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REPORT CRIME

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This Project report has been submitted in fulfillment of the requirements for the Degree of Bachelor of Science in Software Engineering.

APPROVAL

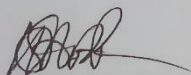
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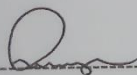
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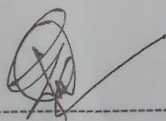
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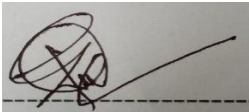
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DECLARATION

I hereby declare that, this project has been done by me under the supervision of **Md. Rajib Mia, Lecturer, Department of SWE, Daffodil International University**. I also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

Supervised By:



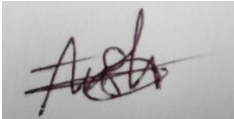
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PROJECT SUMMARY

REPORT CRIME is an online crime reporting website which allows civilians to report any type of crimes instantly. A civilian needs to be registered to be able to report any crime. Civilians are able to contact with the police assigned to the crime, also civilians are able to contact with the Headquarters. A registered civilian is also able to see updates of the reported crime. Police can also login to see which crimes are assigned to him and give updates and contact the person who reported the crime by entering the police id which will be assigned to him during email verification. Police can also contact with the Headquarters. Those who log in as Headquarters personnel are able to see the total civilians and police registered in the website, all registered and solved crimes list, all conversation between police and the crime reporter. REPORT CRIME is an example of Laravel Framework. It is built with php, HTML, CSS and Blade.

**KEYWORDS: BACKEND, FRONTEND, WEB DEVELOPING,
WEB DESIGNING, FULL STACK WEB DEVELOPMENT, LARAVEL, PHP, HTML, CSS.**

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Chapter 1

Introduction

Crime is a day to day issue in our life. We see and hear many crimes happening around us. Irony is that the number of crimes happening around us is huge than the number of crimes reported, some crimes get neglected and the victim doesn't receive any justice. To report every crime that is happening around us in this digital era, I thought of reporting crimes by digital means.

In this digital era we are bound to have a smart phone or a laptop with us to live our day to day life. An online mean of reporting crime can come very handy to civilians. Also keeping up with updates of the reported crime, contacting with assigned police by digital means can also be a blessing.

Report Crime is a website where a registered civilian can be able to report crimes online. All updates of the crime can be provided on the website. Those who are registered as police can view the crime list that he or she is assigned to, give updates to these reports. Registered users have access to his or her own profile. Users both civilian who reported the crime and police who is assigned to the crime can be able to see each others profile and contact with each other for more information. All user information can be accessed if logged in as headquarter personnel. Only the headquarters personnel can be able to add more users as headquarters personnel. All crime related information can be accessed by headquarters. Basically headquarters play the role of admin in Report Crime.

1.1 Background Study

We analyzed many crime reporting websites for the gaining background knowledge of our study. The crime reporting websites that we considered are Internet Crime Complaint Center[1], Action Fraud [4], Report Cyber Crime Online[2], Bangladesh Police[3] etc. We got what functionality that we should consider and the designing for our website and how to design the ERD from our background study.

1.1.1 Overview of Internet Crime Complaint Center

- Anyone being a victim or trying to help a victim of cyber crime can file a complaint.

- No need for registration for reporting crime.
- Cannot contact with police online through the website, need to call the local FBI.

1.1.2 Overview of Report Cyber Crime Online

- Website for reporting cyber crime.
- Needs log in and registration.
- Can email to the authorized members of that location for reporting crime through website.

1.1.3 Overview of Bangladesh Police

- Can see the information of authorized police members in different fields.
- Cannot report crime online through the website.

1.1.4 Overview of Report Crime

- Can report any crime, not necessary that the crime have to be a cyber crime.
- Only registered members can register a complaint.
- Crime Reporter can be able to get updates of reported crime.
- Police can be able to view assigned crime information and the profile of the civilian who reported the crime.
- Police and Civilian are able to contact with each other through the website.

1.2 Purpose of the Project

Crime is a common scene in Bangladesh. But reporting crime is very much of a hard work, one has to be physically present in a police station to report a crime. So the purpose of this study is to give people of Bangladesh a digital way of reporting a crime. I think this Report Crime website may come very handy when it comes to reporting crime and keeping update with the reported crime until solved. Report Crime also allows to contact online with police or civilian through the website.

1.3 Project Scope

Report Crime can be very helpful when it comes to developing web application, it is an example of web engineering. Building these type of projects helps to gain knowledge in the fields of web engineering. Not only that report crime helped us gain information about how a crime reporting website should function. Report Crime is a good example for learning and gaining technical experience.

1.4 Stakeholder

There are three stakeholders for this project-

- Civilian
- Police &
- Headquarter Personnel

1.5 Project Schedule

The intended project schedule is given below-

Activities	Duration (in week)	Total week
Brainstorming	Week-1, Week-2	2
Problem identification	Week-2, Week-3	2
Requirement analysis	Week-4	1
Sketching	Week-5	1
Design specification	Week-6, Week-7	2
Database design	Week-8	1
Implementation	Week-9, Week-10, Week-11, Week-12	4
Testing	Week-13, Week-14, Week-15	3
Delivery	Week-16	1

Figure 1.1: Project Schedule for Report Crime Website

1.6 Preliminary Knowledge

- **Web Engineering:**

Web Engineering is the application of systematic, disciplined and quantifiable approaches to development, operation, and maintenance of Web-based applications[5]. It is the heart and soul when it comes to developing a web application. Web Engineering doesn't mean just developing a web application rather it ensures the deployment, update and evolution of any web project.

- **PHP:**

PHP is a popular general-purpose scripting language that is especially suited to web development[6].

PHP is fast, flexible and pragmatic. It allows to develop powerful websites like e-commerce websites, blog websites etc.

- **Laravel**

Laravel is a web developing framework that uses php language. A web framework provides a structure and starting point for creating your application, allowing you to focus on creating something amazing while the developers of the framework sweat the details[7]. Laravel works on MVC or Model, View and Controller approach.

Chapter 2

Requirement Analysis

Requirements analysis, also called requirements engineering, is the process of determining user expectations for a new or modified product[8]. It basically means gathering the features of developed application. Here, requirement mainly refers to the features of any application. The features of our web application can be divided in two parts.

2.1 Functional Requirement

Functional requirement means the features that define the project. These are the requirements that are bound to be on the project. We considered functional requirements of this project by considering the users of the projects. There are three type of users in this project, Civilian, Police and Headquarters.

The functional requirements for every user for this project is given below:

2.1.1 Functional Requirements for Civilians

- The website should be able to log in and register civilians.
- The website should send a verification email after registration.
- Only verified civilians can be able to register complaint.
- Registered civilian will be provided with a profile.
- Registered civilian will be able to add profile picture also change the profile picture.
- Registered civilian can edit given information.
- Registered civilian can be able to report crime.
- Registered civilian will be able to get updates of registered crime.
- Registered civilian can be able to view profile of assigned police.

- Registered civilian can contact with assigned police by messaging.
- Registered civilian can contact with headquarters.
- Registered civilian's dashboard contains the list and information about reported crime from that civilian.
- Registered civilian can check inbox for viewing new or old received messages and sent message list.

2.1.2 Functional Requirements for Police

- The website should be able to log in and register police.
- The website should send a verification email after registration.
- Police registration will also send a police id to given police email.
- Only verified police with police id can be able to gain access to website.
- Registered police will be provided with a profile.
- Registered police will be able to add profile picture also change the profile picture.
- Registered police can edit given information.
- Registered police will be able to view the crimes information that are assigned to him or her.
- Registered police can give updates to assigned crimes.
- Registered police can see profile of the civilian who reported crime.
- Registered police can contact with civilian.
- Registered police can contact with headquarters.
- Registered police can view all complaints assigned to him or her in dashboard.
- Registered police can check inbox for viewing new or old received messages and sent message list.

2.1.3 Functional Requirements for Headquarters

- Plays the role of admin.
- Headquarter can only register new headquarter personel.
- Headquarters dashboard has the list of all users.
- Headquarters can view all civilians and all police list.
- Headquarters can view total users, total civilians and total police with count.

- Headquarters can view all reported crimes and their information.
- Headquarters can assign police to reported crime and give update.
- Headquarters can receive message and send message to both civilian and police.
- Headquarters can check inbox for viewing new or old received messages and sent message list.
- Headquarters can edit information or profile picture of both civilian and police.
- Headquarter personnel also gains accessibility of own profile.

2.2 Non Functional Requirement

These are requirements that specify criteria that can be used to judge the operation of a system. Non-Functional Requirements such as usability, performance, reliability etc usually specify the characteristics of the system as a whole.

Our system has the following non-functional requirements:

- Usability: Can run from any kind of Operating System which has a browser and required dependencies of php.
- Security: Requires password to open an account. Also to log in as police one needs given police id.
- Performance: The system is well optimized.

Chapter 3

Feasibility Study

A feasibility study is an analysis that considers all of a project's relevant factors—including economic, technical, legal, and scheduling considerations—to ascertain the likelihood of completing the project successfully[9]. The feasibility study for this project is given below:

- **Technical Feasibility:**

For using this application a user needs a personal computer with following specification like

-

Processor: Intel Dual Core(or above)

RAM: 1GB(min)

Hard Disk: 128GB(or above)

- **Resource Feasibility:**

A user must have a laptop or desktop with active internet connection.

- **Financial Feasibility:**

Although the system will follow freeware software standards and no costs will be charged from potential users, a user has to pay his or her internet bill so this can be considered as financial feasibility for this system.

Chapter 4

Use Case Diagram Design

4.1 Civilian Use Case

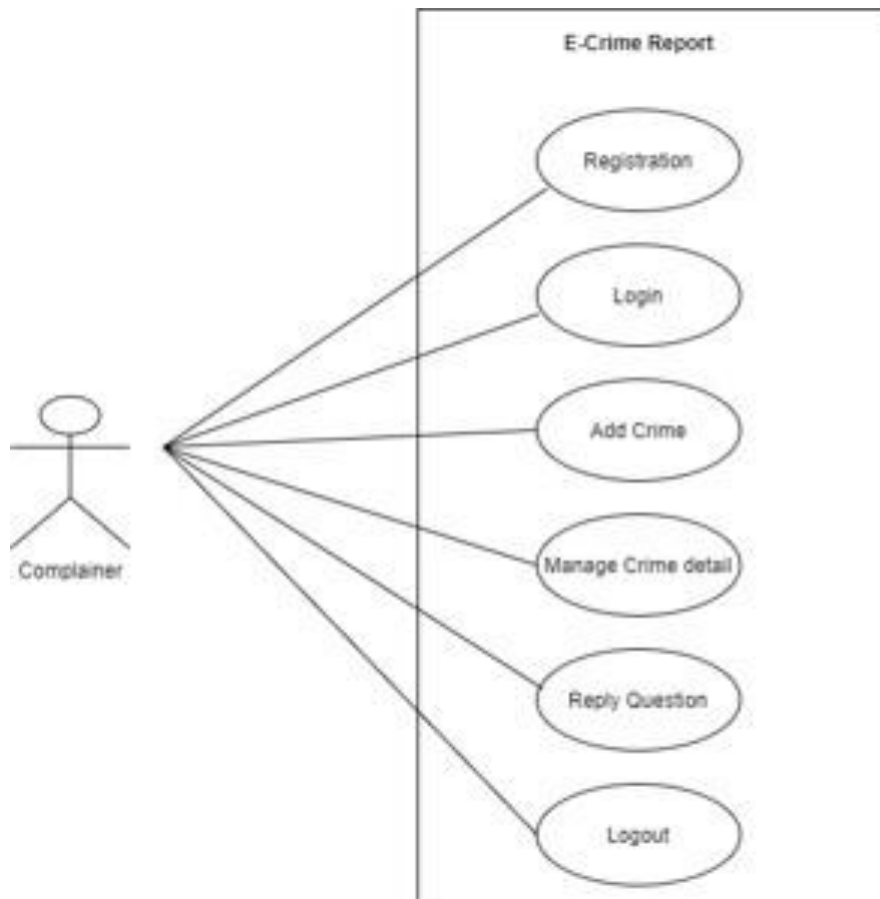


Figure 4.1: Use Case Diagram of Civilian

4.2 Police Use Case

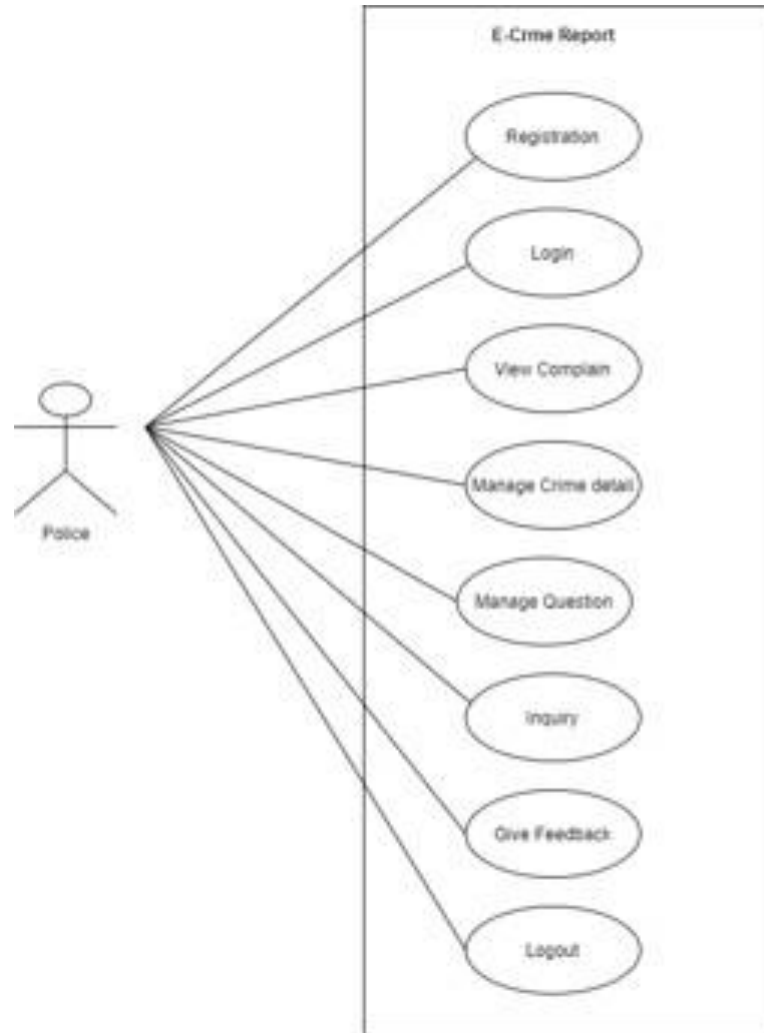


Figure 4.2: Use Case Diagram of Police

4.3 Headquarter Use Case

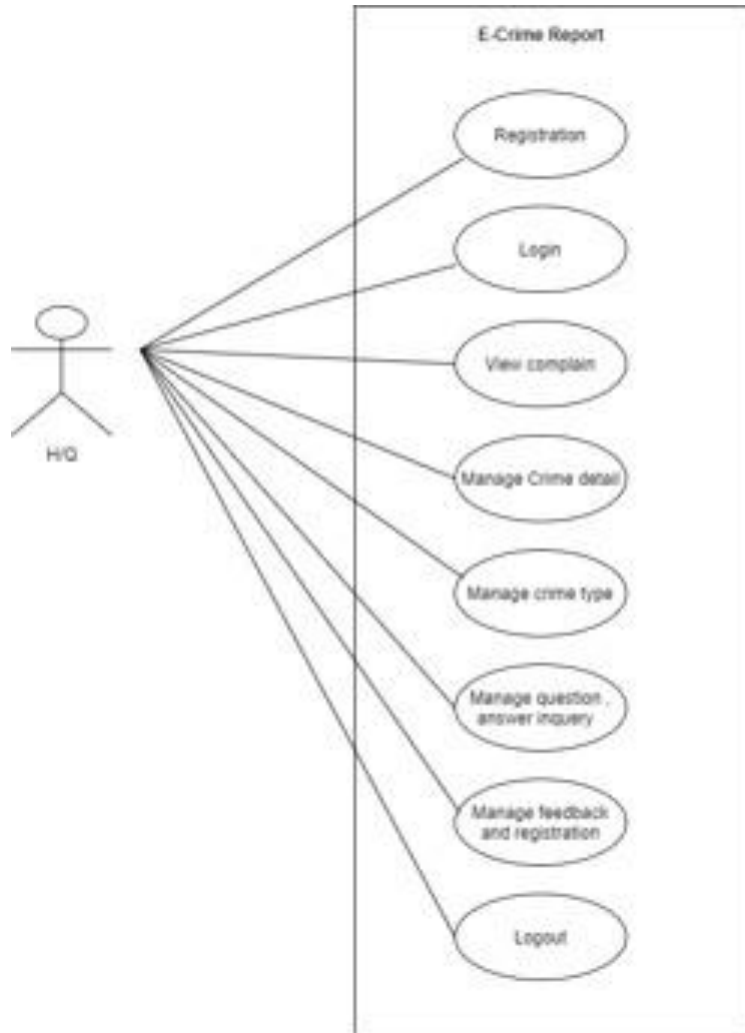


Figure 4.3: Use Case Diagram of Headquarters

Chapter 5

Activity Diagram Design

The ER Diagram of this project is shown below:

5.1 Civilian Activity Diagram

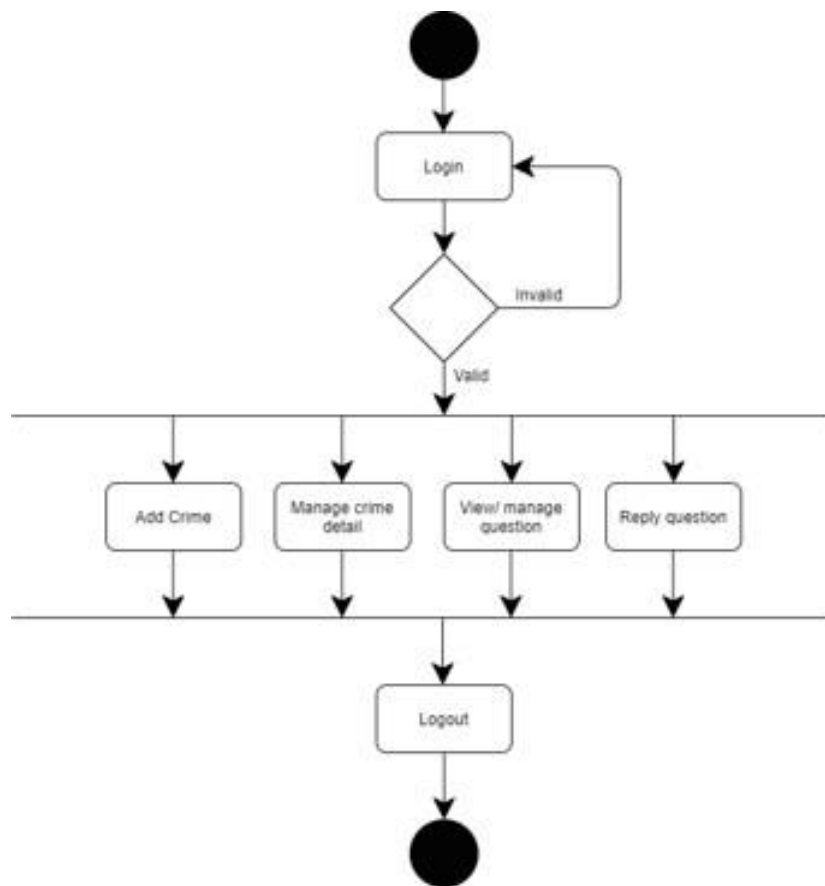


Figure 5.1: Activity Diagram of Civilian

5.2 Police Activity Diagram

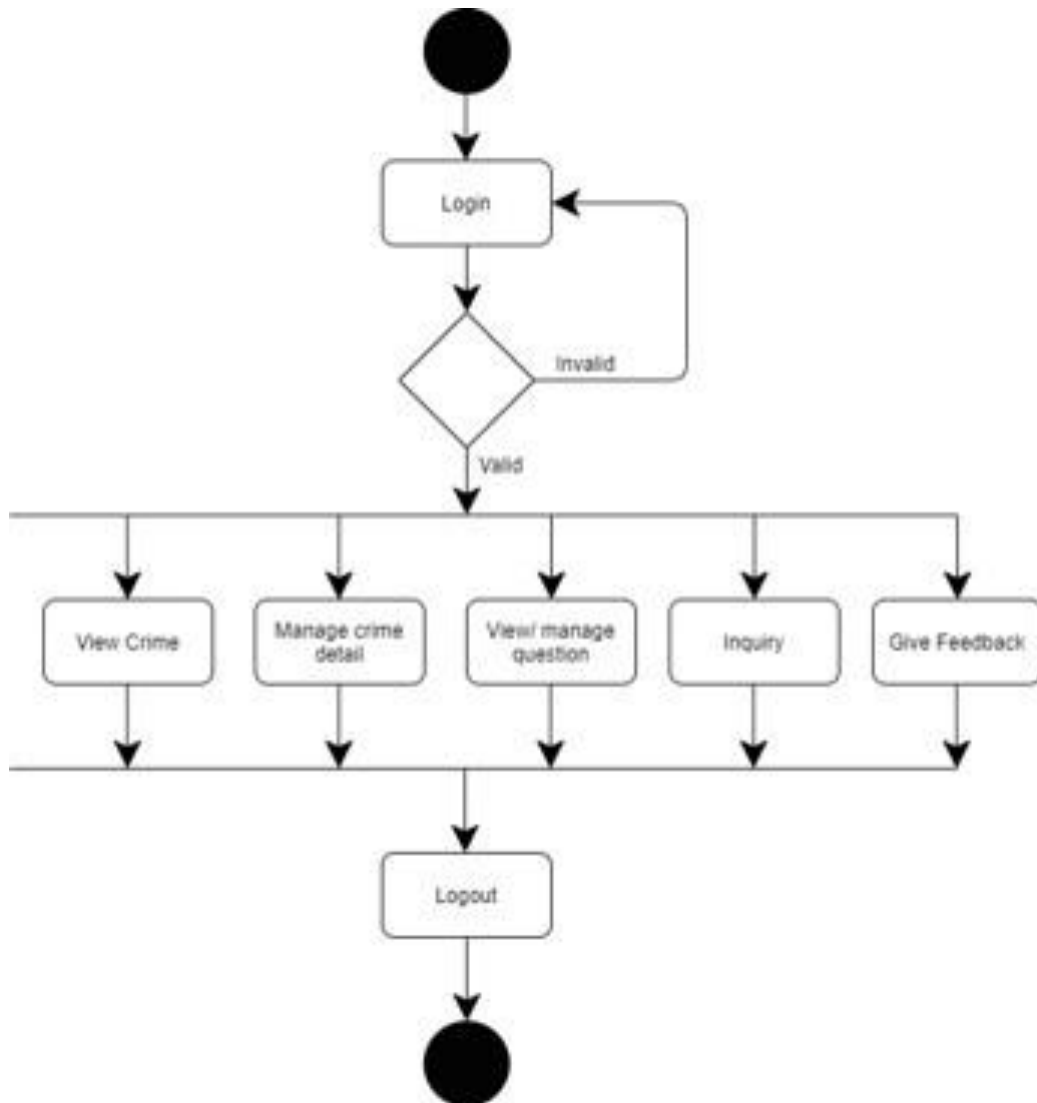


Figure 5.2: Activity Diagram of Police

5.3 Headquarters Activity Diagram

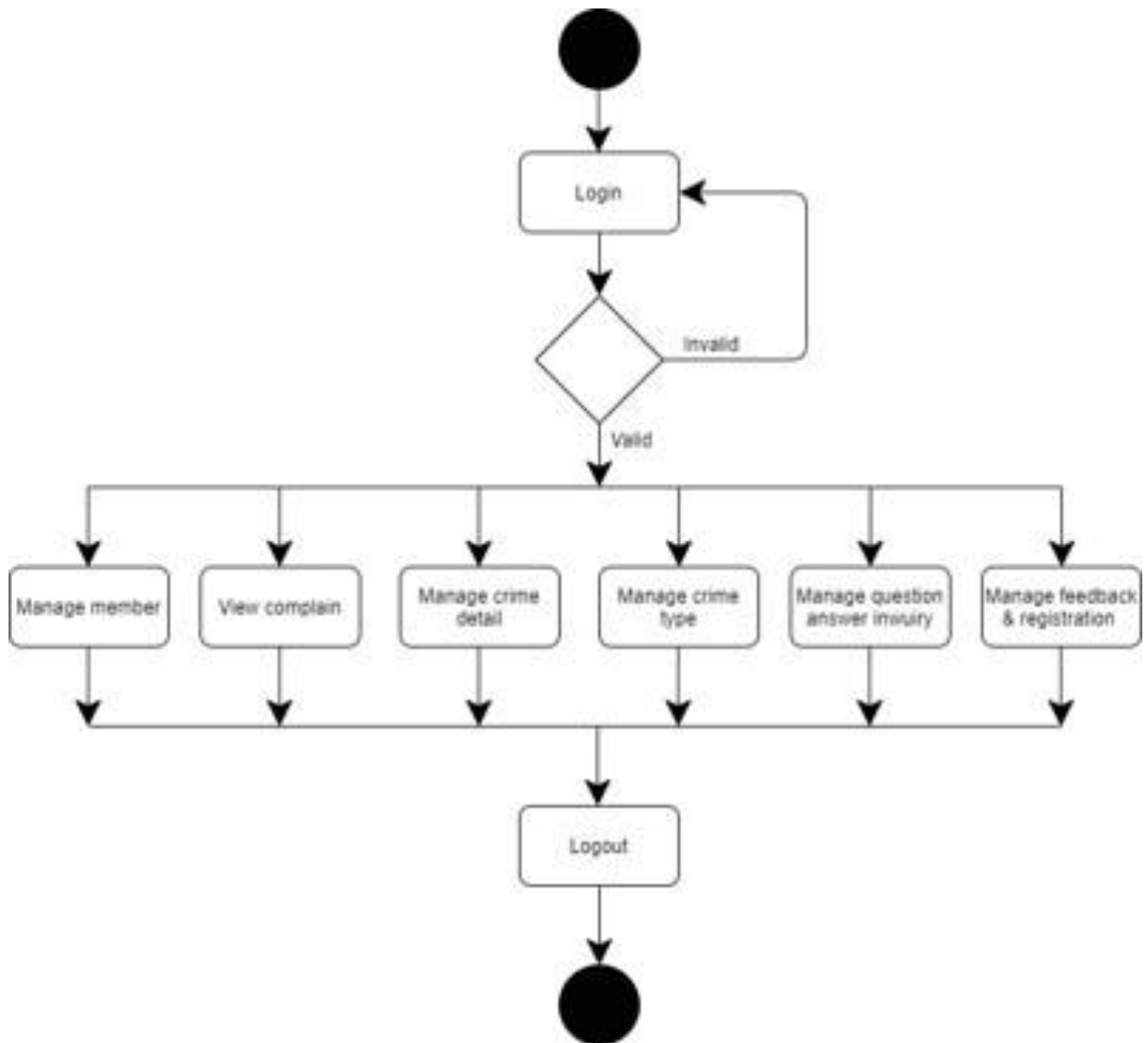


Figure 5.3: Activity Diagram of Headquarters

Chapter 6

Data Flow Diagram Design

6.1 DFD Level 0 Diagram

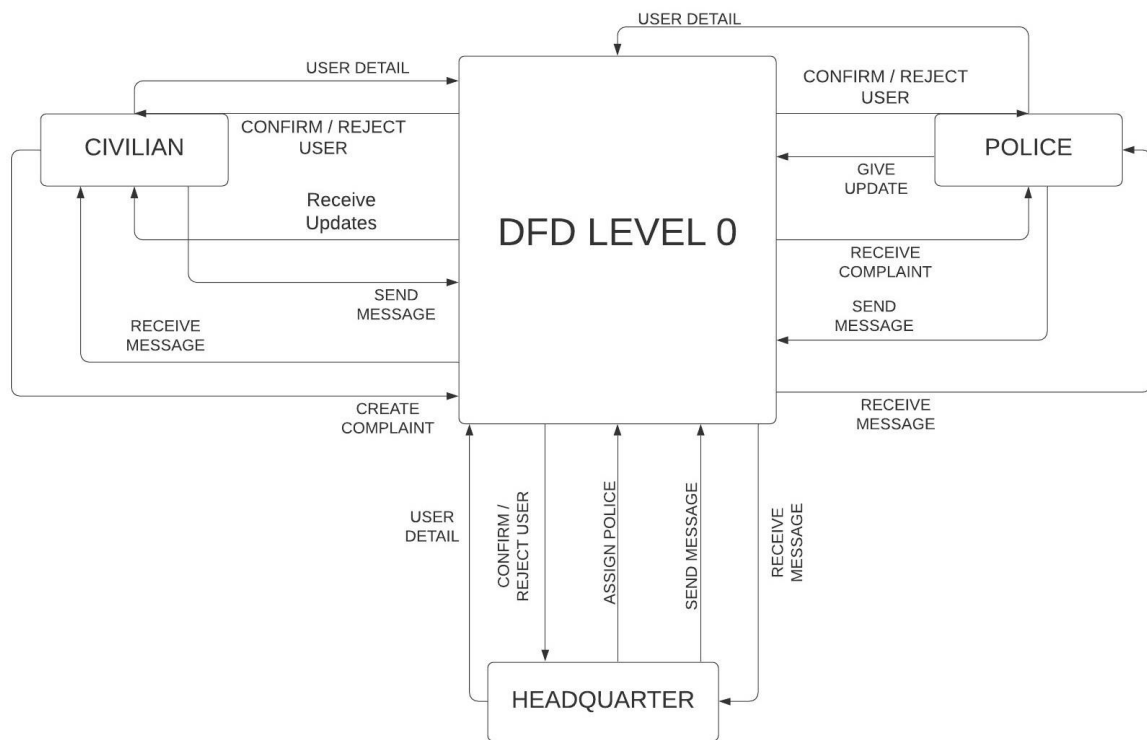


Figure 6.1: Level 0 DFD Design

6.2 DFD Level 1 Diagram

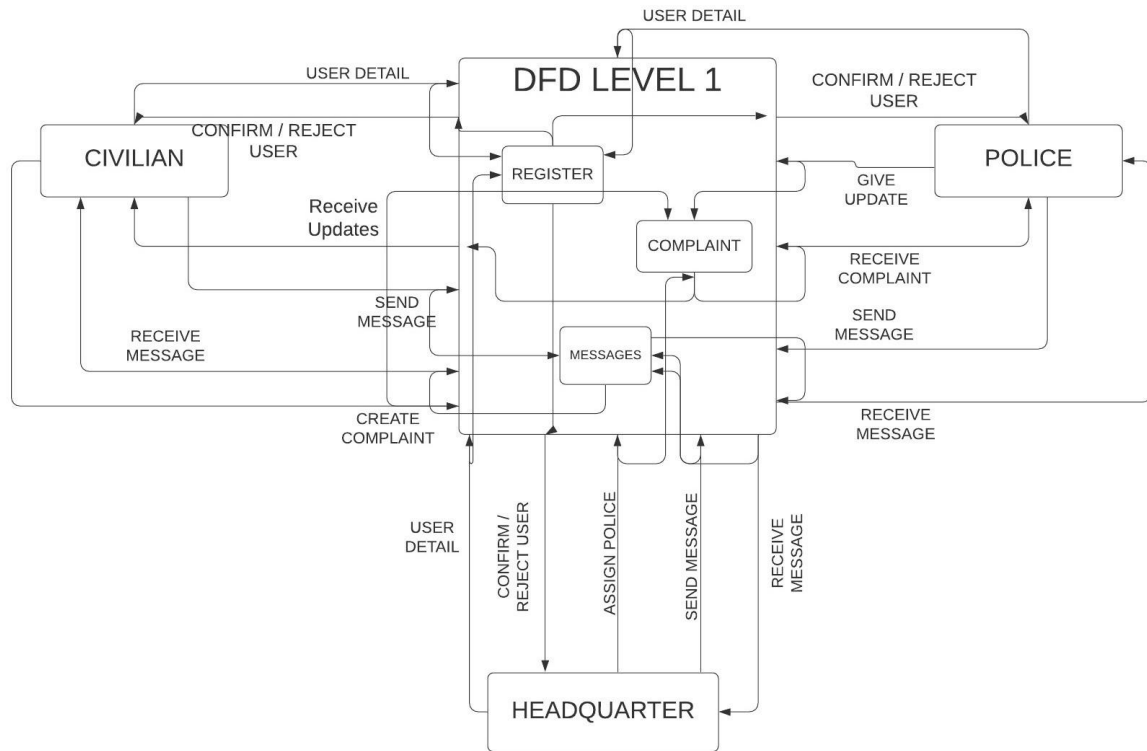


Figure 6.2: Level 1 DFD Design

Chapter 7

Class Diagram

The class diagram of this project is shown below:

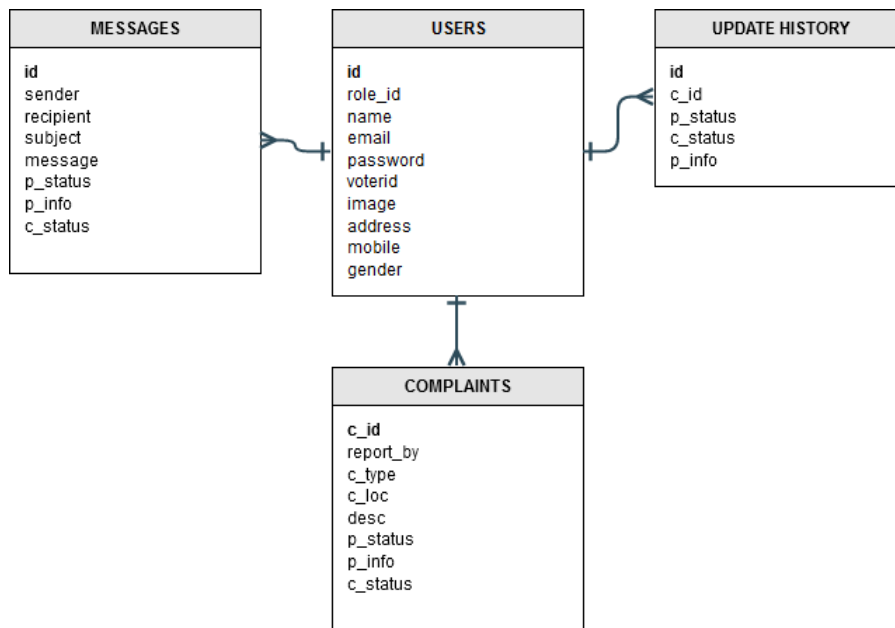


Figure 7.1: Class Diagram of Report Crime

Chapter 8

ER Diagram Design

Database Schema:

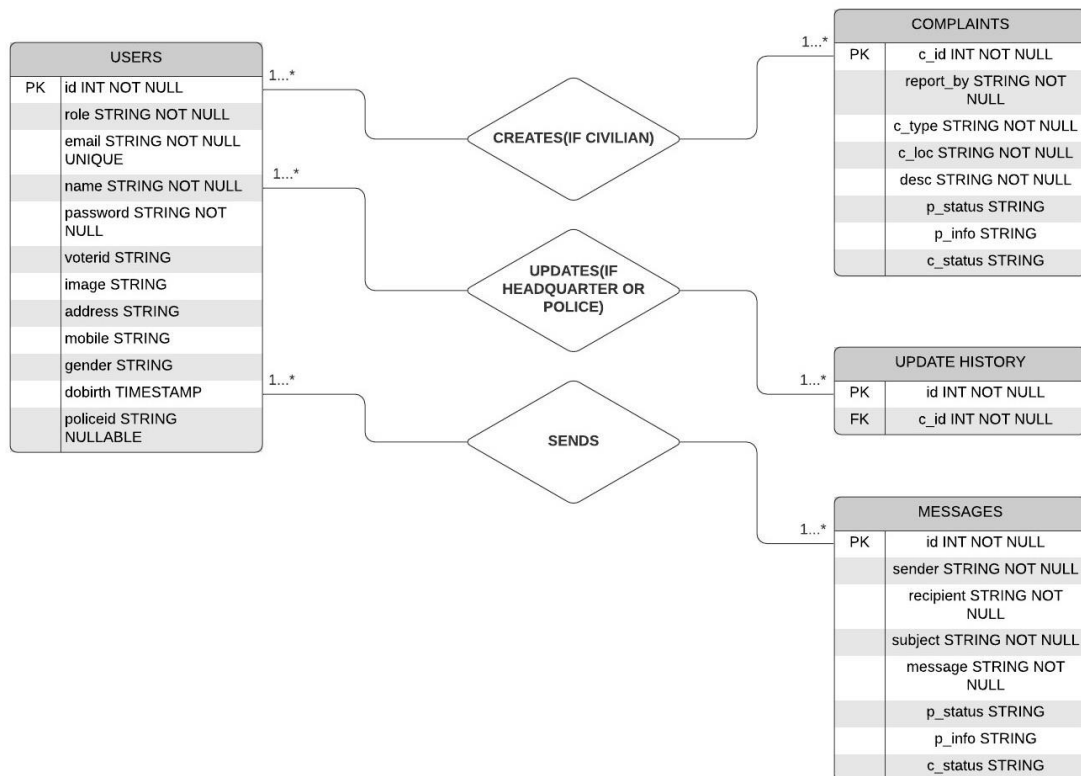


Figure 8.1: Schema of Report Crime

ER Diagram:

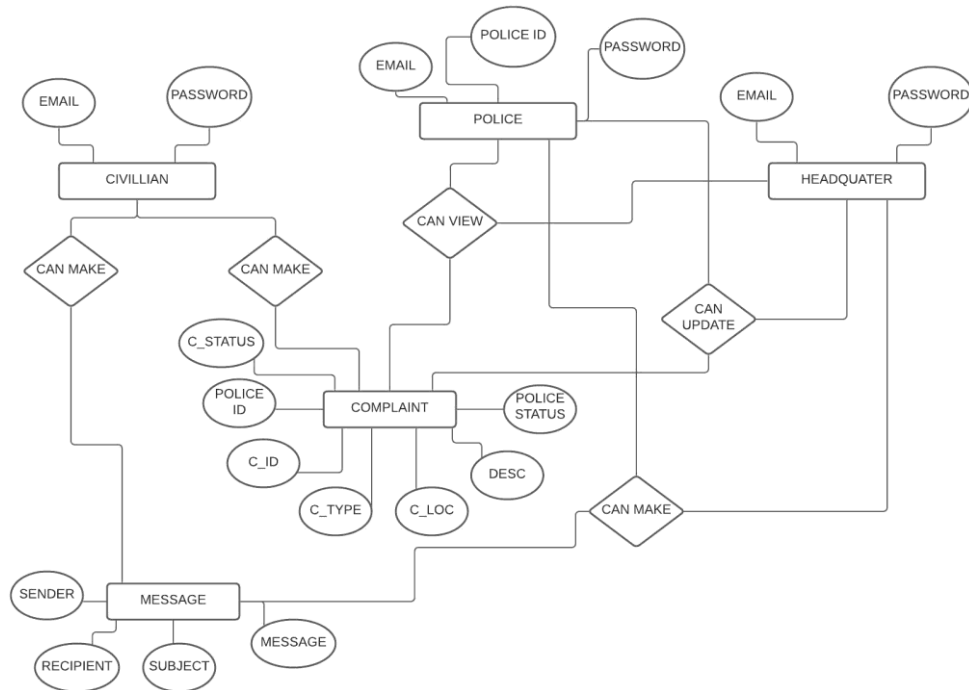


Figure 8.2: ERD of Report Crime

From the above figure we can see any user who is a civilian can be able to create complaints. On the other hand any user who is police or headquarters personnel can be able to edit complaints and give update for that specific complaint. All users can send and receive messages.

Chapter 9

User Interface

9.1 Index Page



Figure 9.1: Report Crime Website

9.2 Sign Up Page

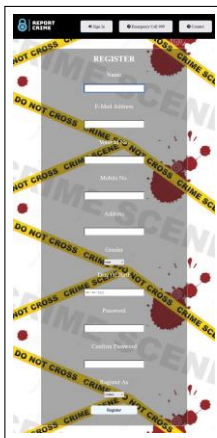


Figure 9.2: Sign Up Page

9.3 Sign In Page

The above figure 9.4 shows civilian login page.



Figure 9.3: Sign In Page



Figure 9.4: Civilian Sign In Page

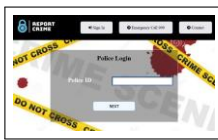


Figure 9.5: Enter Police ID Page

The above figure 9.5 shows when a police tries to log in to account he or she must enter a police id.



Figure 9.6: Police Sign In Page

The above figure 9.6 shows police login page.



Figure 9.7: Headquarter Sign In Page

The figure 9.7 shows headquarter login page.

Contact Page



Figure 9.8: Contact Page

The Figure 9.8 shows the contact page of Report Crime website.

9.4 Footer



Figure 9.9: Footer of Report Crime Website

The Figure 9.9 footer part of Report Crime Website.

9.5 Civilian Interface



Figure 9.10: Registered Civilian Dashboard

The civilian dashboard is quiet user friendly. A user is able to go to his profile or make a new complaint or show all his reported complaints from his dashboard. In the Figure 9.11 below we can see complaint register page where civilian can report crimes like robbery, cyber-crime, violence etc. All they need is to insert the required fields to register any complaint.



Figure 9.11: Complaint Register Page



Figure 9.12: Civilian Complaint List

The above Figure 9.12 shows the list of all the complaints registered by this account. We can see that we are able to see the update history and assigned police details of each registered complaint.



Figure 9.13: Civilian Registered Complaints Update History

The above Figure 9.13 shows the update history of specific registered complaint to the specific user.

Now in the Figure 9.14 below we see the profile page of civilian user. We can also see that the user is able to edit his or her profile information and also show his or her inbox.

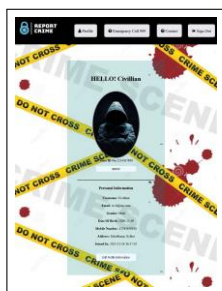


Figure 9.14: Civilian Profile Page

The above figure shows that the website allows users to change certain information also user can change his or her profile picture.



Figure 9.15: Edit Profile Page

From the profile page we saw we can go to the inbox of a certain user. The Figure 9.16 below shows us the inbox of a user. We see that we can be able to see the received message list and also if we want we can see the whole message by clicking show details. Also a user can be able to go see the list of sent messages by clicking the sent message button.



Figure 9.16: Inbox Page



Figure 9.17: Message Details Page

The Figure 9.17 shows the detailed message. And in Figure 9.18 we see the list of sent messages from this account.



Figure 9.18: Sent Message Page

9.6 Police Interface

The Figure 9.19 below shows the dashboard of registered police user. We can see that it is much like the civilian dashboard with a link to profile page where police can be able to access inbox and edit profile information pages for logged in account and contact page, but a registered police user

can show the details of the latest crimes assigned to him and is able to see the list of all the crimes assigned to this police account.



Figure 9.19: Police Dashboard

The figure below shows all the assigned complaints list to the police account. We can see police can give update, show details and show the complainer of each complaint.



Figure 9.20: Police Assigned Complaints List



Figure 9.21: Police Giving Update to Specific Complaint

In the Figure 9.21 we see police can give update to complaints.



Figure 9.22: Complaint Details with Updates

In the Figure 9.22 we see the details of registered complaint with all update histories. Also in Figure 9.23 we see the profile of civilian because when police presses show complainer button it links to the profile of the person who registered the complaint in this case Civilian, so

that police can be able to contact with the complainer for more information. Any civilian user can also show police information this way.



Figure 9.23: Complainer Details

9.7 Headquarters Interface



Figure 9.24: Headquarters Dashboard

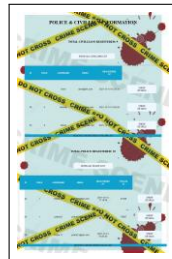


Figure 9.25: Headquarters Dashboard



Figure 9.26: Headquarters Dashboard

The Figures 9.24, 9.25 and 9.26 altogether shows the headquarters dashboard. We see from the headquarters dashboard a headquarters personnel can see total users list and also create a new user. Also can be able to see total civilians and police accounts separately, and can be able to see all the registered crimes reported to the website and also could see the total solved crimes count. Headquarters can also see all the messages list but can not edit any message information whereas headquarters personnel can be able to edit necessary profile information like voter id number, date of birth of a civilian or police user. So if any user inserts incorrect date of birth he or she can contact with headquarters to change that information.



Figure 9.27: Headquarter Personnel Creating New User

In the above figure we see that a headquarter personnel can be able to create new user from headquarter dashboard, In Figure 9.27 we see there is a field Role ID, this role id determines whether a user is civilian or police or headquarter personnel. If any headquarter personnel enters an id value of 2 the registered user will be a headquarter personnel, on the other hand 0 means civilian and 1 means police.

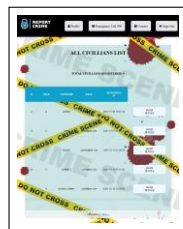


Figure 9.28: All Civilian List



Figure 9.29: All Police List

The above Figure 9.28, shows all the civilians list and Figure 9.29 shows all police list. The show details button links to the profile of each user. In the Figure 9.30 we see that a headquarter

personnel can see inbox of a user and edit personal information like we saw before, also he or she can edit basic information like voter id or gender or date of birth and also can delete the user account.

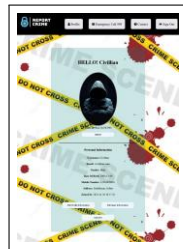


Figure 9.30: Headquarter Personnel Viewing User Profile

The below Figure 9.31 we see that after clicking Edit Basic Information of an individual user profile headquarter personnel can be able to edit basic information of that account.



Figure 9.31: Headquarters Editing Basic Information of a User Account



Figure 9.32: All Registered Crime List

The figure above shows all the crime list to the headquarters personnel. The show details button shows the details of the registered crime. In Figure 9.33 we see that when a headquarter personnel views the details of a crime he or she is able to assign police to the specific crime.



Figure 9.33: Headquarter Personnel Viewing Crime Details



Figure 9.34: Headquarter Personnel Assigning Police to registered Crime

The above figure shows the interface where a headquarter personnel is assigning police to a registered complaint. We can see that headquarter personnel is also able to change the crime status or give update to the registered complaint.

Chapter 10

System Testing and Development

10.1 Registration

10.1.1 Civilian Sign Up



Figure 10.1: Civilian Registration

In the above figure we see that civilian can easily insert all required fields for registration.

10.1.2 Police Sign Up



Figure 10.2: Police Registration

In the above figure we see that police can easily insert all required fields for registration.

10.2 Email Verification

10.2.1 User Email Verification

After clicking the submit button in register page any type of user will get a email verification mail like the image below.

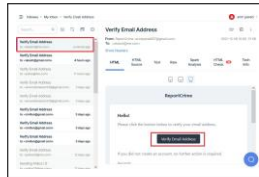


Figure 10.3: User Email Verification

10.2.2 Sending Police ID

When it comes to police registration a police will also receive another mail with verification email which will contain the police id.

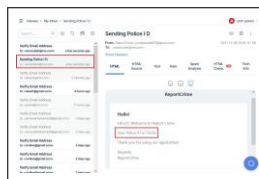


Figure 10.4: Police Receiving Police ID

10.3 Login

Successful Civilian Login



Figure 10.5: Civilian Login

From the above pictures we see a civilian can enter information and log in after email verification.

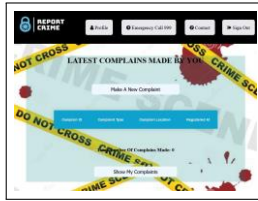


Figure 10.6: Successful Login

10.3.1 Successful Police Login



Figure 10.7: Police Required to Enter Police ID



Figure 10.8: Police Login



Figure 10.9: Successful Police Login

From the above figures Figure 10.7, Figure 10.8 and Figure 10.9, we can see a registered police after email verification can log in to his account by inserting the police id that was provided during registration and by inserting the login information.

10.3.2 Headquarter Login

From the above figures we see headquarter personnel also can log in easily to his account.



Figure 10.10: Headquarter Login



Figure 10.11: Successful Headquarter Login

10.4 Create Complaint



Figure 10.12: Civilian Tries to Register a Complaint



Figure 10.13: Complaint Registered

Successfully From the figures we see civilian can successfully register complaint.



Figure 10.14: Latest Registered Complaint Shown in Headquarter Dashboard



Figure 10.15: Headquarter Viewing Details of Crime

10.5 Headquarters Assign Police to Registered Complaint

From above figures we see any registered complaint is shown in headquarter dashboard and headquarter personnel can view the details of crime. Now we see there is a button called "Assign Police" which will let the headquarter personnel to assign a police id to that specific registered crime.



Figure 10.16: Headquarter Assigning Police and Giving Update

10.6 Police Give Update to Assigned Complaint

The above figures shows that when headquarters assign a police to a registered crime the crime details is shared with that police. Police can give updates regarding that crime.

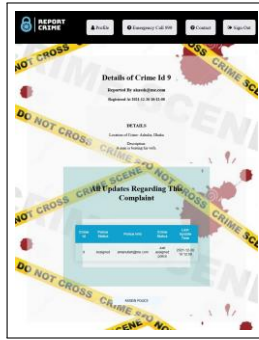


Figure 10.17: Headquarter Assigned Police



Figure 10.18: Complaint that was Assigned to Police is Shown in Police Dashboard



Figure 10.19: Assigned Complaint Details Shown to Police



Figure 10.20: Police Give Update to Assigned Complaint

10.7 Civilian Receive Complaint Update

We can see from the above figure that all the updates regarding to this complaint can be viewed by civilian.



Figure 10.21: Police Given Update Saved

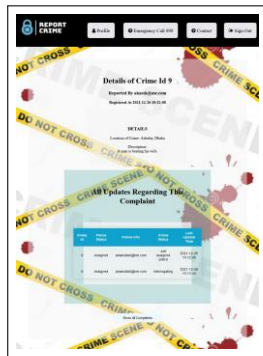


Figure 10.22: Complaints Update are shown to Civilian

10.8 Users Contact With Each Other

Now as we know Civilians and Police can send messages to one another. Let us see an example, After the civilian viewed the update history of registered complaint he now can see who the assigned police is, and get his email id. In the contact page if we enter the email id and related information, this message will be sent to the recipient email that was given.



Figure 10.23: Civilian Tries to Send Message to Police



Figure 10.24: Message is Sent and shown in Sent Messages Page



Figure 10.25: User Successfully Received Message

10.9 User Profile Picture Change

Any user can change his or her profile picture.

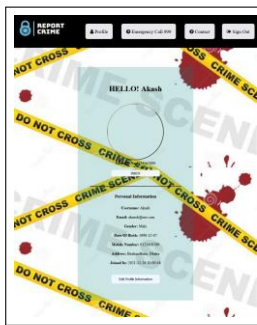


Figure 10.26: Before Updating Profile Picture



Figure 10.27: Inserting New Profile Picture



Figure 10.28: Updated Profile Picture

10.10 User Profile Information Change

Any user can change his or her profile information.

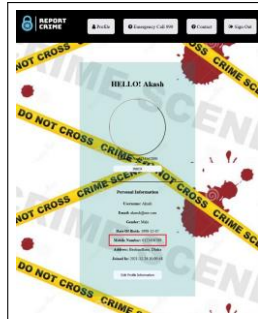


Figure 10.29: Before Updating Profile Information



Figure 10.30: Changing Information

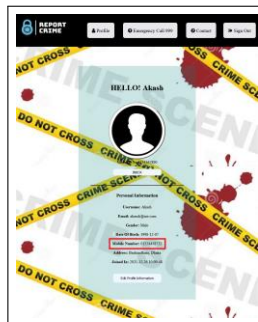


Figure 10.31: Updated Profile Information

Chapter 11

Tools Used

For this project I worked with php language and laravel framework. The designing of the website is done by html, css and blade. The functionalities of this website is achieved with php. Laravel made the process easier with its MVC model. I used MySQL for database creation and management. The server that ran the website is Apache server. The software and hardware that were used to built this project is give below:

SOFTWARES:

- Laravel Framework to built website functionalities and designing.
- XAMPP to sun the server and handle database management.
- Visual Studio Code to write program.
- Mozilla Firefox browser for viewing website.
- Windows Operating System.

HARDWARES:

- Core I5 10th Gen Processor.
- 8GB RAM.
- 1TB HDD.
- Intel HD620 Graphics.

Chapter 12

Conclusion

As we are emerging to a digital era, using digital means for our own good should be our motto. We see many crimes happening around us all the time, we see many fall victim to scams, violence and other illegal activities. It is our duty to inform the police if there is any crime taking place as soon as possible. In this age the most secure and fast way to transfer any information is online. Report Crime is an online platform where civilians can register any kind of complaints. Also receiving updates of registered crimes is also possible with Report Crime. Also Report Crime ensures communication between civilian and police or headquarter personnel. Report Crime is also a very easy and user friendly platform. One just needs to get registered to register complaints.

12.1 Current Situation Future Work:

The current situation of Report Crime can be stated as that the functionality that were described before are 100% working. All frontend and backend feature are working.

In future I would like to deploy my website and add more features like calling emergency number, adding images of crime scene etc.

12.2 Project Source Code

The source code of this whole project can be found on the following link,

- **Github Link:** <https://github.com/Akash328-hash/Report-Crime.git>

References

- [1] Internet Crime Complaint Center IC3, available at <https://www.ic3.gov/>, last accessed 25-12-2021 at 11:25am.
- [2] Report Cybercrime online, available at <https://www.europol.europa.eu/report-a-crime/report-cybercrime-online>, last accessed 23-12-2021 at 10:22pm.
- [3] Bangladesh Police, available at https://www.police.gov.bd/en/expatriate_help_center, last accessed 24-12-2021 at 2:20pm.
- [4] Action Fraud, available at <https://www.actionfraud.police.uk/reporting-fraud-and-cyber-crime>, last accessed 24-12-2021 at 3:18pm.
- [5] Yogesh Deshpande, San Murugesan, Athula Ginige, Steve Hansen, Daniel Schwabe, Martin Gaedke, Bebo White, "WEB ENGINEERING", Journal of Web Engineering, Vol. 1, No.1 (2002) 003-017.
- [6] PHP, available at <https://www.php.net/>, last accessed 26-12-2021 at 7:45am.
- [7] Laravel, available at <https://laravel.com/docs/8.x>, last accessed 26-12-2021 at 8:45am.
- [8] Requirements Analysis (Requirements Engineering), available at <https://searchsoftwarequality.techtarget.com/definition/requirements-analysis>, last accessed 25-12-2021 at 7:48pm.
- [9] Feasibility Study, available at <https://www.investopedia.com/terms/f/feasibility-study.asp>, last accessed 24-12-2021 at 12:48pm.