

**E- Sumbong: An Android-Based Incident Report Mobile Application**

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**A Capstone Project**

**Presented to**

**The Committee of Oral Examiners**

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**Dumingag Campus**

**Caridad, Dumingag, Zamboanga del Sur**

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**In Parial Fullfilment**

**of the Requirements for the Degree**

**Bachelor of Science in Information Technology**

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## ABSTRACT

The occurrence of incident is rampant in our society today yet reporting to authorities was still using manual reporting. Blottering was one of the most important ways to notify an occurrence to the police station. In the municipality of Dumingag, the only option to file a report was to dial the police department's hotline number and go to the police station manually. The proposed E-sumbong app could assist the police station in receiving legitimate reports, eliminating the need for the user to visit the police station.

The purpose of this project was to develop a mobile application that would take a picture or video of an occurrence observed by the user and send it to the police investigator. The user must first register before using the application. The police station would be able to take action using the map accessible in the police investigator.

A waterfall approach was used to develop the project which has the following phases: Planning, Requirements Analysis, Software Design and Development, Implementation, Testing, Deployment, and Maintenance and Updates. Important data were gathered and used for the project. JavaScript with android studio and firebase were used in creating the application.

The testing of the project was done to see and assess whether the objectives set were met. Based on the results of series of tests, the application was able to perform its functions.

**Keywords:** JavaScript, Android Studio, Firebase, Waterfall Approach, Blottering

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## Chapter 1

### **BACKGROUND OF THE STUDY**

#### **Introduction**

Technology has greatly aided in the betterment of people's daily life basis. People may utilize technology to accomplish their jobs more quickly and easily, as well as interact with their friends and family in an instant, and search for information as quickly as possible. Technology has been employed in both a life saving device and a criminal investigations.

Surveillance cameras were one of the most frequently utilized technologies today, assisting many people in a variety of enterprises such as medical, education, and other organizations.

“CCTV systems can give warning indicators of impending criminal crimes and function as a reactive tool,” writes Phillips (2008). CCTV systems may serve as a proactive tool as well as a warning system for possible criminal crimes. CCTV watches crowds and people, responds to threats, and therefore alerts the operator(s) of potentially hazardous behaviour and activities before, during, and after an event.

Another technology that is extremely useful to the general public, particularly automobile owners, is the automated detection of accidents and remote alarms. The study of Goud and Padmaja (2012) demonstrates the benefits of placing a device in the automobile where an accident can be readily followed down by GPS position and remote alarm to alert emergency stations so that they can respond as quickly as possible. These are some examples of evidence demonstrating that technology not only it affects the lives of individuals, but it also has a positive impact on society saving.

Furthermore, the advent of 3G/4G cellular network technology by most mobile

network operators has boosted the communication demands of mobile consumers,

according to Agangiba and Agangiba (2013). Thus, the idea of mobile incident reporting was developed by integrating the notion of mobile devices with the active involvement of the general population and the service of mobile networks.

### **Project Context**

Various crimes have been observed in our society in the current period, according to observations. However, the issue was that police personnel were delayed in responding because of the process in reporting crimes that needed to check the specific location and time of the incident.

As a result, the researchers proposed E-Sumbong, a mobile application that could assist the Dumingag Police Department in reporting incident by mapping using longitude and latitudes coordinates. It does not only allow the public to report with an image captured or recorded video clip in a specific incident promptly but also allow law enforce to have the necessary evidence instantly so that they could respond as quickly as possible.

### **Purpose and Description**

The goal of this system was to assist the police officers in obtaining information about occurrences and promptly correlating the incidents and crimes. Not only the Dumingag Police Station would benefit from this system, but as well as the people of Dumingag by providing pictures or videos of occurrences that occurred in the neighborhood.

Before using this mobile application, a user must create or register an account first using Name, Contact Number, Address, Email Address and Password. The user must wait for the confirmation from the server, before the user can log-in and access the application system. This method utilized the Global Positioning System (GPS) and longitude/latitude coordinates to pinpoint the sender's or user's position. And only

police officers or those assigned officers could access the Administrator system and receive those information sent by the witnesses.

### **Objectives of the Study**

This research aimed to develop a mobile application named E-Sumbong: An Android-Based Incident Report Application for PNP Dumingag and it addressed the following specific objectives:

- 1) To capture or record a video clip of the incidence for quick and easy reporting.
- 2) To pinpoint the location using GPS technology, latitude and longitude coordinates of where the incident happen.
- 3) To generate incident reports.

### **Scope and Limitation**

This research focused on the job of police officers within Dumingag Police Station in receiving information about the incidents as quickly as possible.

The Dumingagnons who can access internet connection and who have android mobile phones were the main respondents in this study and served as the sender. The system's administrator would be the in-charge police officer, who have access to the system and would tell the chief of police to dispatch his personnel to the incident area.

It covered the different crimes, incidents and environmental problems that may occur in the society such as gambling, harassment, killing, floods and landslide.

One of the most essential components in this system was the internet connection, which was very needed to send reports to the administrator.

This research have a limitations which include the following: *IOs* users can't access the system, no internet connection, not accessible by phones that doesn't have a camera, and only assigned officer can access the admin.

## Significance of the Study

The study would assist the following persons or groups: Police personnel could act as promptly as possible to discover the nearest incident location and maximize the likelihood of obtaining accurate reports.

It could also give victims a fantastic chance to get the justice they deserve by allowing them to use the evidence that has been caught or recorded.

## Definition of Terms

**Authentic.** Is a quality of being genuine or real.

**Correlating.** Have a mutual relationship or connection, in which one thing affects or depends on another.

**Data Base.** Is an organized collection of data stored and accessed electronically. Small databases can be stored on a file system, while large databases are hosted on computer clusters or cloud storage. The design of databases spans formal techniques and practical considerations including data modelling, efficient data representation and storage, query languages, security and privacy of sensitive data, and distributed computing issues including supporting concurrent access and fault tolerance.

**Firebase.** Is a platform developed by Google for creating mobile and web applications. It was originally an independent company founded in 2011. In 2014, Google acquired the platform and it is now their flagship offering for app development.

**GPS (Global Positioning System).** The Global Positioning System (GPS) is a U.S. - owned utility that provides users with positioning, navigation, and timing (PNT) services. This system consists of three segments: the space segment, the control segment, and the user segment.

**Latitude.** Is a geographic coordinate that specifies the north–south position of a point on the Earth's surface. Latitude is an angle (defined below) which ranges from 0° at the Equator to 90° (North or South) at the poles.

**Longitude.** Is a geographic coordinate that specifies the east–west position of a point on the Earth's surface, or the surface of a celestial body. It is an angular measurement, usually expressed in degrees and denoted by the Greek letter lambda

**Pinpoint.** Find or locate exactly.

**Promptly.** Exactly a specified time; punctually.

## Chapter 2

### REVIEW OF RELATED STUDIES AND SYSTEM

#### Technical Background

The researchers built a mobile application using the core i3 laptop with 32gb RAM and used a mobile phone to use as the immolator. Also it used a Wi-Fi or sim that have internet connection to test the application if it was able to send the reports and allowing the GPS, to locate the specific location. In addition, the researchers also used a mobile phone as the back end.

#### Hardware Specification

In order to develop this project the researchers were required to use an android phones with at least 2gb RAM, 16gb ROM and at least 4G/LTE internet connection used to emulate the application, personal computer with at least 4gbRAM/32ROM and core i3 laptop for system developing and building.

#### Software Specification

Android Studio connected with java script is a piece of application software that the researchers utilized to develop the E-Sumbong mobile app. This programming language was simple to use because it simply requires drag and drop. It was designed specifically for Android to speed development and aid with the creation of high-quality apps for all Android devices. Furthermore, this android studio was linked to a database in order to store data.

#### Programming Environment

The proponents used Android Studio a general-purpose, class-based, object-oriented programming language designed for having lesser implementation dependencies. It was a computing platform for application development. Android



Studio is fast, secure, and reliable, therefore, it is widely used for developing Android



Studio applications in laptops, data centres, game consoles, scientific supercomputers and cell phones with the support of firebase database.

### **Related Literature**

Related studies promotes a greater understanding of the problem and its crucial aspects and ensures the avoidance of unnecessary duplication. It is an indispensable part of any research project. It is also an important prerequisite to actual planning and execution of the research project.

### **Foreign Studies**

Agangiba & Agangiba created another great paper named "Mobile Solution for Metropolitan Crime Detection and Reporting." With this created application, the general people may simply and discreetly report suspicious activity in the surrounding region for the authorities to investigate.

TipSoft created another well-known Android-based application that was extensively utilized by many schools, towns, and governments. TipSubmit is widely regarded as the first anonymous tip submission smartphone application. It enables individuals to safely and anonymously submit criminal tips to Crime Stoppers. The system only recognizes tippers by their tip number, which it assigns to the tip. The Mobile App allows tipsters to upload images or videos and may communicate the video's location using a GPS locator.

With the notion of the aforementioned research, mobile devices would be a huge aid in reducing incidents and making law enforcement and the general public more productive. In this regard, the android platform was the most practical operating system to utilize in the creation of E-Sumbong Application, because of the majority are smartphone users in the nation.

In North America, the company Omega Group developed [crimemapping.com](http://crimemapping.com) to help law enforcement agencies to provide the public with valuable information about recent crime activity in their neighbourhood. The goal was to assist police departments in reducing crime through better informed citizens. This system allowed students and parents to received crime alerts for crime incidents occurring at or near the student dormitories or campus residence.

### **Local Studies**

Elnas, et.al. (2014) created Location-Based Reporting and Mapping of Crimes using Google Maps which could depict a very good illustration of mapping the location of an occurrence using the Google Maps feature, and it is browser-based. Reporting is accomplished by enabling the user to point to a place on a map where the event happened, allowing the Google API to retrieve the coordinates, which consist of latitude and longitude. The technology is already in operation in Iligan City, Philippines.

De Guzman, et.al. (2014) Mobile Emergency Response Application using geo-location for Command Centers is a combination of a mobile and web application for responding to emergency requests for ambulance, fire truck and police by people in a certain area or city. The mobile application would detect user's current location through geo-location and sends to the web application deployed in a command centre the name, age, mobile number and location of the user for easily dispatching of emergency units.

### **Synthesis**

The project developed by the proponents was derived from the existing projects stated on the related studies that were the basis of the researchers in conducting this study.

Those developed system developed by Jan B. Elnas, Eldrin C. Duran, James Leo E. Mayol, and Rabby Q. Lavilles created Location-Based Reporting and Mapping

of Crimes using Google Maps was similar to E-Sumbong: Android-Based Incident Report Mobile Application which can locate the accurate area where the incidents happen by using the google map features and browser-based. In order to accomplish the reporting, user enable to pin point the exact location of occurrence. Like the study of Jan B. Elnas, Eldrin C. Duran, James Leo E. Mayol, and Rabby Q. Lavilles, this study also used google map and GPS to locate the precise place on where the incident happen. Moreover, the study of Jethro B. de Guzman, Ritz Carlo C. de Guzman, and Engr. Remedios G. Ado which used the combination of web and mobile application was developed for responding the requests for ambulance, fire truck and police by people in a certain area or city. Through the Geolocation the mobile application detects the user's location and sends to the web with information of the sender. The difference between the existed project and the researchers proposed project. First, the project can generate reports front-end and back-end while the existed project can generate only the users report. Second, during reporting the user can captured a photo or recording video without time limit which could be use as evidence while the existed project do not. Lastly, the project only used a mobile application while the existed project used both mobile app and web-based application.

## Chapter 3

**DESIGN AND METHODOLOGY**

The researchers used a waterfall model in order to show the flow of the methods done by the proponents in creating the study. Shown in Figure 3.0

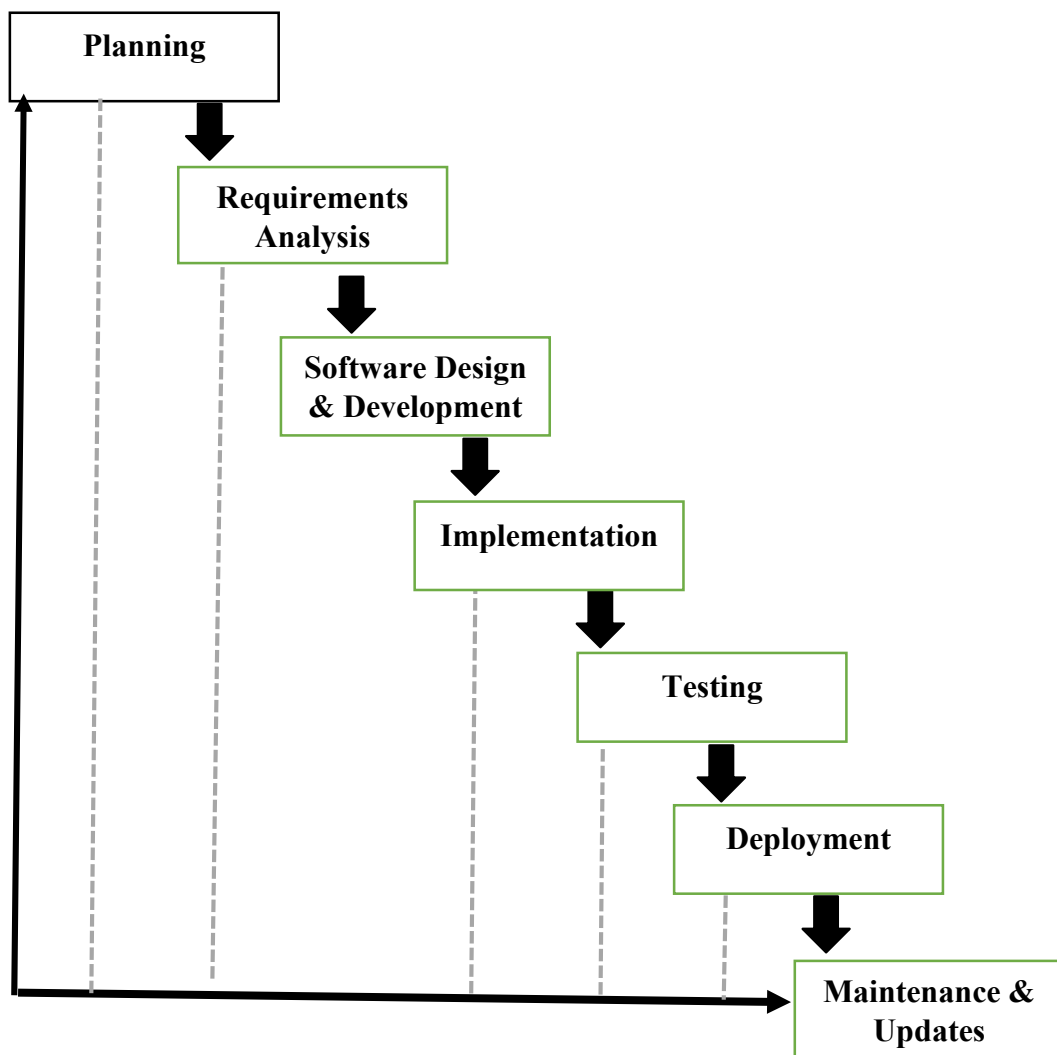


Figure 3.0 Waterfall Model

## **Planning**

Following the researchers' discussion on what people's requirements were in today's age. Instead of wasting time driving to the police station to report an incident, they would create an app that simply requires a smartphone with a camera and an internet connection. They would request approval from the police department by sending them a letter that included comments about the study's objectives.

## **Requirement Analysis**

In order to construct the mobile application and online system to be designed, the proponents would finalize the requirements, particularly the device and software requirements. After that, the proponents prepared the hardware requirements in order to build the application, as well as the software requirements in order to connect the two and create the E-Sumbong: Android-Based Incident Report Mobile Application.

## **System Design and Development**

In designing and developing of the application system, order to achieve its desired design the researcher used the application Photoshop in design. In designing, Photoshop application is easy to handle due to the tools that the Photoshop has , and also Photoshop had all the requirements in order to achieve all the desired design of the system .

## **Flowchart**

In order to comply on how to use the system application, the Figure 3.1 shows the flow of system. The flowchart indicated the starting point of the user system onto the end point of the system. To start, the user must create an account first using it name, address, contact number, email address and password before the user can log in to the system. If the user already created an account the system will ask for a mobile location

be turned on after that the user can add report by providing a captured photo, recorded video and description to be submitted or sent to the admin.

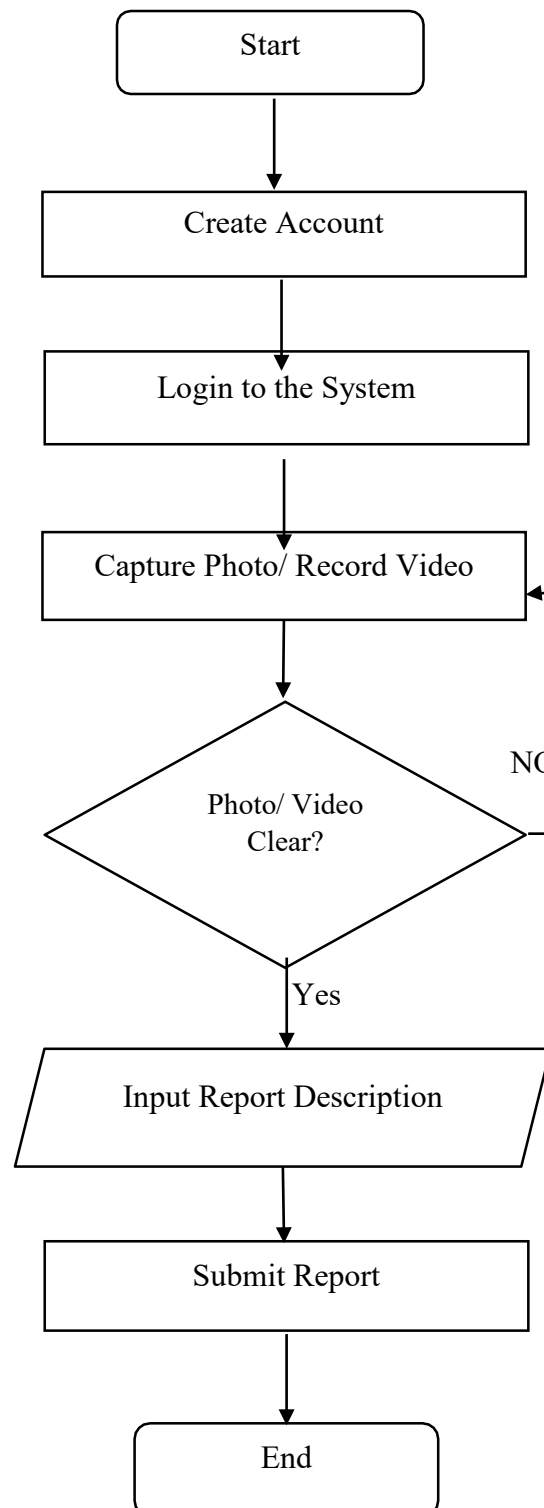
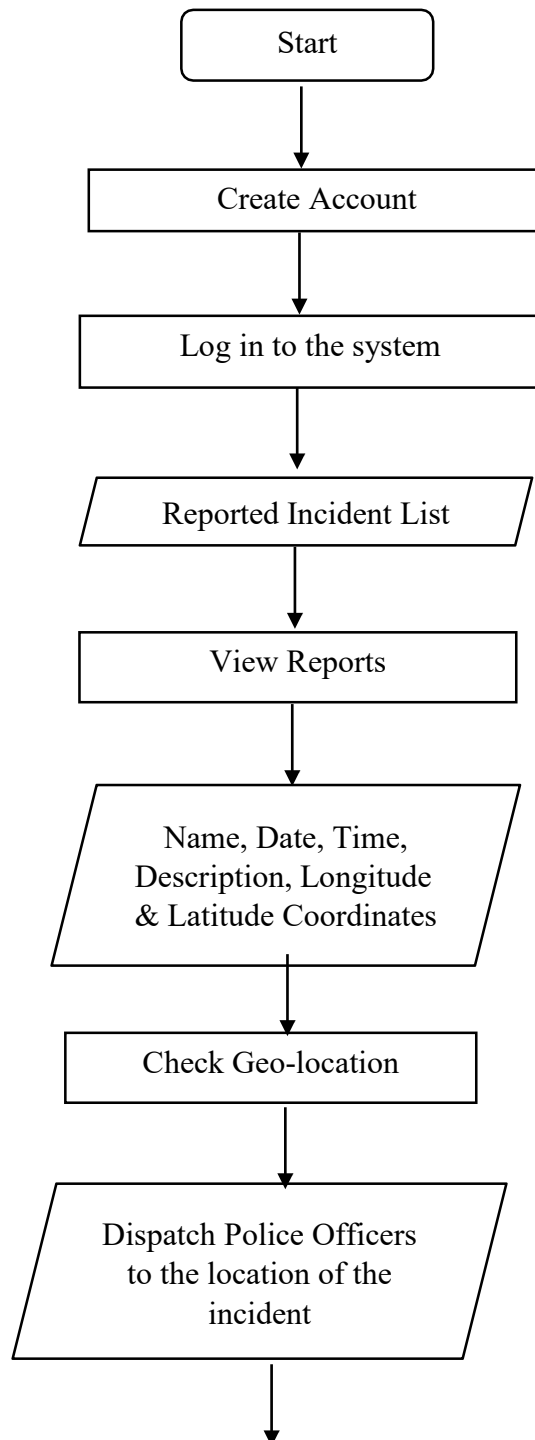


Figure 3.1 Flowchart of the Front-End



The task of the administrator was to process all the reported incident by the registered users. The Figure 3.2 shows the flow on how to use the system from starting point until the last process.

To start, the admin must create an account using its username and password before he/she can log-in into the system. If the admin already logged-in into the system, in this stage the admin can view all the reported incidents together with the captured photo, recorded video, time/date, description, address, geo-location, longitude/latitude coordinates sent by the registered users. On the other hand if the admin already viewed the reports the admin would manually dispatch its police officers in to the location of the reported incident to take action, after the action has been taken, the admin can generate the reported incident reports by exporting the printable data such as Name, Date, Time, Description and Contact Number of the reporter into a PDF file, Also the admin can download the captured images and recorded videos for storing evidence.



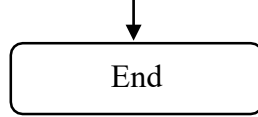


Figure 3.2 Flowchart of the Back-End

### **Data Flow Diagram**

Data flow diagram of the user system shown in Figure 3.3. In this figure, it showed the data of users using the application system. In order to access the system, the user must enter first its personal data such as Name, Address, Email Address, Contact Number and password in order to register in the users system. After the user created an account, all the data that the user input would be stored in the database and served as registered. If the user successfully registered an account the user can log-in into the system by using its Email Address and password. After that, the user can add or create a report by providing captured photos, recorded video, description and geo-location, on the other hand the reported incident sent by the user would directly go to the admin system, data sent by the user system would be stored at the database.

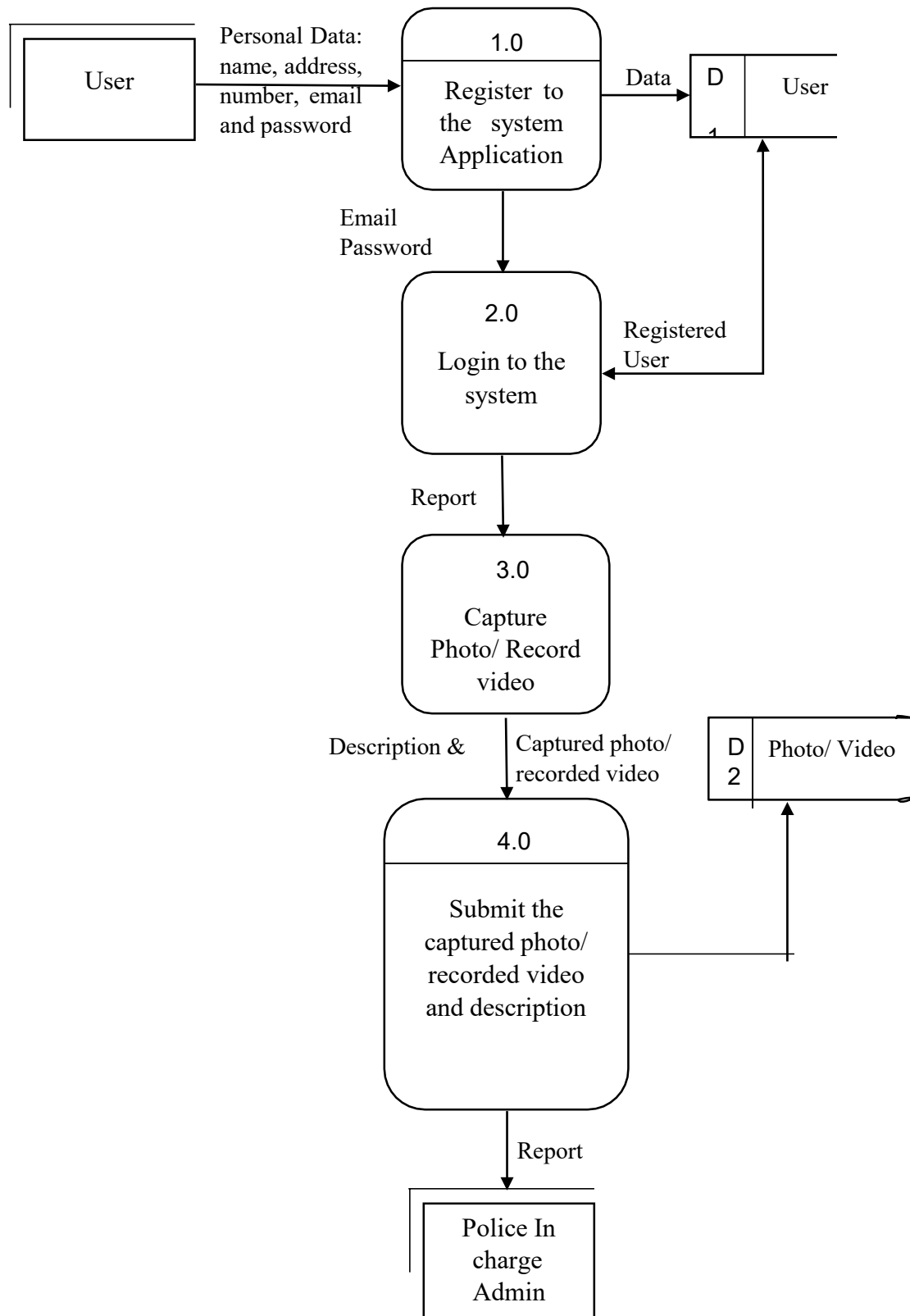


Figure 3.3 Data Flow Diagram of the Front-End

The administrator data flow diagram shown in Figure 3.4, In this figure, showed the data flow for administrators. In order to access the administrator, the assigned person must first create an account with their username and password. An administrator can only create an account once. After created an account, the data entered by the administrator is automatically stored in the database, allowing the administrator to log in to the system. Only assigned personnel can view the reports sent by the user stored in the database that contained the data of the reported incident such as Name, Description, Date, Time, and Longitude/Latitude coordinates, reporters contact number and Geo-Location. In order to locate and verify the reported incident the system would provide a Longitude/Latitude coordinates and Geo-location by simply clicking the check location button, in that way the police officers could take an action.

After the action has been taken the admin can generate printable report such as Name of the sender, Date, Time, Description of the incident and Contact Number of the user by exporting the reported data into a PDF file. In addition, the captured images and recorded videos are downloadable in case of storing evidences.

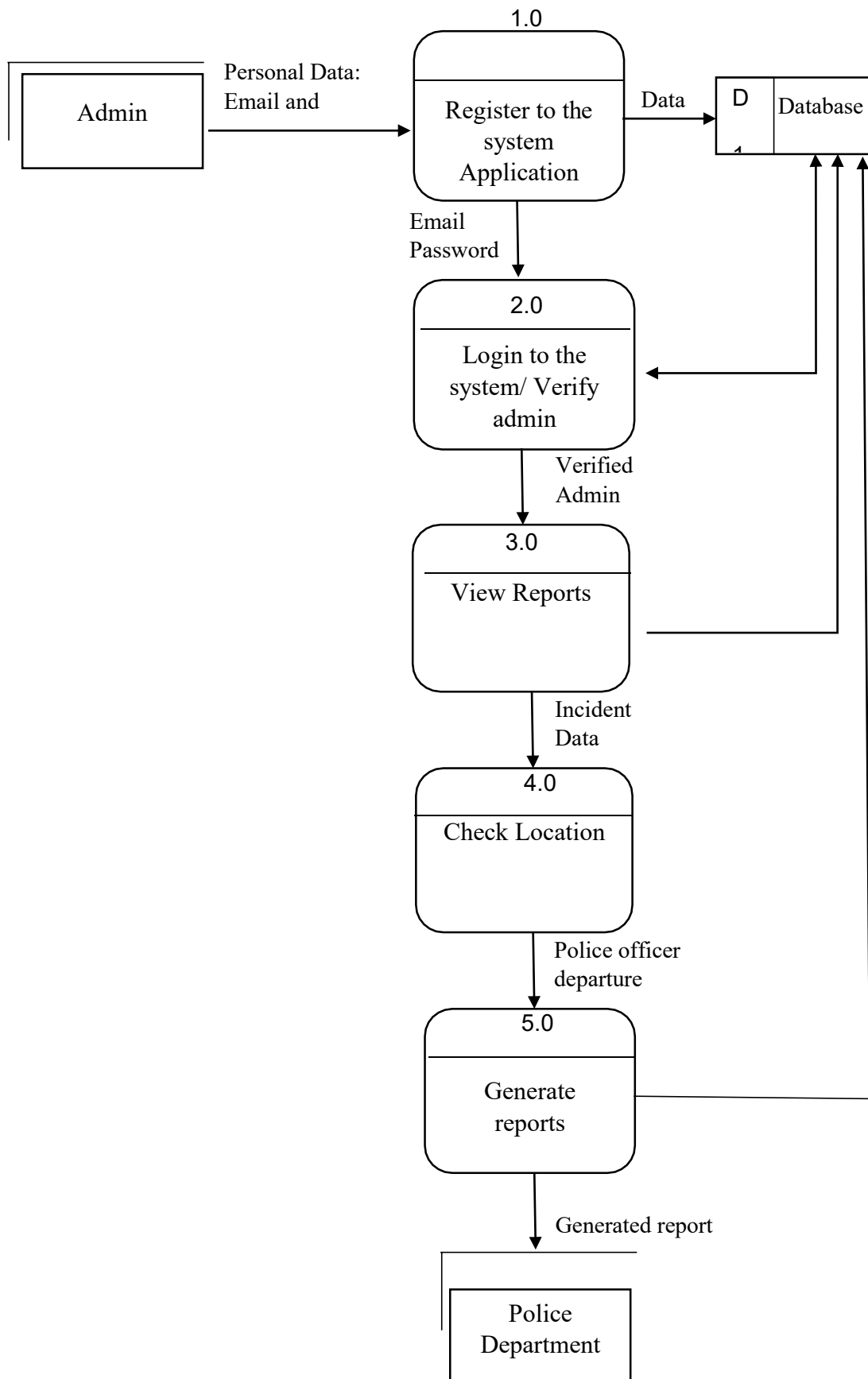


Figure 3.4 Data Flow Diagram of the Back-End

### System Overview

The system overview of the mobile application was shown in Figure 3.5. This demonstrates the interaction of the sender with the server side application. All the information sent by the sender would be stored in the database temporarily. This information could be retrieved by the application server in the police department. When the police department confirmed or viewed that the reported incident was valid, the information from the storage table would be stored permanently.

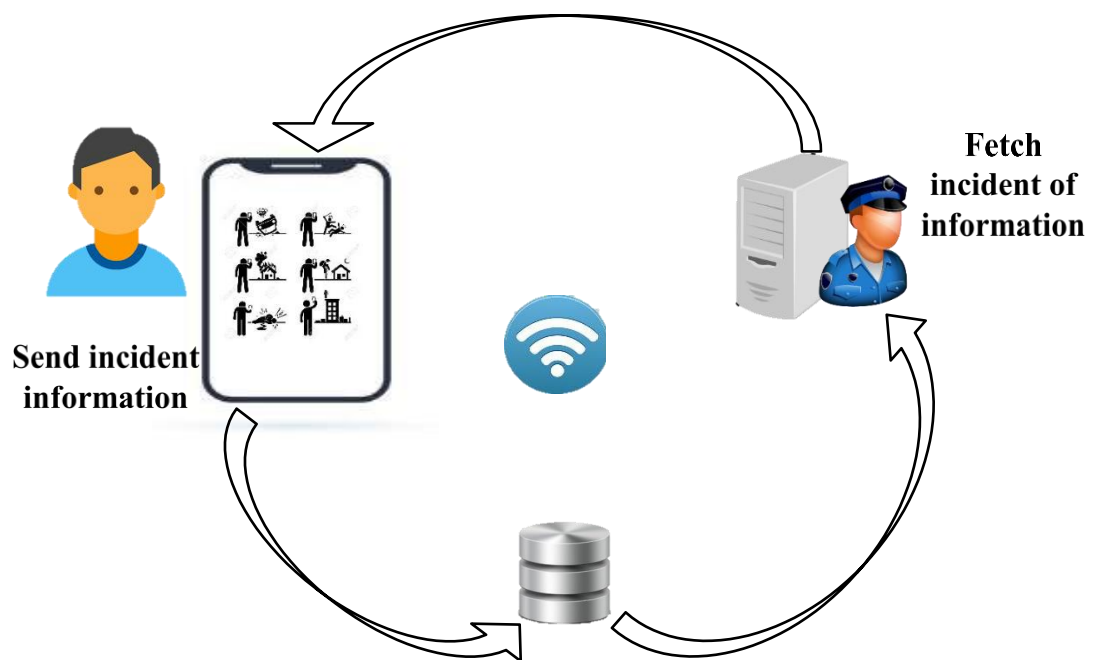


Figure 3.5, System Overview

### Story Board

#### A. Mobile Application interface



**E-Sumbong: An Android-Based Incident Report Mobile Application**



#### A. User Log-In and Registration Form



#### Camera Button

In order to have an image, that serves as evidence, the camera button would lead the user to capture an image or record a video clip by clicking the buttons shown in Figure 3.6. A photograph, in fact, may reveal a lot about a subject. E-Sumbong was mainly reliant on the witness's captured incident photo.



Figure 3.6 Camera Button

### Admin Features

To log-in into the system the admin must input its Email Address and password in order to use the admin. Figure 3.6 shows the log in form of the admin. In this phase the admin must log in first in order to use the system.



Figure 3.6, Admin's Login Form

The administrator shown in Figure 3.7 depicted the main page of an admin application that offers received reported incident and basic information about the sender. And when clicking the reports displayed on the screen, it would display an image with a longitude and latitude coordinates, indicating the possible nearest location of the occurrences.



Figure 3.7, Administrator

The primary purpose of this research was to report occurrences that occur in various areas by capturing them and with the use of Geo-location, longitude and latitude coordinates to retrieve the specific location, time, and date of the event with Google Map, as shown in Figure 3.8.

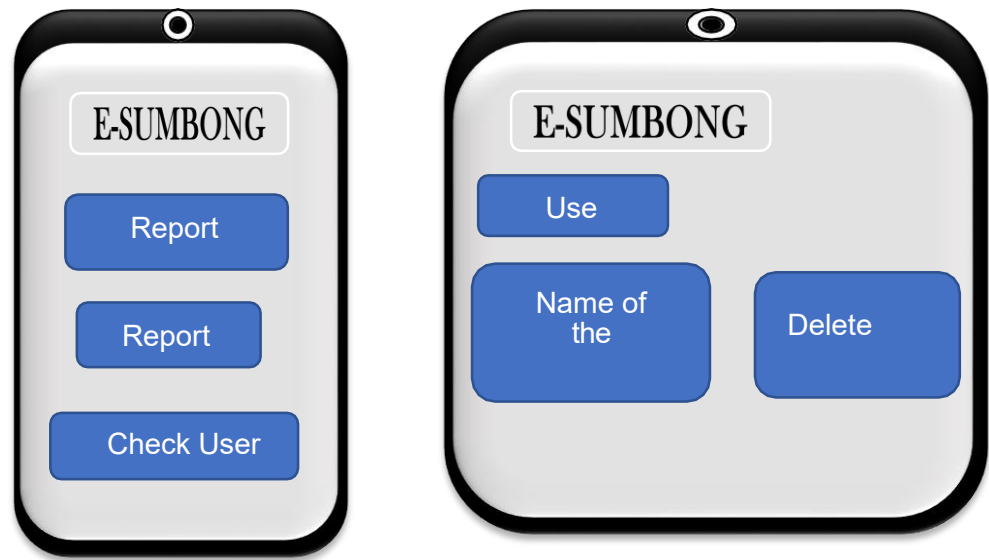


Figure 3.8 Submitted report of the witness

## Chapter 4

**DEVELOPMENT, TESTING, IMPLEMENTATION****Description of System**

This interface provided Log in and Registration buttons, which the user and administrator may log in and register. Log in button included Email address and Password. The register button contained your full name, address, contact information, email address, and password, as illustrated in Figure 4.0.

The figure consists of two side-by-side screenshots of a mobile application interface. The left screenshot shows the login screen with the title 'E-Sumbong' at the top. Below the title are two input fields labeled 'E-mail' and 'Password'. At the bottom of the form are two buttons: 'LOGIN' and 'REGISTER'. The right screenshot shows the registration screen with the title 'Register' at the top. Below the title are five input fields: 'Name', 'Address', 'Contact', 'E-mail', and 'Password'. At the bottom of the form is a single button labeled 'SIGN UP'. Both screenshots show a status bar at the top with the time 1:17, signal strength, 4G network, and 9% battery.

Figure 4.0 User's Login and Registration Form

The user application system contained a few buttons for adding or creating reports, such as the new report button for adding a specific incident report and the export button for exporting all reported incidents into a Pdf file, as illustrated in Figure 4.1.





Figure 4.1 User's Homepage

There's a New Report button, a Capture Photo button, and a Record Video button at this phase. The new report button would direct the user to the capture photo and record video buttons, which would take images and record videos of the situations depicted in Figure 4.2.

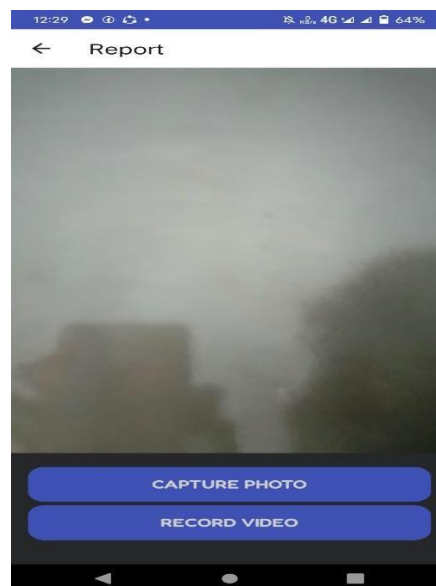


Figure 4.2 Camera And Video Interface

The E-Sumbong: An Android-based incident report Mobile application had buttons like “Check User Button”, which was used for check all registered users, the “Pinpoint Location Button”, to point the incident's location, the “Download Button”, to

download the captured photos or recorded video, and to export all data and to create

individual reports using “Export Buttons, to extract printable data into a PDF for backup copies of the reported incident, as shown in Figure 4.3.

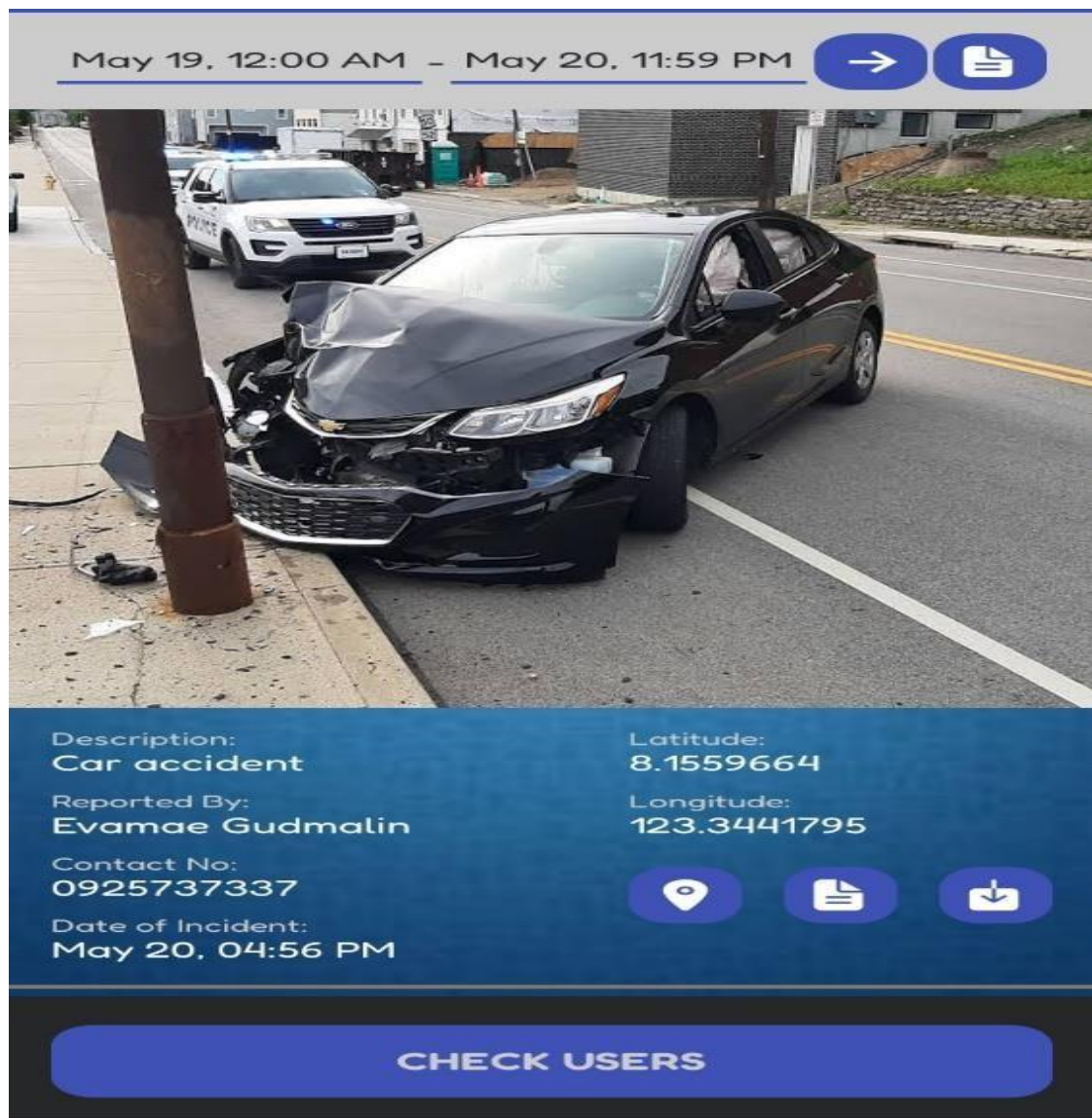


Figure 4.3 Admin Homepage

This was the admin side that provided information about each user, and it belonged to the check users' button. The Reload button was used to reload the display and the search button was filtered by name used to search the users name shown in Figure 4.4.





Figure 4.4 List of Users

## Development

The researchers were able to illustrate or show the development on the time frame done by the researchers in order to accomplished thesis project titled, E-Sumbong: Android-based Incident report Mobile Application shown in Table 1. It also showed the working schedule of the researchers from research until the documentation and presentation where they were able to construct and develop the project based on the objectives. The researcher also conducted a testing in order to test its functionality and documented it. After several testing the researchers were able to present it during the final defence.

	W1	W2	W3	W4	W5	W6	W7	W8
	03/1-5-22	03/7-11/22	03/13-16/22	03/19-24/22	04/02-07/22	04/09-14/22	04/16-21/22	04/24-30/22
<b>Planning</b>								
<b>Research</b>								
<b>Proposal</b>								
<b>Interface Designing</b>								
<b>Programming</b>								
<b>Testing</b>								
<b>Documentations</b>								

**Table 1. Gantt Chart**

### Testing

During this phase, after writing the source code in Android Studio, the mobile application of this study was tested if it could function to its desired outcome. The E-Sumbong: An Android-Based Incident Report Mobile Application project was able to function to send photos and information given by the user and was able to receive information from user to admin, as an administrator.

### Implementation

The researchers created a system that was presented to the Dumingag Police department asking for a consent. If the Dumingag Police Department would agree to use the framework, the researchers would hand over the project, as well as the documents that would act as a guide for user updates and maintenance. Table 2 shows the proponents plan in implementing the E-sumbung: Android-based Incident Report Mobile Application project.

<b>Strategy</b>	<b>Activities</b>	<b>Person Involved</b>	<b>Duration</b>
Approval from the Dumingag Police Department	Agreement from the PNP Dumingag and the researchers	PNP Dumingag and the researchers	1 Day
System Designing	Designing of the required System	The researchers	5 Days
System Coding	Coding of the required system	The researchers	10 Days
System Installation	Installation of the required system	The PnP Dumingag, the researchers and the user's	2 Days
Information Distribution	Distribution of the system	The Researchers	2 Days

Table 2. Implementation plan

### **Deployment**

In this Phase, the researchers would find respondents to test the effectiveness of the application if it could function as to the expected outcome.

## Chapter 5

**RESULT, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS****Captured or recorded a video clip of the incidence for quick and easy reporting**

The process on reporting an incident was shown in figure 5.1. If the user witnessed/experienced an incident, clicking the capture photo button or record video button, the user could create a report together with its geo- location, longitude/latitude coordinates, name, address, contact number and description.

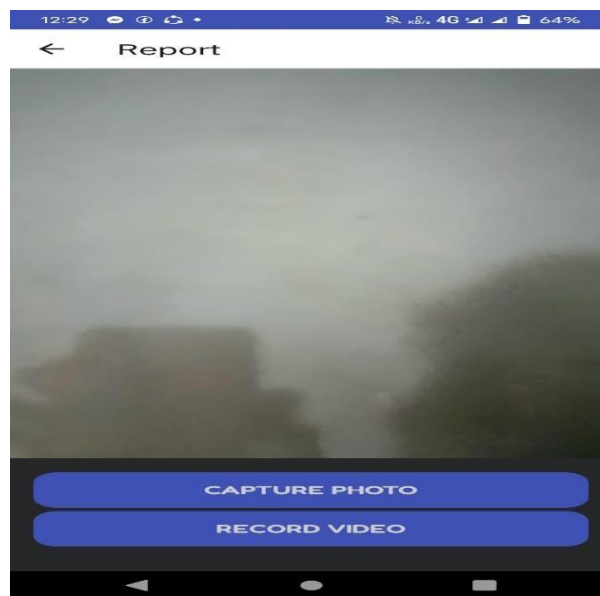


Figure 5.1 Capture Photo and Record Video Buttons

**Pinpointed the location using GPS technology, latitude and longitude coordinates of where the incident happened.**

To locate and verify the reported incident the admin could view the photo or watch the video clip sent by the user, clicking the pinpoint geo-location in which admin could map-out where the incident happened. The admin could also download the image or video sent by the user for storing evidence and print all the printable data such as Description, Name, Address, Date and Time by exporting it into a PDF file. The admin could also check the list of the registered users by clicking the check users' button and also delete a user if they found some anomalies on the particular user.



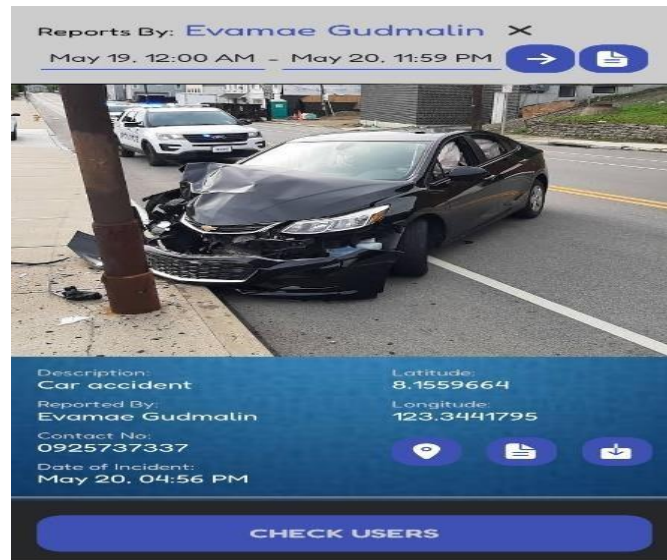


Figure 5.2 Incident Report

### Generated reports on reported incident

The list of reports of the user was shown in Figure 5.3. This was the admin side where all users' reports would be generated and user can generate individually. The report data could be exported to PDF and print the printable data, like description, name of the user, address of the user, contact number of the user and time and date of the incident. The captured photo or recorded video report could also be downloaded to be used as an evidence of the victim if needed.

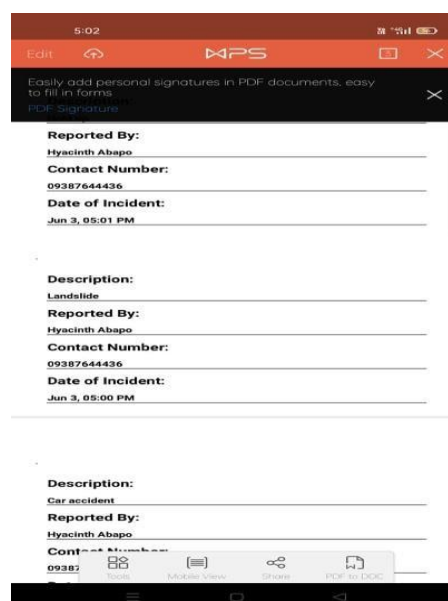


Figure 5.3 List of Reported Incident

## **Conclusion**

Based on the result of continuous study, testing and implementation, the system was able to accomplish its objectives. The researchers were able to create a system that could capture possible incidents that may occur in the community and to report the said incident promptly to authorities. The developed system could send a report using captured images, longitude and latitude coordinates to easily locate the incident, its description details to classify the incident. All data would be stored and generated an amount of reports in case of re-viewing the uploaded reports. And lastly the admin system could also store and generate amounts of reports sent by the users in which allows the admin to review and print those reports.

## **Recommendation**

In the conclusion drawn above, the researcher's offer some recommendation: The users would use the E-sumbong an Android Base incident Report Mobile Application. That the user would utilize data to capture an image or select a picture from the gallery to upload to the admin; and In the future, researchers should include a notification to alert administrators that a report has been forwarded to them, allowing them to become aware of the situation and take appropriate action.

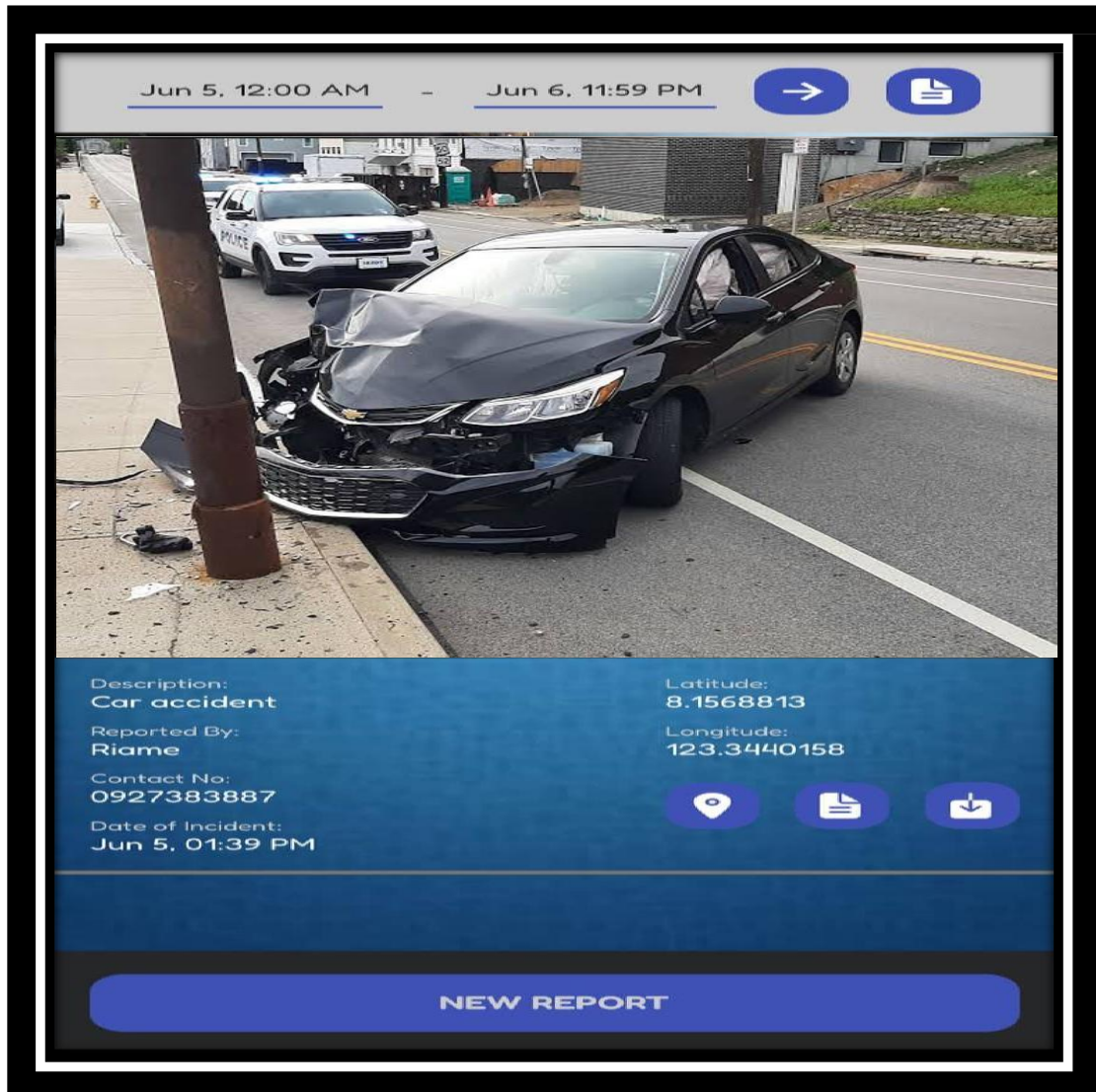


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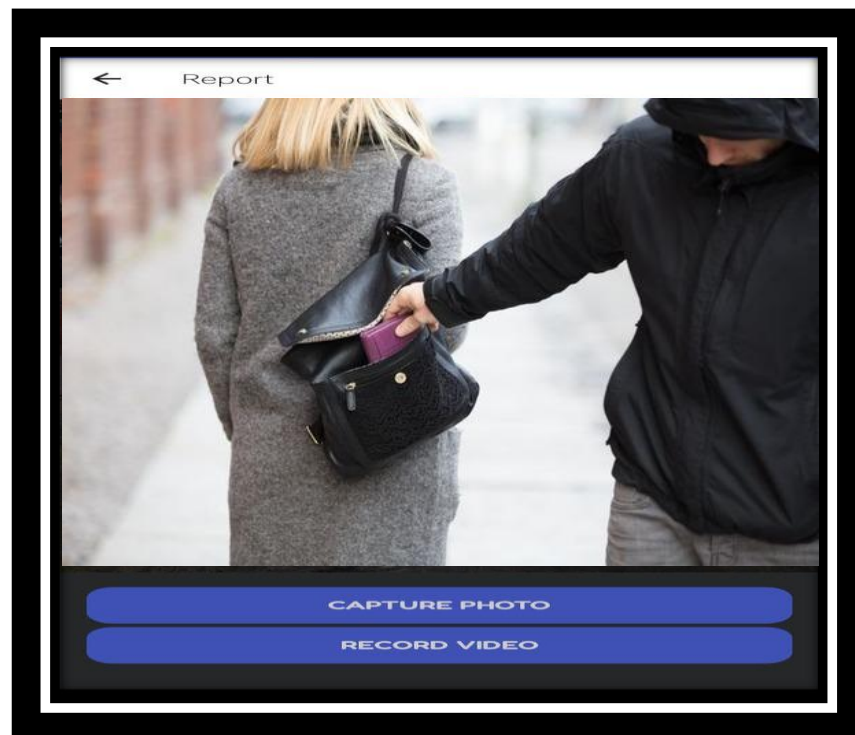
## APPENDIX “A”

### User Design

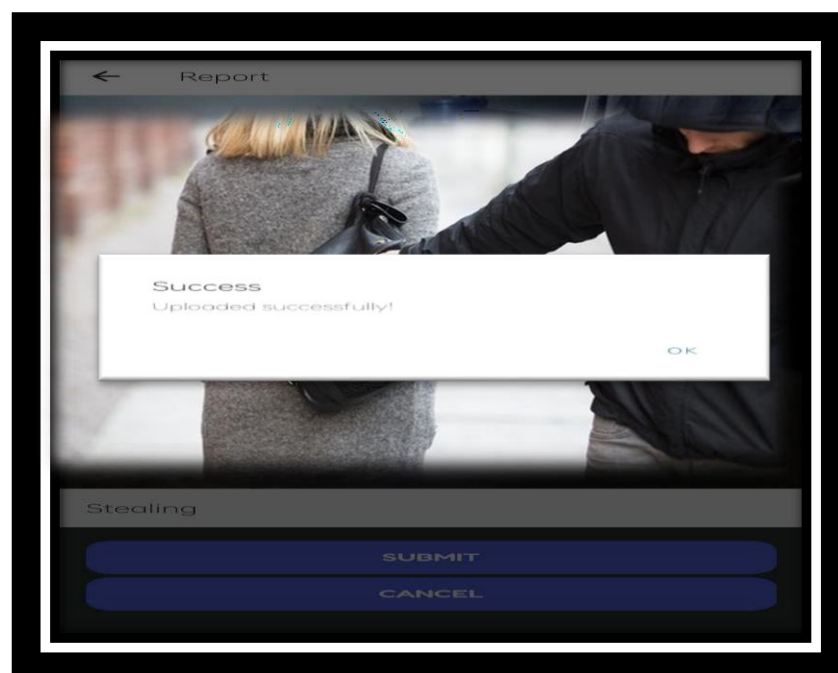


### HOMEPAGE OF USER





CAMERA FOR CAPTURING PHOTO OR RECORDING VIDEO



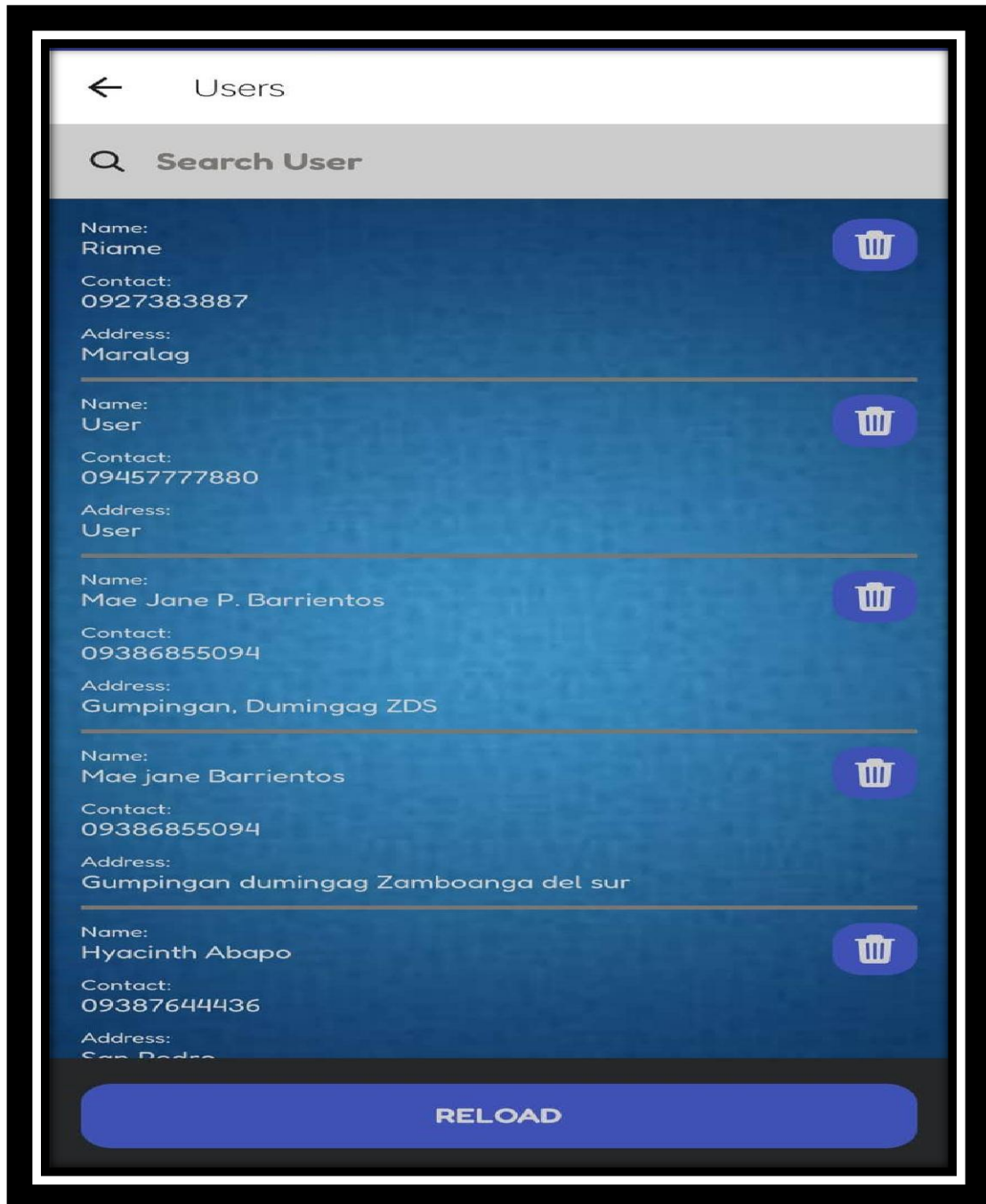
SUBMITTING REPORT

## APPENDIX “B”

### Admin Design



LIST OF REPORTED INCIDENTS BY THE USER



LIST OF REGISTERED USERS



## APPENDIX “C”

### Photo Documentation



RESEARCHERS IS STARTING TO BUILD THEIR APPLICATION.



RESEARCHERS ASKED FOR AN ADVICE FROM THEIR ADVISER  
AND CHECKING OF THEIR MANUSCRIPT.



RESEARCHERS DURING THEIR ORAL DEFENSE.



RESEARCHERS HAVING HARD TIME FIXING THE SYSTEM ERRORS AND RECONSTRUCTING THE MANUSCRIPT.





RESEARCHERS DURING THE FINAL DEFENSE.

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**E-Sumbong: An Android-Based Incident Report Mobile Application**

**E-Sumbong: An Android-Based Incident Report Mobile Application**

## Appendix “D”

### Poster Design



# E-SUMBONG APP





LABRADA, NEGIEL



ABAPO, EPIR JR,



BARRIENTOS, MAEJANE



JOAQUIN, MANILYN

**Introduction:**  
Technology has greatly aided in the betterment of people's daily life basis. People may utilize technology to accomplish their jobs more quickly and easily, as well as interact with their friends and family in an instant, and search for information as quickly as possible. Technology has been employed in both a life saving device and a criminal investigations.

**Objectives:**  
This research aimed to develop a mobile application named E-Sumbong:  
An Android-Based Incident Report Application for PNP Dumingag and it addressed the following specific objectives:

- 1) To capture or record a video clip of the incidence for quick and easy reporting.
- 2) To pinpoint the location using GPS technology, latitude and longitude coordinates of where the incident happen.
- 3) To generate any kind of reported incident.

**Methodology:**  
This study will be using Figure 1 shows the flow of the methods done by the proponents in creating the study.



**Result:**

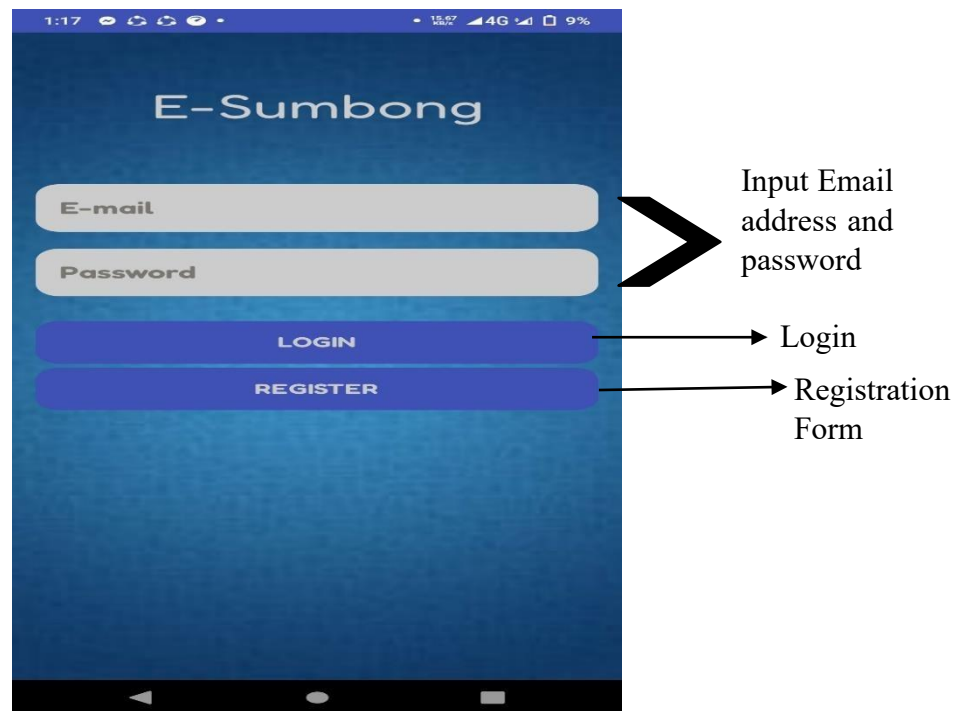


**Conclusion:**  
The developed system can send a report using captured images, longitude and latitude coordinates in order to locate the incident, description in order to classify the incident and can store and generate an amount of reports in case of re-viewing the uploaded reports. And lastly the admin system can also store and generate amounts of reports sent by the user's system in which allows the admin system to review and print those reports.

## APPENDIX “E”

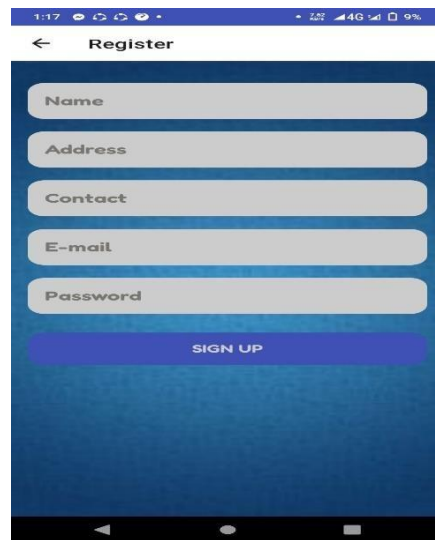
### User’s Manual

#### Home



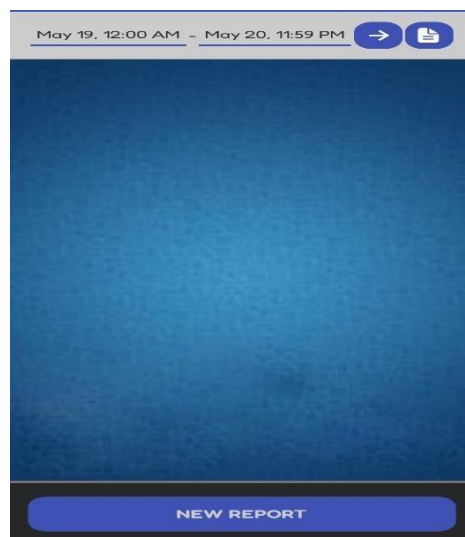
This phase serves as both home and registration and log in form. After registering, users can log in using their email address and password.

## Registration Form

A screenshot of a mobile application's registration screen. The screen has a dark blue background. At the top, there is a status bar showing the time 1:17, signal strength, 4G network, and 9% battery. Below the status bar is a header bar with a back arrow and the text "Register". The main content area contains five white input fields with labels: "Name", "Address", "Contact", "E-mail", and "Password". Below these fields is a blue button with the text "SIGN UP". At the bottom of the screen is a black navigation bar with three white icons: a back arrow, a home circle, and a recent apps square.

In registration form users should input their name, address, contact number, email address and password.

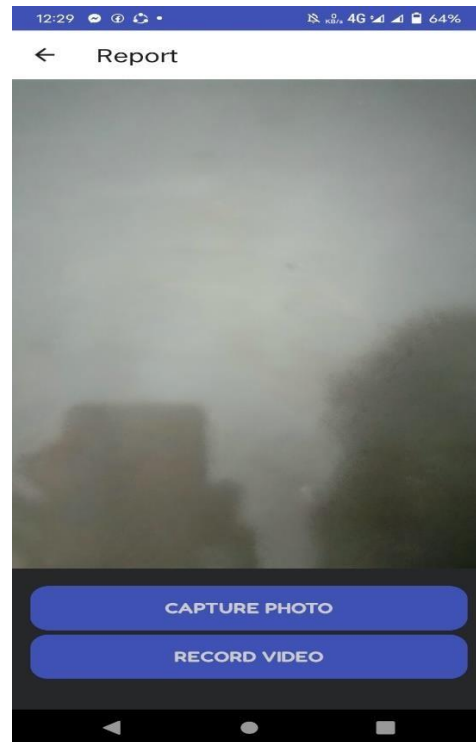
## New Report

A screenshot of a mobile application's "New Report" screen. The screen has a dark blue background. At the top, there is a header bar with a date range "May 19, 12:00 AM - May 20, 11:59 PM", a right arrow icon, and a document icon. The main content area is a large, empty dark blue rectangle. At the bottom of the screen is a blue button with the text "NEW REPORT".

To proceed in the camera phase click new report button.

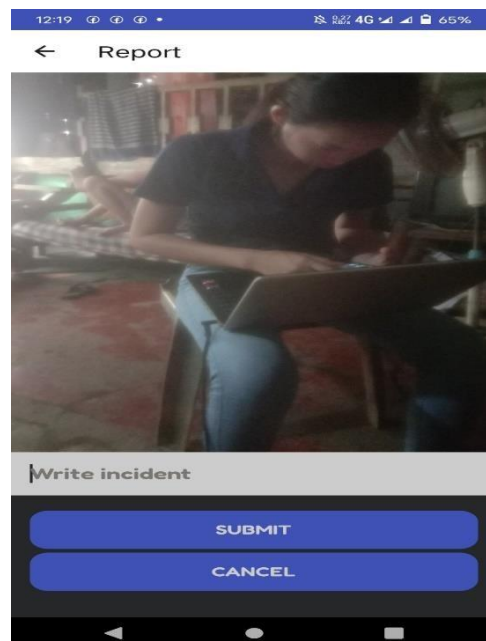


## Camera



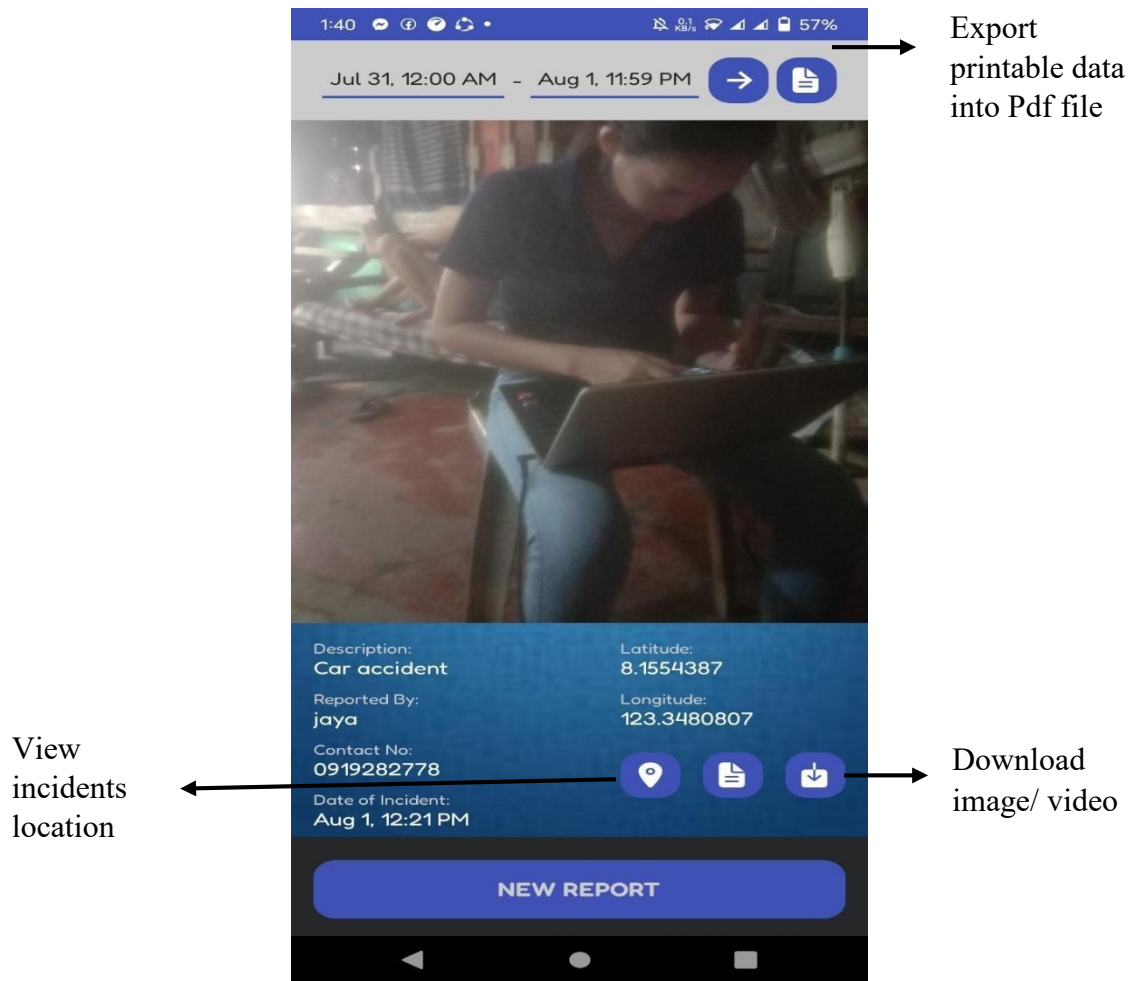
In order to capture the any incidents click capture photo and if users want to record a video click record video.

## Sending Report



After capturing or recording write a description what kind of incidents that happened and then submit.

## List of Reports



In this phase, list of submitted reports of the user displayed above New Report button. Consist of the personal information of the sender, date and time and the location of the incidents. Users can download captured photos and recorded videos as well as export all printable data.

