("assets/js/markerclusterer_compiled.js")
; ?>"></script>

```

```

<!-- generate map -->
<script type="text/javascript">
    function initialize(){
        var latitude = <?php echo
json_encode($latitude);?>;
        var longitude = <?php echo
json_encode($longitude);?>;
        var reportId = <?php echo
json_encode($reportId);?>;
        var projectTitles = <?php echo
json_encode($projectTitles);?>;

        var myCenter=new
google.maps.LatLng(13.6218, 123.1948);

        var mapProp =
{center:myCenter,zoom:5,mapTypeId:google.maps.Map
TypeId.ROADMAP};

        var map = new
google.maps.Map(document.getElementById("googleMa
p"), mapProp);

        var clusterStyles = [{{
            textColor: 'white',
            url: "<?php echo base_url();?>" +
"/assets/images/m1.png",
            height: 50,
            width: 50
        }},
        {{
            textColor: 'white',
            url: "<?php echo base_url();?>" +
"/assets/images/m2.png",
            height: 50,
            width: 50
        }},
        {{
            textColor: 'white',
            url: "<?php echo base_url();?>" +
"/assets/images/m3.png",
            height: 50,
            width: 50
        }},
        {{
            textColor: 'white',
            url: "<?php echo base_url();?>" +
"/assets/images/m4.png",
            height: 50,
            width: 50
        }},
        {{
            textColor: 'white',
            url: "<?php echo base_url();?>" +
"/assets/images/m5.png",
            height: 50,
            width: 50
        }}];
    }

    var infowindow =  new
google.maps.InfoWindow({
    content: ''
});

```

```

//array of markers
var markers = [];

for(i=0; i<latitude.length; i++){
    (function(i) {
        var marker = new
google.maps.Marker({position:new
google.maps.LatLng(latitude[i], longitude[i])});
        var address = "<?php echo
base_url();?>" + "publicpage/view_report/" +
reportId[i];
        var contentString = projectTitles[i];
    });

google.maps.event.addListener(marker,'click',func
tion() {
    window.location.href = address;
});
    marker.addListener('mouseover',
function() {
    infowindow.setContent(contentString);
    infowindow.open(map, this);
});

    marker.addListener('mouseout',
function() {
    infowindow.close();
});

    markers.push(marker);
//marker.setMap(map);
    })(i));
}

var mcOptions = {
    gridSize: 50,
    styles: clusterStyles,
    maxZoom: 15
};

var markerCluster = new
MarkerClusterer(map, markers, mcOptions);
}
google.maps.event.addDomListener(window,
'load', initialize);
</script>

<?php
if($this->session-
has_userdata('showerror')){
?
<script type="text/javascript">
    $(document).ready(function(){
        showModal();
    });
</script>

<?php }
?>

<script type="text/javascript">
    function showModal(){
        $('#myModal').modal('show');
    }
</script>
<script type="text/javascript">
```

```

$(document).ready(function(){
    $('[data-toggle="tooltip"]').tooltip();
});
</script>

</body>
</html>

List_project_public

<?php
defined('BASEPATH') OR exit('No direct script
access allowed');
?>
<!DOCTYPE html>

<html lang="en">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-
width, initial-scale=1.0">
    <title>Home</title>

    <!--link the bootstrap-->

    <link rel="stylesheet" href="<?php echo
base_url("assets/css/bootstrap.css"); ?>"/>
    <link rel="stylesheet" href="<?php echo
base_url("assets/css/maicam-bootstrap.css");
?>"/>
    <link rel="stylesheet" href="<?php echo
base_url("assets/css/dataTables.css"); ?>"/>

    <style type="text/css">
        ul{
            list-style-type: none;
        }
    </style>

    <style type="text/css">
        .btn-default:hover {
            color: #fff;
            background-color: #235594;
            border-color: #235594;
        }
    </style>

    <!--Load jQuery libraries -->
    <script type="text/javascript" src="<?php echo
base_url("assets/js/jquery-1.12.2.js");
?>"/></script>
    <script type="text/javascript" src="<?php echo
base_url("assets/js/bootstrap.js"); ?>"/></script>
    <script type="text/javascript" src="<?php echo
base_url("assets/js/jquery.dataTables.min.js");
?>"/></script>

    <!-- own script-->
    <script type="text/javascript">
        $(function(){
            $("#example").dataTable();
        })
    </script>
```

```

</head>
<body>

    <div>
        <?php
            $projects = $projects->result();
            for($i=0; $i<sizeof($projects); $i++){
                // $locationId[$i] = $location[$i]->location_id;
                $projectId[$i] = $projects[$i]->project_id;
                $projectTitles[$i] = $projects[$i]->project_description;
                $latitude[$i] = $projects[$i]->latitude;
                $longitude[$i] = $projects[$i]->longitude;
            }
            if($this->session->userdata('role') == 'admin'){
                $adminPower = true;
            }else{
                $adminPower = false;
            }
        ?>

        <div class="container center-container">
            <div class="page-header" style="margin-top: 10px;">
                <?php
                    if($adminPower){
                        echo '<h4><a href="'.base_url("projects/create_project") . '"><span class=" glyphicon glyphicon-plus"></span>Projects</a></h4>';
                    }else{
                        echo '<h4>All Projects</h4>';
                    }
                ?>
            </div>
            <div class="well">
                <table id="example" class="display" cellspacing="0" width="100%">
                    <thead>
                        <tr>
                            <th></th>
                            <th>Ref. No.</th>
                            <th>Project Description</th>
                            <th>Start Date</th>
                            <th>End Date</th>
                            <th>Location</th>
                        </tr>
                    </thead>
                    <tbody>
                        <?php foreach ($projects as $value): ?>
                            <tr>
                                <td>
                                    <?php if($adminPower){ ?>
                                        <div class="btn-group-vertical">
                                            <a style="text-align: left;" class="btn btn-default btn-xs" href="<?php echo base_url();?>projects/edit_project/<?php echo $value->project_id;?>"><span class="glyphicon glyphicon-edit"></span> Edit</button></a>
                                            <a style="text-align: left;" class="btn btn-default btn-xs" onclick="return confirm('Delete project with project description: <?php echo $value->project_description;?>');" href="<?php echo base_url();?>projects/delete_project/<?php echo $value->project_id;?>"><span class=" glyphicon glyphicon-minus-sign"></span> Delete</button></a>
                                            <a class="btn btn-primary btn-xs" href="<?php echo base_url();?>home/create_report/<?php echo $value->project_id;?>"><span class="glyphicon glyphicon-pencil"></span> Create Report</button></a>
                                        </div>
                                    <?php } else{ ?>
                                        <div class="btn-group-vertical">
                                            <a class="btn btn-default btn-xs" href="<?php echo base_url();?>publicpage/view_project/<?php echo $value->project_id;?>"><span class="glyphicon glyphicon-eye-open"></span> View</button></a>
                                        </div>
                                    <?php }?>
                                <td><?php echo $value->reference_no; ?></td>
                                <td><?php echo $value->project_description;?></td>
                                <td><?php echo $value->contract_startdate;?></td>
                                <td><?php echo $value->contract_enddate;?></td>
                                <td><?php echo $value->location_address;?></td>
                            </tr>
                            <?php endforeach; ?>
                    </tbody>
                    <tfoot>
                        <tr>
                            <th></th>
                            <th>Ref. No.</th>
                            <th>Project Description</th>
                            <th>Start Date</th>
                            <th>End Date</th>
                            <th>Location</th>
                        </tr>
                    </tfoot>
                </table>
            </div>
        <?a style="text-align: left;" class="btn btn-default btn-xs" href="<?php echo base_url();?>projects/view_project/<?php echo $value->project_id;?>"><span class="glyphicon glyphicon-eye-open"></span> View</button></a>

```

```

</div>

<br>
<div class="container center-container">
  <div class="page-header" style="margin-top: 10px;">
    <h4>Map of Projects</h4>
  </div>
  <div id="googleMap" style="height:500px; background-color: #235594">
    <p style="text-align: right; color: #fff; padding: 10px;">Map of Reports
  </div>
  <br><br>
  <div class="alert alert-info">
    <p>Click the markers to view reports.</p>
  </div>
</div>

<script type="text/javascript" src=<?php echo base_url("assets/js/markerclusterer_compiled.js") ; ?>></script>
<script
src="https://maps.googleapis.com/maps/api/js?key=AIzaSyBtYXaX0Z6Wfktkucs_BD7LI1I4vGk0aeY"></script>
<!-- generate map -->
<script type="text/javascript">
  function initialize(){
    var latitude = <?php echo json_encode($latitude);?>;
    var longitude = <?php echo json_encode($longitude);?>;
    var projectId = <?php echo json_encode($projectId);?>;
    var projectTitles = <?php echo json_encode($projectTitles);?>

    var myCenter=new google.maps.LatLng(13.6218, 123.1948);

    var mapProp =
{center:myCenter,zoom:5,mapTypeId:google.maps.MapTypeId.ROADMAP};

    var map = new google.maps.Map(document.getElementById("googleMa
p"), mapProp);

    var clusterStyles = [
      {
        textColor: 'white',
        url: "<?php echo base_url();?>" +
"/assets/images/m1.png",
        height: 50,
        width: 50
      },
      {
        textColor: 'white',
        url: "<?php echo base_url();?>" +
"/assets/images/m2.png",
        height: 50,
        width: 50
      },
      {
        textColor: 'white',
        url: "<?php echo base_url();?>" +
"/assets/images/m3.png",
        height: 50,
        width: 50
      }
    ];
  }
</script>

```

```

    height: 50,
    width: 50
  },
  {
    textColor: 'white',
    url: "<?php echo base_url();?>" +
"/assets/images/m4.png",
    height: 50,
    width: 50
  },
  {
    textColor: 'white',
    url: "<?php echo base_url();?>" +
"/assets/images/m5.png",
    height: 50,
    width: 50
  }
];

var infowindow = new google.maps.InfoWindow({
  content: ''
});

//array of markers
var markers = [];

for(i=0; i<latitude.length; i++){
  (function(i) {
    var marker = new google.maps.Marker({position:new google.maps.LatLng(latitude[i], longitude[i])});
    var address = "<?php echo base_url();?>" + "publicpage/view_project/" + projectId[i];
    var contentString = projectTitles[i];

    google.maps.event.addListener(marker,'click',function() {
      window.location.href = address;
    });
    marker.addListener('mouseover',
    function() {
      infowindow.setContent(contentString);
      infowindow.open(map, this);
    });

    marker.addListener('mouseout',
    function() {
      infowindow.close();
    });

    markers.push(marker);
    //marker.setMap(map);
  })(i));
}

var mcOptions = {
  gridSize: 50,
  styles: clusterStyles,
  maxZoom: 15
};

```

```

        var markerCluster = new
MarkerClusterer(map, markers, mcOptions);
    }
    google.maps.event.addListener(window,
'load', initialize);
</script>
</body>

<footer class="footer">
    <div class="navbar navbar-default navbar-
bottom">
    </div>
</footer>

</html>

List_report_public
<?php
defined('BASEPATH') OR exit('No direct script
access allowed');
?>
<!DOCTYPE html>

<html lang="en">

<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-
width, initial-scale=1.0">

    <?php
        $projects = $projectEntries;
        $reports = $lastEntries->result();

        for($i=0; $i<sizeof($reports); $i++){
            // $locationId[$i] = $location[$i]-
            >location_id;
            $reportId[$i] = $reports[$i]->report_id;
            $latitude[$i] = $projects[$i]->row()-
            >latitude;
            $longitude[$i] = $projects[$i]->row()-
            >longitude;
            $projectTitles[$i] = $projects[$i]->row()-
            >project_description;
        }
    ?>

    <title>Home</title>

    <!--link the bootstrap-->

    <link rel="stylesheet" href="<?php echo
base_url("assets/css/bootstrap.css"); ?>"/>
    <link rel="stylesheet" href="<?php echo
base_url("assets/css/maicam-bootstrap.css");
?>"/>
    <link rel="stylesheet" href="<?php echo
base_url("assets/css/dataTables.css"); ?>"/>

    <style type="text/css">
        .colbox {
            margin-left: 0px;
            margin-right: 0px;
        }
        .form-group {
            margin-top: 20px;
        }
    </style>
}

.center-button{
    text-align: center;
}
</style>

<style type="text/css">
    .btn-default:hover {
        color: #fff;
        background-color: #235594;
        border-color: #235594;
    }
</style>

<!--Load jQuery libraries -->
<script type="text/javascript" src="<?php echo
base_url("assets/js/jquery-1.12.2.js");
?>"></script>
<script type="text/javascript" src="<?php echo
base_url("assets/js/bootstrap.js"); ?>"></script>
<script type="text/javascript" src="<?php echo
base_url("assets/js/jquery.dataTables.min.js");
?>"></script>
<script type="text/javascript" src="<?php echo
base_url("assets/js/markerclusterer_compiled.js");
?>"></script>
<script
src="https://maps.googleapis.com/maps/api/js?key=
AIzaSyBtYXaXOZ6Wfktkucs_BD7LI1I4vGk0aeY"></script>

<script type="text/javascript">
    $(function(){
        $("#reports").dataTable();
    });
    $(document).ready(function(){
        $('#reports_li').addClass('active');
    });
</script>

</head>
<body>

<div class="container center-container">
    <div class="page-header" style="margin-top:
10px;">
        <h4>All Reports</h4>
    </div>
    <div class="well">
        <table id="reports" class="display"
cellspacing="0" width="100%">
            <thead>
                <tr>
                    <th>Report No.</th>
                    <th>Project Description</th>
                    <th>Subject of Inspection</th>
                    <th>Remark</th>
                    <th>Date Submitted</th>
                </tr>
            </thead>
            <tbody>
                <?php for($i=0; $i<sizeof($reports);
$i++){?>
                    <tr>
                        <td align="center">

```

```

        <a href="<?php echo
base_url();?>publicpage/view_report/<?php echo
$reports[$i]->report_id;?>"><button type="button"
class="btn btn-default btn-xs"><span
class="glyphicon glyphicon-eye-open"></span>
View</button></a>
        </td>
        <td><?php echo $projects[$i]-
>row()->project_description; ?></td>
        <td><?php echo $reports[$i]-
>inspection_subject;?></td>
        <td><?php
            if($reports[$i]->remark ==
'1'){
                echo "<span
style='color:#00af00'>Positive</span>";
            }else{
                echo "<span
style='color:#af0000'>Negative</span>";
            }
        ?></td>
        <td><?php echo $reports[$i]-
>report_date; ?></td>
        </tr>
    <?php } ?>

</tbody>
<tfoot>
    <tr>
        <th>Report No.</th>
        <th>Project Description</th>
        <th>Subject of Inspection</th>
        <th>Remark</th>
        <th>Date Submitted</th>
    </tr>
    </tfoot>
</table>
</div>
</div>

<br>
<div class="container center-container">
    <div class="page-header" style="margin-top:
10px;">
        <h4>Map of Reports</h4>
    </div>
    <div id="googleMap" style="height:500px;
background-color: #235594">
        <p style="text-align: right; color: #fff;
padding: 10px;">Map of Reports
    </div>
    <br><br>
    <div class="alert alert-info">
        <p>Click the markers to view reports.</p>
    </div>
</div>

<footer class="footer">
    <div class="navbar navbar-default navbar-
bottom">
        </div>
</footer>

<!-- google map js-->
<script
src="https://maps.googleapis.com/maps/api/js?key=
AIzaSyBtYXaXOZ6Wfktkucs_BD7LI1I4vGk0aeY"></script>
<script type="text/javascript" src="<?php echo
base_url("assets/js/markerclusterer_compiled.js") ;
?>"></script>

<!-- generate map -->
<script type="text/javascript">
    function initialize(){
        var latitude = <?php echo
json_encode($latitude);?>;
        var longitude = <?php echo
json_encode($longitude);?>;
        var reportId = <?php echo
json_encode($reportId);?>;
        var projectTitles = <?php echo
json_encode($projectTitles);?>;

        var myCenter=new
google.maps.LatLng(13.6218, 123.1948);

        var mapProp =
{center:myCenter,zoom:5,mapTypeId:google.maps.Map
TypeId.ROADMAP};

        var map = new
google.maps.Map(document.getElementById("googleMa
p"), mapProp);

        var clusterStyles = [{{
            textColor: 'white',
            url: "<?php echo base_url();?>" +
"/assets/images/m1.png",
            height: 50,
            width: 50
        }},
        {{
            textColor: 'white',
            url: "<?php echo base_url();?>" +
"/assets/images/m2.png",
            height: 50,
            width: 50
        }},
        {{
            textColor: 'white',
            url: "<?php echo base_url();?>" +
"/assets/images/m3.png",
            height: 50,
            width: 50
        }},
        {{
            textColor: 'white',
            url: "<?php echo base_url();?>" +
"/assets/images/m4.png",
            height: 50,
            width: 50
        }},
        {{
            textColor: 'white',
            url: "<?php echo base_url();?>" +
"/assets/images/m5.png",
            height: 50,
            width: 50
        }}
    ];

```

```

        var infowindow = new
google.maps.InfoWindow({
    content: ''
});

//array of markers
var markers = [];

for(i=0; i<latitude.length; i++){
    (function(i) {
        var marker = new
google.maps.Marker({position:new
google.maps.LatLng(latitude[i], longitude[i])});
        var address = "<?php echo
base_url();?>" + "publicpage/view_report/" +
reportId[i];
        var contentString = projectTitles[i];

        google.maps.event.addListener(marker,'click',func
tion() {
            window.location.href = address;
        });
        marker.addListener('mouseover',
function() {
    infowindow.setContent(contentString);
    infowindow.open(map, this);
});

        marker.addListener('mouseout',
function() {
    infowindow.close();
});

        markers.push(marker);
        //marker.setMap(map);
    })(i));
}

var mcOptions = {
    gridSize: 50,
    styles: clusterStyles,
    maxZoom: 15
};

var markerCluster = new
MarkerClusterer(map, markers, mcOptions);
}
google.maps.event.addDomListener(window,
'load', initialize);
</script>

</body>
</html>

<?php
defined('BASEPATH') OR exit('No direct script
access allowed');
?>
<!DOCTYPE html>

```

View_project_public.php

```

<html lang="en">

<head>

    <meta charset="utf-8">
    <meta name="viewport" content="width=device-
width, initial-scale=1.0">
    <title>Create Report</title>

    <!--link the bootstrap-->
    <link rel="stylesheet" href="<?php echo
base_url("assets/css/bootstrap.css"); ?>"/>
    <link rel="stylesheet" href="<?php echo
base_url("assets/css/maicam-bootstrap.css");
?>"/>
    <link rel="stylesheet" href="<?php echo
base_url("assets/css/dataTables.css"); ?>"/>

    <style type="text/css">

        .left-text{
            text-align: right;
        }
        .replies{
            margin-left: 50px;
        }

    </style>

    <style type="text/css">
        .btn-default:hover {
            color: #fff;
            background-color: #235594;
            border-color: #235594;
        }
    </style>

</head>

<body>

<?php
    $entry = $project->row();
    $reports = $report->result();
    $comments = $comment->result();
?>

<div class="container center-container">
    <form class="form-signin" role="form"
enctype="multipart/form-data">
        <div class="form-control-static left-text">
            <p> Date Created: <?php echo $entry-
>date_added; ?>
        </div>

        <fieldset class="form-group">
            <legend>Project Information</legend>
            <div class="well">
                <div class="form-group">
                    <label for="reference_no">Reference
No.</label>
                    <br><?php echo $entry-
>reference_no; ?>
                </div>
            <div class="form-group">
```

```

        <label
for="project_description">Project Title</label>
        <br><?php echo $entry-
>project_description; ?>
    </div>
    <div class="form-group">
        <label
for="contracting_parties">Contracting
Party</label>
        <br><?php echo $entry-
>contracting_parties; ?>
        <?php
            // foreach ($contractingParties as
$row) {
                //     echo "<br>" . $row-
>party_name;
                // }
            ?>
        </div>

        <div class="form-group">
            <label for="contract_date">Contract
Date</label>
            <div>
                <mark>Start Date:</mark>
<span><?php echo $entry->contract_startdate;
?></span>
                <mark>End Date:</mark><span><?php
echo $entry->contract_enddate; ?></span>
            </div>
            </div>
        </fieldset>

    </fieldset>

    <fieldset class="form-group">
        <legend>Ground Control Point</legend>
        <div class="well">
            <div class="form-group">
                <label
for="province">Address</label>
                <?php echo "<br>" . $entry-
>location_address; ?>
            </div>
            <div class="form-group">
                <label for="coordinates">Geographic
Coordinates</label>
                <div>
                    <mark>Latitude:</mark> <?php echo
$entry->latitude;?>
                    <mark>Longitude:</mark> <?php
echo $entry->longitude;?>
                </div>
            </div>
        </div>
    </fieldset>

    <fieldset class="form-group">
        <legend>Reports</legend>
        <div class="well">
            <table id="reports" class="display"
cellspacing="0" width="100%">
                <thead>
                    <tr>

```

| </th></th> | Subject of Inspection</th> | Remark</th> | Date Submitted</th> | Submitted by</th> |
|---|----------------------------|-------------|---------------------|-------------------|
| <?php for(\$i=0; \$i<sizeof(\$reports); \$i++){?> | | | | |
| <tr> | | | | |
| <td align="center"> | | | | |
| <a href="<?php echo | | | | |
| base_url();?>home/view_report/<?php echo | | | | |
| \$reports[\$i]->report_id;?>"><button type="button" | | | | |
| class="btn btn-default btn-xs"><span | | | | |
| class="glyphicon glyphicon-eye-open"> | | | | |
| View</button> | | | | |
| </td> | | | | |
| <td><?php echo \$reports[\$i]- | | | | |
| >inspection_subject;?></td> | | | | |
| <td><?php | | | | |
| if(\$reports[\$i]->remark == | | | | |
| '1'){ | | | | |
| echo "<span | | | | |
| style='color:#00af00'>Positive"; | | | | |
| } else{ | | | | |
| echo "<span | | | | |
| style='color:#af0000'>Negative"; | | | | |
| } | | | | |
| ></td> | | | | |
| <td><?php echo \$reports[\$i]- | | | | |
| >report_date; ?></td> | | | | |
| <td><?php echo \$reports[\$i]- | | | | |
| >submitted_by; ?></td> | | | | |
| </tr> | | | | |
| <?php } ?> | | | | |

```

        <div class="form-group">
            <input class="form-control small"
type="email" name="email"
placeholder="Email"></input>
        </div>
        <div class="form-group">
            <textarea class="form-control"
row="3" name="message" placeholder="Your
Message"></textarea>
        </div>

        <button type="submit" onclick="return
confirm('Do you want to submit your comment?')"
class="btn btn-primary" formmethod="post"
formaction="<?php echo
base_url();?>publicpage/submit_comment/<?php echo
$entry->project_id; ?>">Submit</button>

    </form>
</div>
</div-->
<div id="add-comment" class="well">
    <form>
        <label> Leave a comment</label>
        <div class="form-group small">
            <input class="form-control input-
sm" type="text" name="name"
placeholder="Name"></input>
        </div>
        <div class="form-group">
            <input class="form-control input-
sm" type="email" name="email"
placeholder="Email"></input>
        </div>
        <div class="form-group">
            <textarea class="form-control
input-sm" row="3" name="message"
placeholder="Your Message"></textarea>
            <span class="help-block">Post only
the concerns you have about the project. </span>
        </div>

        <button type="submit" onclick="return
confirm('Do you want to submit your comment?')"
class="btn btn-primary btn-sm" formmethod="post"
formaction="<?php echo
base_url();?>publicpage/submit_comment/<?php echo
$entry->project_id; ?>">Submit</button>

    </form>
</div>
<br>
<div id="view-comment" style="max-height:
300px; margin-left: 30px; margin-right: 30px;"
class="pre-scrollable">
    <?php for($i=0; $i<sizeof($comments);
$i++) { ?>
        <b><?php echo $comments[$i]->name;
?></b> <i>wrote:</i> <br>
        <?php echo $comments[$i]->message;
?><br>
        <span class="text-muted"
style="font-size: 13px;"><?php echo
$comments[$i]->date_added; ?></span>

```

```

        <?php //print_r($replies[$i]-
>result());           $responses = $replies[$i]-
>result();           ?>

        <hr style="margin-top: 5px; margin-
bottom: 5px;">
        <?php }?>
    </div>

        <?php
            if(sizeof($comments)==0){
                echo "<span class='text-muted'><i>No
comments yet.</i></span>";
            }
        ?>

    </fieldset>

        </form>
</div>

<!--Load jQuery libraries -->
<script type="text/javascript" src="<?php echo
base_url("assets/js/bootstrap.js"); ?>"></script>
<script type="text/javascript" src="<?php echo
base_url("assets/js/jQuery-1.12.2.js");
?>"></script>
<script type="text/javascript" src="<?php echo
base_url("assets/js/jquery.dataTables.min.js");
?>"></script>

<script type="text/javascript">
$(function(){
    $("#reports").dataTable();
});

</script>

<footer class="footer">
    <div class="navbar navbar-default navbar-
bottom">
        </div>
</footer>
</body>

</html>
View_report_public.php

<?php
defined('BASEPATH') OR exit('No direct script
access allowed');
?>
<!DOCTYPE html>
```

```

<html lang="en">
<head>

    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Create Report</title>

    <!--link the bootstrap-->
    <link rel="stylesheet" href="<?php echo base_url("assets/css/bootstrap.css"); ?>"/>
    <link rel="stylesheet" href="<?php echo base_url("assets/css/maicam-bootstrap.css"); ?>"/>

    <style type="text/css">
        .form-group {
            margin-top: 20px;
        }
        .left-text{
            text-align: right;
        }
        .longText{
            width: 300px;
        }
        .gallery{
            max-width: 70%;
            padding: 15px;
            margin: 0 auto;
        }
        .gallery-container{
            max-width: 100%
            padding: 15px;
            margin: 0 auto;
        }
        .toggleColumn{
            background-color: #235594;
            border-color: #235294;
        }
    </style>
    <script src="<?php echo base_url("assets/js/jquery-1.12.2.js"); ?>"></script>
    <script src="<?php echo base_url("assets/js/bootstrap.js"); ?>"></script>

    <script type="text/javascript">

        $(document).on('click', '#toggleColumn',
        function() {
            //$(this).parentsUntil('.contract-
            field').remove();
            //alert("yow");
            //$(".col-lg-6").toggleClass('col-lg-12');
            $(this).toggleClass("glyphicon glyphicon-th-
            glyphicon glyphicon-align-justify");
            $(".col-lg-4, .col-lg-12").toggleClass("col-
            lg-12 col-lg-4");
            $(".gallery, .gallery-
            container").toggleClass("gallery gallery-
            container");
        });

    </script>
</head>
<body>

```

```

    <?php
        $entry = $selectedEntry->row();
        $project = $projectEntry->row();
        $images = $images->result();
        $objectives = $objectives->result();
        $personnel = $personnel->result();
    ?>

    <div class="container center-container">
        <form class="form-signin" role="form"
        enctype="multipart/form-data">
            <div class="form-control-static left-text">
                <p> Date Created: <?php echo $entry-
                >report_date; ?>
            </div>

            <fieldset class="form-group">
                <legend>Project Information</legend>
                <div class="well">
                    <!-- <div class="form-group"> -->
                    <label for="reference_no">Reference
                    No.</label>
                    <br><?php echo $project-
                    reference_no; ?>
                    <!-- </div> -->
                    <div class="form-group">
                        <label
                        for="project_description">Project
                        Description</label>
                        <br><?php echo $project-
                        project_description; ?>
                    </div>
                    <div class="form-group">
                        <label
                        for="contracting_parties">Contracting
                        Party</label>
                        <br><?php echo $project-
                        contracting_parties; ?>
                    </div>
                    <div class="form-group">
                        <label for="contract_date">Contract
                        Date</label>
                        <div>
                            <mark>Start Date:</mark>
                            <span><?php echo $project->contract_startdate;
                            ?></span>
                            <mark>End Date:</mark><span><?php
                            echo $project->contract_enddate; ?></span>
                        </div>
                    </div>
                    </div>
                </div>
                <fieldset class="form-group">
                    <legend>Inspection Details</legend>
                    <div class="well">
                        <!-- <div class="form-group"> -->
                        <label
                        for="subject">Subject</label>
                        <br><?php echo $entry-
                        >inspection_subject; ?>
                        <!-- </div> -->
                        <div class="form-group">
                            <label
                            for="objectives">Objectives</label>

```

```

<?php
foreach ($objectives as $row) {
    echo "<br>" . $row->statement;
}
?>

</div>

<div class="form-group">
    <label for="dateInspection">Date</label>
    <div>
        <mark>Start Date:</mark> <?php
echo $entry->inspection_startdate; ?>
        <mark> End Date: </mark> <?php
echo $entry->inspection_enddate; ?>
    </div>
</div>
<div class="form-group">
    <label for="persons">Personnel Present During Inspection</label>
    <table class="table">
        <thead>
            <tr>
                <th>Name</th>
                <th>Office</th>
                <th>Position</th>
            </tr>
        </thead>
        <tbody>
            <?php foreach ($personnel as $row) {?>
            <tr>
                <td><?php echo $row->name; ?>&nbsp;&nbsp;&nbsp;</td>
                <td><?php echo $row->office; ?>&nbsp;&nbsp;&nbsp;</td>
                <td><?php echo $row->position; ?>&nbsp;&nbsp;&nbsp;</td>
            </tr>
            <?php }?>
        </tbody>
    </table>
</div>

</div>
</fieldset>

<fieldset class="form-group">
    <legend>Ground Control Point</legend>
    <div class="well">
        <!-- <div class="form-group"> -->
        <label for="address">Address</label>
        <?php echo "<br>" . $project->location_address; ?>
        <!-- </div> -->
        <div class="form-group">
            <label for="coordinates">Geographic Coordinates</label>
            <div>
                <mark>Latitude:</mark> <?php echo $project->latitude; ?>

```

```

defined('BASEPATH') OR exit('No direct script
access allowed');
?>
<!DOCTYPE html>

<html lang="en">
<head>
    <meta charset="utf-8">
    <meta name="viewport"
content="width=device-width, initial-scale=1.0">
    <title>Create Report</title>

    <!--link the bootstrap-->
    <link rel="stylesheet" href="php echo
base_url("assets/css/bootstrap.css"); ?&gt;"/&gt;
    &lt;link rel="stylesheet" href="<?php echo
base_url("assets/css/maicam-bootstrap.css");
?&gt;"/&gt;

    &lt;script src="<?php echo
base_url("assets/js/jquery-1.12.2.js");
?&gt;"></script>
    <script src="php echo
base_url("assets/js/bootstrap.js"); ?&gt;"></script>

    <style type="text/css">

```

```

<script type="text/javascript">

$(document).on('change', '#file_url', function()
{
    //var input = $(this).val();
    var input = $(this).prop('files')[0];
    //alert($('#file_url').prop('files'));
    //file = $('#fileInput').prop('files')[0];
    //alert($(this).prop('tagName'));
    var fileholder = $(this);

    if ($(this).prop('files') &&
$(this).prop('files')[0]) {
        var reader = new FileReader();

        reader.onload = function (e) {

fileholder.siblings('img').attr('src',
e.target.result);

fileholder.siblings('img').attr('style',
'display:visible');
        //$(this).closest('.image-
field').children('.img_id')

//$(this).siblings('#img_id').attr('src',
e.target.result);
        //$(this).css( "background", "yellow"
);
        //$(this).closest("img").attr('src',
e.target.result);
        //$('#img_id').attr('src',
e.target.result);

//$('#file_url').closest("img").attr('src',
e.target.result);

```

```

//$(#file_url').closest("img").css("background-
color", "yellow");
    //var parent = $(this).parent('image-
field');
    //$(this).remove();
}

reader.readAsDataURL($(this).prop('files')[0]);
}

$( "p" ).parent( ".selected" ).css(
"background", "yellow" );
});

$(document).on('click', '.add-contract',
function() {
    $('.contract-wrapper').append("<div
class='contract-field'><div class='row'><div
class='col-xs-10'><input type='text'
name='contracting_parties[]' class='form-
control'></div><div class='col-xs-2'><button
type='button' class='btn btn-danger remove-
contract'><span class='glyphicon glyphicon-
minus'></span></button></div></div></div>");
});

$(document).on('click', '.remove-contract',
function() {
    $(this).parentsUntil('.contract-
field').remove();
});

$(document).on('click', '.add-personnel',
function() {
    $('.personnel-wrapper').append("<div
class='personnel-field form-inline'> Name: <input
type='text' class='form-control' name='name[]'>
Office: <input type='text' class='form-control'
name='office[]'> Position: <input type='text'
class='form-control' name='position[]'> <button
type='button' class='btn btn-danger remove-
personnel'><span class='glyphicon glyphicon-
minus'></span></button></div>");
});

$(document).on('click', '.remove-personnel',
function() {
    $(this).parent('.personnel-
field').remove();
});

$(document).on('click', '.add-objective',
function() {
    $('.objective-wrapper').append("<div
class='objective-field'><div class='row'><div
class='col-xs-10'><input type='text'
name='objective[]' class='form-
control'></div><div class='col-xs-2'><button
type='button' class='btn btn-danger remove-
objective'><span class='glyphicon glyphicon-
minus'></span></button></div></div>");
});

```

```

$(document).on('click', '.remove-objective',
function() {
    $(this).parentsUntil('.objective-
field').remove();
});

$(document).on('click', '.add-image', function()
{
    $('.image-wrapper').append("<div
class='image-field thumbnail col-lg-6'><input
type='file' id='file_url' name='file_url[]'><img
id='img_id' src='#' alt='your image'
style='display: none;'/><br><input type='text'
class='form-control img-responsive'
name='image_description[]' placeholder='Image
Description'><br><button type='button' class='btn
btn-danger btn-sm remove-image'><span
class='glyphicon glyphicon-minus'>/</span>
Remove</button></div>");
});

$(document).on('click', '.remove-image',
function() {
    $(this).parents('.image-field').remove();
});

</script>

</head>
<body>
<?php
    $projectEntry= $project->row();
?>

<div class="container center-container">
    <form role="form" id="submitForm"
enctype="multipart/form-data" method="post"
action="<?php echo
base_url();?>home/review_input">
        <div class="form-control-static"
style="text-align: right">
            <p> <?php echo date('Y-m-d'); ?>
        </div>
        <fieldset class="form-group">
            <input type="hidden" value="<?php
echo $projectEntry->project_id?>">
            <label for="project_id">Project
Information</label>
            <div class="well">
                <div class="form-group">
                    <label for="reference_no">Reference
No.</label>
                    <input disabled type="number"
class="form-control" name="refno" value="<?php
echo $projectEntry->reference_no?>">
                </div>
                <div class="form-group">

```

```

                    <label
for="project_description">Project
Description</label>
                    <input disabled type="text"
class="form-control" name="project_description"
value="<?php echo $projectEntry-
>project_description?>">
                </div>
                <div class="form-group">
                    <label
for="contracting_parties">Contracting
Party</label>
                    <input disabled type="text"
class="form-control" name="contracting_parties"
value="<?php echo $projectEntry-
>contracting_parties?>">
                </div>
                <div class="form-group">
                    <label for="contract_date">Contract
Date</label>
                    <div class="form-inline">
                        <mark>Start Date:</mark><input
disabled type="date" class="form-control"
name="start_contract_date" value="<?php echo
$projectEntry->contract_startdate?>">
                        <mark>End Date:</mark><input
disabled type="date" class="form-control"
name="end_contract_date" value="<?php echo
$projectEntry->contract_enddate?>">
                    </div>
                </div>
                </div>
            </fieldset>
            <fieldset class="form-group">
                <legend>Inspection Details</legend>
                <div class="well">
                    <div class="form-group">
                        <label
for="subject">Subject</label>
                        <input type="text" class="form-
control" name="subject">
                    </div>
                    <div class="form-group">
                        <label for="objectives">Objectives
                    </label>
                        <div class="objective-wrapper">
                            <div class="objective-field">
                                <div class="row">
                                    <div class="col-xs-10">
                                        <input class="form-control"
name="objective[]" type="text"/>
                                    </div>
                                    <div class="col-xs-2">
                                        <button class="btn btn-
success add-objective" type="button">
                                            <span class="glyphicon
glyphicon-plus">

```

```

        <div class="form-group">
            <label for="dateInspection">Date</label>
            <div class="form-inline">
                <mark>Start Date:</mark><input type="date" class="form-control" name="start_inspection_date">
                <mark>End Date:</mark><input type="date" class="form-control" name="end_inspection_date">
            </div>
        </div>
        <div class="form-group">
            <label for="persons">Personnel Present During Inspection</label>
            <div class="personnel-wrapper">
                <div class="form-inline personnel-field">
                    Name: <input type="text" class="form-control" name="name[]"/>
                    Office: <input type="text" class="form-control" name="office[]"/>
                    Position: <input type="text" class="form-control" name="position[]"/>
                    <button class="btn btn-success" type="button"><span class="glyphicon glyphicon-plus"></span></button>
                </div>
            </div>
        </div>
    </div>

    </fieldset>
    <fieldset class="form-group">
        <legend>Ground Control Point</legend>
        <div class="well">
            <div class="form-group">
                <label for="project_description">Location Address</label>
                <input disabled type="text" class="form-control" name="location_address" value="<?php echo $projectEntry->location_address?>">
            </div>
            <div class="form-group">
                <label for="coordinates">Geographic Coordinates</label>
                <div class="form-inline">
                    Latitude: <input disabled type="number" class="form-control" name="latitude" value="<?php echo $projectEntry->latitude?>">
                    Longitude: <input disabled type="number" class="form-control" name="longitude" value="<?php echo $projectEntry->longitude?>">
                </div>
            </div>
        </div>
    </fieldset>
    <div class="well">
        <div class="form-group" style="text-align: center;">
            <button type="submit" id="submitConfirm" class="btn btn-primary" formenctype="multipart/form-data" formmethod="post" formaction="<?php echo base_url();?>home/review_input">Submit Report</button>
        </div>
    </div>

```

```

<footer class="footer">
    <div class="navbar navbar-default navbar-
bottom">
        </div>
</footer>

<!-- Modal Submit-->
<div id="submitModal" class="modal fade"
role="dialog">
    <div class="modal-dialog modal-sm" >
        <!-- Modal content-->
        <div class="modal-content">
            <div class="modal-header">
                <button type="button" class="close" data-
dismiss="modal">&times;</button>
                <h4 class="modal-title">Submit
Report</h4>
            </div>
            <div class="modal-body">
                <!-- -->
                <p id="modal_message">Do you want to
submit your report?</p>
                <!-- -->
            </div>
            <div class="modal-footer">
                <a id="okButtonSubmit" type="button"
class="btn btn-primary" >OK</a>
                <button type="button" class="btn btn-
default" data-dismiss="modal">Cancel</button>
            </div>
        </div>
    </div>
</div>

<!--Load jQuery libraries -->
    <script type="text/javascript" src=<?php
echo base_url("assets/js/jquery-1.12.2.js");
?>></script>
    <script type="text/javascript" src=<?php
echo base_url("assets/js/bootstrap.js");
?>></script>

<script type="text/javascript">
    $(document).ready(function() {
        $('#submitConfirm').click(function(){
            var href =
$(this).attr('formaction');
            $('#submitModal').modal('show');
            return false;
        });

        $('#okButtonSubmit').click(function(){
            document.getElementById('submitForm').submit();
        });
    });
</script>
});
```

```

    .center-button{
        text-align: center;
    }

```

```

<!--Load jQuery libraries -->
<script type="text/javascript" src="<?php echo base_url("assets/js/jquery-1.12.2.js"); ?>"></script>
<script type="text/javascript" src="<?php echo base_url("assets/js/bootstrap.js"); ?>"></script>
<script type="text/javascript" src="<?php echo base_url("assets/js/jquery.dataTables.min.js"); ?>"></script>
<script type="text/javascript" src="<?php echo base_url("assets/js/markerclusterer_compiled.js"); ?>"></script>
<script
src="https://maps.googleapis.com/maps/api/js?key=AIzaSyBtYXaXOZ6Wfktkucs_BD7LI1I4vGk0aeY"></script>
>

<script type="text/javascript">
$(function(){
    $("#reports").dataTable();
});
$(document).ready(function(){
    $('#reports_li').addClass('active');
});
</script>

<!-- generate map -->
<script type="text/javascript">
    function initialize(){
        var latitude = <?php echo json_encode($latitude);?>;
        var longitude = <?php echo json_encode($longitude);?>;
        var reportId = <?php echo json_encode($reportId);?>;
        var projectTitles = <?php echo json_encode($projectTitles);?>;
        var myCenter=new google.maps.LatLng(13.6218, 123.1948);

        var mapProp =
{center:myCenter,zoom:5,mapTypeId:google.maps.MapTypeId.ROADMAP};

        var map = new google.maps.Map(document.getElementById("googleMap"), mapProp);

        var clusterStyles = [
            {
                textColor: 'white',
                url: "<?php echo base_url();?>" +
"/assets/images/m1.png",
                height: 50,
                width: 50
            },
            {
                textColor: 'white',
                url: "<?php echo base_url();?>" +
"/assets/images/m2.png",
                height: 50,
                width: 50
            },
        ];
    }

```

```

    {
        textColor: 'white',
        url: "<?php echo base_url();?>" +
"/assets/images/m3.png",
        height: 50,
        width: 50
    },
    {
        textColor: 'white',
        url: "<?php echo base_url();?>" +
"/assets/images/m4.png",
        height: 50,
        width: 50
    },
    {
        textColor: 'white',
        url: "<?php echo base_url();?>" +
"/assets/images/m5.png",
        height: 50,
        width: 50
    }
];

```

```

var infowindow = new google.maps.InfoWindow({
    content: ''
});

//array of markers
var markers = [];

for(i=0; i<latitude.length; i++){
    (function(i) {
        var marker = new google.maps.Marker({position:new google.maps.LatLng(latitude[i], longitude[i])});
        var address = "<?php echo base_url();?>" + "home/view_report/" + reportId[i];
        var contentString = projectTitles[i];

        google.maps.event.addListener(marker,'click',function() {
            window.location.href = address;
        });
        marker.addListener('mouseover',function() {
            infowindow.setContent(contentString);
            infowindow.open(map, this);
        });

        marker.addListener('mouseout',function() {
            infowindow.close();
        });

        markers.push(marker);
        //marker.setMap(map);
    })(i));
}

var mcOptions = {
    gridSize: 50,
}

```

```

        styles: clusterStyles,
        maxZoom: 15
    );

    var markerCluster = new
MarkerClusterer(map, markers, mcOptions);
}
google.maps.event.addDomListener(window,
'load', initialize);
</script>

</head>
<body>
<?php
    if($this->session->userdata('role') ==
'admin'){
        $adminPower = true;
    }else{
        $adminPower = false;
    }
?>
<div class="container center-container">
    <div class="page-header" style="margin-top:
10px;">
        <h4>All Reports</h4>
    </div>
    <table id="reports" class="display"
cellspacing="0" width="100%">
        <thead>
            <tr>
                <th>Report No.</th>
                <th>Project Description</th>
                <th>Subject of Inspection</th>
                <th>Remark</th>
                <th>Date Submitted</th>
                <th>Submitted by</th>
            </tr>
        </thead>
        <tbody>
            <?php for($i=0; $i<sizeof($reports);
$i++){?>
            <tr>
                <td align="center">
                    <?php if($adminPower){ ?>
                        <a href="<?php echo
base_url();?>home/view_report/<?php echo
$reports[$i]->report_id;?>"><button type="button"
class="btn btn-default btn-xs"><span
class="glyphicon glyphicon-eye-open"></span>
View</button></a>
                    <?php } else{ ?>
                        <a href="<?php echo
base_url();?>home/view_report/<?php echo
$reports[$i]->report_id;?>"><button type="button"
class="btn btn-default btn-xs"><span
class="glyphicon glyphicon-eye-open"></span>
View</button></a>
                    <?php }?>
                </td>
                <td><?php echo $projects[$i]-
>row()->project_description; ?></td>
                <td><?php echo $reports[$i]-
>inspection_subject;?></td>
                <td><?php
                    if($reports[$i]->remark ==
'1'){

echo "<span
style='color:#00af00'>Positive</span>";
                }else{
                    echo "<span
style='color:#af0000'>Negative</span>";
                }
            ?></td>
            <td><?php echo $reports[$i]-
>report_date; ?></td>
            <td><?php echo $reports[$i]-
>submitted_by; ?></td>
        </tr>
    <?php } ?>
</tbody>
<tfoot>
    <tr>
        <th></th>
        <th>Project Description</th>
        <th>Subject of Inspection</th>
        <th>Remark</th>
        <th>Date Submitted</th>
        <th>Submitted by</th>
    </tr>
</tfoot>
</table>
</div>
<br>
<div class="container center-container">
    <div class="page-header" style="margin-top:
10px;">
        <h4>Map of Reports</h4>
    </div>
    <div id="googleMap" style="height:500px;
background-color: #235594">
        <p style="text-align: right; color: #fff;
padding: 10px;">Map of Reports
    </div>
    <br><br>
    <div class="alert alert-info">
        <p>Click the markers to view reports.</p>
    </div>
</div>
<footer class="footer">
    <div class="navbar navbar-default navbar-
bottom">
        </div>
</footer>
</body>
</html>
Report_success_view.php

<?php
defined('BASEPATH') OR exit('No direct script
access allowed');
?>
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="utf-8">

```

```

        <meta name="viewport"
content="width=device-width, initial-scale=1.0">
<title>Home</title>

        <!--link the bootstrap-->
        <link rel="stylesheet" href="php echo
base_url("assets/css/bootstrap.css"); ?&gt;"/&gt;
&lt;/style&gt;
&lt;/head&gt;

&lt;body&gt;

&lt;h1&gt;Report submitted!&lt;/h1&gt;

&lt;h4&gt;Project Information&lt;/h4&gt;
    Reference No. &lt;?php echo $refno; ?&gt;
    &lt;br&gt;Project Description: &lt;?php echo
$project_description; ?&gt;
    &lt;br&gt;Contracting Party: &lt;?php echo
$contracting_parties; ?&gt;
    &lt;br&gt;Contact Date
        &lt;div class="subtext"&gt;Start Date: &lt;?php
echo $start_contract_date; ?&gt;
        &lt;br&gt;End Date: &lt;?php echo
$end_contract_date; ?&gt;
        &lt;/div&gt;

&lt;h4&gt;Inspection Details&lt;/h4&gt;
    Subject &lt;?php echo $subject; ?&gt;
    &lt;br&gt;Objectives &lt;?php echo $objective1; ?&gt;
    &lt;br&gt;Date
        &lt;div class="subtext"&gt;Start Date: &lt;?php
echo $start_inspection_date; ?&gt;
        &lt;br&gt;End Date: &lt;?php echo
$end_inspection_date; ?&gt;
        &lt;/div&gt;
    &lt;br&gt;Personnel Present During Inspection
        &lt;div class="subtext"&gt;
            Name: &lt;?php echo $personnel; ?&gt;
            &lt;br&gt;Office: &lt;?php echo $office; ?&gt;
            &lt;br&gt;Position: &lt;?php echo $position; ?&gt;
        &lt;/div&gt;

&lt;h4&gt;Ground Control Point&lt;/h4&gt;
Island:&lt;?php echo $island; ?&gt;
&lt;br&gt;Province:&lt;?php echo $province; ?&gt;
&lt;br&gt;City: &lt;?php echo $city; ?&gt;
&lt;br&gt;Barangay: &lt;?php echo $barangay; ?&gt;
&lt;br&gt;Geographic Coordinates
    &lt;div class="subtext"&gt;
        Latitude: &lt;?php echo $latitude; ?&gt;
        &lt;br&gt;Longitude: &lt;?php echo $longitude; ?&gt;
    &lt;/div&gt;
&lt;h4&gt;Travel Description and Landmarks&lt;/h4&gt;
File Url: &lt;?php echo $file_url; ?&gt;
&lt;br&gt;Image Description: &lt;?php echo
$image_description; ?&gt;

&lt;!--Load jQuery libraries --&gt;
    &lt;script type="text/javascript" src="&lt;?php
echo base_url("assets/js/jquery-1.12.2.js");
?&gt;"&gt;&lt;/script&gt;</pre

```

```

        <script type="text/javascript" src="<?php
echo base_url("assets/js/bootstrap.js");
?>"></script>

        <footer class="footer">
<div class="navbar navbar-default navbar-
bottom">
</div>

</footer>
</body>
</html>

View_report_view

<?php
defined('BASEPATH') OR exit('No direct script
access allowed');
?>
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">
<meta name="viewport" content="width=device-
width, initial-scale=1.0">
<title>Create Report</title>

        <!--link the bootstrap-->
        <link rel="stylesheet" href="php echo
base_url("assets/css/bootstrap.css"); ?&gt;"/&gt;
        &lt;link rel="stylesheet" href="<?php echo
base_url("assets/css/maicam-bootstrap.css");
?&gt;"/&gt;

&lt;style type="text/css"&gt;
.form-group {
    margin-top: 20px;
}
.left-text{
    text-align: right;
}
.longText{
    width: 300px;
}
.gallery{
    max-width: 70%;
    padding: 15px;
    margin: 0 auto;
}
.gallery-container{
    max-width: 100%
    padding: 15px;
    margin: 0 auto;
}
.toggleColumn{
    background-color: #235594;
    border-color: #235294;
}
&lt;/style&gt;
&lt;script src="&lt;?php echo
base_url("assets/js/jquery-1.12.2.js");
?&gt;"&gt;&lt;/script&gt;
&lt;script src="&lt;?php echo
base_url("assets/js/bootstrap.js"); ?&gt;"&gt;&lt;/script&gt;

&lt;script type="text/javascript"&gt;</pre

```

```

$(document).on('click', '#toggleColumn',
function() {
    //$(this).parentsUntil('.contract-
    field').remove();
    //alert("yow");
    //$(".col-lg-6").toggleClass('col-lg-12');
    $(this).toggleClass("glyphicon glyphicon-th-
    glyphicon glyphicon-align-justify");
    //(".col-lg-4, .col-lg-12").toggleClass("col-
    lg-12 col-lg-4");
    $(".gallery, .gallery-
    container").toggleClass("gallery gallery-
    container");
});

</script>

</head>

<body>

<?php
    $entry = $selectedEntry->row();
    $project = $projectEntry->row();
    $images = $images->result();
    $objectives = $objectives->result();
    $personnel = $personnel->result();
?>

<div class="container center-container">
    <form class="form-signin" role="form"
    enctype="multipart/form-data">
        <div class="form-control-static left-text">
            <p> Date Created: <?php echo $entry-
    report_date; ?>
        </div>

        <fieldset class="form-group">
            <legend>Project Information</legend>
            <div class="well">
                <!-- <div class="form-group" -->
                    <label for="reference_no">Reference
No.</label>
                    <br><?php echo $project-
    reference_no; ?>
                <!-- </div> -->
                <div class="form-group">
                    <label
for="project_description">Project
Description</label>
                    <br><?php echo $project-
    project_description; ?>
                </div>
                <div class="form-group">
                    <label
for="contracting_parties">Contracting
Party</label>
                    <br><?php echo $project-
    contracting_parties; ?>
                </div>

                <div class="form-group">
                    <label for="contract_date">Contract
Date</label>
                <div>

```

```

<mark>Start Date:</mark>
<span><?php echo $project->contract_startdate;
?></span>
<mark>End Date:</mark><span><?php
echo $project->contract_enddate; ?></span>
</div>
</div>
</fieldset>

<fieldset class="form-group">
    <legend>Inspection Details</legend>
    <div class="well">
        <!-- <div class="form-group" -->
            <label
for="subject">Subject</label>
            <br><?php echo $entry-
    inspection_subject; ?>
        <!-- </div> -->
        <div class="form-group">
            <label
for="objectives">Objectives</label>
            <?php
                foreach ($objectives as $row) {
                    echo "<br>" . $row->statement;
                }
            ?>

```

```

        </div>

        <div class="form-group">
            <label
for="dateInspection">Date</label>
            <div>
                <mark>Start Date:</mark> <?php
echo $entry->inspection_startdate; ?>
                <mark> End Date: </mark> <?php
echo $entry->inspection_enddate; ?>
            </div>
            <div class="form-group">
                <label for="persons">Personnel
Present During Inspection</label>
                <table class="table">
                    <thead>
                        <tr>
                            <th>Name</th>
                            <th>Office</th>
                            <th>Position</th>
                        </tr>
                    </thead>
                    <tbody>
                        <?php foreach ($personnel as
$row) {?>
                            <tr>
                                <td><?php echo $row->name;
?></td>
                                <td><?php echo $row-
    office; ?></td>
                                <td><?php echo $row-
    position; ?></td>
                            </tr>
                        <?php }?>
                    </tbody>
                </table>
            </div>

```

```

        </div>
    </fieldset>

    <fieldset class="form-group">
        <legend>Ground Control Point</legend>
        <div class="well">

            <!-- <div class="form-group"> -->
            <label
for="address">Address</label>
            <?php echo "<br>" . $project-
location_address; ?>
            <!-- </div> -->
            <div class="form-group">
                <label for="coordinates">Geographic
Coordinates</label>
                <div>
                    <mark>Latitude:</mark> <?php echo
$project->latitude;?>
                    <mark>Longitude:</mark> <?php
echo $project->longitude;?>
                </div>
            </div>
        </div>
    </fieldset>

    <fieldset>
        <legend>Travel Description and Landmarks
        <a id="toggleColumn" class =
"toggleColumn btn btn-sm btn-info glyphicon
glyphicon-th pull-right" role = "button"></a>
        </legend>

        <div class="form-group">
            <div class = "row gallery-container">
                <?php
                    foreach ($images as $row) { ?>
                    <div class = "col-lg-4">
                        <div href = "#" class =
"thumbnail">
                            image_path;?>">
                        </div>
                        <div class = "caption">
                            <p><?php echo $row-
description;?></p>
                        </div>
                        <hr class="divider">
                    </div>
                <?php
            ?>
            </div>
        </div>
    </fieldset>

    </form>
</div>

```

```

<!--Load jQuery libraries -->
<script type="text/javascript" src="<?php echo
base_url("assets/js/jquery-1.12.2.js");
?>"></script>
<script type="text/javascript" src="<?php echo
base_url("assets/js/bootstrap.js");
?>"></script>
</body>

<footer class="footer">
    <div class="navbar navbar-default navbar-
bottom"></div>
</footer>
</html>

Models

Account_models

<?php
    if(! defined('BASEPATH'))
        exit('No direct script access allowed');

class Account_model extends CI_model{
    function __construct(){
        //call model constructor
        parent::__construct();
        $this -> load -> library('session');
    }

    public function add_user($data){
        //sql query for users
        $sql = "INSERT INTO users
(firstname, lastname, email_address, username,
password, role, active)
VALUES
('$data[firstname]', '$data[lastname]',
'$data[email]', '', '$data['username'].',
'" . sha1($data['username']) . ', '$data[role]',
'$data[active]' )";

        if($this->db->query($sql)){
            //echo "New user added" . $this-
>db->insert_id();
        }else{
            //echo "User not added";
        }
    }

    public function view_users(){
        $sql = "SELECT * FROM users WHERE 1";
        return $this->db->query($sql);
    }

    public function edit_user($username){
        $sql = "SELECT * FROM users WHERE
username=' " . $username . " '";
        return $this->db->query($sql);
    }

    public function update_profile($data){
        $sql = "UPDATE users SET firstname
= '$data[firstname]', lastname='$data[lastname]'
WHERE `users`.`username` = '$data[username]'";
        //echo $sql;
        if($this->db->query($sql)){
            //echo "update profile only no
password";
        }
    }
}

```

```

        }
    else{
        //echo "nopeeee update user";
    }

    public function update_password($data){
        $password = sha1($data['password']);
        $sql = "UPDATE users SET firstname
        ='$data[firstname]', lastname='$data[lastname]',
        password='$password' WHERE `users`.`username` =
        '$data[username]'";
        //echo $sql;
        if($this->db->query($sql)){
            $this -> session ->
            set_userdata('password',
            sha1($data['password']));
            //echo $this->session-
            >userdata('password');
        }
        else{
            //echo "nopeeee update user";
        }
    }

    public function update_user($data){
        $sql = "UPDATE users SET firstname
        ='$data[firstname]', lastname='$data[lastname]',
        role='$data[role]', active='$data[active]' WHERE
        `users`.`username` = '$data[username]'";
        //echo $sql;
        if($this->db->query($sql)){
            //echo "yey naedit";
        }
        else{
            //echo "nopeeee update user";
        }
    }

    public function delete_user($data){
        $sql="DELETE FROM users WHERE
        users.username = '$data'";
        if($this->db->query($sql)){
            //echo "yey deleted";
        }
        else{
            //echo "nopeeee not yet
            deleted";
        }
    }
}

?>

Login_model

<?php
if(! defined('BASEPATH'))
    exit('No direct script access allowed');

class Login_model extends CI_model{
    function __construct(){
        //call model constructor
        parent::__construct();
        $this -> load -> library('session');
    }

    public function validate(){
        //get user input
        $username = $this -> security->
        xss_clean($this->input->post('username'));
        $password = $this -> security->
        xss_clean($this->input->post('password'));

        //prepare query
        $this->db->where('username', $username);
        $this->db->where('password',
        sha1($password));

        //run query
        $query = $this -> db -> get('users');

        if($query -> num_rows() == 1){
            //success
            $row = $query -> row();
            if($row->active == 1){
                if($row->role ==
                'admin'){
                    $header =
                    'header_admin';
                }
                else{
                    $header =
                    'header_user';
                }
                $data = array(
                    'username' => $username,
                    'password' => sha1($password),
                    'role' => $row->role,
                    'header_role' => $header,
                    'validated' => TRUE,
                    'loginuser' => TRUE
                );
                $this -> session ->
                set_userdata($data);
                //print_r($data);
                return true;
            }
            //fail
            return false;
        }
    }
}

?>

Project_model.php
<?php
if(! defined('BASEPATH'))
    exit('No direct script access allowed');

```

```

class Project_model extends CI_model{
    function __construct(){
        //call model constructor
        parent::__construct();
        $this->load -> library('session');
    }

    public function view_projects(){
        $sql = "SELECT * FROM projects WHERE 1";
        return $this->db->query($sql);
    }

    public function get_projects($username){
        $sql = "SELECT * FROM projects WHERE
added_by='".$username."'";
        return $this->db->query($sql);
    }

    public function get_selected_project($id){
        $sql = "SELECT * FROM projects WHERE
project_id=" . $id;
        return $this->db->query($sql);
    }

    public function get_reports($id){
        $sql = "SELECT * FROM reports WHERE
status='approved' AND project_id=" . $id;
        return $this->db->query($sql);
    }

    public function get_comments($id){
        $sql = "SELECT * FROM comments WHERE
project_id=" . $id;
        return $this->db->query($sql);
    }

    public function get_replies($id){
        $sql = "SELECT * FROM replies WHERE
comment_id=" . $id;
        return $this->db->query($sql);
    }

    public function add_comment($data){
        $sql = "INSERT INTO comments
(project_id, name, email_address, message)
VALUES
('$data[project_id]', '$data[name]',
'$data[email]', '$data[message]')";

        if($this->db->query($sql)){
            //echo "New report added" .
$this->db->insert_id();

        }else{
            //echo "Report not added";
        }
    }

    public function add_project($data){
        $dateAdded = date('Y-m-d');
        $added_by = $this->session-
>userdata('username');

        //sql query for project
    }

    $sql = "INSERT INTO projects
(date_added,reference_no, project_description,
contract_startdate, contract_enddate,
location_address, added_by, contracting_parties,
latitude, longitude)
VALUES
('$dateAdded', '$data[reference_no]', '$data[project_description]', '$data[contract_startdate]', '$data[contract_enddate]', '$data[location_address]', '$data[added_by]', '$data[contracting_parties]', '$data[latitude]', '$data[longitude]')";

    if($this->db->query($sql)){
        echo "New project submitted" .
$this->db->insert_id();
    }else{
        echo "Project not submitted";
    }
    //query for report_id
    $project_id = $this->db->insert_id();
}

public function edit_project($projectId){
    $sql = "SELECT * FROM projects WHERE
project_id=" . $projectId . "";
    return $this->db->query($sql);
}

public function update_project($data){
    $sql = "UPDATE projects SET reference_no
='$data[reference_no]', project_description='$data[project_description]', contract_startdate='$data[contract_startdate]', contract_enddate='$data[contract_enddate]', location_address='$data[location_address]', contracting_parties='$data[contracting_parties]', latitude='$data[latitude]', longitude='$data[longitude]' WHERE
`projects`.`project_id` = '$data[project_id]'";

    if($this->db->query($sql)){
        //echo "yey naedit";
    }else{
        //echo "nopeeee update user";
    }
}

public function delete_project($data){
    $reportSql = "DELETE FROM reports WHERE
reports.project_id = '$data'";
    $sql="DELETE FROM projects WHERE
projects.project_id = '$data'";
    $this->db->query($reportSql);

    if($this->db->query($sql)){
        echo "yey deleted";
    }else{
        echo "nopeeee not yet deleted";
    }
}

```

```

}

?>

Report_model.php
<?php
    if(! defined('BASEPATH'))
        exit('No direct script access allowed');

class report_model extends CI_model{
    function __construct(){
        //call model constructor
        parent::__construct();
        $this -> load -> library('session');
    }

    public function get_list_location(){
        //1st 3 locations
        $sql = "SELECT location_id, latitude,
longitude, report_id FROM location ORDER BY
'location_id'";
        //ASC LIMIT 3";
        return $this->db->query($sql);
    }

    public function
get_list_reports($username){
    //10 reports;
    $latestReports = "SELECT * FROM reports
WHERE submitted_by='$username' ORDER BY report_id
DESC";
    return $this->db->query($latestReports);
}

//approved reports
public function get_approved_reports(){
    $latestReports = "SELECT * FROM reports
WHERE status='approved' ORDER BY report_id DESC";
    return $this->db->query($latestReports);
}

//pending reports
public function
get_pending_reports($username){
    $pendingReports = "SELECT * FROM reports
WHERE status='pending' AND project_id IN (SELECT
project_id FROM projects WHERE
added_by='$username')";
    return $this->db-
>query($pendingReports);
}

public function get_list_reports_all(){
    //10 reports
    $latestReports = "SELECT * FROM reports
ORDER BY report_id DESC";
    return $this->db->query($latestReports);
}

public function
get_selected_report($reportId){
    $sql = "SELECT * FROM reports WHERE
report_id=" . $reportId;
    return $this->db->query($sql);
}

public function
get_selected_parties($reportId){

                $sql = "SELECT * FROM
contracting_parties WHERE report_id=" .
$reportId;
                    return $this->db->query($sql);
                }

                public function
get_selected_images($reportId){
                $sql = "SELECT * FROM images WHERE
report_id=" . $reportId;
                    return $this->db->query($sql);
                }

                public function
get_selected_location($reportId){
                $sql = "SELECT * FROM location WHERE
report_id=" . $reportId;
                    return $this->db->query($sql);
                }

                public function
get_selected_objectives($reportId){
                $sql = "SELECT * FROM objectives WHERE
report_id=" . $reportId;
                    return $this->db->query($sql);
                }

                public function
get_selected_personnel($reportId){
                $sql = "SELECT * FROM personnel_present
WHERE report_id=" . $reportId;
                    return $this->db->query($sql);
                }

                public function add_report_public($data){

                    $sql = "INSERT INTO public_reports
(firstname, lastname, email_address, contact,
project_description, location_address, subject,
message)
VALUES
('$data[firstname]', '$data[lastname]',
'$data[email]', '$data[contact]',
'$data[project_description]', '$data[location_addr
ess]', '$data[subject]', '$data[message]')";

                    if($this->db->query($sql)){
                        //echo "New report added" .
$this->db->insert_id();

                    }else{
                        //echo "Report not added";
                    }
                }

                public function approve_report($id){
                    $status = "approved";
                    $sql = "UPDATE reports SET status
='$status' WHERE `reports`.`report_id` = '$id'";
                    if($this->db->query($sql)){
                    }
                    else{
                        //echo "nopeeee update user";
                    }
                }
}

```

```

        $names = $data['name'];
        $offices = $data['office'];
        $positions = $data['position'];

        for($i=0; $i < sizeof($names); $i++){
            $personnelSql = "INSERT INTO
                personnel_present (name, office, position,
                report_id)
                VALUES ('" . $names[$i] . "' ,
                " . $offices[$i] . "' , '" . $positions[$i] .
                "' , '$report_id')";

            if($this->db-
                >query($personnelSql)){
                    $id = $this->db-
                    >insert_id();
                    echo "New personnel
                    submitted " . $id;
                } else{
                    echo "Personnel not
                    submitted";
                }
            }
        }

        //=====
        =====sql query for objectives
        //session
        $objectives = $data['objective'];
        for($i=0; $i < sizeof($objectives);
        $i++){
            $objectiveSql = "INSERT INTO
                objectives ( statement, report_id)
                VALUES ('" . $objectives[$i] . "' ,
                '$report_id')";

            if($this->db-
                >query($objectiveSql)){
                    $id = $this->db-
                    >insert_id();
                    echo "New objective
                    submitted " . $id;
                } else{
                    echo "Objective not
                    submitted";
                }
            }
        }

        //=====
        =====sql query for images
        $targetFile = $data['file_url'];
        $imageDescription =
        $data['image_description'];

        for($i=0; $i < sizeof($targetFile);
        $i++){
            $imagePath = "uploads/" .
            basename($targetFile[$i]);
            $imageSql = "INSERT INTO images
                (report_id, description, image_path)
                VALUES ('$report_id',
                '" . $imageDescription[$i] . "' ,
                '$imagePath')";

            if($this->db->query($imageSql)){
                echo "Image uploaded successfully";
            } else{
                echo "Error uploading image";
            }
        }
    }
}

```

```

        $id = $this->db-
>insert_id();
submitted " . $id;
        }else{
submitted";
        }
    }
}

?>

Controllers files

Account.php
<?php
defined('BASEPATH') OR exit('No direct script
access allowed');

class Account extends CI_Controller {

    function __construct(){
        parent::__construct();
        if(!$this->session-
>has_userdata('username')){
            redirect('publicpage');
        }
    }

    public function index(){
        $this->view_users();
    }

    public function view_users(){
        $this->load->model('account_model');
        $data['users'] = $this->account_model-
>view_users();
        $this->load->view($this->session-
>userdata('header_role'));
        $this->load->view('account-
views/manage_account_view', $data);
    }

    public function home_account($username){
        $this->load->model('account_model');
        $data['user'] = $this->account_model-
>edit_user($username);
        $this->load->view($this->session-
>userdata('header_role'));
        $this->load->view('account-
views/edit_profile',$data);
    }

    public function add_user(){
        $this->load->view($this->session-
>userdata('header_role'));
        $this->load->view('account-
views/add_user_view');
    }

    public function submit_user(){

        $input = array(
            'firstname'=>$this->input-
>post('firstname'),
            'lastname'=>$this->input-
>post('lastname'),
            'email'=>$this->input-
>post('email'),
            'username'=>$this->input-
>post('username'),
            'password'=>$this->input-
>post('password'),
            'role'=>$this->input-
>post('role'),
            'active'=>$this->input-
>post('active')
        );

        $data = $input;
        $this->load->model('account_model');
        $this->account_model->add_user($data);
        $this->view_users();

        // $this->load->view('submit_user_view');
    }

    public function edit_user($username){

        $this->load->model('account_model');
        $data['user'] = $this->account_model-
>edit_user($username);
        $this->load->view($this->session-
>userdata('header_role'));
        $this->load->view('account-
views/edit_user_view',$data);
    }

    public function save_changes(){

        $input = array(
            'firstname'=>$this->input-
>post('firstname'),
            'lastname'=>$this->input-
>post('lastname'),
            'username'=>$this->input-
>post('username'),
            'role'=>$this->input-
>post('role'),
            'active'=>$this->input-
>post('active')
        );

        $data = $input;
        $this->load->model('account_model');
        $this->account_model-
>update_user($data);
        $this->view_users();
    }

    public function save_profile(){

        $input = array(
            'firstname'=>$this->input-
>post('firstname'),
            'lastname'=>$this->input-
>post('lastname'),
            'current_password' => $this-
>input->post('current_password'),
            'password'=>$this->input-
>post('password'),

```

```

        'confirm_password'=> $this-
>input->post('confirm_password'),
        'username'=>$this->session-
>userdata('username')
    );

    if($input['current_password'] == ''){
        $this->load-
>model('account_model');
        $this->account_model-
>update_profile($input);
        $this-
>home_account($input['username']);
    }else{

        if(sha1($input['current_password']) ==
$this->session->userdata('password')){

            if($input['confirm_password'] ==
$input['password']){
                $this->load-
>model('account_model');
                $this->account_model-
>update_password($input);
                $this-
>home_account($input['username']);
                echo "<script
type='text/javascript'>";
                echo "alert('New
password has been saved.');";
                echo "</script>";
            }else{
                $this-
>home_account($input['username']);
                echo "<script
type='text/javascript'>";
                echo "alert('New
passwords do not match. Changes not saved.');";
                echo
"</script>";
            }
        }else{
            $this-
>home_account($input['username']);
            echo "<script
type='text/javascript'>";
            echo "alert('Error in
your current password. Changes not saved.');";
            echo "</script>";
        }
    }

    public function delete_user($data){
        $this->load->model('account_model');
        $this->account_model-
>delete_user($data);
        $this->view_users();
    }
}

?>

```

```

Home.php

<?php
defined('BASEPATH') OR exit('No direct script
access allowed');

class Home extends CI_Controller {

    function __construct(){
        parent::__construct();

        if(!$this->session-
>has_userdata('username')){
            // $this->load-
>model('report_model');
            // $data['locationEntries'] =
$this->report_model->get_list_location($this-
>session->userdata('username'));
            // $this->load->view('public-
views/home_public', $data);
            redirect('publicpage');
        }else{
            // if($this->session-
>userdata('role') == 'admin'){
            //     $header =
'header_admin';
            // }else{
            //     $header = 'header_user';
            // }
        }
    }

    public function index(){
        if($this->session-
>has_userdata('username')){
            $this->load-
>model('report_model');
            $this->load-
>model('project_model');
            if($this->session-
>userdata('role')=='admin'){
                //pending reports
                $data['pending'] =
$this->report_model->get_pending_reports($this-
>session->userdata('username'));
                $projectsPendingReports
= array();
                $reportsList =
$data['pending']->result();
                foreach ($reportsList as
$value) {
                    $project_id =
$value->project_id;
                    $projectsPendingReports[] =
$this-
>project_model-
>get_selected_project($project_id);
                }
                $data['projectsPending'] =
$projectsPendingReports;
                //your projects
                $data['yourProjects'] =
$this->project_model->get_projects($this-
>session->userdata('username'));
            }
        }
    }

    //reports table

```

```

        $data['yourReports'] = $this-
>report_model->get_list_reports($this->session-
>userdata('username'));
            $projectsYourReports = array();
            $reportsList =
$data['yourReports']->result();
                foreach ($reportsList as $value)
{
                    $project_id = $value-
>project_id;
                    $projectsYourReports[] =
$this->project_model-
>get_selected_project($project_id);
                }
                $data['projectsYourReports'] =
$projectsYourReports;

                $this->load->view($this-
>session->userdata('header_role'));
                $this->load->view('home_view',
$data);
            }else{
                redirect('publicpage');
            }
        }

        public function approve_report($id){
            $this->load->model('report_model');
            $this->report_model-
>approve_report($id);
            $this->index();
        }

        public function remove_report($id){
            $this->load->model('report_model');
            $this->report_model->remove_report($id);
            $this->index();
        }

        public function delete_report($data){
            $this->load->model('report_model');
            $this->report_model-
>delete_report($data);
            $this->index();
        }

        public function create_report($id){
            $this->load->model('project_model');
            $data['project'] = $this->project_model-
>get_selected_project($id);
            $this->load->view($this->session-
>userdata('header_role'));
            $this->load->view('report-
views/create_report_view', $data);
        }

        public function list_report(){
            $this->load->model('report_model');
            $this->load->model('project_model');
            // $data['selectedEntry'] = $this-
>report_model->get_selected_report($reportId);

            // $reportData = $data['selectedEntry']-
>row();
            // $projectId = $reportData-
>project_id;
        }

        // $data['projectEntry'] = $this-
>project_model-
>get_selected_project($projectId);
        $data['lastEntries'] = $this-
>report_model->get_approved_reports();

        $projectsList = array();
        $reportsList = $data['lastEntries']-
>result();

        foreach ($reportsList as $value) {
            $project_id = $value-
>project_id;
            $projectsList[] = $this-
>project_model-
>get_selected_project($project_id);
        }
        $data['projectEntries'] = $projectsList;
        // $data['lastEntries'] = $this-
>report_model->get_approved_reports();
        $this->load->view($this->session-
>userdata('header_role'));
        $this->load->view('report-
views/list_report_view', $data);
    }

    public function view_report($id){
        $reportId = $id;
        $this->load->model('report_model');
        $this->load->model('project_model');
        $data['selectedEntry'] = $this-
>report_model->get_selected_report($reportId);

        $reportData = $data['selectedEntry']-
>row();
        $projectId = $reportData->project_id;

        $data['projectEntry'] = $this-
>project_model-
>get_selected_project($projectId);

        $data['images'] = $this->report_model-
>get_selected_images($reportId);
        $data['objectives'] = $this-
>report_model-
>get_selected_objectives($reportId);
        $data['personnel'] = $this-
>report_model->get_selected_personnel($reportId);
        $this->load->view($this->session-
>userdata('header_role'));
        $this->load->view('report-
views/view_report_view', $data);
    }

    public function review_input(){
        $target_dir = "uploads/";

        if(isset($_FILES['file_url']['tmp_name'])){
            // Number of uploaded files
            $num_files =
count($_FILES['file_url']['tmp_name']);
            $target_dir = "uploads/";

            /** loop through the array of files
            */
            for($i=0; $i < $num_files;$i++){

```

```

        // check if there is a file in
the array

if(!is_uploaded_file($_FILES['file_url']['tmp_name'][$i])){
    $messages[] = 'No file
uploaded';
}
else{
    // copy the file to the
specified dir
    $target_file = $target_dir
. basename($_FILES['file_url']['name'][$i]);

if(move_uploaded_file($_FILES["file_url"]["tmp_na
me"][$i], $target_file)) {
    /*** give praise and
thanks to the php gods ***/
    $messages[] =
$_FILES['file_url']['name'][$i]. ' uploaded';
}
else{
    /*** an error message
***/
    $messages[] =
'Uploading '.$_FILES['file_url']['name'][$i].'
Failed';
}

print_r($_FILES['file_url']['name']);
print_r($messages);
}

$input = array(
    'inspection_subject'=>$this-
>input->post('subject'),
    'objective'=>$this->input-
>post('objective'),
    'inspection_startdate'=>$this-
>input->post('start_inspection_date'),
    'inspection_enddate'=>$this-
>input->post('end_inspection_date'),
    'name'=>$this->input-
>post('name'),
    'office'=>$this->input-
>post('office'),
    'position'=>$this->input-
>post('position'),
    'latitude'=>$this->input-
>post('latitude'),
    'longitude'=>$this->input-
>post('longitude'),
    'file_url'=>$_FILES['file_url']["name"],
    'image_description'=>$this-
>input->post('image_description'),
    'project_id'=>$this->input-
>post('project_id'),
    'contracting_parties' => $this-
>input->post('contracting_parties'),
    'remark'=>$this->input-
>post('remark'),
);
//$/data['input'] = $input;
//$/this->load->view('review_input_view',
$input);

        $this->load->model('report_model');
        $this->report_model->add_report($input);
        redirect('home');

}

public function success_report(){
    //$/this->load->model('report_model');
    //$/testing = $this->report_model-
>add_report();
    foreach ($this->input-
>post('report_input') as $key => $value) {
        $data[$key] = $value;
    }

    $this->load->model('report_model');
    $this->report_model->add_report($data);
}

Login.php

<?php
defined('BASEPATH') OR exit('No direct script
access allowed');

class Login extends CI_Controller {

    function __construct(){
        parent::__construct();
        $this->load->library('session');
        $this->load->helper('form');
        $this->load->helper('url');
        $this->load->helper('html');
        $this->load->database();
        $this->load-
>library('form_validation');
        //load model
        $this->load->model('login_model');
        /*if(!$this->session-
>has_userdata('username')){
            redirect('home');
        }*/
    }

    public function index(){
        //$/this->load->view('login_view');
    }

    public function process(){
        //validate whether user can login
        $result = $this->login_model-
>validate();
        if(!$result){
            //login not accepted, go to
login page again
            $this->session-
>set_flashdata('msg', '<div class="alert alert-
danger">Invalid username and password!</div>');
            //$/this->load-
>view('login_view');
            $this->session-
>set_userdata('showerror', 'login');

            redirect('http://localhost/maicam/publicpag
e');
        }else{

```

```

        //redirect('home');

    redirect('http://localhost/maicam/home/');
}

public function logoutko(){
    $this->session->sess_destroy();
    redirect('home');
}

Projects.php

<?php
defined('BASEPATH') OR exit('No direct script
access allowed');

class Projects extends CI_Controller {

    function __construct(){
        parent::__construct();
    }

    public function index(){
        $this->view_projects();
    }

    public function view_projects(){
        $this->load->model('project_model');
        $data['projects'] = $this-
>project_model->view_projects();
        $this->load->view($this->session-
>userdata('header_role'));
        $this->load->view('project-
views/manage_project_view', $data);
    }

    public function view_project($id){
        $this->load->model('project_model');
        $data['project'] = $this->project_model-
>get_selected_project($id);
        $data['report'] = $this->project_model-
>get_reports($id);
        $data['comment'] = $this->project_model-
>get_comments($id);
        $this->load->view($this->session-
>userdata('header_role'));
        $this->load->view('project-
views/view_project_view', $data);
    }

    public function create_project(){
        $this->load->view($this->session-
>userdata('header_role'));
        $this->load->view('project-
views/create_project_view');
    }

    public function add_project(){
        $input = array(
            'reference_no'=>$this->input-
>post('refno'),
            'project_description'=>$this-
>input->post('project_description'),
            'contracting_parties'=>$this-
>input->post('contracting_parties'),
            'contract_startdate'=>$this-
>input->post('start_contract_date'),
            'contract_enddate'=>$this-
>input->post('end_contract_date'),
            'latitude'=>$this->input-
>post('latitude'),
            'longitude'=>$this->input-
>post('longitude'),
            'location_address'=>$this-
>input->post('location_address')
        );
    }

    public function edit_project($projectId){

        $this->load->model('project_model');
        $data['project'] = $this->project_model-
>edit_project($projectId);
        $this->load->view($this->session-
>userdata('header_role'));
        $this->load->view('project-
views/edit_project_view', $data);
    }

    public function save_changes(){

        $input = array(
            'project_id'=>$this->input-
>post('project_id'),
            'reference_no'=>$this->input-
>post('refno'),
            'project_description'=>$this-
>input->post('project_description'),
            'contracting_parties'=>$this-
>input->post('contracting_parties'),
            'contract_startdate'=>$this-
>input->post('start_contract_date'),
            'contract_enddate'=>$this-
>input->post('end_contract_date'),
            'latitude'=>$this->input-
>post('latitude'),
            'longitude'=>$this->input-
>post('longitude'),
            'location_address'=>$this-
>input->post('location_address')
        );

        $this->load->model('project_model');
        $this->project_model-
>update_project($input);
        $this->view_projects();
    }

    public function delete_project($data){

        $this->load->model('project_model');
        $this->project_model-
>delete_project($data);
        $this->view_projects();
    }
}
?>

```

```

PublicPage.php

<?php
defined('BASEPATH') OR exit('No direct script
access allowed');

class PublicPage extends CI_Controller {

    function __construct(){
        parent::__construct();
    }

    public function index(){
        // $this->load->model('report_model');
        // $data['locationEntries'] = $this-
>report_model->get_list_location();

        $this->load->model('report_model');
        $this->load->model('project_model');
        $data['lastEntries'] = $this-
>report_model->get_approved_reports();

        $projectsList = array();
        $reportsList = $data['lastEntries']-
>result();

        foreach ($reportsList as $value) {
            $project_id = $value-
>project_id;
            $projectsList[] = $this-
>project_model-
>get_selected_project($project_id);
        }
        $data['projectEntries'] = $projectsList;

        $this->load->view('public-
views/home_public', $data);
    }

    public function view_report($id){
        $reportId = $id;
        $this->load->model('report_model');
        $this->load->model('project_model');
        $data['selectedEntry'] = $this-
>report_model->get_selected_report($reportId);

        $reportData = $data['selectedEntry']-
>row();
        $project_id = $reportData->project_id;

        $data['projectEntry'] = $this-
>project_model-
>get_selected_project($project_id);

        $data['images'] = $this->report_model-
>get_selected_images($reportId);
        $data['objectives'] = $this-
>report_model-
>get_selected_objectives($reportId);
        $data['personnel'] = $this-
>report_model->get_selected_personnel($reportId);
        $this->load->view('public-
views/header_public');
        $this->load->view('public-
views/view_report_public', $data);
    }

    public function view_project($id){
        $this->load->model('project_model');
        $data['project'] = $this->project_model-
>get_selected_project($id);
        $data['report'] = $this->project_model-
>get_reports($id);
        $data['comment'] = $this->project_model-
>get_comments($id);

        $this->load->view('public-
views/header_public');
        $this->load->view('public-
views/view_project_public', $data);
    }

    public function list_report(){
        $this->load->model('report_model');
        $this->load->model('project_model');
        // $data['selectedEntry'] = $this-
>report_model->get_selected_report($reportId);

        // $reportData = $data['selectedEntry']-
>row();
        // $project_id = $reportData-
>project_id;

        // $data['projectEntry'] = $this-
>project_model-
>get_selected_project($project_id);
        $data['lastEntries'] = $this-
>report_model->get_approved_reports();

        $projectsList = array();
        $reportsList = $data['lastEntries']-
>result();

        foreach ($reportsList as $value) {
            $project_id = $value-
>project_id;
            $projectsList[] = $this-
>project_model-
>get_selected_project($project_id);
        }
        $data['projectEntries'] = $projectsList;

        $this->load->view('public-
views/header_public');
        $this->load->view('public-
views/list_report_public', $data);
    }

    public function list_project(){
        $this->load->model('project_model');
        $data['projects'] = $this-
>project_model->view_projects();
        $this->load->view('public-
views/header_public');
        $this->load->view('public-
views/list_project_public', $data);
    }

    public function create_report(){
        $this->load->view('public-
views/header_public');
        // $this->load->view('public-
views/sample_body');

        $this->load->view('public-
views/create_report_public');
    }
}

```

```

        public function submit_comment($id){
            $input = array(
                'name'=>$this->input-
            >post('name'),
                'email'=>$this->input-
            >post('email'),
                'project_id'=>$id,
                'message'=>$this->input-
            >post('message'),
            );
            $this->load->model('project_model');
            $this->project_model-
        >add_comment($input);
            $this->view_project($id);
        }

    }
?>

CSS files

Bootstrap.css

Maicam-bootstrap.css
/*
  page headings
*/
.page-header{
    color: #23AAF9;
}

fieldset legend{
    color: #23AAF9;
}

.footer > .navbar {
    margin-bottom: 0px; /* or just use:
margin-top: 50px; */
    margin-top: 30px;
}

.small-container {
    max-width: 660px;
    padding: 15px;
    margin: 0 auto;
}

/*
  colored boxes
*/

.colored-box{
    width: 100%;
    padding: 10px;
    margin-bottom: 10px;
    background-color: #235594;
    box-sizing: border-box;
    color:#fff;
}

.colored-box a:hover{
    color:#A4D9F9;
    text-decoration: none;
}

}
.colored-box a{
    color:#23AAFF;
    text-decoration: none;
    padding: 10px;
}
/***
  Center
*/
.center-container{
    max-width: 70%;
    margin: 0 auto;
}

.center-sm-container{
    width: 75%;
    margin: 0 auto;
}

/***
  Navigation bar
*/
.navbar-maicam {
    background-color: #fff;
    border-color: #fff;
}
.navbar-maicam .navbar-brand {
    color: #0E0E0E;
}
.navbar-maicam .navbar-brand:hover,
.navbar-maicam .navbar-brand:focus {
    color: #0E0E0E;
    background-color: transparent;
}
.navbar-maicam .navbar-text {
    color: #0E0E0E;
}
.navbar-maicam .navbar-nav > li > a {
    color: #0E0E0E;
}
.navbar-maicam .navbar-nav > li > a:hover,
.navbar-maicam .navbar-nav > li > a:focus {

    background-color: #ece8fe ;
}
.navbar-maicam .navbar-nav > .active > a,
.navbar-maicam .navbar-nav > .active > a:hover,
.navbar-maicam .navbar-nav > .active > a:focus {

    background-color: #e8effe;
}
.navbar-maicam .navbar-nav > .disabled > a,
.navbar-maicam .navbar-nav > .disabled > a:hover,
.navbar-maicam .navbar-nav > .disabled > a:focus {
    color: #444;
    background-color: transparent;
}
.navbar-maicam .navbar-toggle {
    border-color: #fff;
}
.navbar-maicam .navbar-toggle:hover,
.navbar-maicam .navbar-toggle:focus {
    background-color: #fff;
}
.navbar-maicam .navbar-toggle .icon-bar {
    background-color: #333;
}

```

```

}
.navbar-maicam .navbar-collapse, color: #444;
.navbar-maicam .navbar-form {
  border-color: #efefef;
}
.navbar-maicam .navbar-nav > .open > a,
.navbar-maicam .navbar-nav > .open > a:hover,
.navbar-maicam .navbar-nav > .open > a:focus {
  color: #fff;
  background-color: #080808;
}
@media (max-width: 767px) {
  .navbar-maicam .navbar-nav .open .dropdown-menu
  > .dropdown-header {
    border-color: #080808;
  }
  .navbar-maicam .navbar-nav .open .dropdown-menu
  .divider {
    background-color: #080808;
  }
  .navbar-maicam .navbar-nav .open .dropdown-menu
  > li > a {
    color: #9d9d9d;
  }
  .navbar-maicam .navbar-nav .open .dropdown-menu
  > li > a:hover,
  .navbar-maicam .navbar-nav .open .dropdown-menu
  > li > a:focus {
    color: #fff;
    background-color: transparent;
  }
  .navbar-maicam .navbar-nav .open .dropdown-menu
  > .active > a,
  .navbar-maicam .navbar-nav .open .dropdown-menu
  > .active > a:hover,
  .navbar-maicam .navbar-nav .open .dropdown-menu
  > .active > a:focus {
    color: #fff;
    background-color: #080808;
  }
  .navbar-maicam .navbar-nav .open .dropdown-menu
  > .disabled > a,
  .navbar-maicam .navbar-nav .open .dropdown-menu
  > .disabled > a:hover,
  .navbar-maicam .navbar-nav .open .dropdown-menu
  > .disabled > a:focus {
    color: #444;
    background-color: transparent;
  }
}
.navbar-maicam .navbar-link {
  color: #9d9d9d;
}
.navbar-maicam .navbar-link:hover {
  color: #fff;
}
.navbar-maicam .btn-link {
  color: #9d9d9d;
}
.navbar-maicam .btn-link:hover,
.navbar-maicam .btn-link:focus {
  color: #fff;
}
.navbar-maicam .btn-link[disabled]:hover,
fieldset[disabled] .navbar-maicam .btn-
link:hover,
.navbar-maicam .btn-link[disabled]:focus,
fieldset[disabled] .navbar-maicam .btn-link:focus
{

```

XI. Acknowledgement

Thank you sa lahat ng mga nakasama ko nitong nagdaang 5 years (4 years sa loob ng UP at 1 year sa bahay namin at sa bahay ng mga kaibigang hindi ko malilimutan).

Maraming maraming salamat sa aking adviser, Ms. Perlita Gasmen, sa walang sawang pagtatanong ng progress at pagtulak samin na kaya namin to tapusin!

Sa aking pinakamamahal na mga magulang, para po sa inyo ito! Salamat po sa pagintindi sakin, lalo na sa mga panahong lungkot na lungkot ako.

Akala ko talaga di na to matatapos nakakaiyak.

Kaya ko pala. ☺

Lord, salamat!