A

Project Report on

" Online Crime-Reporting "

Submitted in partial fulfillment of the requirements of E Diploma in Advanced Computing



Submitted By

MARCH 2024

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GUIDE BY

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CERTIFICATE

This is to certify that the Report work entitled

" Online Crime-Reporting "

Has been duly completed by the following students under the my guidance, in a satisfactory manner as a partial fulfillment of the requirement for the award of the E- Diploma in Advanced Computing, Delhi



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Prof. Anuragh Singh Project Engineer

DECLARATION

We declare that this written submission represents our ideas in our own words and where others' ideas or words have been included, we have adequately cited and referenced the original sources. We also declare that we have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

PROJECT TEAM

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Date: -23. Aug.2024

ABSTRACT

This project is a web-based "Online Crime Reporting" for any particular city. The project objective is to deliver the online crime reporting application into web platform.

This project is an attempt to provide the advantages of online crime reporting for end user. It helps user to report a crime as soon as it happens from anywhere through internet by using a website device. Thus, the user will get the service for online crime reporting and status about registered complaint from there place. This system is developed for any city having one centralized admin which highest authority in the project, and can add multiple police stations.

If any city or particular area providing an online crime reporting portal where their citizens can reach to responsible authority as soon as possible from anywhere, this application is inspired from Delhi police portal. Since this application is available in the Smartphone it is easily accessible and always available.

ACKNOWLEDGEMENT

We would like to express my deepest appreciation to Mr. Anurag Singh, our esteemed project guide, for his exceptional guidance, patience, and encouragement throughout the entire duration of this project. His wealth of knowledge and experience provided us with invaluable insights and direction, which were instrumental in shaping this work. His constructive criticism and consistent support have been a constant source of inspiration, driving us to strive for excellence.

We also immensely grateful to Mr. Pankaj Ku. Mahto for his additional support and valuable input during the course of this project. His willingness to assist and share his expertise was incredibly beneficial and contributed significantly to the project's success. His contributions, whether in technical advice or moral support, were greatly appreciated and have left a lasting impact on the quality of this work.

In conclusion, we would like to thank both Mr. Anurag Singh and Mr. Pankaj Ku. Mahto for their unwavering support, mentorship, and encouragement. This project would not have been possible without their guidance and the knowledge they so generously shared.

Thank you for believing in our abilities and for providing the necessary tools to accomplish this project.

PROJECT TEAM

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1.Introduction

The web-based "Online Crime Reporting" project is an attempt to stimulate the basic concepts of the crime reporting system. There are three types of users (Role: Admin, Police Station, Complainant) who will be using this portal. The system enables the users to do the things such as register a complaint after login or register an emergency complaint in case of urgency to the region wise police station and then track the progress of complaint.

The system provides user which is a complainant can register a complaint after login with options like selecting case type, region, police station and many more in dropdown manner. And also, for specific case type relevant fields will appear for the ease of complainant to fill the complaint form. In case of emergency case type such as road accidents, riots, etc. complainant can directly file a complaint without sign up or login by going for emergency complaint service which is provided in navbar.

Security of this web application is done with the spring boot security. It provides admin the access of all functionality including of Complainant and Police Station. Admin has to add new Police Station him/her self. As for Police station functionality, they can add police officers, see all complaints and update their status.

This web application's frontend is developed with React JS, backend with Spring boot and for data persistence MySQL RDBMS is used.

Features:

- 1. In case of emergency don't need to sign up/in.
- 2. User can track complaints status.(Pending, In-progress, Resolved)

1.1 PROJECT OBJECTIVE

The objective of the project is to make an application in web-based platform to report crime to nearest police station. In order to build such an application complete web support, need to be provided. A complete and efficient web application which can provide the online shopping experience is the basic objective of the project. The web application can be implemented in the form of a Web application.

1.2 PROJECT OVERVIEW

The central concept of the application is to allow the users to report crime online. The information pertaining are stores on an RDBMS at the server side (store). This project is an attempt to provide the advantages of online crime reporting for end user. It helps user to report a crime as soon as it happens from anywhere through internet by using a website device. Thus, the user will get the service for online crime reporting and status about registered complaint from there place. This system is developed for any city having one centralized admin which highest authority in the project, and can add multiple police stations.

1.3 PROJECT SCOPE

The web-based "Online Crime Reporting" project is an attempt to stimulate the basic concepts of the crime reporting system. There are three types of users (Role: Admin, Police Station, Complainant) who will be using this portal. The system enables the users to do the things such as register a complaint after login or register an emergency complaint in case of urgency to the region wise police station and then track the progress of complaint

1.4 STUDY OF THE SYSTEM

1.4.1 MODULES:

The system after careful analysis has been identified to be presented with the following modules and roles.

The modules involved are:

- Admin
- Police station
- Users
- Emergency complaint.

1.4.1.1 Admin:

The administrator is the super user of this application. Only admin have access into this admin page. Admin may be the most authorized person. The admin has all the information about all police station & registered complaints.

This module is divided into different sub modules.

- 1. CRUD police station.
- 2. View / delete Emergency Complaints.
- 3. View / delete Complaints.
- 4. View/ delete criminal.

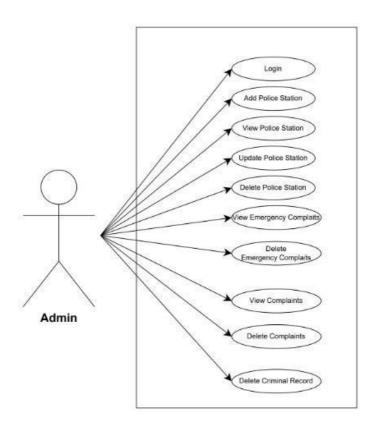


FIGURE 1: ADMIN USE CASE DIAGRAM

1.4.1.2 Police Station:

The police station is a middle authorized state. Having access of basic CRUD operation on police, View/delete/update Complaint as well as Emergency Complaint. And managing about criminal records.

This module is divided into different sub modules.

- 1. CRUD police.
- 2. View / delete / update Emergency Complaints.
- 3. View / delete/ update Complaints.
- 4. View/ delete/ add criminal record.

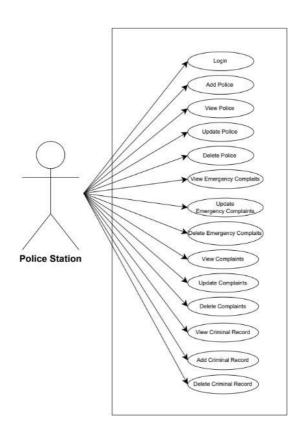


FIGURE 2: POLICE STATION USE CASE DIAGRAM

1.4.1.3 User:

The user is minimum scope but having most valuable asset in the system, user can sing up, sign in register complaint and in case of emergency without sign in/signup can register their complaint.

This module is divided into different sub modules.

- 1. Reset Password.
- 2. Add/Withdraw/check status of complaints.

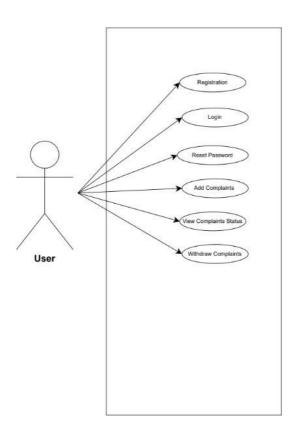


FIGURE 3: USER USE CASE DIAGRAM

2.SYSTEM ANALYSIS

System analysis is the process of gathering and interpreting facts, diagnosing problems, and using the information to recommend improvements on the system. System analysis is a problem-solving activity that requires intensive communication between the system users and system developers.

System analysis or study is an important phase of any system development process. The system is viewed as a whole, the inputs are identified, and the system is subjected to close study to identify the problem areas. The solutions are given as a proposal. The proposal is reviewed on user request and suitable changes are made. This loop ends as soon as the user is satisfied with the proposal.

2.1 EXISTING SYSTEM

The currently to register a complaint complainant need to physically visit police station.

- ✓ It is less user-friendly.
- ✓ User must go to police station and register complaint.
- ✓ It is a time-consuming process
- ✓ Not in reach of distant users.

2.2 PROPOSED SYSTEM

In the proposed system user need not go to the Police station for register complaint. He/ she can register a complaint using smart phone / computer with internet. The nearest police station can reach to victim in laser time.

3. Requirements

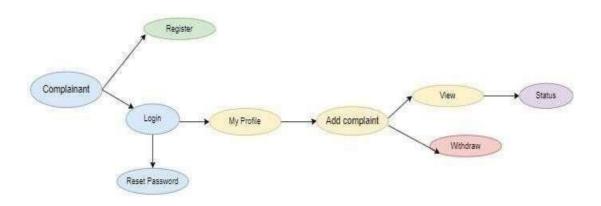
3.1 Functional Requirements

Complaint Scope:

Complainant can register a complaint 24×7 on this web application. Complainant can register a complaint 2 ways. Complainant can sign up, login and might register a complaint. He/she can also lodge a emergency complaint without signup (or login) from home page.

When complainant sign's in to website he/she will be routed to users' home page on successful authentication. Home page consists of his/her previously lodged complaint list, there he/she will be able to track the progress of complaint. On the side bar, there are more two functionalities 1.to register a complaint 2. To view or update his/her profile.

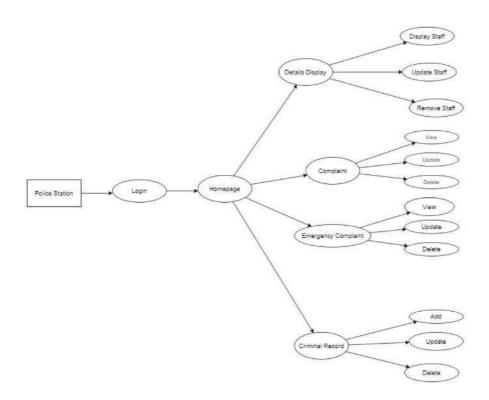
For Sign-up and login, Complainant must have unique email address which means his/her email must not match with the previous email record from database. In case of forget password, he/she might reset the password by providing registered email, security question and its corresponding answer which was provided while signup.



USER ACTIVITY DIAGRAM

Police Station Scope:

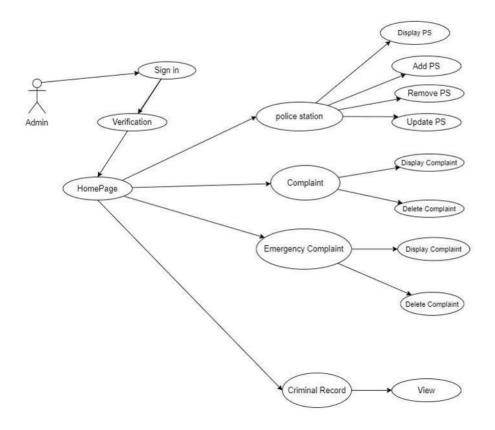
Police station can only be added by admin under the particular division of the city. Managing police staff like enrolling a new Police, updating his information and retiring(/transfer) him/her from the service, further getting list of complaints from all the complainant and updating their status after working on it. Reviewing/ managing emergency complaints and criminal record comes under police station scope.



POLICE STATION ACTIVITY DIAGRAM

Admin Scope:

Admin has access to all the functionality except complainant's complaint management likedelete and profile page of complainant who has logged in.



ADMIN ACTIVITY DIAGRAM

3.2 Non Functional Requirements

3.2.1 Interface

Go to Appendix B for user interfaces

3.2.2 Performance

• No of concurrent users:

OCR shall be able to handle at least 1000 transactions/inquiries per sec.

• Lodging of complaints:

The system is susceptible to any temporary server failure since it uses the strong feature of Struts 2 and Hibernate. Hence the examination will be continued even if the server gets disconnected in between the examination.

3.2.3 Constraint

OCR shall be able to handle at least 1000 transactions/inquiries per second

3.2.4 Other Requirements:

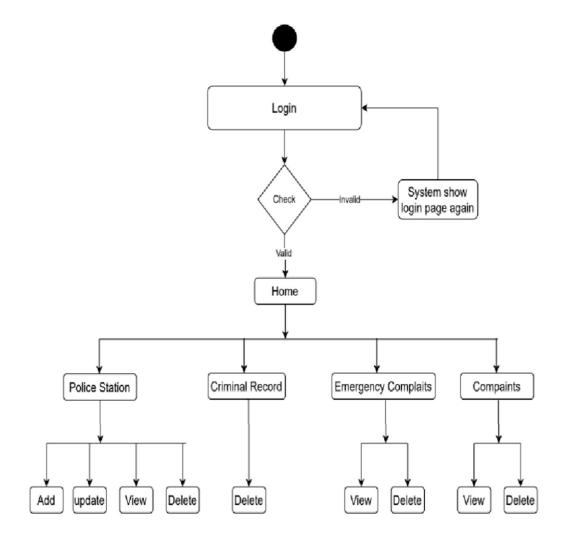
• Hardware Interfaces

The OCRS is expected to function on Intel PIII 900 MHz Processor equivalent or above, 128MB RAM, 20 GB HDD.

• Software Interfaces

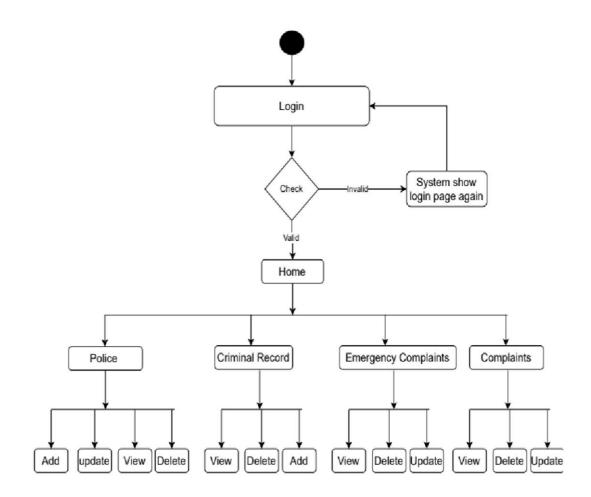
The OCR shall work on MS Windows operating systems family (MS Windows 98, MS Windows NT Workstation, MS Windows 2000, MS Windows XP). It configures to work with MySQL database. This System works on Apache Tomcat server. It uses browser IE 5.0 & above. It uses IIS 5.0 server.

4.Design



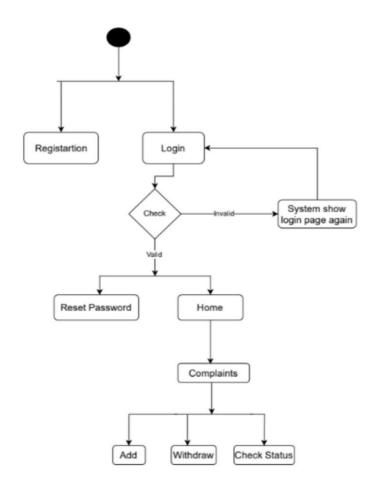
Activity Diagram Of Admin

FIGURE 4: A D M I N ACTIVITY DIAGRAM



Activity Diagram Of Police Station

FIGURE 5: POLICE STATION ACTIVITY DIAGRAM



Activity Diagram Of User

FIGURE 6: USER ACTIVITY DIAGRAM

5.User Interface Design(GUI):

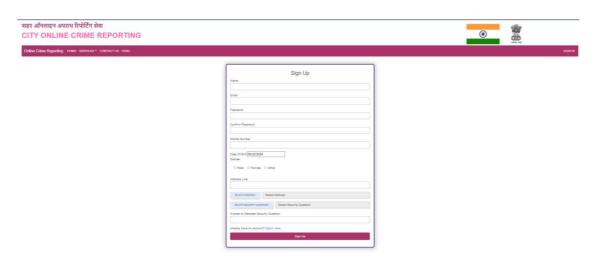
HOME



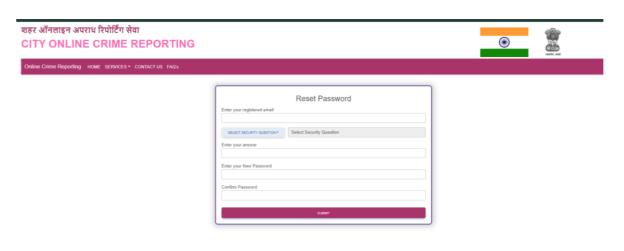
Sign in



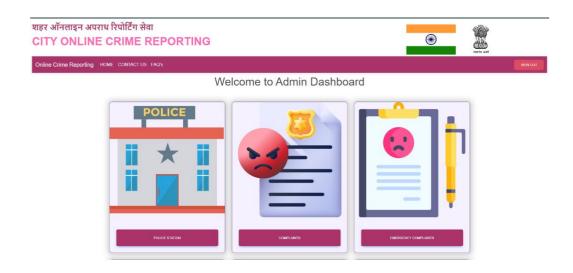
Sign-Up



Reset Password



Admin Home



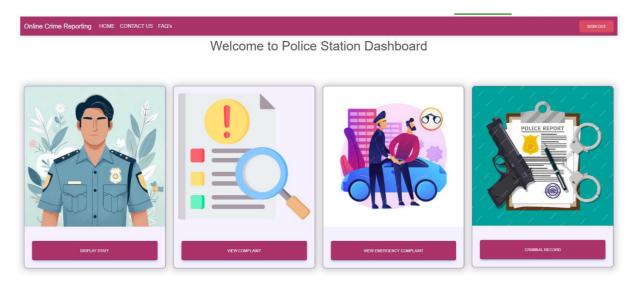
Admin Police Station List



Admin Criminal List



Police Station Home



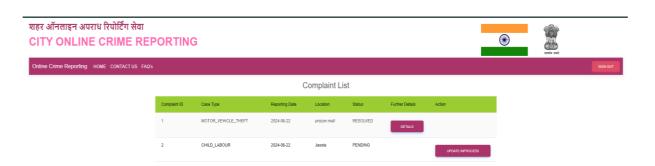
Police Station Add Criminal



Police Station Add Police



Complaint List



User Home



User Complaint registration



User Profile



CONCLUSION

The project entitled Online Crime Reporting was completed successfully.

The system has been developed with much care and free of errors and at the same time it is efficient and less time consuming. The purpose of this project was to develop a web application and for Online Crime Reporting.

This project helped us in gaining valuable information and practical knowledge on several topics like designing web pages using React.js, usage of responsive templates, and management of database using MySQL. The entire system is secured. Also, the project helped us understanding about the development phases of a project and software development life cycle. We learned how to test different features of a project.

This project has given us great satisfaction in having designed an application which can be implemented to any nearby shops or branded shops selling various kinds of products by simple modifications.

There is a scope for further development in our project to a great extent. A number of features can be added to this system in future like providing notification.

These features could have implemented unless the time did not limit us.

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- https://www.w3schools.com/
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- https://react-bootstrap.netlify.app/components/navbar
- https://stackoverflow.com
- https://delhipolice.nic.in/