

SAFETY, CRIME AND MISSING CASE REPORTING APPLICATION

Submitted in partial fulfillment of the required for the award of

Masters of Computer Science

by

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DEPARTMENT OF COMPUTER SCIENCE

SCHOOL OF SCIENCE AND HUMANITIES

SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited with Grade "A++" by NAAC

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BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of
VIDHYA SHREE R (42734025) who carried out the project entitled "**SAFETY,
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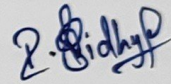
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DECLARATION

I, **VIDHYA SHREE R (42734025)** hereby declare that the Project Report entitled **"SAFETY, CRIME AND MISSING CASE REPORTING APPLICATION"** was done by me under the guidance of **Mrs. Jesintha J M.Sc., Assistant Professor, Department of Computer Science at SATHYABAMA INSTITUTE OF SCIENCE AND TECHNOLOGY, Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai-600 119** is submitted in partial fulfilment of the requirements for the award of Master of Science degree in Computer Science.



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VIDHYA SHREE R

ABSTRACT

The purpose of Crime Report Management System is to automate the existing manual system by the help of computerized equipment and full-fledged computer software, fulfilling the requirements of all policemen, so that their valuable data/information can be stored for a longer period with easy accessing of the same. The required software and hardware are easily available and easy to work with. The main aim of this project is to notify each and every policeman about the release of any criminal, including his/her details, such as, criminal's identity, name, type of release and so on. It can be used as an application by the police department to manage the records of different activities related to First Information Report. In this system all these activities (like registration of the complaint, updating information) are managed that saves time. This application is for the police stations for filling FIR, maintaining prisoners records and also for public safety.

In this application admin can maintain police records or create police, view all FIR as well as missing case and can create division/area and also view complaint of user. Police can check the users complaint and file an FIR and manage the prisoners record. User can use this application for safety purpose as people can use SOS Alert when there in danger. And also create an complaint against someone. It provides better prospective for the enhancement of organization regarding quality and transparency.

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION OF THE PROJECT

In an era marked by technological advancements and interconnectedness, ensuring public safety and swift response to criminal activities and missing persons cases is paramount. The "Safety, Crime, and Missing Case Reporting Application" aims to revolutionize the way communities address these critical concerns by harnessing the power of digital technology. This innovative application serves as a comprehensive platform designed to empower citizens to report safety incidents, crimes, and missing persons cases efficiently and effectively. By leveraging the ubiquity of smartphones and the internet, the application provides a user-friendly interface accessible to individuals of all backgrounds. One of the distinguishing features of this application is its ability to streamline the process of filing First Information Reports (FIRs). Traditionally, this process has been time-consuming and cumbersome, often requiring individuals to visit police stations in person.

However, with this application, users can file FIRs conveniently from their smartphones, reducing delays and improving access to justice. Furthermore, the application facilitates real-time communication between citizens and law enforcement agencies, enabling prompt response to emergencies and enhancing overall public safety. Through geo location services and advanced reporting functionalities, users can provide detailed information about incidents, helping authorities to investigate and address issues swiftly. Police can use this software to manage different crimes and some of the works which is done in police station manually. The crime management system can help in storing the records related to the criminals, cases, complaint record, case history and so on. This can allow a person to enter or delete the records if necessary. All these records can be maintained in a single database.

The "Safety, Crime, and Missing Case Reporting Application" represents a significant step forward in leveraging technology to foster safer communities and promote collaboration between citizens and law enforcement agencies. By harnessing the collective power of digital innovation and community engagement, we can work together to build a safer and more secure society for all.

1.2 AIM OF THE PROJECT

Crime Reporting:

Creating a user-friendly interface where individuals can easily report crimes they have witnessed or been a victim of. This involve providing options to select the type of crime, location, and any additional relevant information.

FIR Management:

Developing a system to efficiently manage First Information Reports (FIRs) filed by users. This app include assigning unique identification numbers to each FIR, storing and organizing the information in a secure database, and allowing authorized personnel to access and update the FIRs as required.

Online Accessibility:

Ensuring that the application is accessible online, allowing users to submit reports and access information from anywhere with an internet connection. This will enhance convenience and encourage more people to report crimes without the need to visit a police station physically.

Safety Features:

Implementing safety features within the application to enhance user security. For instance, incorporating emergency contact numbers, integrating a panic button feature that can alert authorities in case of emergencies.

Data Analysis and Reporting:

Analyzing the data collected through the application to identify crime patterns, hotspots or trends. Generating reports and visualizations can help law enforcement agencies make informed decisions and allocate resources effectively.

1.3 SCOPE OF THE PROJECT

User Registration and Authentication:

The application provide a user registration system to allow individuals to create accounts and authenticate themselves. This ensures that only authorized users can access and interact with the system.

Crime Reporting Interface:

The application provide a user-friendly interface for reporting crimes. Users should be able to select the type of crime, provide relevant details such as location, time, and description, and submit the report.

FIR Management System:

The project include a robust system for managing First Information Reports (FIRs). This involves assigning unique identification numbers to each FIR, storing the information securely in a database, and allowing authorized law enforcement officers to access, update, and track the progress of the FIRs.

Online Accessibility:

The application can be accessible online, allowing users to access and use it from various devices such as smartphones, tablets, or computers with an internet connection. This ensures convenience and encourages wider participation in reporting crimes.

Safety Features:

The application include safety features to enhance user security. It provides emergency contact numbers, incorporating a panic button feature that will alert authorities in case of emergencies.

Integration with Law Enforcement Agencies:

The project involve establishing a seamless integration with law enforcement agencies. This enables authorized personnel to access and review reported crimes, assign cases to investigators, and take necessary actions based on the information provided.

Data Analysis and Reporting:

The application analyze the collected data to identify crime patterns, hotspots, or trends. Generating reports and visualizations can help law enforcement agencies make informed decisions, allocate resources effectively, and implement proactive measures to prevent crimes.

1.4 EXISTING SYSTEM

In the present scenario filing an FIR/complaint is a hectic task since one must go through a very huge process for justice. It matter how small or big the crime is. In general, to file an FIR/complaint one must search for a nearby police station and have to wait until a cop takes upon the request and either we have to recite or have to give it as a written statement.

Certainly this takes nearly a day of an individual's time. In this busy world, it's quite tough to give up on our routine works. The existing system of filing complaints/FIR affects our daily routine, makes us spend a lot of our precious time in it. Mainly could give a lot of chances and time for verdicts to easily escape from cases making their pre bails ready or even for absconding. To avoid such miserable situations we have designed an app that makes everything happen in jut few minutes.

DISADVANTAGES

Time-consuming process:

Individuals have to spend a significant amount of time searching for a nearby police station, waiting for a police officer to attend to their request, and then providing a statement either orally or in writing, which can take up a whole day.

Disruption of daily routine:

The lengthy process of filing FIR/complaints can disrupt individuals' daily routines and commitments, causing inconvenience and stress.

Potential for delays in justice:

Due to the time-consuming nature of the existing system, there is a risk of delays in justice as criminals may have more opportunities to evade arrest or prepare for legal proceedings, such as obtaining pre-bail or absconding.

Accessibility issues:

People living in remote areas or with limited mobility may face challenges in accessing a nearby police station to file FIR/complaints, further exacerbating the inequalities in the justice system.

Disparities in treatment:

There may be disparities in how complaints are handled based on factors such as socio-economic status, gender, or ethnicity, leading to perceptions of unfairness or discrimination.

Inefficiency:

Due to the manual nature of the process, there is a risk of inefficiencies such as lost paperwork or delayed responses, which can hinder the pursuit of justice.

Limited hours:

Police stations may have limited operating hours, further complicating the process for those with busy schedules.

Bureaucratic hurdles:

The process of filing an FIR often involves navigating bureaucratic red tape, which can be confusing and frustrating for individuals seeking justice.

1.5 PROPOSED SYSTEM

The purpose of this work is to develop an android application for crime area detection and store criminal records. It provides an application for the user that would provide an alternate path for the users passing by crime area. It allows user to report incidents and get it verified by the police officials. It will consist of an application for police officials which can perform database operations on criminal record and allows efficient retrieval of required information from the centralized database present on Cloud. The application targets general public and police officials for managing the incidents and crime without consuming much time. This application will be useful for the remote access of criminal data which will be helpful for the investigations carried by police department. Moreover, it will also provide an user an SOS Alert button for they safety purpose. So that the notification will be sent to authorized person in case of emergency. Even it will easy for user to check crime details or missing report, also for registering a complaint against someone This application will be very much useful for each person in a society.

ADVANTAGES

Accessibility and Convenience:

The online system provides a convenient and accessible platform for users to report crimes and file FIRs from the comfort of their homes. This leads to a higher rate of reporting.

Time Efficiency:

Online reporting reduces the time required for the submission of FIRs. Users can submit information promptly, allowing law enforcement agencies to initiate investigations faster.

Real-time Reporting:

The system enables real-time reporting of incidents, allowing law enforcement to respond promptly to emerging situations. This will contribute to prevent crime and public safety.

Data Accuracy and Integrity:

Online systems can incorporate validation checks, reducing the likelihood of errors in reported information. This enhances the accuracy and integrity of data within the FIRs.

Anonymity and Confidentiality:

The system will provide options for users to report incidents anonymously, fostering a sense of security and encouraging individuals to come forward with information without fear of retaliation.

Evidence Documentation:

The system will support the upload and storage of digital evidence, making it easier for law enforcement to build cases and ensuring the preservation of crucial information.

Integration with Emergency Services:

Integration with emergency services can expedite responses to critical situations. This ensures a coordinated effort in handling emergencies and enhances overall public safety.

Cost-Efficiency:

Over time, the online system each leads to cost saving by streamlining processes, reducing paperwork, and optimizing resource allocation within law enforcement agencies.

1.6 FEASIBILITY STUDY

The feasibility of the project is analyzed in this phase and business proposal is put forth with a very general plan for the project and some cost estimates. During system analysis the feasibility study of the proposed system is to be carried out. For feasibility analysis, some understanding of the major requirements for the system is essential.

1.7 ECONOMIC FEASIBILITY

This study is carried out to check the economic impact that the system will have on the organization. The amount of fund that can pour into the research and development of the system is limited. The expenditures must be justified. Thus the developed system as well within the budget of user and this was achieved because most of the technologies used are freely available. This study is carried out to check the technical feasibility, that is, the technical requirements of the system. Any system developed must not have a high demand on the available technical resources. This will lead to high demands on the available technical resources. This will lead to high demands being placed on the client. The developed system must have a modest requirement, as only minimal or null changes are required for implementing this system.

1.8 SOCIAL FEASIBILITY

The aspect of study is to check the level of acceptance of the system by the user. This includes the process of training the user to use the system efficiently. The user must not feel threatened by the system, instead must accept it as a necessity. The level of acceptance by the users solely depends on the methods that are employed to educate the user about the system and to make him familiar with it.

1.8.1 Accuracy:

The system will be accurate and reliable based on the design architecture. If there is any problem in the accuracy then the system will provide alternative ways to solve the problem.

1.8.2 Usability:

The proposed system will be simple and easy to use by the users. The users will comfort in order to communicate with the system. The user will be provided with an easy interface of the system.

1.8.3 Accessibility:

The system will be accessible through internet and there should be no any known problem.

1.8.4 Performance:

The system performance will be at its best when performing the functionality of the system.

1.8.5 Reliability:

The proposed system will be reliable in all circumstances and if there is any problem that will be affectively handle in the design.

1.8.6 Security:

The proposed system will be highly secured; every user will be required registration and username/password to use the system. The system will do the proper authorization and authentication of the users based on their types and their requirements. The proposed system will be designed persistently to avoid any misuse of the application.

CHAPTER 2

LITERATURE SURVEY

2.1 ONLINE FIR MANAGEMENT AND SAFETY SYSTEM

Online FIR Management and Safety System (OFMSS) is a digital platform that allows individuals to file and manage First Information Reports (FIRs) online. It is an important application of technology in the field of law enforcement and aims to streamline the traditional FIR filing process, enhance accessibility, and improve safety and security. A literature survey on the topic reveals several studies and research papers that have explored various aspects of Online FIR Management and Safety Systems. Here are some key findings from the literature

S.NO.	TITLE & YEAR	AUTHOR NAME	METHODOLOGY	RESULT
1	Spatio-Temporal Crime Predictions by Leveraging Artificial Intelligence for Citizens Securityin Smart Cities -2021	Umair MuneerButt	Transfer Learning	Successful
2	A Parallel Corpus-Based Approach to the Crime Event Extraction for Low-Resource Languages-2023	Nina Khairova	CRETransfer Technique	Successful
3	A Natively Fixed- Point Run-Time Reconfigurable FIR Filter Design Method for FPGA Hardware-2022	Josh Goldsmith	FPGA	Successful

4	Safety Assurance of Artificial Intelligence-Based Systems: A Systematic Literature Review on the State of the Art and Guidelines for Future Work-2022	Antonio V. Silvaneto	Artificial Intelligence	Successful
5	An Integrated System Design and Safety Framework for Model-Based Safety Analysis-2020	Rahul Krishnan	Systems Modeling Language (SysML)	Successful
6	An Android based Mobile Crime Reporting app using croud sourcing 2019	Rey,Wp,Hipulan SL,Salayon AAC	python	Successful
7	A Block Chain Challenges And Opportunities :A Survey 2018	Zheng.z, xic.s, dai.h.n,chen.x	Block chain	Successful

Table2.1 Literature survey

CHAPTER 3

SYSTEM DESIGN

3.1 ARCHITECTURE DIAGRAM

System that facilitates interactions between administrators, police, and users for managing FIRs, missing cases, user profiles, and SOS alerts. Administrators have comprehensive control over various functionalities, including managing divisions, areas, and police personnel, as well as accessing reports. Users have capabilities such as registering, filing FIRs, searching missing case details, and sending SOS alerts. Police personnel are responsible for managing missing details, FIRs, user complaints, and updating their status. Overall, it's a comprehensive system for law enforcement and public engagement.

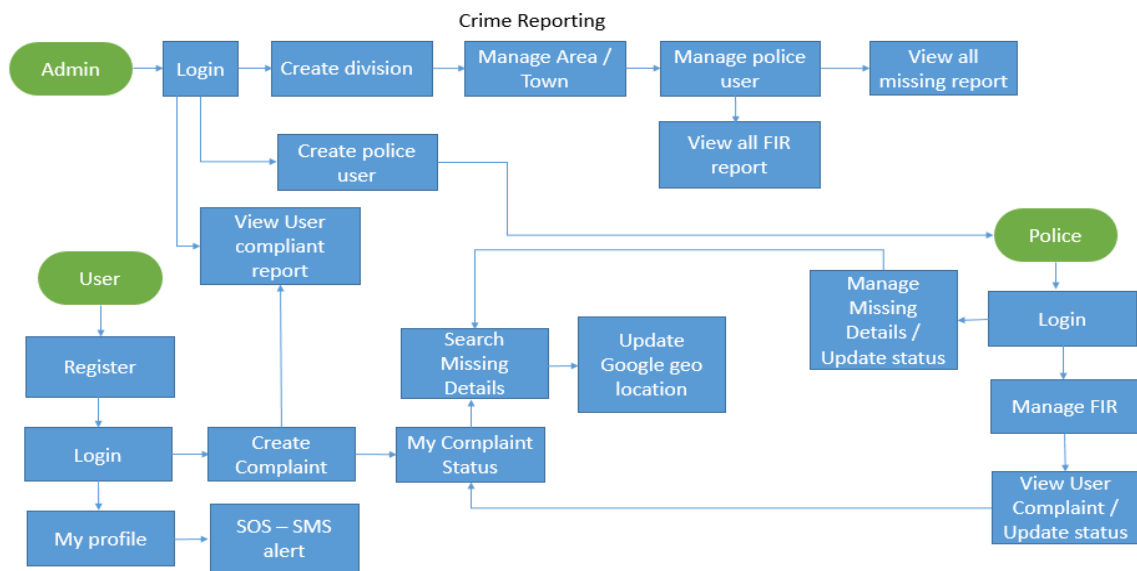


Figure 3.1 Architecture Diagram of safety, crime and missing case application

3.2 DESIGN

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization. Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software. The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made.

These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system. Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software.

3.3 UML DIAGRAMS

UML stands for Unified Modeling Language. UML is a language for specifying, visualizing and documenting the system. This is the step while developing any product after analysis. The goal from this is to produce a model of the entities involved in the project which later need to be built. The representation of the entities that are to be used in the product being developed need to be designed.

There are some kinds of methods in software design:

1. Use case Diagram
2. Sequence Diagram
3. Collaboration Diagram

3.3.1 USE CASE DIAGRAM

Use case diagrams model behavior within a system and helps the developers understand of what the user require. The stick man represents what's called an actor. Use case diagram will be useful for getting an overall view of the system and clarifying who can do and more importantly what they can't do.

In this below use case diagram, Admin work is to login, create category, create division, manage area/town and also capable of creating police user or even manage police user. They can even view all FIR report, missing case report even they can view user complaint report.

Police work is to login, manage FIR report, view user complaint and update status accordingly. Even they can manage and update missing details accordingly.

User work is to register, create login and they create complaint and check the status. They can even search for missing details and send SOS alert incase of any trouble.

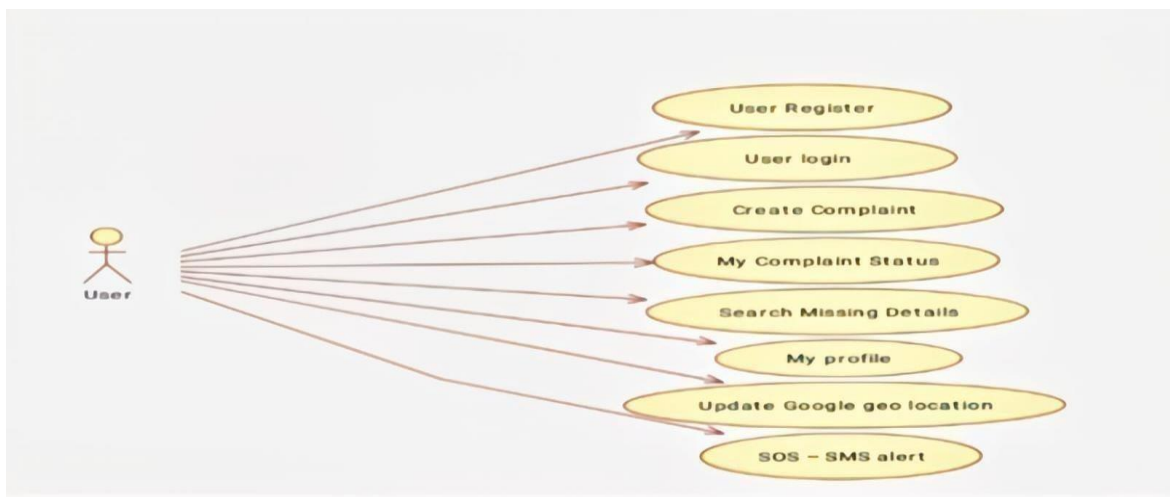
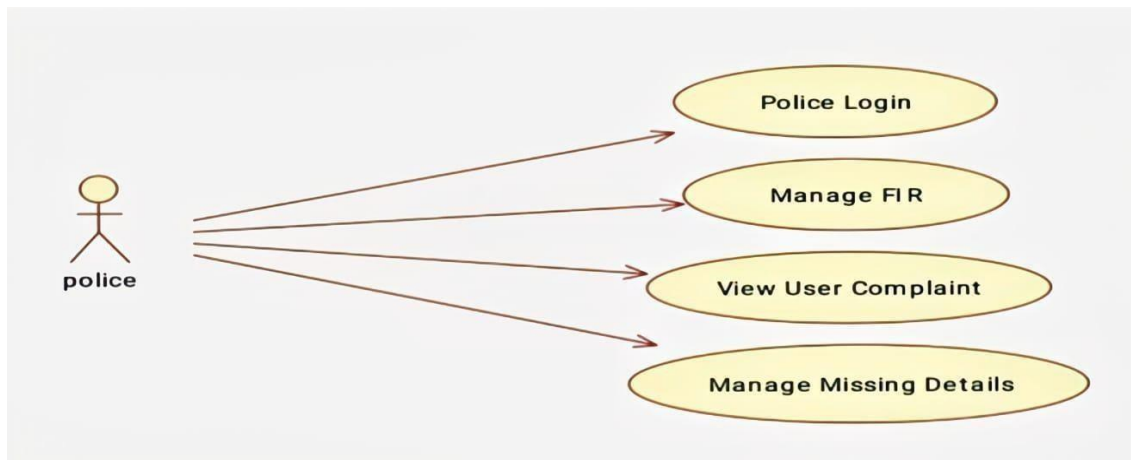
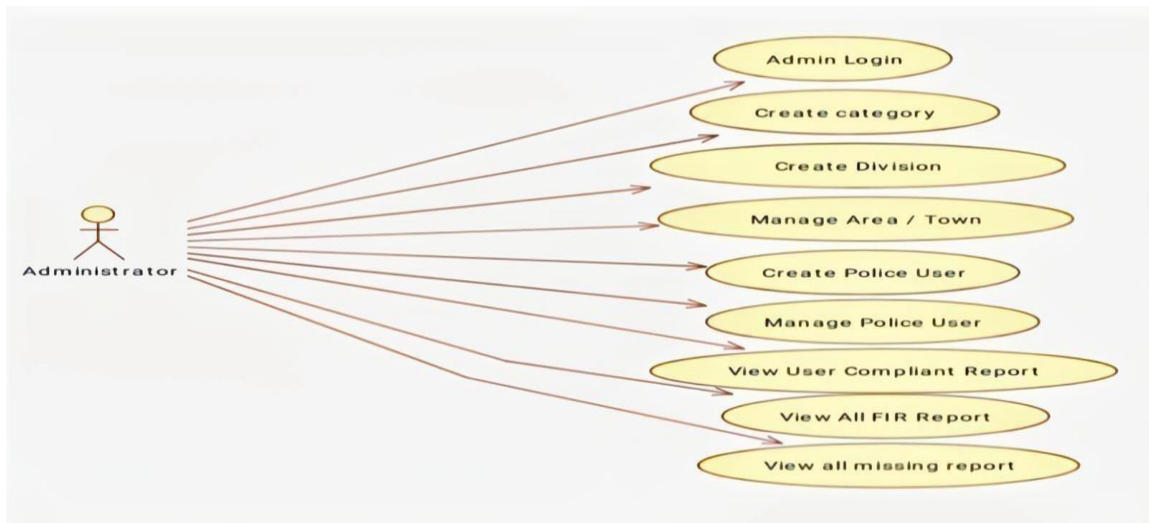


Figure3.3.1 Use Case Diagram of Admin, Police and User

3.3.2 SEQUENCE DIAGRAM

Sequence diagram and collaboration diagram are called Interaction Diagrams . An interaction diagram shows an interaction, consisting of set of objects and their relationship including the messages that may be dispatched among them. A sequence diagram is an introduction that empathizes the time ordering of messages. Graphically a sequence diagram is a table that shows objects arranged along the X- axis and messages ordered in increasing time along the Y-axis.

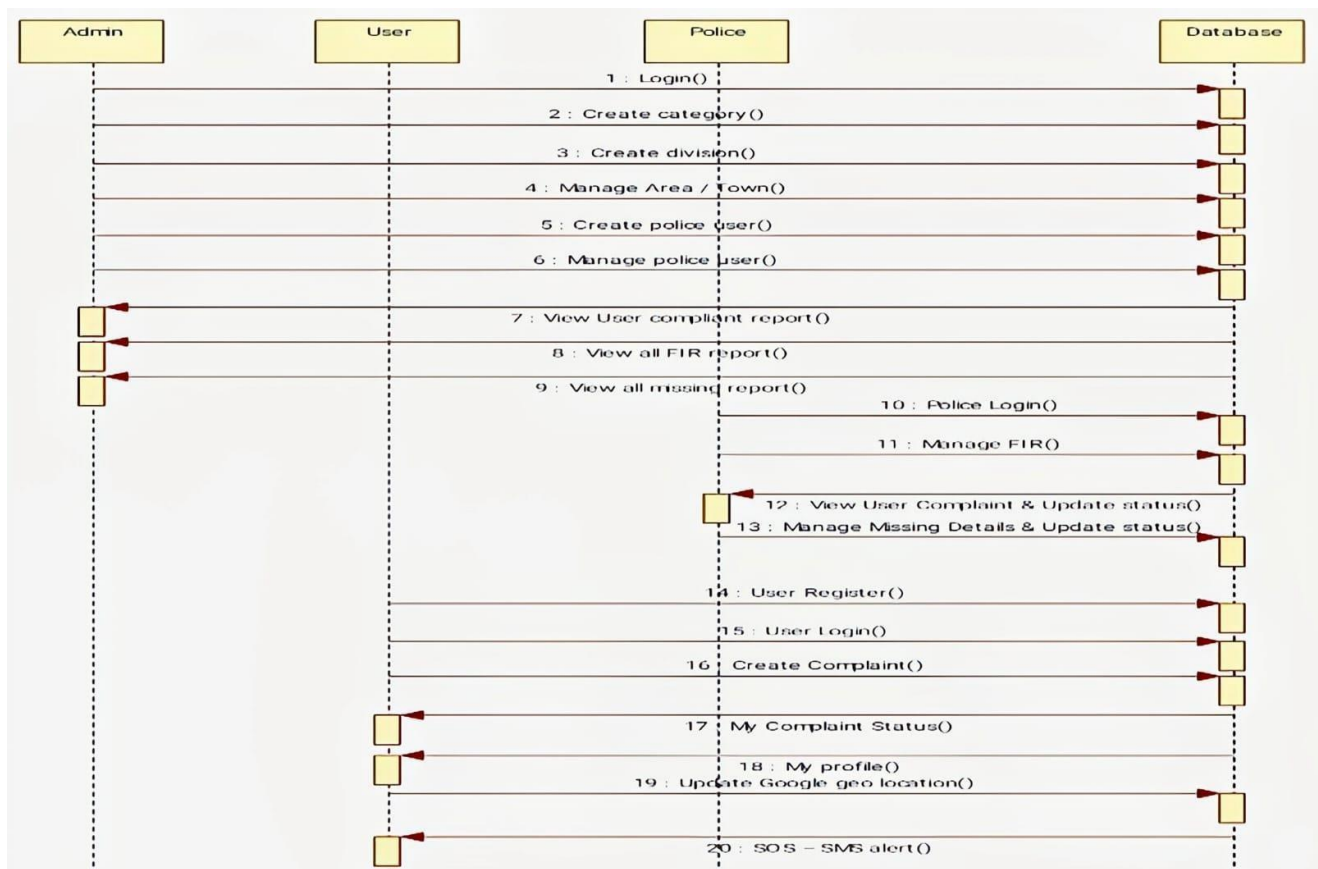


Figure 3.3.2 Sequence Diagram of safety, crime and missing case system

This Sequence diagram illustrates the things that are fed into database. Here in this sequence diagram the works of admin, police and user are fed into database for future reference. Each person has their set of duties to do. For instance Admin can create login, division, area, police user and manage them accordingly. They can even view complaints, FIR, Missing report so on. All these details will be stored in database. Same way police has a set of duties to view user complaint and update status and can file an FIR and manage them so on. Also an user has some advantage by using this application like they can create complaint and check for they status. They can update there location and send sos alert so that in case of emergency they can be saved at right time. Everything was fed into the database for reference.

3.3.3 COLLABORATION DIAGRAM

A collaboration diagram is a type of visual presentation that shows how various software objects interact with each other within an overall IT architecture and how users can benefit from this collaboration. A collaboration diagram often comes in the form of a visual chart that resembles a flow chart.

This Collaboration diagram represents the activities of Admin, User and Police which are stored into the database. It represents the architecture flow of different users in meaningful way in the form of visual chart.

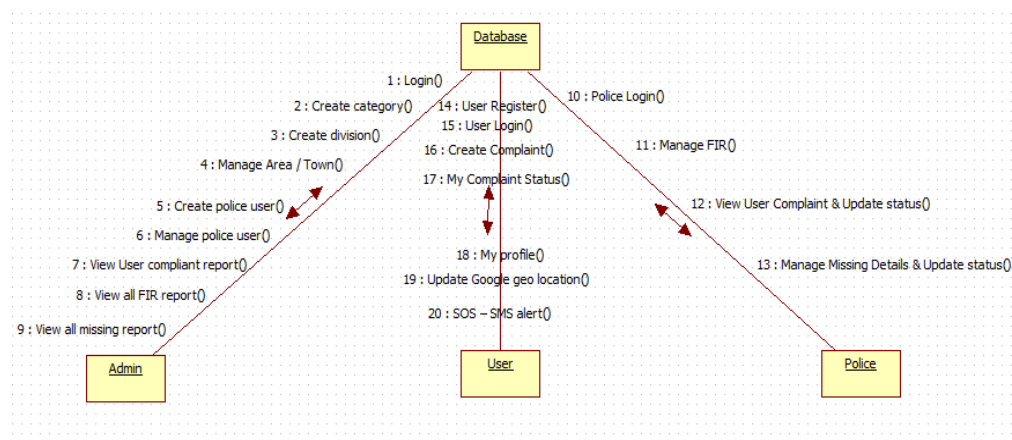


Figure 3.3.3 Collaboration Diagram of safety, crime and missing case application

3.4 DATA FLOW DIAGRAM

This Data Flow diagram illustrates the data within a system. It consists of processes, data stores, external entities, and data flows that show how data moves from one part of system to another. DFDs provides a high- level overview of system's data architecture and interactions.

3.4.1 ZERO LEVEL DATA FLOW DIAGRAM

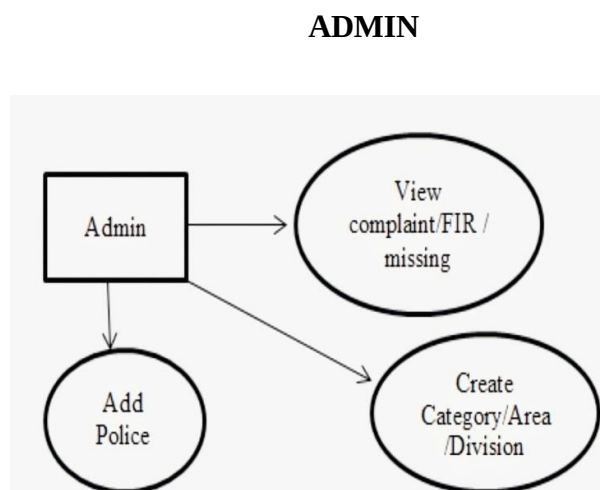
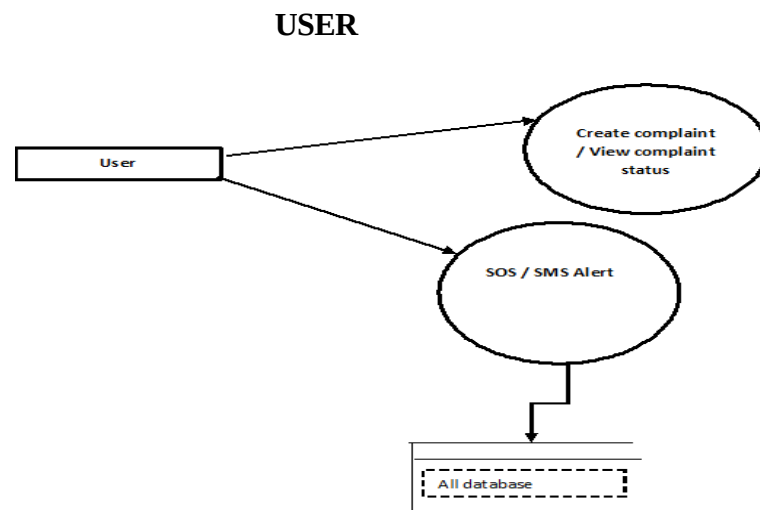
The Zero Level Data Flow Diagram (0th Level DFD), also known as a Context Diagram, provides a broad overview of the entire system. It depicts the system as a single process with external entities, representing the system's boundaries and the flow of data between the system and external entities. In this app user can check crime details and also can post complaint. Meanwhile user can also search for any missing case details and check updates accordingly.



Figure 3.4.1 Zero level Data flow Diagram of safety, crime and missing case reporting

3.4.2 FIRST LEVEL DATA FLOW DIAGRAM

The First Level Data Flow Diagram is a refined version of the overall DFD, focusing on the main processes and data flows at the highest level of abstraction. It breaks down the system into major processes and shows the flow of data between them, providing a more detailed view compared to the context- level DFD.



POLICE

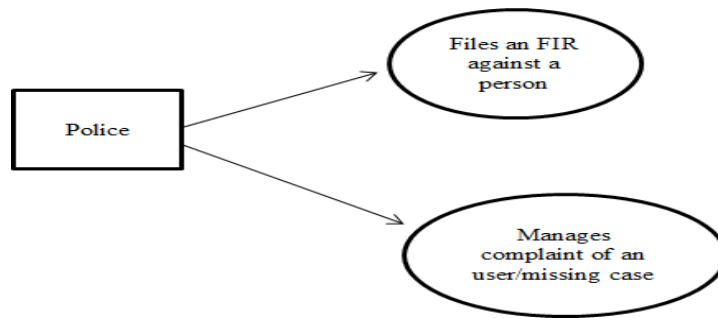


Figure3.4.2 First level data flow diagram of User, Admin and police

User can send emergency alert, create complaint and also view status of the complaint

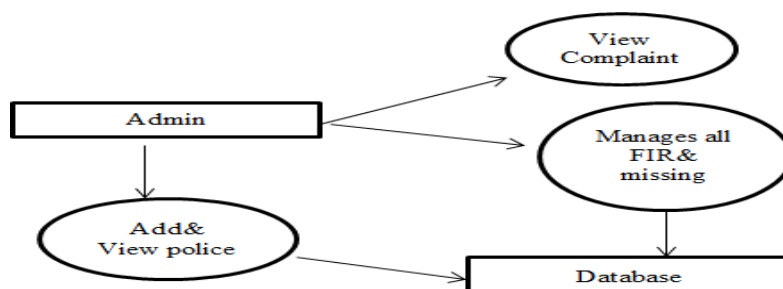
Admin can view complaint of an user / view an FIR of an police. He/she can create category, area and division

Files an FIR against an person, And manages all complaints and missing case of an user and update accordingly

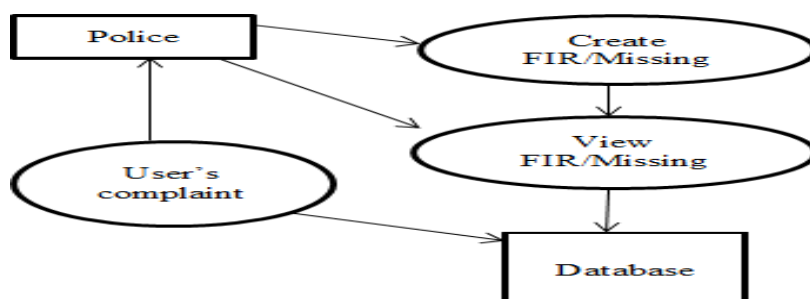
3.4.3 SECOND LEVEL DATA FLOW DIAGRAM

The Second Level Data Flow Diagram expands on the first level DFD by breaking down each major process into smaller sub processes. It provides more detailed information about how data flows within each process, including input, processing, and output data flows. The 2nd level DFD adds granularity to the system's data flow representation.

ADMIN



POLICE



USER

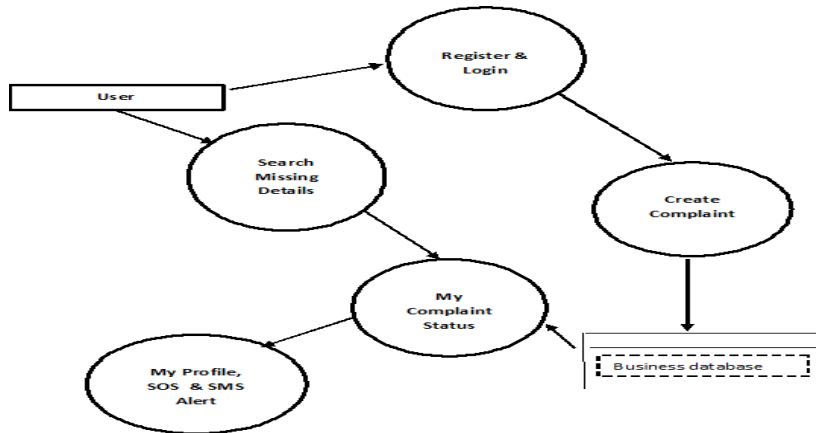


Figure3.4.3 Second Level Data flow diagram of Admin, Police and User

At Second Level Data Flow Diagram provides more detailed information about all three different users which are: Admin, Police and User.

3.4.4 ADMIN-FLOW DIAGRAM

The Admin Flow Diagram depicts the specific flows and interactions associated with administrative tasks within the system. It illustrates how administrators or privileged users interact with the system to perform administrative functions such as user management, data maintenance, system configuration, and access control. Here admin can login, create category, create division as well as they can create police user. Admin can even manage area or town and can view user complaint report.

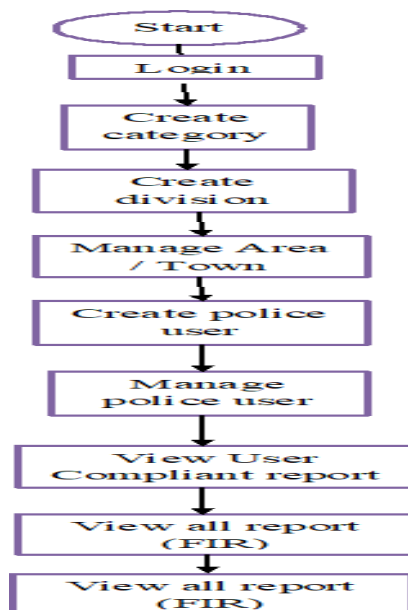


Figure 3.4.4 Admin- flow diagram

3.4.5 USER FLOW DIAGRAM

A User Flow Diagram, also known as a User Journey Map or User Flowchart, illustrates the steps a that user takes to accomplish a specific task or goal within a system or application. It visualizes the sequence of actions, decisions, and interactions a user goes through from the initial entry point to the completion of the task. In this stage we can manage FIR , view user complaint and manage missing details.

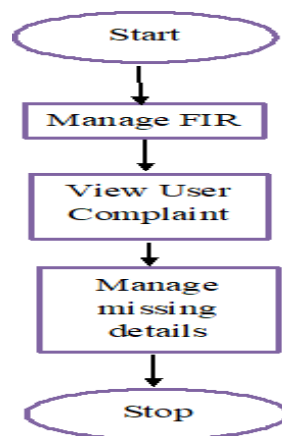


Figure 3.4.5 User-flow Diagram of safety, crime and missing case reporting app

3.5 CLASS DIAGRAM

A Class Diagram is a static structural diagram that represents the structure of a system by showing the classes of objects, their attributes, methods, and relationships. It provides a detailed view of the system's object-oriented design, including class hierarchies, associations, aggregations, and inheritance relationships

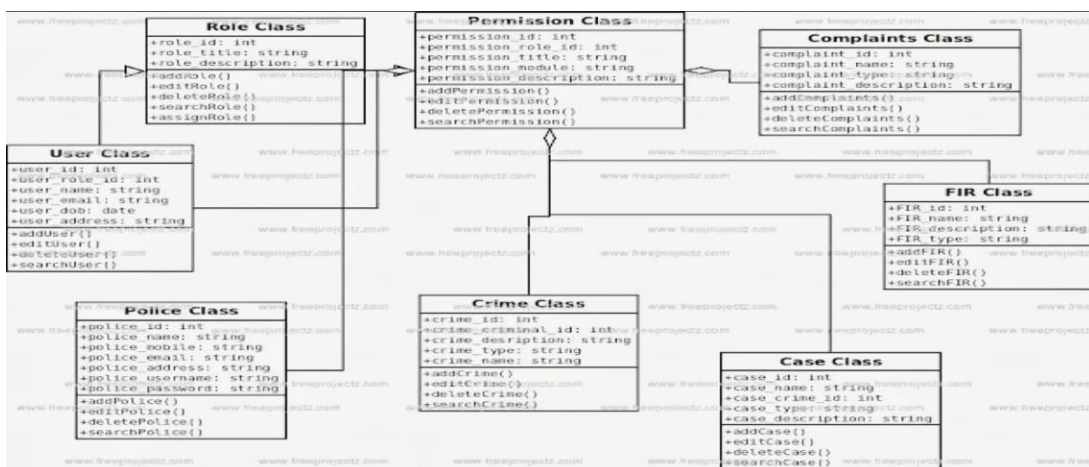


Figure 3.5 Class Diagram of Safety, crime and missing case application

3.6 ACTIVITY DIAGRAM

An Activity Diagram illustrates the flow of control or workflow within a system by showing activities, transitions, decisions, and concurrency. It depicts the sequence of actions or steps performed to achieve a particular goal or complete a process. Activity diagrams are especially useful for modeling business processes, use cases, and system behavior.

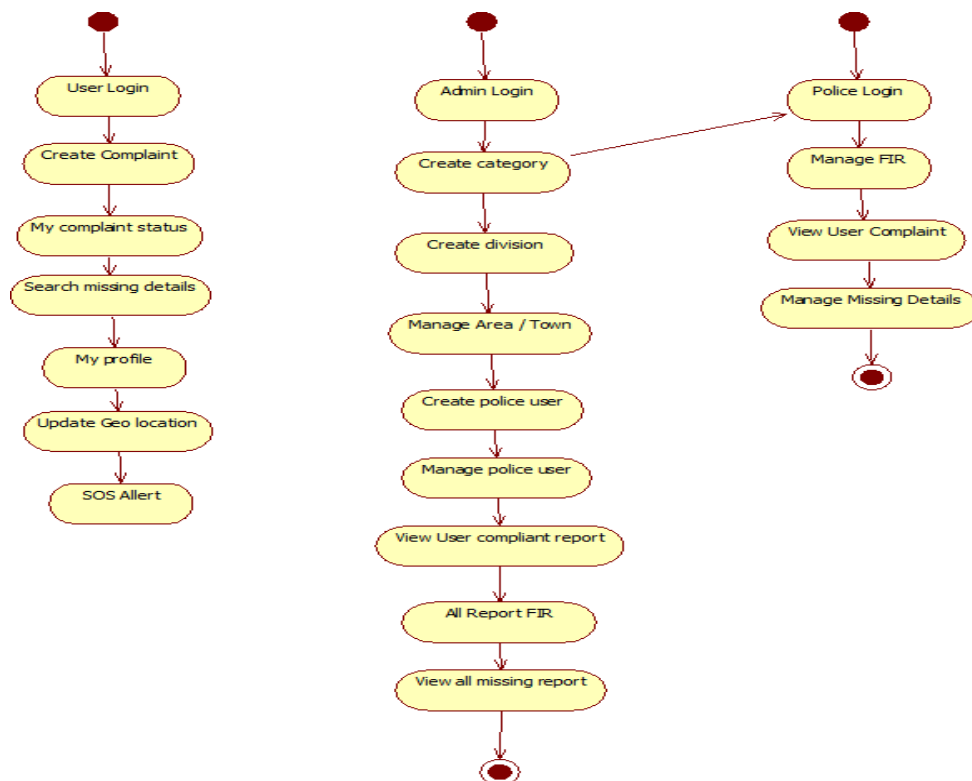


Figure 3.6 ActivityDiagram of safety, crime and missing case application

Activity Diagram shows us the work of every sector and how they are connected to each other and perform operation. Mainly it shows how admin is connected to police and perform the work that is assigned to them. Here to make a clear view of things taking place, the diagram shows that admin will create police and create his category like which department he/she belong and role of the police and which are he is assigned for. So that particular police can view the case report of that particular area he/she has been assigned for.

So here the activity diagram illustrates the activity of each persons and what all role that can be performed by them and shows the flow chart of each person (Admin, Police, User).

CHAPTER 4

SAFETY AND FIR MANAGEMENT SYSTEM

4.1 OVERVIEW OF ONLINE FIRST INFORMATION REPORT MANAGEMENT AND SAFETY SYSTEM

Creating an online FIR (First Information Report) management and safety system application involves several components and considerations. The following is the overview of what such an application:

User Registration and Authentication:

Users can register on the platform using their personal information and authenticate themselves through email or phone verification. This ensures that only authorized individuals can access the system.

FIR Filing:

The system allows users to file FIRs online by providing details such as the nature of the incident, location, date, time, and description of the event. Users can also upload supporting documents or evidence, such as photos or videos.

Case Management Dashboard:

Law enforcement officials are provided with a centralized dashboard to manage incoming FIRs. They can view, prioritize, assign, and track the progress of cases efficiently.

Automated Alerts and Notifications:

The system sends automated alerts and notifications to relevant stakeholders, including law enforcement agencies, first responders, and victims, regarding the status of FIRs and any updates or actions taken.

Geo location Integration:

Geo location services are integrated into the system to accurately capture the location of reported incidents. This information is crucial for dispatching resources and responding to emergencies promptly.

Anonymous Reporting Option:

To encourage reporting, the system offers an option for users to file FIRs anonymously if they prefer not to disclose their identity. This feature helps in gathering information from individuals who may fear retaliation or retribution.

Data Analytics and Reporting:

The system generates comprehensive reports and analytics on various parameters such as the frequency of incidents, trends, geographical hotspots, and response times. This data can be used for strategic planning, resource allocation, and policy-making.

Integration with Law Enforcement Database:

The system integrates with existing law enforcement databases to cross-reference and verify information provided in FIRs. This ensures data accuracy and facilitates collaboration between different agencies.

24/7 Accessibility:

The online FIR management system is accessible 24/7, allowing users to report incidents at any time of the day, enhancing accessibility and convenience.

Data Security and Privacy:

Robust security measures are implemented to safeguard user data and maintain confidentiality. Encryption, access controls, and regular security audits are employed to prevent unauthorized access or data breaches.

Training and Support:

Offer training resources and technical support for users, including law enforcement officers and members of the public, to ensure smooth adoption and usage of the application.

Regular Updates and Maintenance:

Continuously update and maintain the application to address security vulnerabilities, add new features, and improve user experience based on feedback.

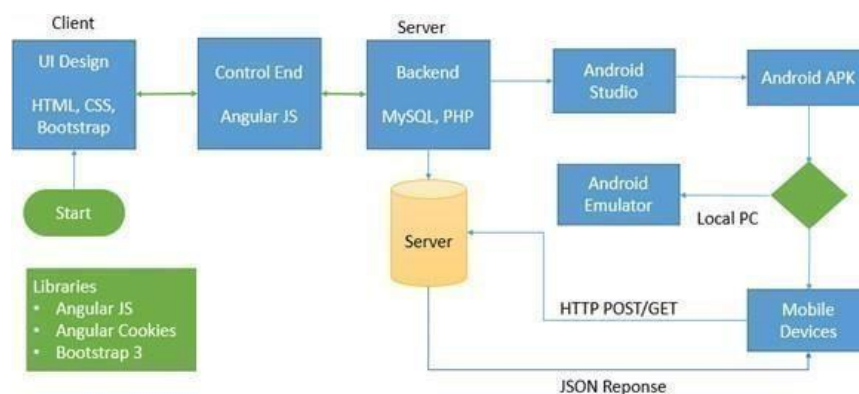


Figure4.1 Work Flow diagram of safety, crime and missing case reporting application

By incorporating these features into an online FIR management and safety system, you can create an efficient and user-friendly platform for reporting and managing incidents, ultimately contributing to enhancing public safety and security.

4.2 INCIDENT REPORTING INTERFACE

User-friendly interface:

The platform prioritizes intuitive layout and navigation, catering to users of all technical backgrounds. It offers clear and concise instructions for incident reporting, guiding users seamlessly through the process. Leveraging familiar design patterns and UI elements reduces the learning curve, while responsive design ensures consistency across various devices. Visual cues provide feedback, reassuring users of successful incident report submissions.

Customizable incident forms:

The platform empowers organizations with the flexibility to customize incident reporting forms according to their unique needs and specifications. Users can effortlessly add, remove, or modify fields within the form to align with the type of incidents being reported. Dynamic form elements, including dropdown menus and checkboxes, streamline the capture of pertinent details. Integration

with backend systems automates the population of specific fields, minimizing manual data entry. Administrators can easily update form templates necessary, eliminating need for technical expertise.

Multiple reporting channels:

The platform offers support for diverse reporting channels, encompassing web forms and mobile apps. Integration among these channels ensures a uniform user experience and data collection process. Accessibility features are integrated across all reporting channels, catering to users with disabilities. Clear communication of available reporting options and instructions assists users in selecting the most suitable channel based on the urgency and nature of the incident, enhancing efficiency and responsiveness.

Notification and escalation:

This application implements automatic notifications to pertinent stake holders responders, supervisors, and administrators upon the submission of incident reports, fostering swift action and accountability. Escalation protocols guarantee timely responses to critical incidents or those demanding immediate attention. Integration with communication channels like SMS, email, and push notifications ensures efficient and reliable message delivery. Furthermore, the system logs and tracks notification history, providing a robust auditing mechanism for accountability and transparency purposes.

Tracking and monitoring:

This application features real-time tracking of reported incidents, ensuring transparency and accountability throughout the entire resolution process. Administrators access a dashboard interface to monitor incident status and progress. Automated assignment of reports to designated personnel is facilitated by predefined criteria like location or severity. Historical data analysis identifies trends, patterns, and areas for improvement in incident management.

4.3 SAFETY FEATURES INTEGRATION

Integrating safety features into a safety, crime and missing case reporting application is crucial for enhancing the security and reliability of the platform. Here are some safety features that can be integrated:

Secure Authentication:

To enhance the security of user accounts, multi-factor authentication (MFA) will be implemented, requiring additional verification steps such as SMS codes or biometric authentication. This will bolster protection against unauthorized access. Additionally, industry-standard authentication protocols like Open ID Connect will be utilized to enable secure single sign-on (SSO) across multiple platforms, ensuring user privacy and data security are maintained at all times.

Data Encryption:

Sensitive data transmitted between users and the server will be protected using end-to-end encryption, ensuring that only authorized parties can access and decrypt the information. Strong encryption algorithms such as AES-256 will be employed to encrypt data at rest, safeguarding it from unauthorized access in storage or database systems. This comprehensive approach aims to maximize data security and confidentiality throughout the system.

Role-based Access Control (RBAC):

Role-based access control (RBAC) will be implemented to assign specific permissions and privileges to users based on their roles and responsibilities within the organization, thereby limiting access to sensitive information and functionality. Regular review and updating of user roles and permissions will be conducted to ensure alignment with employees' current roles and responsibilities, thereby minimizing the risk of unauthorized access or data breaches. This proactive approach aims to maintain an optimal balance between security and usability within the system.

Anonymity Options:

Anonymous reporting options will be offered for users who wish to report incidents without disclosing their identity, fostering a safe and confidential reporting environment that encourages transparency and accountability. Mechanisms will be provided for users to submit anonymous tips or feedback securely, ensuring that their privacy is protected while still enabling them to contribute valuable information to incident management efforts. This approach prioritizes user privacy and promotes a culture of openness and responsibility within the organization.

Real-time Alerts and Notifications:

Real-time alerts and notifications will be configured to notify relevant stakeholders, including administrators, security personnel, or emergency responders, immediately upon the detection of security incidents or breaches. Push notifications or SMS alerts will be utilized to ensure that recipients receive critical information promptly, enabling them to take timely action to mitigate risks or address security threats effectively. This proactive approach aims to enhance incident response capabilities and minimize the impact of security incidents on the organization.

GPS Integration:

GPS functionality will be integrated into the application to enable users to report incidents with precise location information, facilitating faster response times and accurate dispatching of emergency services or security personnel. Geo fencing technology will be utilized to create virtual perimeters around specific areas or locations, triggering automated alerts or notifications when incidents occur within those boundaries. This approach enhances situational awareness and enables proactive incident management, ensuring timely responses to critical situations.

Incident Escalation Procedures:

Clear incident escalation procedures will be established, outlining the steps to be followed when escalating security incidents or emergencies to higher levels of authority or specialized response teams. Defined escalation paths and criteria will be based on the severity, impact, and urgency of incidents, ensuring that appropriate personnel are notified and empowered to respond effectively to mitigate risks and minimize disruptions. This structured approach enhances incident response capabilities, enabling swift and coordinated actions to address security threats or emergencies.

Secure Communication Channels:

Secure communication protocols, such as TLS/SSL, will be utilized to encrypt data transmitted between users and the server, safeguarding it from interception or eavesdropping by malicious actors. Additionally, end-to-end encryption will be implemented for messaging and communication features within the application, ensuring that sensitive information remains confidential and inaccessible to unauthorized parties throughout the transmission process.

Audit Trails and Logging:

Detailed audit trails and logs of user activities, system events, and security-related incidents will be maintained to facilitate forensic analysis, compliance auditing, and incident response investigations. Log management and retention policies will be implemented to securely store audit logs, ensuring their integrity, accessibility, and availability for regulatory compliance and security monitoring purposes. This comprehensive approach enhances visibility into system activities and enables proactive measures to maintain regulatory compliance effectively.

CHAPTER 5

METHODOLOGY

5.1 CRIME REPORTING, ONLINE FIR MANAGEMENT AND SAFETY

SAFETY, CRIME AND MISSING CASE REPORTING APPLICATION is a comprehensive digital platform designed to streamline the process of reporting criminal incidents, managing First Information Reports (FIRs), and enhancing overall safety and security within communities. This innovative application leverages modern technology to provide a user-friendly interface that facilitates the reporting of various types of crimes, ranging from theft and vandalism to more serious offenses such as assault and fraud. With the increasing prevalence of digital communication and connectivity, there is a growing need for efficient and accessible tools to report and address criminal activities promptly. Traditional methods of filing FIRs and reporting crimes often involve cumbersome paperwork, long wait times, and limited accessibility, which can hinder the timely response of law enforcement agencies and emergency responders.

This application aims to address these challenges by offering a centralized platform accessible via web and mobile devices, allowing users to report incidents quickly and conveniently from anywhere at any time. By harnessing the power of digital technology, this application empowers communities to actively participate in crime prevention and law enforcement efforts, fostering collaboration between citizens, authorities, and other stakeholders. Key features of the application include secure authentication to ensure the confidentiality and integrity of user data, real-time incident reporting with GPS integration for accurate location tracking, and anonymous reporting options to encourage individuals to come forward without fear of reprisal. Additionally, the application provides functionalities for managing FIRs, tracking the status of reported incidents, and facilitating communication between users and law enforcement agencies.

By promoting transparency, accountability, and efficiency in the reporting and management of criminal incidents, the safety, crime and missing case reporting application contributes to the creation of safer and more resilient communities. It serves as a vital tool in the ongoing efforts to combat crime, protect citizens, and uphold the rule of law in the digital age. Moreover, the application prioritizes user privacy and security through secure authentication measures and anonymous reporting options, fostering trust and transparency in the reporting process.

5.2 SYSTEM MODULE LIST

5.2.1 ADMIN MODULE DESCRIPTION

Login:

Provides secure access to the administrative panel for authorized personnel, ensuring only authenticated users can manage the system.

Create Category:

Enables the creation and categorization of various types of incidents, facilitating a systematic organization of reported data.

Create Division:

Allows administrators to define and manage divisions within the system, ensuring effective jurisdictional control.

Manage Area / Town:

Provides functionality for administrators to oversee and maintain information related to different areas or towns, enhancing geographical management.

Create Police User:

Permits the addition of police users to the system, assigning roles and responsibilities to law enforcement personnel.

Manage Police User:

Offers tools for administrators to supervise and modify the roles, permissions, and details of registered police users.

View User Compliant Report:

Displays a comprehensive list of user complaints, allowing administrators to review and take necessary actions.

View All FIR Report:

Provides an overview of all First Information Reports (FIRs) submitted, aiding administrators in monitoring and managing reported incidents.

View All Missing Report:

Displays a consolidated view of all missing person reports, facilitating efficient tracking and resolution.

5.2.2 POLICE MODULE DESCRIPTION

Login:

Grants access to the police user interface, ensuring secure and authenticated entry.

Manage FIR:

Allows police personnel to oversee and manage FIRs, including updating the status and progress of investigations.

View User Complaint:

Presents a list of user complaints for police officers to review and take necessary actions, including updating the status of the reported incidents.

Manage Missing Details:

Provides tools for police officers to handle missing person reports, including updating the status of the investigation.

5.2.3 USER MODULE DESCRIPTION

Register:

Allows users to create accounts within the system, providing a personalized experience for reporting incidents.

Login:

Grants access to the user interface, ensuring secure entry and access to personalized features.

Create Complaint:

Enables users to submit complaints, detailing incidents and providing essential information for law enforcement

My Complaint Status:

Displays the current status and updates of the user's submitted complaints, keeping them informed about the progress of investigations.

Search Missing Details:

Facilitates users in searching and accessing information related to missing persons, promoting community involvement in locating individuals

My Profile:

Allows users to view and update their profiles, ensuring accurate and up-to-date information for effective communication.

Update Google Geo-location:

Provides functionality for users to update and share their current geographical location, aiding law enforcement in responding to incidents more efficiently.

SOS – SMS Alert:

Enables users to send emergency SMS alerts (SOS) to predefined contacts or authorities, ensuring swift response in critical situations.

CHAPTER 6

SYSTEM IMPLEMENTATION

6.1 INTRODUCTION TO HTML FRAMEWORK

Hypertext Markup Language, commonly referred to as HTML, is the standard markup language used to create web pages. Along with CSS, and JavaScript, HTML is a cornerstone technology used to create web pages, as well as to create user interfaces for mobile and web applications. Web browsers can read HTML files and render them into visible or audible web pages. HTML describes the structure of a website semantically along with cues for presentation, making it a markup language, rather than a programming language. HTML can embed scripts written in languages such as JavaScript which affect the behavior of HTML web pages. HTML markup can also refer the browser to Cascading Style Sheets (CSS) to define the look and layout of text and other material. Here we use HTML to structure my applications pages including forms for reporting incidents and filling FIRs. Also it is used to create HTML forms for users to report safety concerns, crimes or missing persons.

6.2 CASECADING STYLE SHEETS (CSS)

CSS is a style sheet language used for describing the presentation of a document written in a markup language. Although most often used to set the visual style of web pages and user interfaces written in HTML and XHTML, the language can be applied to any XML document, including plain XML, SVG and XUL, and is applicable to rendering in speech, or on other media. Along with HTML and JavaScript, CSS is a cornerstone technology used by most websites to create visually engaging webpages, user interfaces for web applications, and user interfaces for many mobile applications. By Implementing CSS to my application it makes my application visually appealing and User friendly. It also helps in optimizing the performance by reducing page load times, Improving rendering speed and provides cross- browser compatibility.

6.3 MYSQL SERVER

MySQL is an open-source relational database management system (RDBMS);[6] in July 2013, it was the world's second most widely used RDBMS, and the most widely used open- source client–server model RDBMS. The MySQL development project has made its source code available under the terms of the GNU General Public License, as well as under a variety of proprietary agreements. By setting up MYSQL database, we can store User Information, reported incidents, FIRs and Other relevant data. Also MYSQL is used to Create, Read, Update and Delete operations to manage user Report, FIRs. It helps in securely manage user accounts and login session.

6.4 PHP

PHP is a server-side scripting language designed for web development but also used as a general-purpose programming language. Originally created by Rasmus Lerdorf in 1994, the PHP reference implementation is now produced by The PHP Group. PHP is called Hypertext Preprocessor. PHP & MYSQL both used to manage the users information securely. It is used to create server side scripts for user authentication, data processing and database interactions. PHP scripts to process FIR submissions, validate input and store FIR records in database. By server side logic in PHP to process geo location data and store it along with incident report in MYSQL database.

6.5 ANGULAR JAVA SCRIPT

Angular JS (commonly referred to as "Angular" or "Angular.js") is an open-source web application framework mainly maintained by Google and by a community of individuals and corporations to address many of the challenges encountered in developing single-page applications. It aims to simplify both the development and the testing of such applications by providing a framework for client-side model-view-controller (MVC) and model-view-view model(MVVM) architectures, along with components commonly used in rich Internet applications. Utilizing Angular Java script for integrating geo location services to capture the location of reported incidents. Exploring Libraries or Angular JS plugins to implement notifications & alerts for users, providing updates

CHAPTER 7

SYSTEM TESTING

The purpose of testing is to discover errors. Testing is the process of trying to discover every conceivable fault or weakness in a work product. It provides a way to check the functionality of components, sub-assemblies, assemblies and/or a finished product. It is the process of exercising software with the intent of ensuring that the Software system meets its requirements and user expectations and does not fail in an unacceptable manner. There are various types of test. Each test type addresses a specific testing requirement.

7.1 ADMIN TEST CASE

Module	Test Case Description	Test Input	Expected Output	Actual Output
ADMIN - Login	Validate successful login for an admin user.	Admin credentials (username, password)	Admin dashboard is displayed.	Admin dashboard displayed successfully.
ADMIN - Create Category	Verify the creation of a new incident category.	Category details (name, description)	New category is added to the system.	Category added successfully.
ADMIN - Create Division	Confirm the creation of a new geographical division.	Division details (name, description)	New division is created and visible in the system.	Division created and visible as expected.
ADMIN - Manage Area/Town	Ensure the addition and management of areas or towns.	Area/Town details (name, division)	Area/Town is successfully added and linked to a division.	Area/Town added and linked as expected.
ADMIN - Create Police User	Validate the creation of a new police user account.	Police user details (username, password)	New police user account is successfully created.	Police user account created successfully.
ADMIN - Manage Police User	Confirm the Modification of police user details.	Police user Details (Username, Role)	Police user details are updated as per the input.	Police user Details updated Successfully.

ADMIN - View User Complaint	Verify the display of user complaints for review.	N/A	List of user complaints is displayed.	User complaints displayed as expected.
ADMIN - View All FIR Report	Confirm the display of all FIR reports in the system.	N/A	List of all FIR reports is displayed.	All FIR reports displayed as expected.
ADMIN - View All Missing Report	Ensure the display of all missing person reports.	N/A	List of all missing person reports is displayed.	All missing person reports displayed as expected.

Table 7.1 Admin Test Case

7.2 POLICE TEST CASE

Module	Test Case Description	Test Input	Expected Output	Actual Output
POLICE - Login	Validate successful login for a police user.	Police credentials (username, password)	Police dashboard is displayed.	Police dashboard displayed successfully.
POLICE - Manage FIR	Confirm the ability to manage and view FIRs.	FIR details (status, updates)	FIR details are updated as per the input.	FIR details updated successfully.
POLICE - View User Complaint	Verify the display of user complaints for review.	N/A	List of user complaints is displayed.	User complaints displayed as expected.
POLICE - Update Status (User Complaint)	Confirm the update of user complaint status.	Complaint ID, new status	User complaint status is updated as expected.	User complaint status updated successfully.
POLICE - Manage Missing Details	Confirm the management of missing person reports.	Missing person details (status, updates)	Missing person details are updated as per the input.	Missing person details updated successfully.
POLICE - Update Status (missing detail)	Validate the update of Missing person	Missing person ID, new status	Missing person status is updated	Missing person Status Updated successfully.

Table 7.2 Police Test Case

7.3 USER TEST CASE

Module	Test Case Description	Test Input	Expected Output	Actual Output
USER - Register	Validate the successful registration of a new user.	User details (username, password)	New user account is created successfully.	User account created successfully.
USER - Login	Confirm successful login for a registered user.	User credentials (username, password)	User dashboard is displayed.	User dashboard displayed successfully.
USER - Create Complaint	Verify the successful creation of a user complaint.	Complaint details (type, description)	New user complaint is created and submitted.	User complaint created and submitted successfully.
USER - My Complaint Status	Confirm the display of the status of user complaints.	N/A	User's complaint status is displayed.	Complaint status displayed as expected.
USER - Search Missing Details	Ensure successful searching for missing persons.	Search criteria (name, description)	List of matching missing person reports is displayed.	Matching missing person reports displayed.
USER - My Profile	Confirm the display and update of user profile.	Updated user details (name, contact)	User profile is updated as per the input.	User profile updated successfully.
USER - Update Google Geo- location	Validate the update of user's geographical location.	New location coordinates	User's location is updated as expected.	User's location updated successfully.
USER -SOS - SMS Alert	Confirm the successful sending of an SOS SMS	SOS alert trigger	SOS SMS alert is sent to predefined contacts.	SOS SMS alert sent successfully.

Table7.3 User Test Case

7.4 TYPES OF TESTS

Unit testing:

Unit testing involves the design of test cases that validate that the internal program logic is functioning properly, and that program inputs produce valid outputs. Unit testing can help ensure the reliability and correctness of critical functionalities such as incident reporting, FIR filing, and user authentication. By using unit testing we can build a more robust and dependable application that meets the needs of its users effectively. Unit testing verifies the functionality of individual components or modules within application. For example, you can test specific functions or methods responsible for user registration, crime reporting, missing person reporting, FIR filing, etc. This ensures that each component performs its intended task correctly.

Integration testing:

Integration tests are designed to test integrated software components to determine if they actually run as one program. Integration testing helps in providing users with a reliable and effective tool for reporting incidents, seeking assistance, and promoting public safety. It helps in validating system behavior, detecting integration issues, and delivering a high-quality and trustworthy application to users. Integration testing ensures that all these features such as crime reporting, missing person reporting, FIR filing, and possibly others like user registration, authentication, and geo location services work together seamlessly without any conflicts or issues.

Functional test:

Functional testing is crucial for validating the functionality, usability, and compliance of safety and crime reporting application. It ensures that the application meets user needs, complies with requirements and regulations, and delivers a reliable and satisfactory user experience. Functional testing ensures that your application functions correctly from end to end. It verifies that all features, including crime reporting, missing person reporting, FIR filing, user registration, authentication, and any others, work as intended and meet the specified requirements. Also it helps in identifying and verifying error handling mechanisms and edge cases within your application.

System Test:

System testing ensures that the entire integrated software system meets requirements. It tests a configuration to ensure known and predictable results. It ensures that application meets user's needs, complies with requirements and regulations. Reliability testing verifies consistent and dependable results, and compliance testing ensures adherence to regulations and standards. Additionally, system testing supports user acceptance testing by validating user needs and expectations, while also verifying documentation accuracy. It plays a critical role in validating the application's overall functionality, performance, security, and reliability, ensuring it meets user needs and operates effectively.

White Box Testing:

White Box Testing is a testing in which the software tester has knowledge of the inner workings, structure and language of the software, or at least its purpose. It is used to test areas that cannot be reached from a black box level. It involves examining the internal structure and logic of application code. It ensures that each component function, and path within the code base is tested thoroughly. White box helps in identifying logic errors and optimize the code efficiency. As it focuses on internal code correctness and efficiency it makes the application trustworthy and promotes high security and quality.

Black Box Testing:

Black Box Testing is testing the software without any knowledge of the inner workings, structure or language of the module being tested. Black box tests, as most other kinds of tests, must be written from a definitive source document, such as specification or requirements document. Black Box Testing focuses on validating the external behavior and functionality of the application without the knowledge of internal implementation. Testers interact with application's user interface and inputs to verify its outputs and responses. Also provide user experience by evaluating the application's usability, accessibility and intuitiveness. It ensures users can navigate through application easily, understand its features, and accomplish tasks effectively and also ensures security to my application. It provides a robust testing framework for delivering high quality.

CHAPTER 8

RESULT AND DISCUSSION

8.1 RESULT AND DISCUSSION

Following points are the results and discussion which has been implemented in this application:

Increased Reporting Rates:

The application leads to an uptick in crime reporting rates due to its user-friendly interface, accessibility, and anonymity options. This increase in reporting can provide law enforcement agencies with more comprehensive data on criminal activities, enabling them to better allocate resources and devise targeted crime prevention strategies.

Enhanced Response Times:

With real-time incident reporting capabilities and GPS integration, authorities can respond to reported crimes more promptly and effectively. This will potentially lead to faster resolution of incidents, increased apprehension of perpetrators, and improved victim support services.

Improved Community Engagement:

By empowering citizens to report crimes directly through the application, it fosters a sense of community involvement in crime prevention efforts. This increased engagement facilitates collaboration between residents, law enforcement agencies, and other stakeholders, leading to stronger community ties and shared responsibility for safety.

Efficient FIR Management:

The application streamlines the process of filing and managing First Information Reports (FIRs), reducing paperwork, administrative burdens, and processing times for law enforcement agencies. This efficiency allows officers to focus more resources on investigating reported crimes and maintaining public safety.

CHAPTER 9

CONCLUSION

In the modern world, the use of computers and mobile phones is becoming rampant. As a result, the crime recording system needs to embrace the new technologies. This application will present a simple, convenient, cost-effective and efficient online crime recording system with a sensitive and intelligible web interface, thereby it reduces the amount of manual data entry. It is software which helps the policemen to work with the crimes and criminals easily. Additionally, it notifies the registered policemen about the release of criminals. This crime management system is a solution to all the problems related to the crime reports, criminal details and their crimes. Also, the criminal information will be readily accessible to the police officials as it is stored on the cloud. The problem of reporting fake crimes will be overcome as this application will need the verification of police to report incidents reported by user to broadcast it to other users using the same application. In future, some other security algorithms can be used to provide better security measures for the criminal database. The only challenge of this proposed system is that GPS and the Internet connection has to be activated 24x7. Future research can be dedicated for these challenge.

CHAPTER 10

FUTURE ENHANCEMENT

Following points are advanced features which can be implemented in near future:

Real-time Collaboration and Communication:

Implement real-time communication features between users, police, and administrators. This could include chat functionality and instant notifications for updates on reported incidents.

Machine Learning for Predictive Analytics:

Integrate machine learning algorithms to analyze historical crime data and patterns. This can help in predicting potential crime hotspots and enabling proactive law enforcement measures.

Voice and Image Recognition:

Integrate voice and image recognition capabilities for reporting incidents. This could allow users to verbally describe incidents or upload images as part of the reporting process, enhancing the richness of information.

Community Engagement Features:

Enhance community engagement by incorporating features such as public awareness campaigns, safety tips, and community forums within the application. This can strengthen the bond between law enforcement and the community.

Integration with Smart Devices:

Explore integration with smart devices and the Internet of Things (IoT) to enable automatic incident reporting in emergencies. For example, smart sensors detecting gunshots or accidents could trigger automatic incident reports.

Multilingual Support:

Ensure the application supports multiple languages to cater to a diverse user base. This can enhance inclusivity and accessibility for individuals who may not be proficient in the primary language.

Crowdsourcing for Investigations:

Allow users to contribute to investigations by crowdsourcing information. This could involve the creation of public campaigns seeking information related to specific incidents.

CHAPTER11

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CHAPTER 12

APPENDICES

```
-- phpMyAdmin SQL Dump
-- version 5.2.0
-- https://www.phpmyadmin.net/
--
-- Host: 127.0.0.1
-- Generation Time: Jan 18, 2024 at 12:43 PM
-- Server version: 10.4.24-MariaDB
-- PHP Version: 7.4.29
SET SQL_MODE = "NO_AUTO_VALUE_ON_ZERO"; START TRANSACTION;
SET time_zone = "+00:00";

/*!40101 SET @OLD_CHARACTER_SET_CLIENT=@@CHARACTER_SET_CLIENT */;
/*!40101 SET @OLD_CHARACTER_SET_RESULTS=@@CHARACTER_SET_RESULTS */;
/*!40101 SET @OLD_COLLATION_CONNECTION=@@COLLATION_CONNECTION */;
/*!40101 SET NAMES utf8mb4 */;

--
-- Database: `crime_report_2`
--

-----

--
-- Table structure for table `category`
--

CREATE TABLE `category` (
  `cus_id` int(255) NOT NULL,
  `email` varchar(100) COLLATE utf8_bin NOT NULL,
  `field_1` varchar(100) COLLATE utf8_bin NOT NULL,
  `created_date` date NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_bin;

-- Dumping data for table `category`

INSERT INTO `category` (`cus_id`, `email`, `field_1`, `created_date`) VALUES (64, '', 'Others', '2021-03-12'),
(65, '', 'Without License', '2021-05-07'),
(66, '', 'Without Insurance', '2021-05-07'),
(67, '', 'Regardless of Disqualification', '2021-05-07'),
(68, '', 'Alcohol or Intoxicating', '2021-05-07'),
(69, '', 'Not Wearing Helmet', '2021-05-07'),
(70, '', 'Racing and Speeding', '2021-05-07'),
```

```
(71, ", 'Offences by Juveniles', '2021-05-07'),
(72, ", 'Dangerous / Rash Driving', '2021-05-07'), (73, ", 'Accident Related Offences', '2021-05-07'),
(74, ", 'Enforcing Officers', '2021-05-07');
```

```
-----
```

```
--
-- Table structure for table `department`
--
```

```
CREATE TABLE `department` (
  `cus_id` int(255) NOT NULL,
  `email` varchar(100) COLLATE utf8_bin NOT NULL,
  `field_1` varchar(100) COLLATE utf8_bin NOT NULL,
  `created_date` date NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_bin;
```

```
--
-- Dumping data for table `department`
--
```

```
INSERT INTO `department` (`cus_id`, `email`, `field_1`, `created_date`) VALUES (59, ", 'E 1
Ambasamudram', '2021-03-12'),
(60, ", 'C3 Perumalpuram', '2021-03-12'),
(61, ", 'D1 Triplicane EAST', '2021-03-12'),
(62, ", 'D3 Royapettah East', '2021-03-12'),
(63, ", 'D3 Tnagar East', '2021-03-12');
```

```
-----
```

```
--
-- Table structure for table `fir`
```

```
CREATE TABLE `fir` (
  `user_id` int(100) NOT NULL,
  `name` varchar(100) COLLATE utf8_bin NOT NULL,
  `email` varchar(100) COLLATE utf8_bin NOT NULL,
  `password` varchar(100) COLLATE utf8_bin NOT NULL,
  `mobile` varchar(100) COLLATE utf8_bin NOT NULL,
  `field_1` varchar(100) COLLATE utf8_bin NOT NULL,
  `field_2` varchar(100) COLLATE utf8_bin NOT NULL,
  `field_3` varchar(100) COLLATE utf8_bin NOT NULL,
  `field_4` varchar(100) COLLATE utf8_bin NOT NULL,
  `field_5` varchar(100) COLLATE utf8_bin NOT NULL,
  `field_6` varchar(100) COLLATE utf8_bin NOT NULL,
  `field_7` varchar(100) COLLATE utf8_bin NOT NULL,
  `field_8` varchar(100) COLLATE utf8_bin NOT NULL,
  `field_9` varchar(100) COLLATE utf8_bin NOT NULL,
  `created_date` varchar(100) COLLATE utf8_bin NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_bin;
```

```
--
-- Dumping data for table `fir`
--

INSERT INTO `fir` (`user_id`, `name`, `email`, `password`, `mobile`, `field_1`, `field_2`, `field_3`,
`field_4`, `field_5`, `field_6`, `field_7`, `field_8`, `field_9`, `created_date`) VALUES
(178, 'Selvam', 'selvam@gmail.com', '2021-03-12', '1234567882', '1234567980', 'D3 Royapettah East-1', 'Kidnapping', 'complaining', 'Nil', '2021-03-12', 'place', 'Male', 'Completed', '2021-03-12'),
(179, 'Panneer', 'user@gmail.com', '2021-05-07', '1234567890', 'Nil', 'D3 Royapettah East', 'Without Insurance', 'No insurance', 'Nil', '2021-05-07', 'Bangalore', 'Male', 'Completed', '2021-05-07');
```

```
-----
--
) ENGINE=InnoDB DEFAULT CHARSET=utf8 COLLATE=utf8_bin;
```

ANGULAR ADMIN JS:

```
var app = angular.module("myapp", ['ngCookies']);
app.controller("myappCtrl", function($scope, $cookies, $cookieStore, $http, $filter)
{

/*****
****User Cookies *****/

$scope.cook_user_dept = $cookieStore.get("cook_user_dept");
$scope.cook_user_email = $cookieStore.get("cook_user_email");
$scope.cook_admin_email = $cookieStore.get("cook_admin_email");
$scope.cook_user_mail = $cookieStore.get("cook_user_mail");

/*****
**** User Logout *****/

$scope.user_logout = function()
{
if(confirm("Are You Sure?"))
{
        $cookies.cook_admin_email = "";
        $cookies.cook_user_email = "";
        $cookies.cook_user_type = "";
        $cookies.cook_user_dept = "";
        $cookies.cook_user_mail = ""; window.location = "index.html"; return;

}
        return false;
else
{

}
}
}
```

```

/*****
****Home page****
****
if(!$cookies.cook_admin_email)
{
    $scope.UserHomeVar = false; //hide
    $scope.HomeVar = true; //hide
}
else
{
    $scope.UserHomeVar = true; //show
    $scope.HomeVar = false; //hide
}

```

ANGULAR USER JS:

```

ar app = angular.module("myapp", ['ngCookies']); app.controller("myappCtrl",
function($scope, $cookieStore,
$cookies, $http)
{
/*****
****
**** User Login
****
****
****
// sign in button
$scope.user_login = function()
{
$http.post('user_login.php',
{'email': $scope.email, 'password': $scope.password})
.success(function(data, status, headers, config)
{
if(data.success == 1)
{
alert("Login Successful");
$cookieStore.put("cook_admin_email",data.field_1); window.location = "home.html"; //
Home Page return;
}
}

```

```

else if(data.success == 3)
{
alert("Login Successful");

$cookieStore.put("cook_user_mail",data.email);
$cookieStore.put("cook_user_mob",data.mobile);
$cookieStore.put("cook_user_name",data.name);
$cookieStore.put("cook_user_email",data.field_1);
$cookieStore.put("cook_user_type",data.field_2);
$cookieStore.put("cook_user_dept",data.field_3);
$cookieStore.put("cook_user_desg",data.field_4);
$cookieStore.put("cook_user_site",data.field_6);
$cookieStore.put("cook_user_area",data.field_7); window.location = "user_home.html"; // HomePage
return;
}
else if(data.success == 5) // College Head Login
{
alert("Login Successful");

$cookieStore.put("cook_user_mail",data.email);
$cookieStore.put("cook_user_mob",data.mobile);
$cookieStore.put("cook_user_name",data.name);
$cookieStore.put("cook_user_email",data.field_1);
$cookieStore.put("cook_user_type",data.field_2);
$cookieStore.put("cook_user_dept",data.field_3);
$cookieStore.put("cook_user_desg",data.field_4);
$cookieStore.put("cook_user_site",data.field_6);

```

```
$cookieStore.put("cook_user_area",data.field_7); window.location = "police_home.html"; //
Home Page
```

```
        return;
    }
    else if(data.success == 2)
    {
        alert("Please Fill All Fields");
    }
    else if(data.success == 4)
    {
        alert("Please Install New Version!");
    }
    else
    {
        alert("Login Unsuccessful");
    }
});
}
```

```
/****** Cookies
******/
```

```
$scope.cook_user_mail = $cookieStore.get("cook_user_mail");
$scope.cook_user_mob = $cookieStore.get("cook_user_mob");
$scope.cook_user_name = $cookieStore.get("cook_user_name");
$scope.cook_user_desg = $cookieStore.get("cook_user_desg");
$scope.cook_user_email=
$cookieStore.get("cook_user_email");
$scope.cook_admin_email=
$cookieStore.get("cook_admin_email");
$scope.cook_user_type = $cookieStore.get("cook_user_type");
$scope.cook_user_dept = $cookieStore.get("cook_user_dept");
$scope.cook_user_site = $cookieStore.get("cook_user_site");
$scope.cook_user_area = $cookieStore.get("cook_user_area");
```

```
/******
*****Home page*****
******/
```

```

if(!$cookies.cook_admin_email)
{
    $scope.UserHomeVar = false; //hide
    $scope.HomeVar = true; //hide
}
else
{
    $scope.UserHomeVar = true; //show
    $scope.HomeVar = false; //hide
}

/*****
*****/
/***** User Logout
*****/
/*****
*****/
$scope.user_logout = function()
{
    if(confirm("Are You Sure?"))
    {
        $cookies.cook_user_area = "";
        $cookies.cook_user_site = "";
        $cookies.cook_user_desg = "";
        $cookies.cook_user_name = "";
        $cookies.cook_user_mob = "";
        $cookies.cook_user_mail = "";
        $cookies.cook_user_email = "";
        $cookies.cook_admin_email="";
        $cookies.cook_user_type = "";
        $cookies.cook_user_dept = ""; window.location = "index.html"; return;

    }
    return false;
}
else
{
}
}
}

```

BOOTSTRAP:

```
/**
bootstrap.js v3.0.0 by @fat and @mdo
Copyright 2013 Twitter Inc.
http://www.apache.org/licenses/LICENSE-2.0
*/
if (!jQuery) { throw new Error("Bootstrap requires jQuery") }
/*
=====
=====
+function ($) { "use strict";
// CSS TRANSITION SUPPORT (Shoutout:
http://www.modernizr.com/)
//
=====
function transitionEnd() {
var el = document.createElement('bootstrap')

var transEndEventNames = { 'WebkitTransition' : 'webkitTransitionEnd'
, 'MozTransition'    : 'transitionend'
, 'OTransition'      : 'oTransitionEnd otransitionend'
, 'transition' : 'transitionend'
}

for (var name in transEndEventNames) { if (el.style[name] !== undefined) {
return { end: transEndEventNames[name] }
}
}
}
```

```

// http://blog.alexmaccaaw.com/css-transitions
$.fn.emulateTransitionEnd = function (duration) { var called =
false, $el = this
$(this).one($.support.transition.end, function () { called
= true })
var callback = function () { if (!called)
$( $el ).trigger($.support.transition.end) } setTimeout(callback,
duration)
return this
}
$(function () {
$.support.transition = transitionEnd()
})
}(window.jQuery);
/*
+function ($) { "use strict";

// ALERT CLASS DEFINITION
// =====
var dismiss = '[data-dismiss="alert"]' var Alert    = function
(el) {
$(el).on('click', dismiss, this.close)
}
Alert.prototype.close = function (e) { var $this    = $(this)
var selector = $this.attr('data-target')

if (!selector) {
selector = $this.attr('href')
selector = selector && selector.replace(/.*(?=#[^\s]*$)/, '') //
strip for ie7
}
}

```

```

var $parent = $(selector) if (e) e.preventDefault() if (!$parent.length) {
$parent = $this.hasClass('alert') ? $this :
$this.parent()
}
$parent.trigger(e = $.Event('close.bs.alert')) if (e.isDefaultPrevented()) return
$parent.removeClass('in') functionremoveElement() {
$parent.trigger('closed.bs.alert').remove()
}
$.support.transition && $parent.hasClass('fade') ?
$parent
.one($.support.transition.end, removeElement)
.emulateTransitionEnd(150): removeElement()
}
// ALERT PLUGIN DEFINITION
// =====
var old = $.fn.alert
$.fn.alert = function (option) { return this.each(function () {
var $this = $(this)
var data = $this.data('bs.alert')

if (!data) $this.data('bs.alert', (data = new Alert(this)))
if (typeof option == 'string') data[option].call($this)
})
}
$.fn.alert.Constructor = Alert
// ALERT NO CONFLICT
// =====
$.fn.alert.noConflict = function () {
$.fn.alert = old return this
}

```

CHAPTER 13 SCREENSHOTS

13.1 ADMIN

13.1.1 ADMIN HOME



Figure13.1.1 Admin Home page

13.1.2 CRIME REPORT



Figure13.1.2 All Crime Report

13.13 ALL FIR REPORT

S.No	Name	Email	Date	Mobile	Division	Complaint	Reason	Gender	Place
179	Panneer	user@gmail.com	2021-05-07	1234567890	D3 Royapettah East	Without Insurance	No insurance	Male	Bangalore
178	Selvam	selvam@gmail.com	2021-03-12	1234567882	D3 Royapettah East-1	Kidnapping	complaing	Male	place

Figure13.1.3 All FIR Report

13.14 ALL MISSING REPORT

S.No	Name	Email	Date	Mobile
181	Arun	test@gmail.com	2024-12-18	123456798

Figure13.1. 4 All Missing Report

13.15 ADD CATEGORY

The screenshot shows a web browser window with the address bar displaying 'localhost/pro...'. The page title is 'Crime Reporting'. Below the title, there is a section titled 'Add Category' with a text input field labeled 'Category'. Below this field is a 'Create Category' button. Underneath, there is a 'Category List' section containing four entries, each with an 'Update' and a 'Delete' button:

- Enforcing Officers**
Update Delete
- Accident Related Offences**
Update Delete
- Dangerous / Rash Driving**
Update Delete
- Offences by Juveniles**
Update Delete

Figure13.1.5 Add Category

13.16 VIEW POLICE DETAIL

The screenshot shows a web browser window with the address bar displaying 'localhost/pro...'. The page title is 'Crime Reporting'. Below the title, there is a section titled 'View Police Details'. This section contains a 'User Type' dropdown menu, a 'Division' dropdown menu, and a 'Search' text input field. Below these fields, there are two user detail cards:

User 1:
Name : Admin
Login ID:123456
Email : admin@gmail.com
Mobile : 9999955555 Type : master
Division : Dept
Update More

User 2:
Name : Triplicane
Login ID:triplicane001

Figure13.1.6 View Police Detail

13.1.7 ADD DIVISION

Crime Reporting

Add Division

Dept Name

Create Division

Division List

D3 Tnagar East	Update	Delete
D3 Royapettah East	Update	Delete
D1 Triplicane EAST	Update	Delete
C3 Perumalpuram	Update	Delete

Figure13.1.7 Add Division

13.1.8 ADD AREA

Crime Reporting

Add Area

Area

Create Area

Area List

Trichy	Update	Delete
Delhi	Update	Delete
Bangalore	Update	Delete
Chennai	Update	Delete

Figure13.1.8 Add Area

13.2 POLICE

13.2.1 POLICE HOME



Figure13.2.1 Police Home

13.2.2 VIEW FIR DETAILS



Figure13.2.2 View FIR Details

13.2.3 VIEW MISSING DETAILS

Search

Name: Arun
Status : Closed
Age: 3
Date of Missing : 2024-12-18
Identification - Characters : Long Hair - Talkive
Height - Weight : 50 cm - 13 Kg
Eyes Color : Brown
Place of Missing : Cmbt

Figure13.2.3 View Missing Details

13.2.4 ALL COMPLAINT ENTRY

Search

ID	Date	Category	Description	Status	Login ID	Name	Address	Download	Update	
D1 Triplicane EAST-3	2024-01-18	Enforcing Officers	testtest	Under Progress	user123	Name	address	Download	Under Progress	Update Comment
D1 Triplicane EAST-2	2024-01-18	Dangerous / Rash Driving	New Complaint	Under Progress	user123	User	test	Download	Under Progress	Update Comment Nil
D1 Triplicane EAST-1	2024-01-12	Enforcing Officers	New complaint	Completed	12341234	Selvam	Ullur Kmu	Download	Completed	Update Comment

Figure13.2.4 All Complaint Entry

13.3 PUBLIC

13.3.1 PUBLIC HOME



Figure13.3.1 Public Home

13.3.2 REGISTER COMPLAINT

A screenshot of a web browser displaying the 'Crime Reporting' application. The browser's address bar shows 'localhost/pro...'. The application has a dark blue header with a hamburger menu icon and the text 'Crime Reporting'. Below the header, the page is titled 'Register Complaint'. The form contains the following elements: a date field showing '2024-01-18'; a 'Division' dropdown menu; a 'Complaint Category' dropdown menu; a text input field for 'Crime Title (Min 5 Letters)'; a text area for 'Complaints Description'; and a large empty text area at the bottom for additional details.

Figure13.3.2 Register Complaint

13.3.3 SEARCH MISSING DETAILS



Crime Reporting

Search Missing Details

Search



Name: Arun
Status : Closed
Age: 3
Date of Missing : 2024-12-18
Identification - Characters : Long Hair - Talkive
Height - Weight : 50 cm - 13 Kg
Eyes Color : Brown

Figure13.3.3 Search Missing Details

13.3.4 MY STATUS



Crime Reporting

My Status

Search

ID : D1 Triplicane EAST-1
Status: Completed
Date : 2024-01-12
Category : Enforcing Officers
Crime Reporting : New complaint
Download

[Upload Proof](#) [Rating](#)

Figure13.3.4 My Status

13.3.4 UPDATE GEO

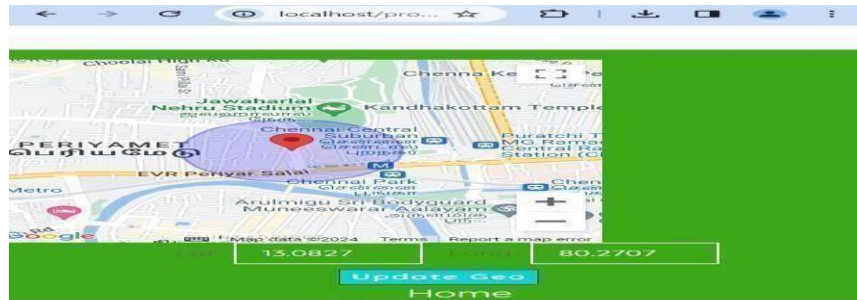


Figure13.3.5 Update Geo location

13.3.5 GEOLOCATION



Figure13.3.6 Geo location