Crime Portal

Training Report Submitted in Partial Fulfilment of the Requirements for the Degree of

Bachelor of Engineering
in
Computer Science and Engineering

Submitted by

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Under the Supervision of

Guide

Dr. Anil Gupta

Professor

Department of Computer Science and Engineering

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CERTIFICATE

This is to certify that the work contained in this report entitled **"Crime Portal"** is submitted by the group members Mr. ALOK BHARAT TIWARI (19UCSE4001), NEERAJ CHOUHAN (19UCSE4039) to the Department of Computer Science & Engineering, M.B.M. University, Jodhpur, for the partial fulfilment of the requirements for the degree of **Bachelor of Engineering** in **Computer Science And Engineering**.

They have carried out their work under my supervision. This work has not been submitted else-where for the award of any other degree or diploma.

The project work in our opinion, has reached the standard fulfilling of the requirements for the degree of Bachelor of Engineering in Computer Science in accordance with the regulations of the Institute.

Guide – Dr. Anil Gupta
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DECLARATION

We ***Alok Bharat Tiwari, Neeraj chouhan*** hereby declare that this work titled **"Crime Portal"** is a record of original work done by me under the supervision and guidance of **Dr. *Anil Gupta,* Professor.**

I, further certify that this work has not formed the basis for the award of the Degree/Diploma/Associateship/Fellowship or similar recognition to any candidate of any university and no part of this report is reproduced as it is from any other source without appropriate reference and permission.

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ACKNOWLEDGEMENT

We, *Alok Bharat Tiwari , Neeraj Chouhan*, would sincerely like to thank Dr. Nemi Chand Barwar, Head of Department, Computer Science & Engineering, MBM University, Jodhpur for the support and availability of facilities by the department. I wish to express my deepest sense of gratitude to Prof. Dr. Anil Gupta, Professor, for his able guidance and useful suggestions, that helped me in completing the project work, on time. His guidance, encouragement, suggestion, and constructive criticism have contributed immensely to the evolution of my ideas on the report.

Finally, yet most importantly, I would like to express my heartfelt thanks to my family, friends, and peers for their blessings, wishes, and support for the successful completion of this report.

ABSTRACT

The number of people using online systems is increasing rapidly and hence; online facilities can be used efficiently for personal security or various other protection purposes. The crimes happening around awakened us to go for the safety issues, so new websites have been developed to provide security systems online that can be operated easily. This project presents City Without Crime (CWC), a web-based application for managing crime. This software provides a facility for reporting crimes online, registering complaints, entering missing persons, showing most wanted person details, news reporting, and chatting. Police will receive the complaint can send a message regarding the status of the complaint to the user who filed the complaint. Police can use this software to manage different crimes, and some of them are done in police stations manually. Police gets their login password from the admin directly. So this website helps police find out the problems in the society without them coming to the police station. Any number of clients can connect to the server. Each user first makes their login to the server to show their availability. A XAMPP Server must be maintained for the temporary storage of the database to enable the processing facilities. This paper describes how simple HTML and PHP coding has been used to design the website. We then took a look at the challenges ahead and opportunities in this fundamental technology that is all set to revolutionise our digital world.

Contents

List of Figures

Chapter 1

INTRODUCTION

The Crime Records Management System applies to Police Stations all across the country and specifically looks into the subject crime prevention, detection, conviction of criminals depending on a highly responsive backbone of Information Management. The efficiency of the Police and the effectiveness with which it tackles crime depend on what quality of information it can derive from its existing records and how fast it can have access to it.

1.1 Overview

This system was aimed at the implementation of a Criminal Records Management System. It is a database system in which the police keep the record of criminals who have been arrested, to be arrested, or escaped. This will help the police department in enhanced management of information. The main entities in the whole process include; the petitioner (the person who files a First Incident Report (FIR)), victim, accused or criminal, case, and investigating officer. The CRMS keeps records of the petitioner, victim, accused, FIR, case and investigation officer entities.

The system's strengths lay in that it allows for storage of multiple data for a criminal. A weakness observed in the system however, is that it lacks in covering all the necessary entities required for a CRMS built for the PF, it has no interface; as only the database was designed, there is no proper distinction between an accused and the criminal in the system, there is no generation of crime analysis and report.

1.2 Existing System

Almost all operations are done manually in the existing crime management system, such as sing complaints, taking actions against crimes, viewing status, etc. So with the existing system, if someone needs to register a complaint, he must do it through the

police. If it is done manually, numerous minor errors will occur. Error detection in the previous entries and data cross verification is another essential operation. These are done manually, and it would take time.

Drawbacks of the existing system can be concluded as follows:

1. The existing system is time-consuming and not very user friendly.
2. Even a sincere and experienced officer cannot lead more than one case at a time.
3. In many case, due to bribery, the innocents are accused in the existing system since the records are manually kept, which is easy to manipulate.
4. Moreover, the records are not centralized . Hence changes made might not reflect everywhere.

1.3 Aim and objectives

The proposed Crime Record Management System enhances the crime recording operations of the Police Force. The aim is to store records in a centralized database which holds information about criminals, crime and users of the system. The database is the basis for all actions in the system and can be easily updated and used to aid in all of the system's processes, that is, all of the required information is stored in one central location and thus is easily accessible. Furthermore, the correctness of the centralized database will allow functions such as crime report generation and statistical analysis of crime data. This is a more effective storage method than a paper-based file system.

In addition to the functions highlighted above, the system performs the basic functions of storage, retrieval and manipulation of crime and criminal data and information.

The Objectives of the proposed system are as follows:

i. Interstation communication in real time
ii. Centralized data handling
iii. Reduced time consumption
iv. Computerized record keeping with manpower
v. Cost reduction
vi. Operational efficiency

1.4 Feasibility Study

A feasibility study is a kind of analysis before the work on the project starts. It considers all the economic, technical, scheduling considerations—to ensure that the project completes successfully.

A feasibility study is a test of system proposal according to its workability, impact on the organization, ability to meet user needs and effective use of resources. Apart from these, an initial investigation is launched to study the present system, evaluate the possible application of computer based of methods. Selecting a tentative system, evaluate the cost and effectiveness of the proposed system, evaluate the impact of the proposed system, existing personal and ascertain the need of new personal. To define an improved information system, the study group must understand the information requirements of the organization. This understanding may be obtained by determining what is currently being done and of investigating through interviews and analysis what information is needed to be provided that is not being furnished by the existing system. Data on the cost of operating the current system needs to be collected in order to make a cost benefit for a new system. The objective of feasibility study is not to solve the problem, but to acquire a sense of its scope. During the study, the problem definition is crystallized and aspects of the problem to be included in the system are determined, consequently costs and benefits are estimated with greater detail at this stage. The result of the feasibility study is a system formal proposal. This is a simply a form of documenting or detailing the nature and scope of proposed solutions. The proposal summarizes what is known and what is going to be done.

Three key considerations involved in the feasibility analysis:

Economic feasibility, Technical feasibility, Behavioral feasibility

Economic feasibility

This analysis studies the project's cost and its worth price. It compares the cost with the project's output and shows a point in spending the number of resources. In the existing system, there are many people to do the fieldwork. In the propose methodem, since the manual work decreases drastically, the number of people involved also decreases, reducing the cost. Hence, the project is economically feasible, but it is also profitable.

Technical feasibility

This aspect checks whether we have enough technical support to be able enough to finish the project. Conclusion: To conclude, we have to change the current system for the proposed plan to put into the effort. Implementing a database is a one-time effort, and other required technical aspects are readily available. So the project was technically feasible as well.

Behavioral feasibility

People are inherently resistant to change and computer has known to facilitate change. An estimate should be made of how strong a reaction the user staff likely to have towards the developments of computerized system.

Overall, the project is feasible to staff w, with and is profitable once implemented.

Chapter 2

TECHNOLOGY USED

2.1 Languages Used

We use PHP for the back-end development and HTML5 for front-end development. Hypertext Markup Language (HTML) is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by Cascading Style Sheets (CSS) and scripting language. PHP (recursive acronym for PHP: Hypertext Preprocessor) stands for Personal Home Page and is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML. We chose PHP because instead of lots of commands to output HTML (as seen in C or Perl), PHP pages contain HTML with embedded code What distinguishes PHP from something like client side JavaScript is that the code is executed on the server, generating HTML, which is then sent to the client. The client would receive running that script but not know the underlying code. You can even configure your webserver to process all your HTML files with PHP, and then there's no way that users can tell what you have up your sleeve. The best thing about using PHP is that it is straightforward.

Features of PHP

1. Simple: It is simple to use compared to other scripting languages; this is widely used worldwide.
2. Interpreted: It is an interpreted language, i.e. there is no need for compilation.
3. Faster: It is faster than another scripting language, e.g. asp and JSP.
4. Open Source: Open source means you no need to pay to use PHP; you can free download and use it.
5. Platform Independent: PHP code will be run on every platform, Linux, Unix, Mac OS X, Windows.
6. Case Sensitive: PHP is case sensitive scripting language at the time of variable declaration, while keywords are NOT case sensitive.
7. Loosely Typed Language: PHP supports variable usage without declaring its data type. It will be taken at the execution based on the kind of data it has on its value.

Features of HTML5

1. File Format: HTML is essentially a file format. Microsoft Word uses .DOC files, music player uses .MP3 files, and browsers use .HTML files.
2. Platform Independence: One can display HTML documents on any platform such as Windows and Linux.
3. It provides a more flexible way to design web pages and text.
4. Doctype: HTML5 has a doctype function where there is no struggle of memorising complex codes. The declaration is straightforward in this version, and it allows browsers to render the ages in the standard model.
5. Media Support: HTML5 brings you outstanding audio and video support. You can easily add audio and video files to make your website look lively and engaging.

2.2 Database Platform

A database is an organised collection of data. The data is typically collected to model aspects of reality in a way that supports processes requiring information, such as modelling the availability of rooms in hotels in a way that keeps finding a hotel with vacancies.

Database management systems (DBMS) are computer software applications that interact with the user, other applications, and the database to capture and analyse data. A general-purpose DBMS is designed to allow the definition, creation, querying, update, and administration of databases. Well-known DBMSs include MySQL, PostgreSQL, Microsoft SQL Server, Oracle, Sybase and IBM DB2.

XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MySQL database server, and interpreters for scripts written in the PHP and Perl programming languages. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible.

MySQL is a freely available open-source Relational Database Management System (RDBMS) that uses Structured Query Language (SQL). SQL is the most popular language for adding, accessing and managing a database. It is most noted for its quick processing, proven reliability, ease and flexibility of use.

2.3 Software Requirements

1. Microsoft Windows XP/ Windows 7/ Windows Vista/ Windows 8/ Windows 10/ Windows Server 2003, 2008, 2012.
2. XAMPP must be installed.
3. Sublime Text is used as a source code editor.

Chapter 3

SYSTEM ANALYSIS

There are various ways of understanding the required elements: DFDs, Flowcharts, UML diagrams, etc. For this project, we have used a Use Case diagram and then later a class diag. better understanding of the requirements and functionalities of our project.

A use case diagram represents a user's interaction with the system that shows the relationship between the user and the different use cases in which the user is involved. A use case diagram can identify the different types of users of a system and the different use cases and will often be accompanied by other types of charts. Either circles or ellipses represent the use cases.

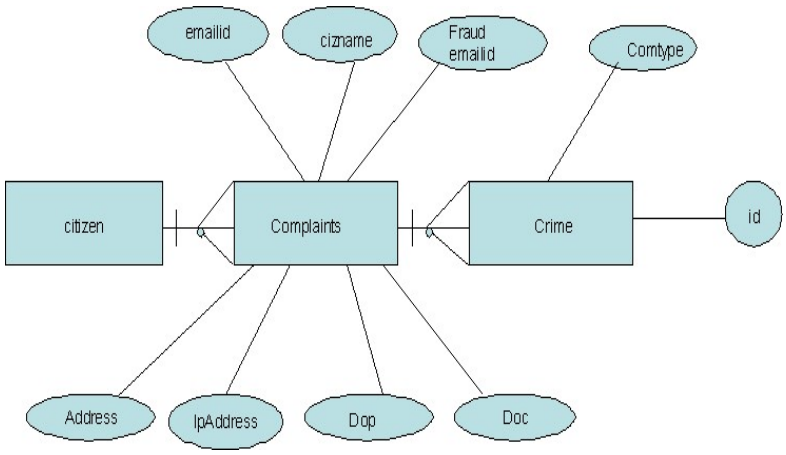


Fig 3.1 - E-R diagram for complaints

Use case Diagram for Department

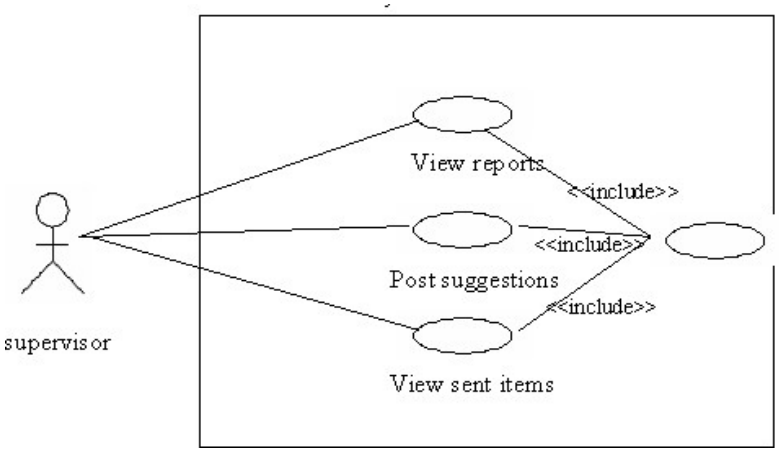


Fig. 3.2 - Use case Diagram for Department

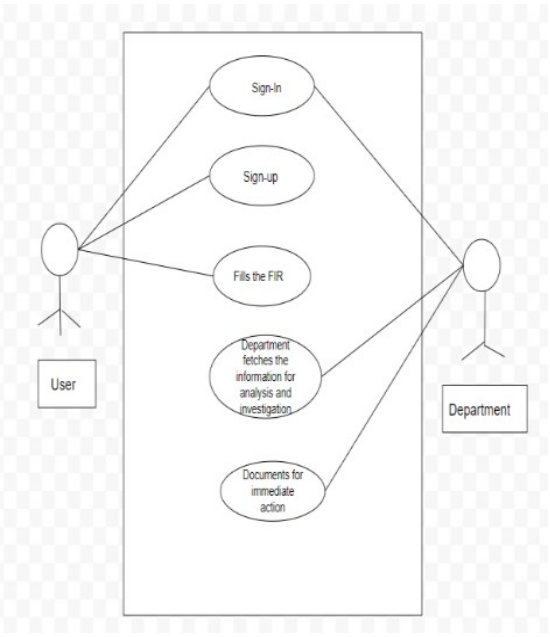


Fig. 3.3 – User login diagram

3.1 Modules

A. Login

This includes Administrator, Police and User login. There will be a username and password to login into the system to use all the facilities.

B. Complaint registration

This module helps to register the details about the crime. This is done by entering some details, such as incident details, Victim details, crime details etc.

C. View complaint status

This module allows us to view the status of the complaint that you have registered earlier.

D. Criminal register management

Here we can have the facility to view the details of the criminals. The administrator can add new criminals' details and save it in a database. This can be done by entering details such as criminal number, age, occupation, type of crime etc.

E. Case history details management

Here we can view the details of the case, date of occurrence, the type of crime and place of occurrence etc.

3.2 Advantages

- The main advantage of on-line application is that, an individual will report the crime anytime from anyplace.
- Users will read the progress of their grievance on- line.
- The details of the users/reporters won't show in public.

3.3 Risk Management

During the analysis of our whole application, we discovered some of the rise that could affect our application while developing and also while using.

These are those risks: 1. Technical Risk 2. Project Risk 3. Political Risk

1. Technical Risks : First the application struck with the problem of the browser because it is depended on the browser technology as the website is going to be opened at the user side in the browser where any user can use any of the browsers available today. Our project is developed under the data documentations list of various hardware products of the user and according to their needs.

2. Project Risks : As this application is developed for crime reporting, security has been given special importance. Privacy is a basic requirement expected by the users of this application. In our project there is very less requirement of budget because the only concentration here is on the computer and the internet access when this project is used as the real application so economical risks does not matter so much in our application

3. Political Risks : There is no need to worry about the political issues here because it is just a website where the political issues may not occur.

3.4 Testing

This section discuss about the testing which was accomplished to check the functionality of the various interfaces that formed e-cops system.

Performance testing

This type of testing verifies the following aspects: The concurrent users that requesting the web application and the response time. The main goal of this test is to verify the availability and responsiveness.

Compatibility testing

This is done to ensure the Browser compatibility of the website and therefore determine the hardware and operating system platforms that are supported by the application to understand the behavior of the system in different environments.

User interface testing

This test is meant for detecting the correct functionality of the graphical user interface (GUI) of the system and ensure that specifications are conformed.

Chapter 4

Project

Home Page

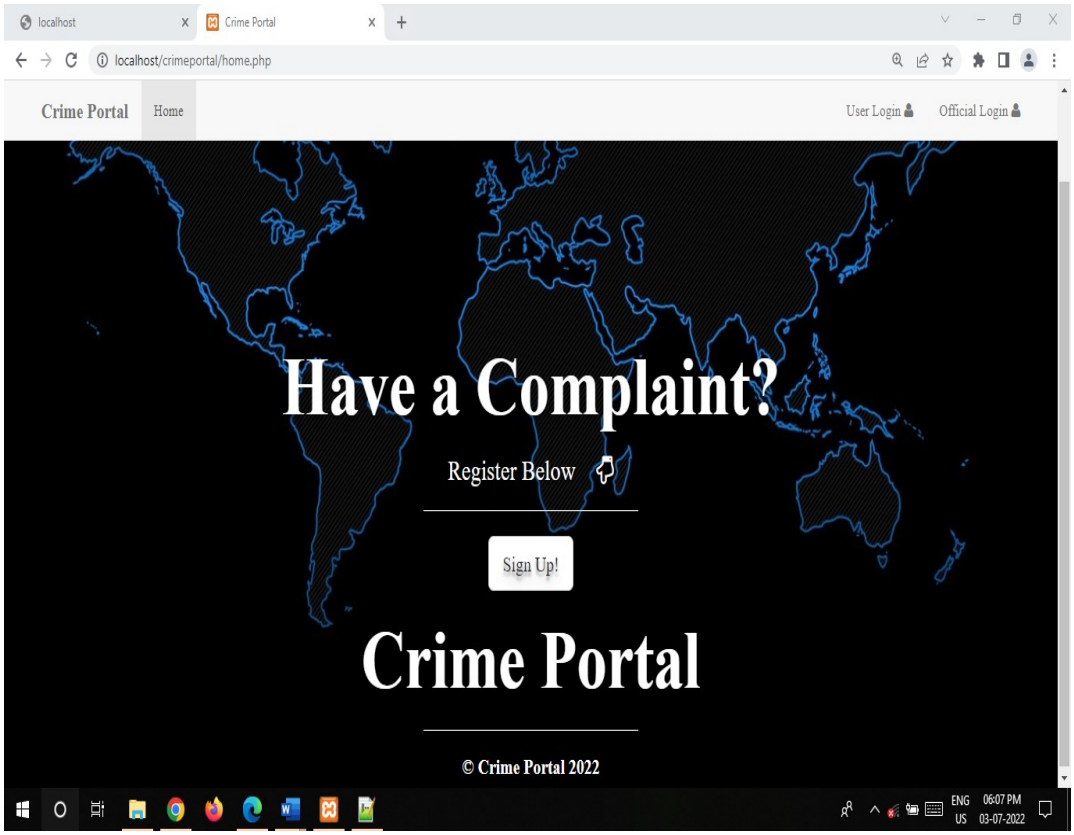


Fig. 4.1 Home

User Registration

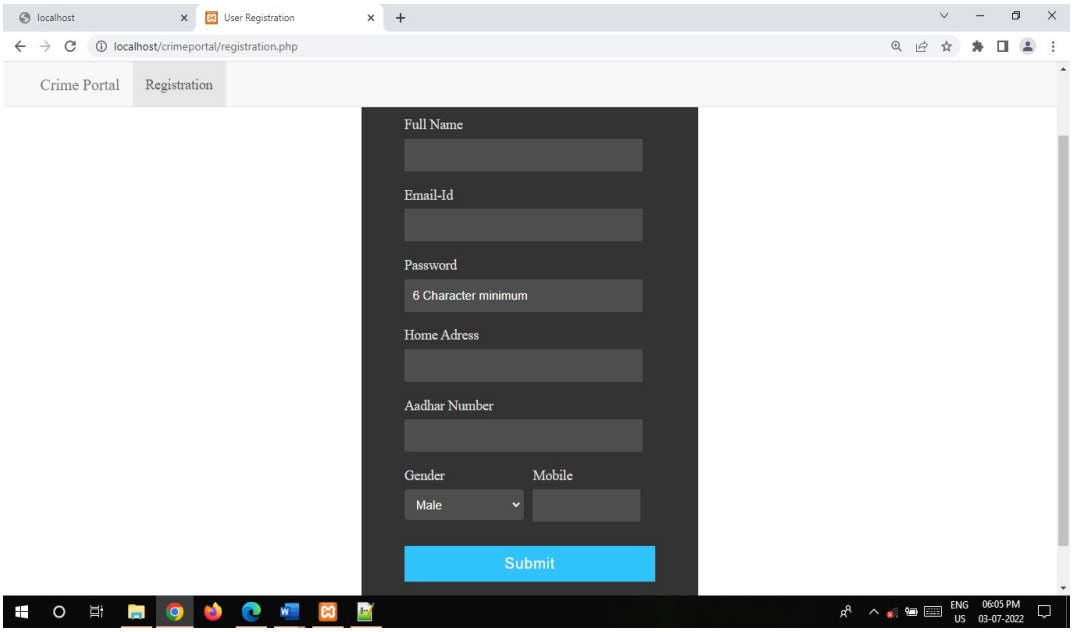


Fig. 4.2 User Registration

User Registered Successful Popup

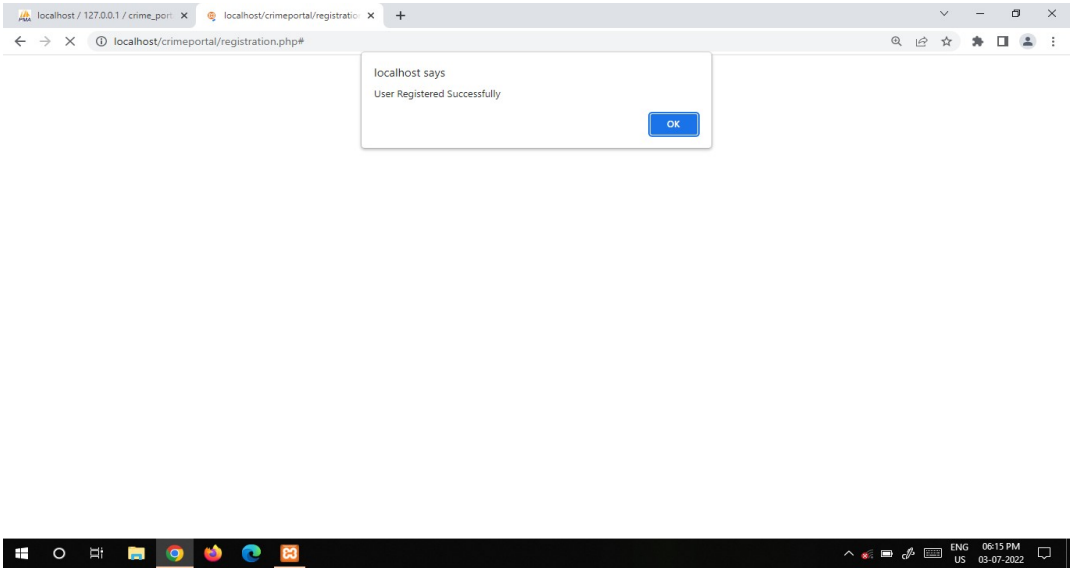


Fig. 4.3 User Registered Successful Popup

User Login page

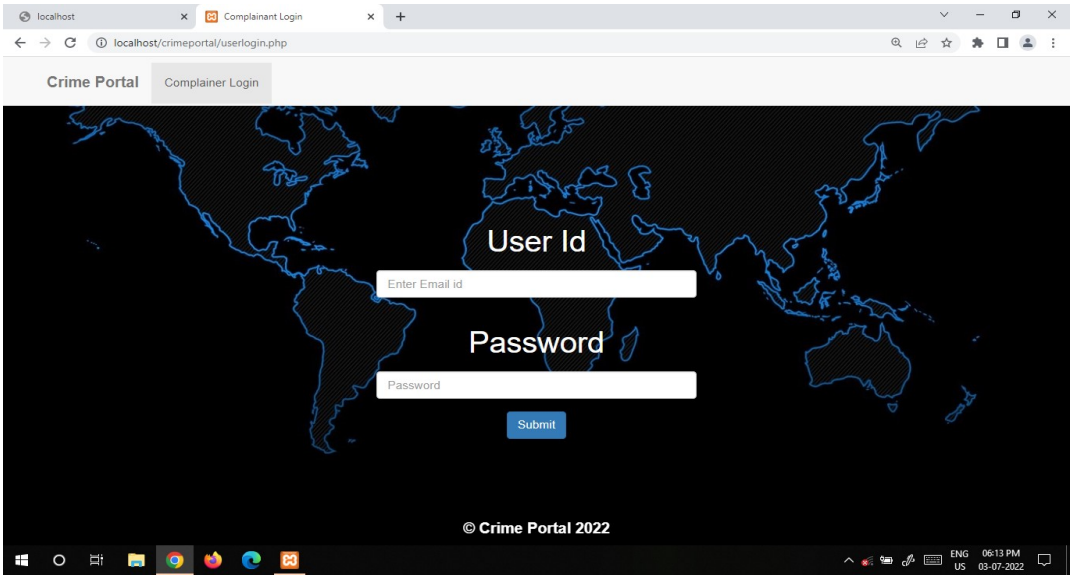


Fig. 4.4 User Login

User Complaint register form

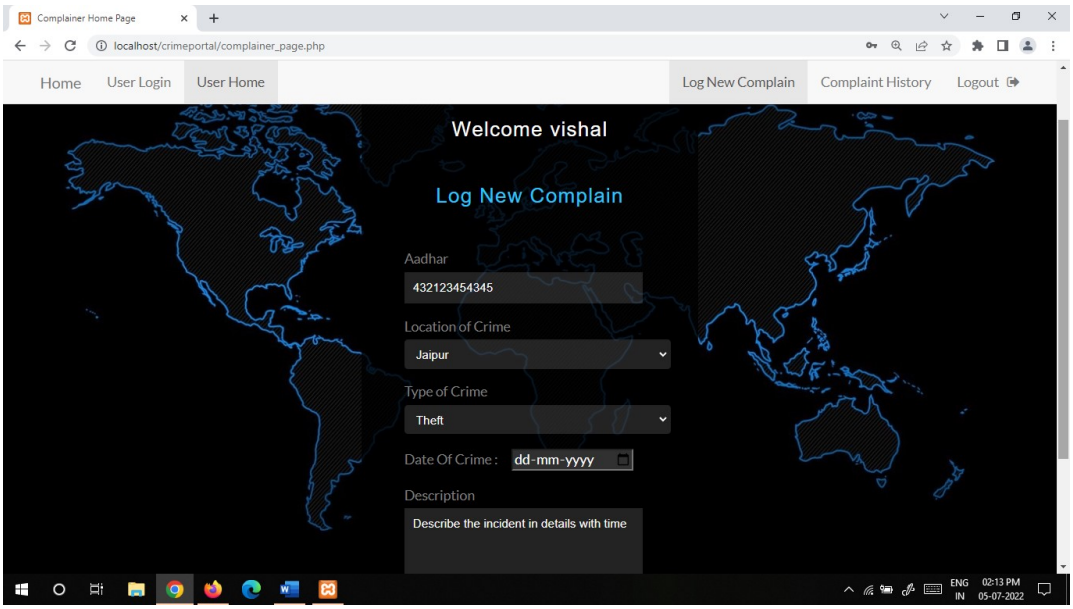


Fig. 4.5 User Complaint register form

User view complaint history

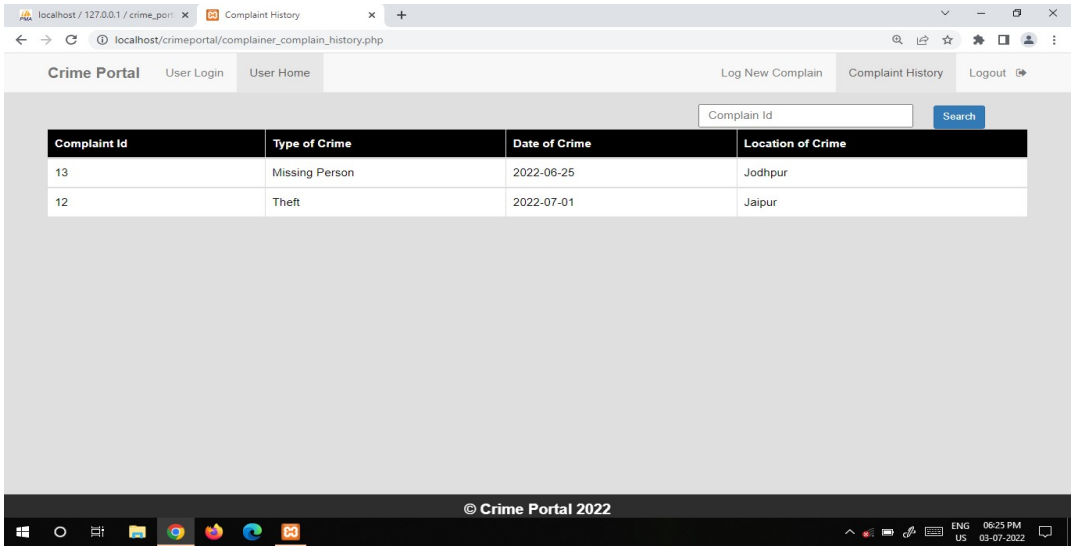


Fig. 4.6 User view complaint history

Official login

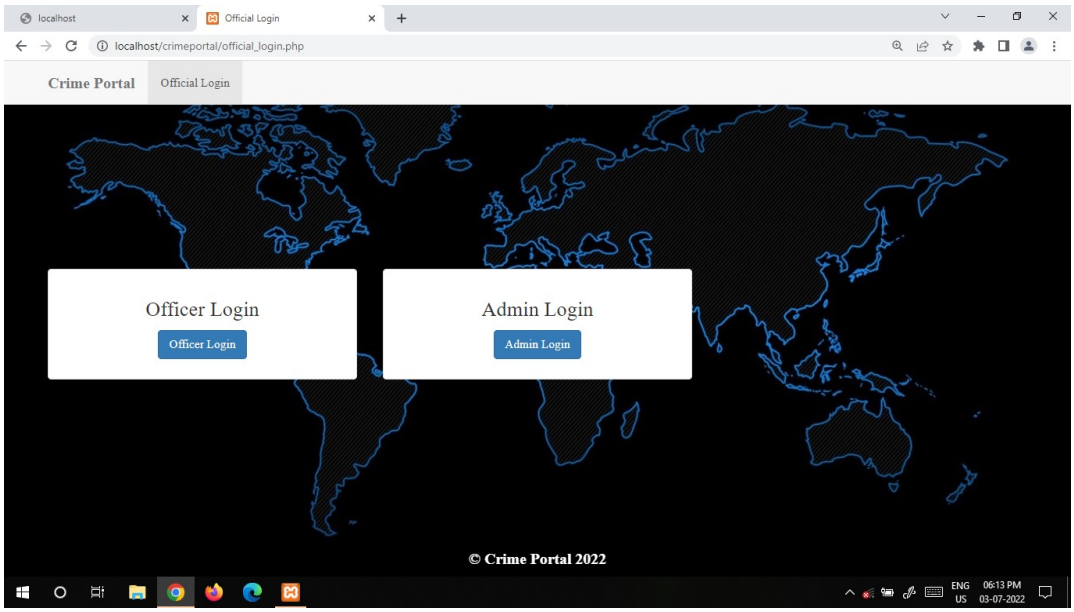


Fig. 4.7 Official login

Officer login

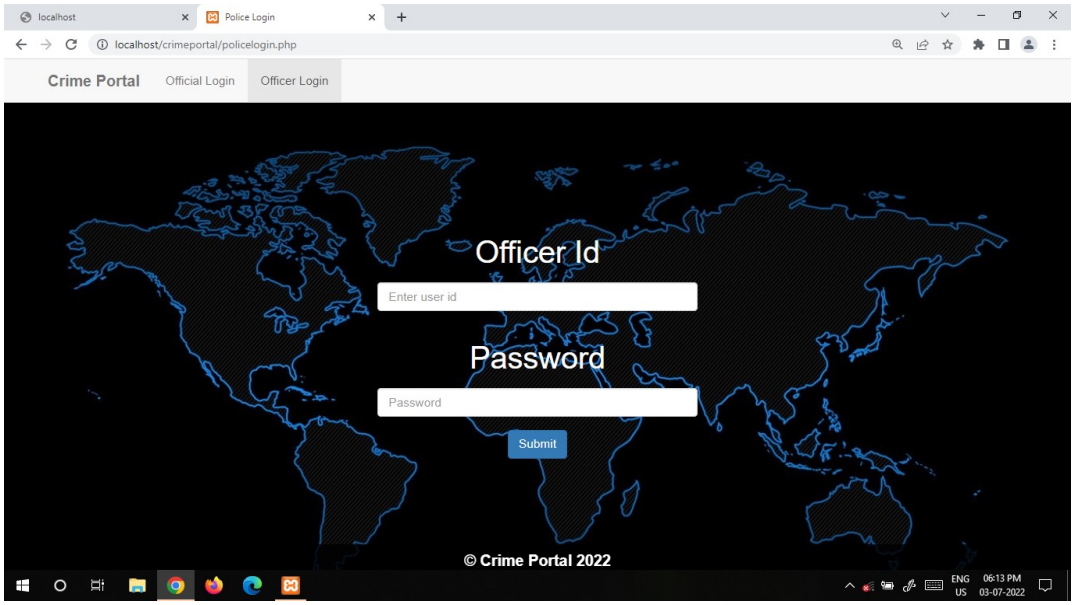


Fig. 4.8 Officer login

Officer (Police) Home Page & Pending Complaint

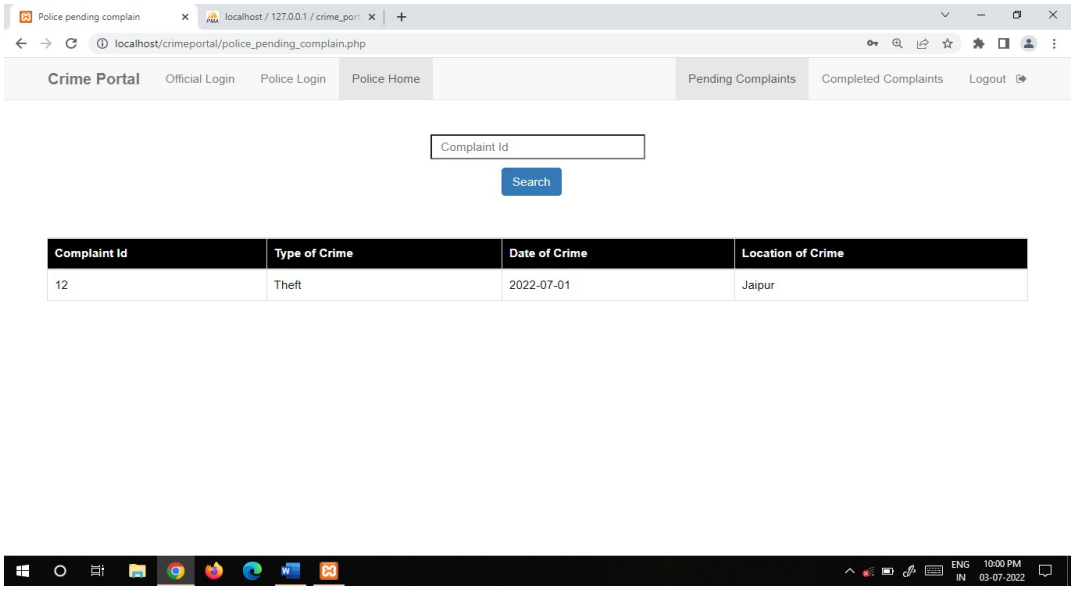


Fig. 4.9 Officer (Police) Home Page & Pending Complaint

Officer Complaint Update

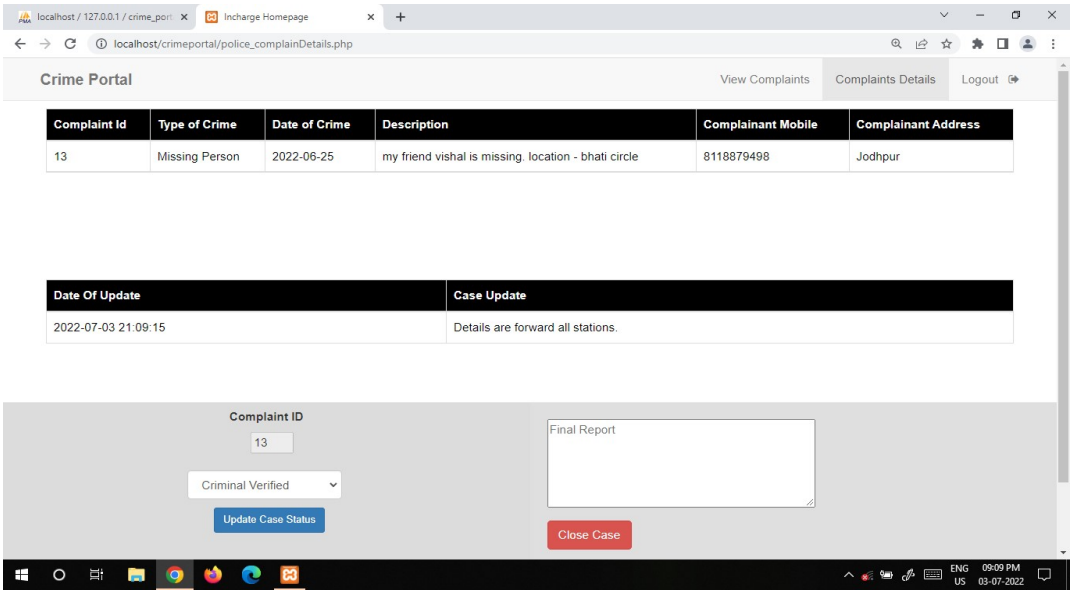


Fig. 4.10 Officer Complaint Update

Officer Completed complaints

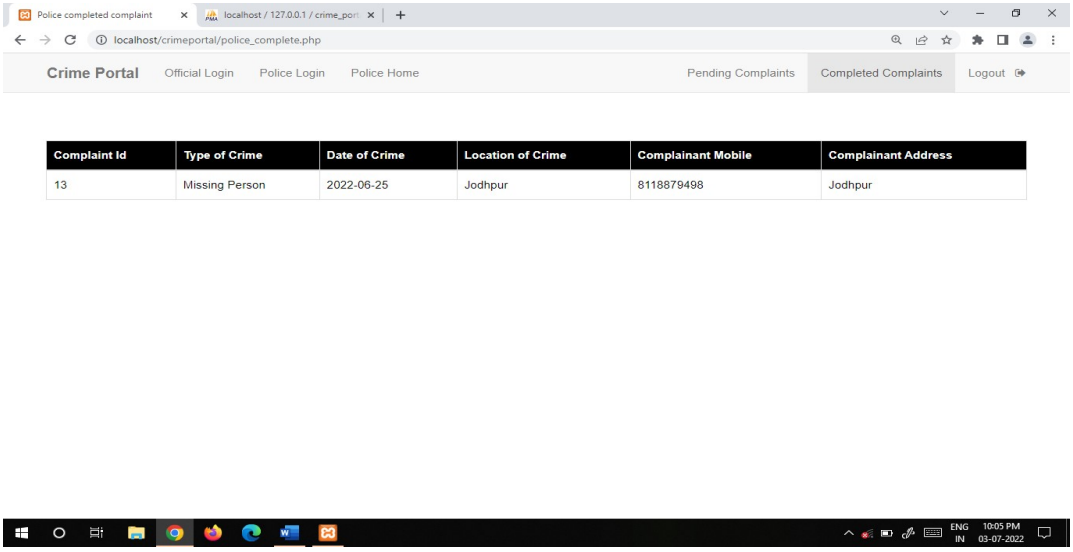


Fig. 4.11 Officer Completed complaints

Admin login

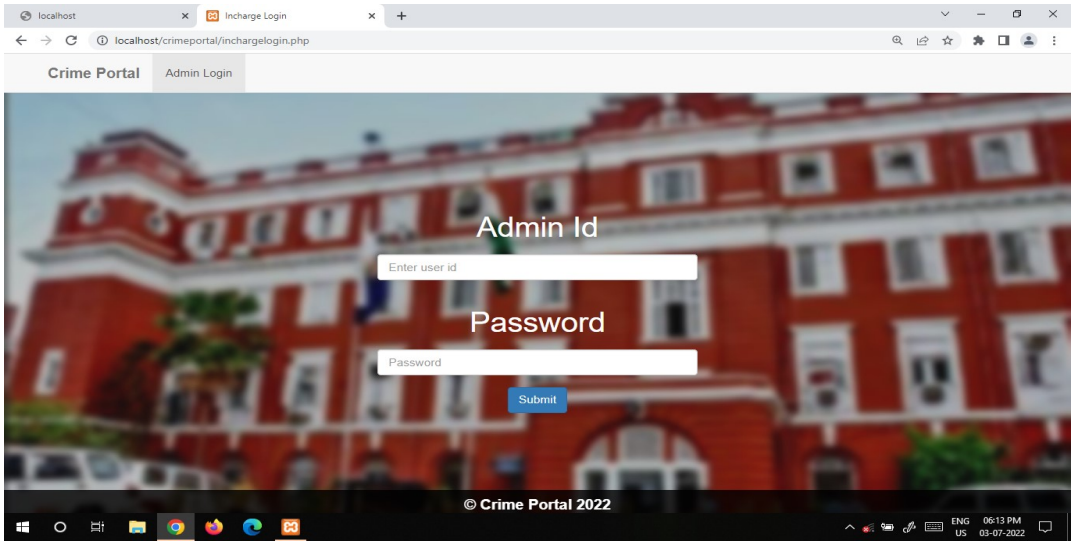
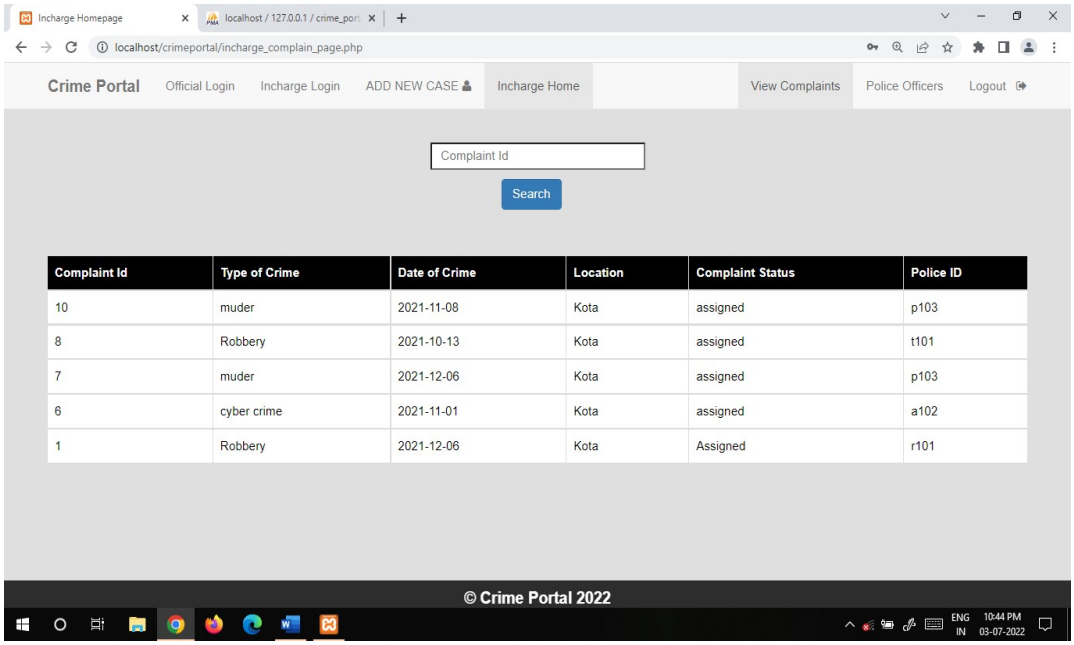


Fig. 4.12 Admin login

Admin Home Page & View Complaints



Complaint Id	Type of Crime	Date of Crime	Location	Complaint Status	Police ID
10	muder	2021-11-08	Kota	assigned	p103
8	Robbery	2021-10-13	Kota	assigned	t101
7	muder	2021-12-06	Kota	assigned	p103
6	cyber crime	2021-11-01	Kota	assigned	a102
1	Robbery	2021-12-06	Kota	Assigned	r101

Fig. 4.13 Admin Home Page & View Complaints

Admin view police officer list

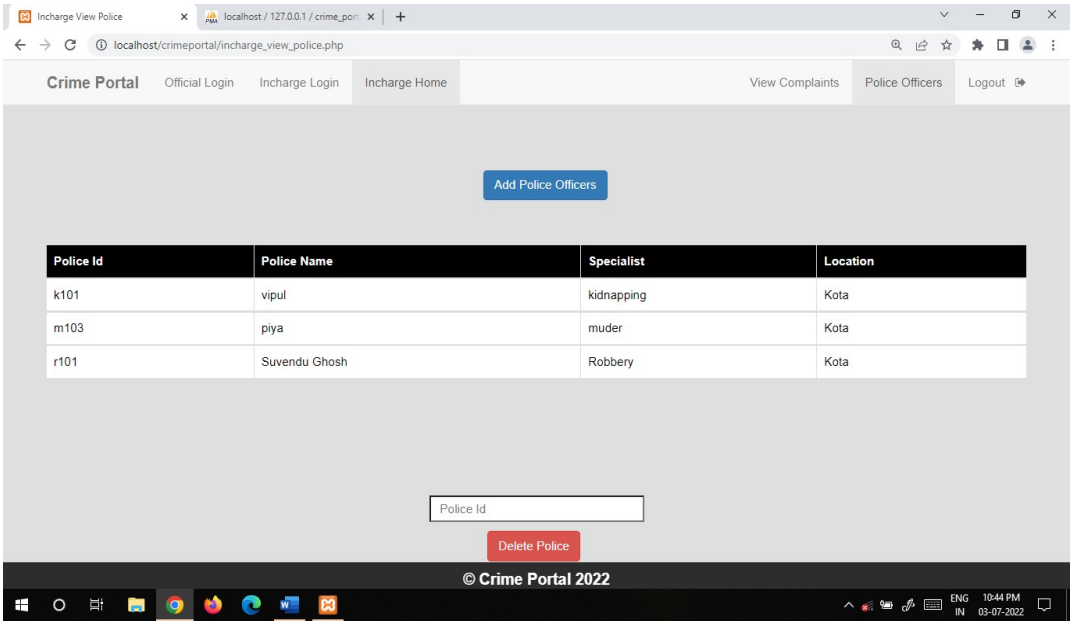


Fig. 4.14 Admin view police officer list

Admin add new police officer

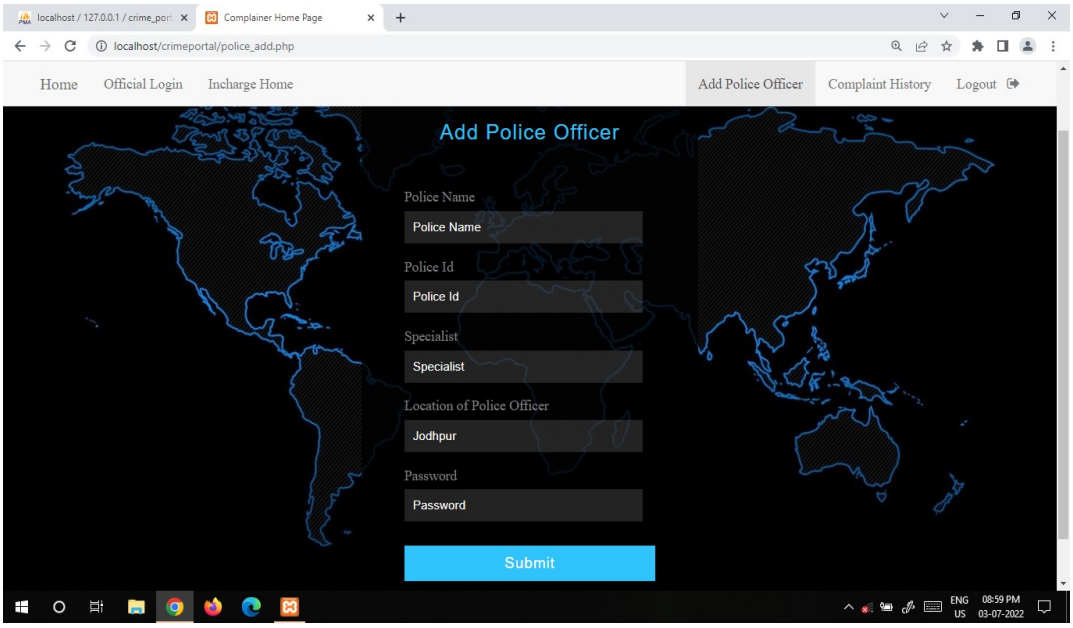


Fig. 4.15 Admin add new police officer

Complaint assign officer

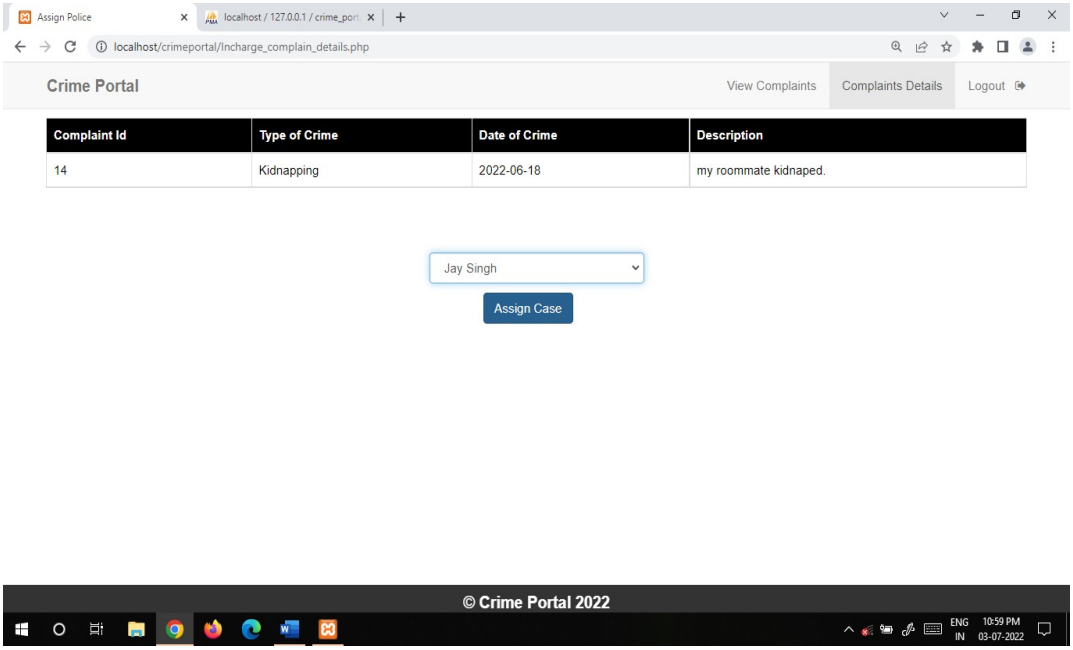


Fig. 4.16 Complaint assign officer

Chapter 5

CONCLUSION & FUTURE WORK

Conclusion

Nowadays everything is getting computerised. Manual work usually consumes a lot of time and is error-prone. To make complaining easy and manage crime records, this application is beneficial. Thus, Crime Management System overcomes most of the existing system's limitations and is a very user-friendly application.

Future Scope

1. Biometric can be added

2. Face Recognition can be added

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