



MBARARA UNIVERSITY OF SCIENCE AND TECHNOLOGY

FACULTY OF COMPUTING AND INFORMATICS

DEPARTMENT OF COMPUTER SCIENCE

CRIME REPORTING SYSTEM

CASE STUDY: MBARARA CITY SOUTH

BY

EDWOGU RONNIE NOEL 2022/BCS/020/PS

**WEB DEVELOPMENT PROJECT REPORT SUBMITTED TO THE FACULTY OF
COMPUTING AND INFORMATICS IN PARTIAL FULFILMENT TO THE WEB
DEVELOPMENT COURSE UNIT**

MAY, 2024

Contents

1. Introduction.....	3
1.1Motivation	3
2. Problem Statement (Web project selection)	3
3. Functionality	3
Home page.	4
Login Page:.....	4
User Authentication	5
Dashboard Pages	5
Crime reporting form	7
4.Future improvements	8
References	9

List of Figures

Figure 1:Home page	4
Figure 2:Login Page.....	4
Figure 3:user authentication	5
Figure 4:Dashboard Page(All users).....	6
Figure 5: Files Page(Only staff).....	6
Figure 6:Statistics Page(Only staff).....	7
Figure 7:Crime reporting Form	8
Figure 8:Copy of Crime reported on email.....	8

1. Introduction.

In this report, I present an overview of my web development project focused on creating a crime reporting management system, utilizing Django as the backend framework. This undertaking provided me with a great experience in web development, encompassing the entire process from initial design to functional implementation, while effectively utilizing Django's powerful features.

1.1 Motivation

My motivation for developing this crime reporting system stems from observing my mother, who is a dedicated police officer. I've seen firsthand the challenges she faces in organizing files and compiling case statistics, all while dealing with the pressures of her demanding superiors. Witnessing her struggles has inspired me to create a solution that can streamline these processes and alleviate some of the burdens on law enforcement officers like her.

2. Problem Statement (Web project selection)

The police is struggling with paper-based crime reporting systems which makes gathering analytics of crimes not only very difficult and prone to errors but also causing difficulty accessing updating records is time-consuming, increasing the risk of errors and inconsistencies. Limited accessibility restricts information sharing between departments and jurisdictions, hindering collaboration. Furthermore, physical records are vulnerable to loss, theft, or damage, posing security risks. These limitations have a ripple effect, impacting case investigation efficiency, resource allocation, and overall transparency. Delays in accessing information can stall investigations and reduce case-solving rates. Without robust data analysis capabilities, identifying crime trends and allocating resources strategically becomes difficult. Limited information sharing across agencies impedes collaboration and coordination, and inaccurate or inaccessible data undermines public trust in law enforcement.

3. Functionality

I successfully developed a crime reporting system using HTML, CSS, and Bootstrap, while implementing the concepts taught in my class. Additionally, I utilized Django as the backend framework to ensure robust functionality and seamless integration. This project allowed me to apply and enhance my skills in both front-end and back-end web development, resulting in a comprehensive and functional system.

Home page.

This is the first page that the user sees when he or she opens the system

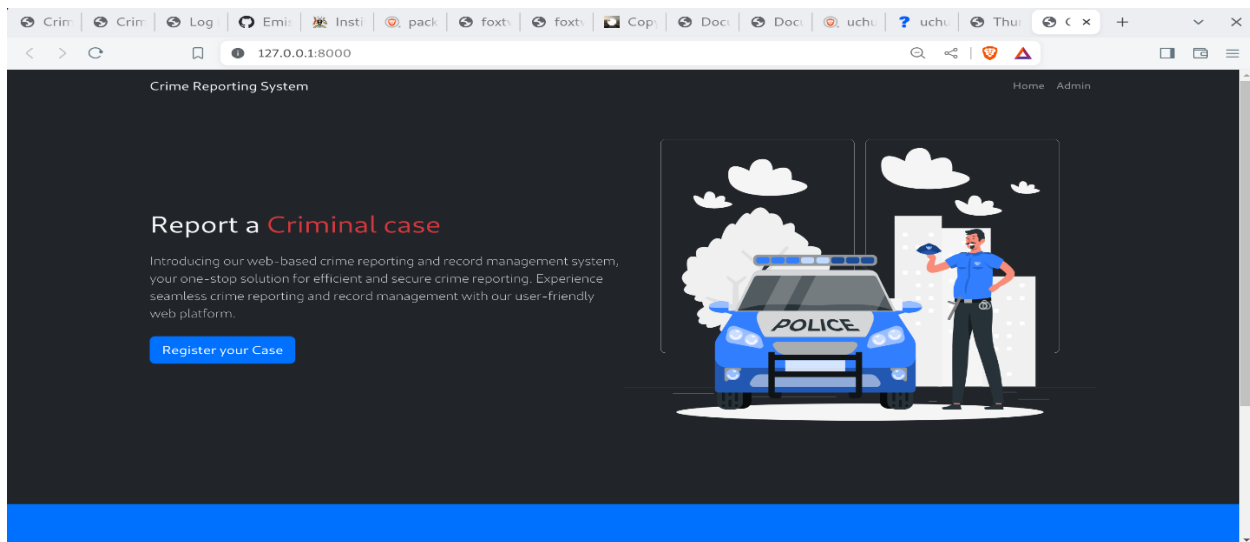


Figure 1:Home page

Login Page:

It is displayed when a user clicks on report login link on the home page. The login page is used to authenticate different users in the system

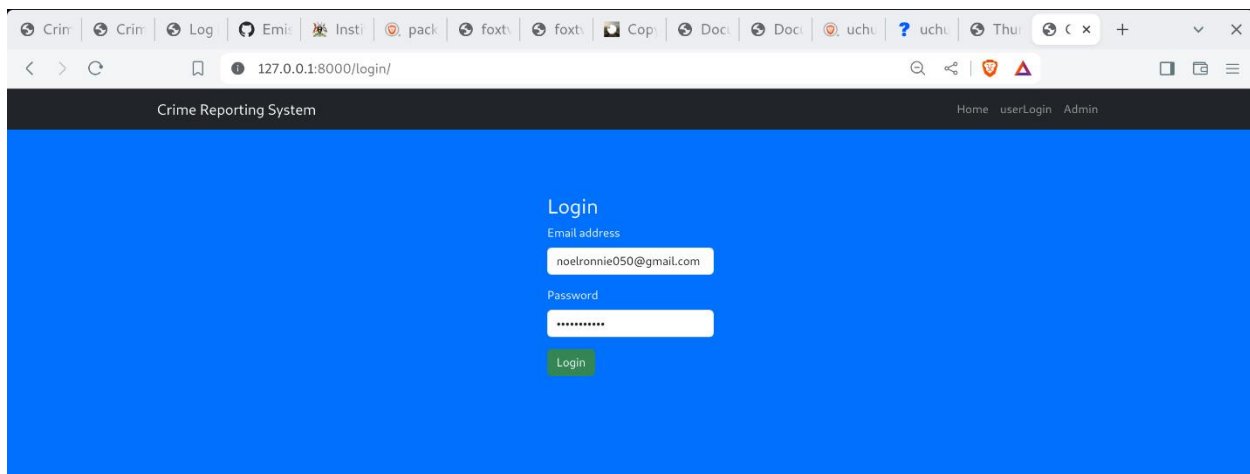


Figure 2:Login Page

User Authentication

While using the Django in-built authentication system, I created a login page where that different users belonging to different user groups can use to securely log in to the system with the correct user credentials

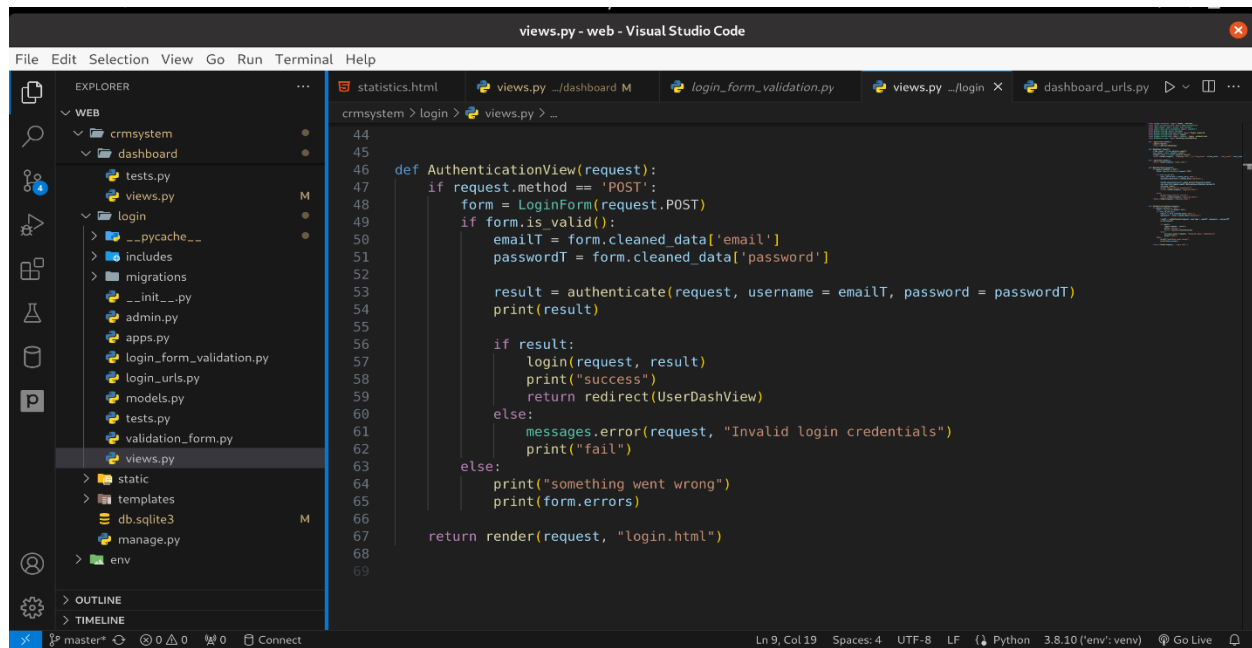


Figure 3:user authentication

Dashboard Pages

The Dashboard pages are accessed after the user logs in to the system with the right previlegies. It has links to the files and statistics pages that are also part of the dashboard but only accessed by the staff.

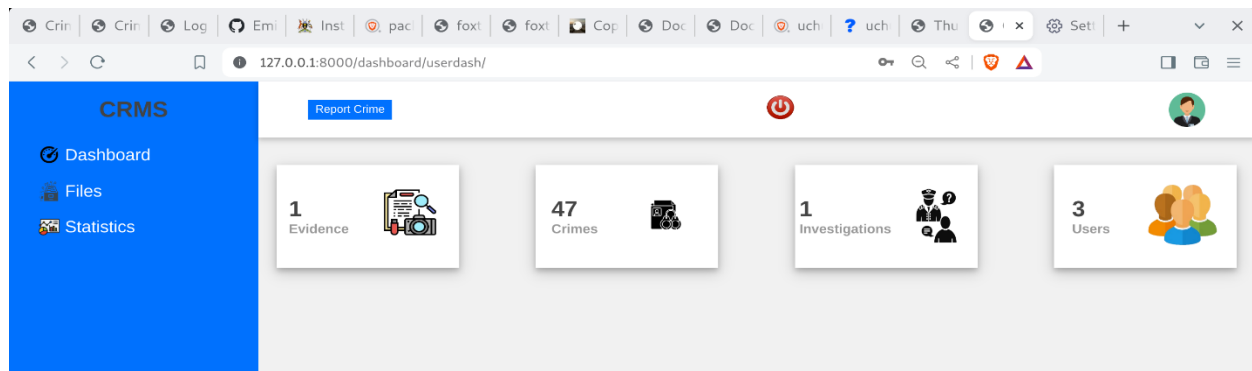


Figure 4: Dashboard Page (All users)

The following page is also part of the dashboard but are only viewed by the staff

It contains links to the Django backend where the staff can view more detailed records and make changes to the records that have been created as well. It displays the recent 5 crimes reported and 5 recent 5 suspects reported as well as the number of evidence records crime records investigations and users with links to the Django backend.

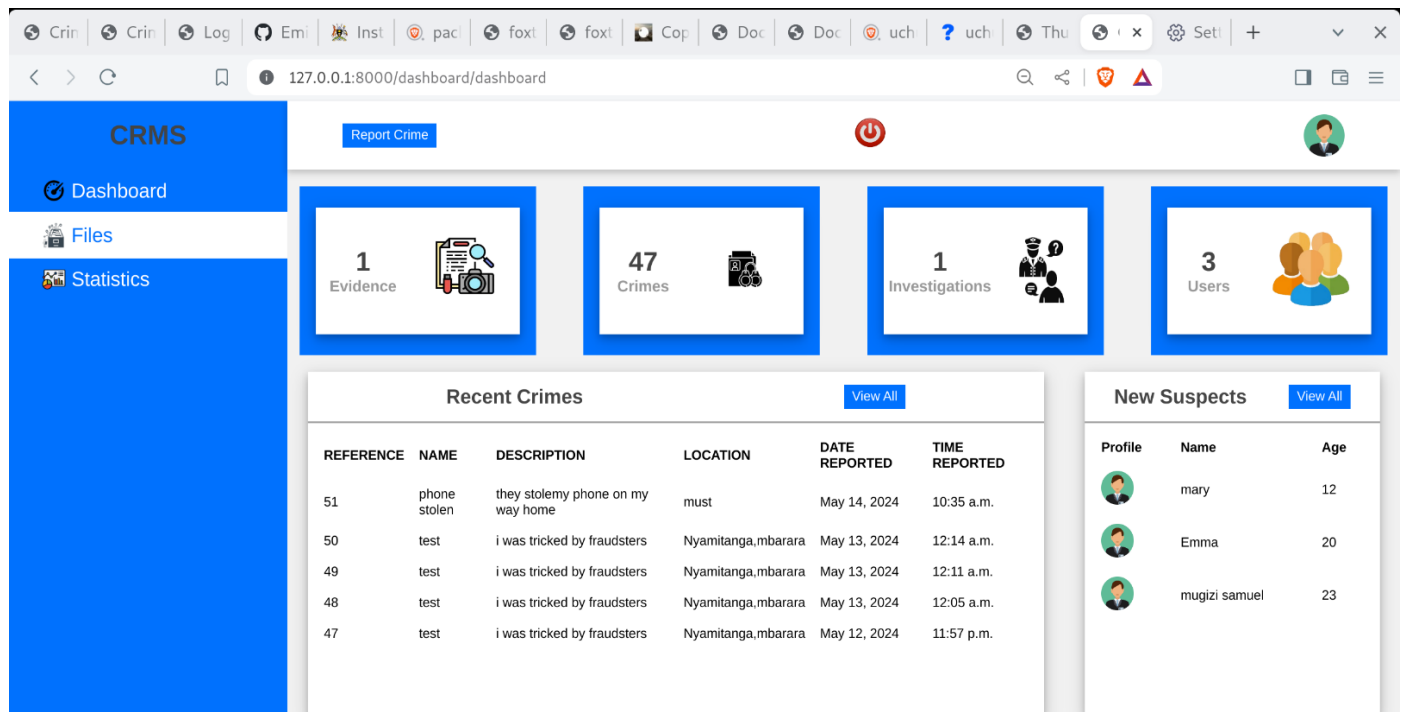


Figure 5: Files Page (Only staff)

In addition to the display of the recent 5 crimes reported and 5 recent 5 suspects reported as well as the number of evidence records crime records investigations and users with links to the Django backend, the statistics page shows a graphical representation of the total records in the database and

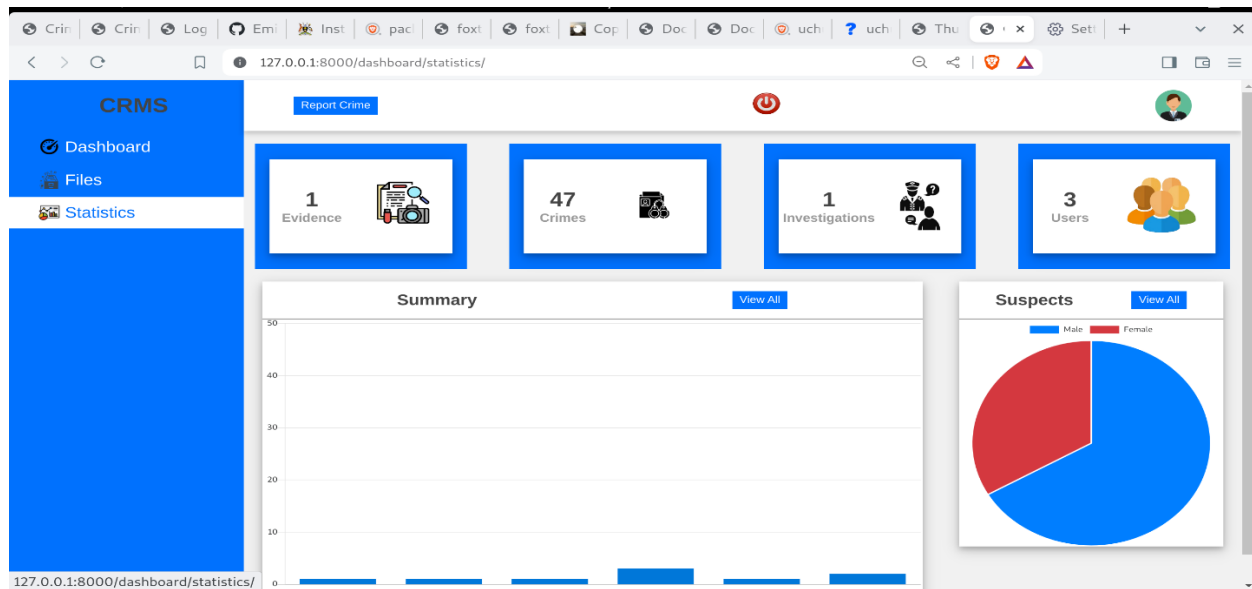


Figure 6: Statistics Page (Only staff)

Crime reporting form

This form is used for reporting a crime by filling it in and clicking on the submit button. When the button is clicked the data is validated and the record saved in the database. A copy of the crime reported is sent to the email registered in the form to enable the user to easily track the case.

127.0.0.1:8000/dashboard/reportcase/

Report Crime

Report a Crime

Crime Name
Enter crime name

Description
Enter description

Location
Enter location

Date Reported
mm/dd/yyyy

Time Reported
--:--:--

Email

Submit

Figure 7:Crime reporting Form

The following is a copy of the case reported that was sent on email after reporting a case

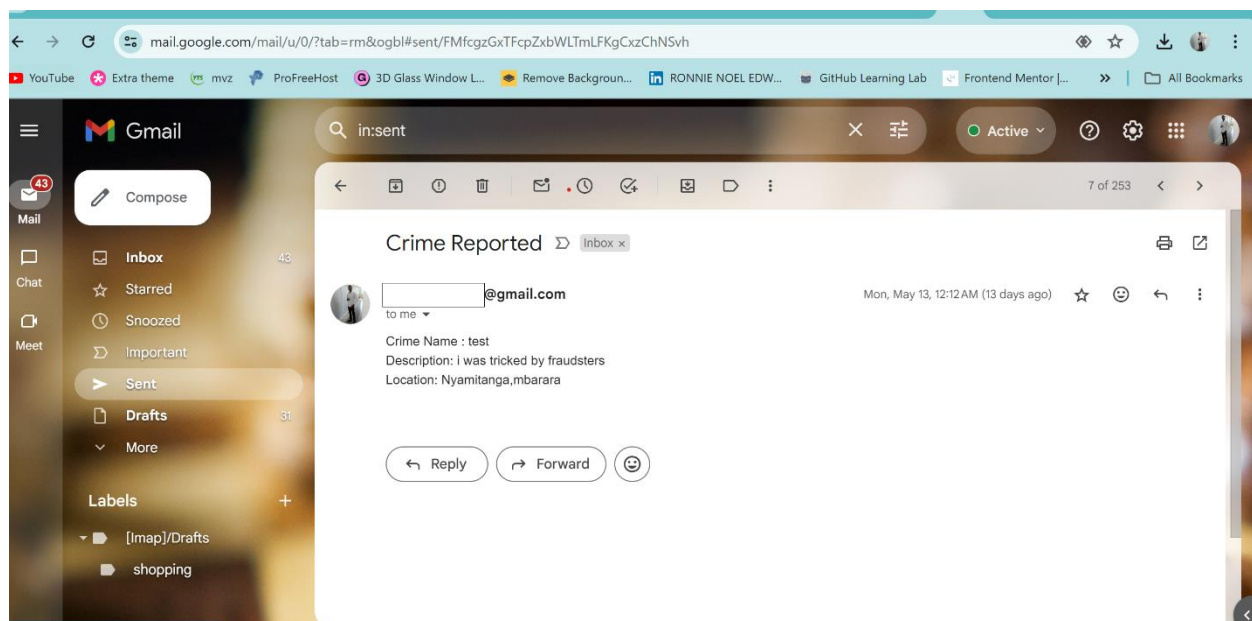


Figure 8:Copy of Crime reported on email

4.Future improvements

In the future, I plan of implementing maps to enhance the analytics functionality of the system

References

<https://docs.djangoproject.com>

<https://www.w3schools.com/django>

<https://www.bootstrap.com>

Complete project available on

<https://github.com/RonnieNoel/crms-project>