

CHAPTER 1

Introduction

1.1 Overview:

The objective of this system can broadly be listed as follows:

- To keep record of the criminals
- To look for unidentified dead bodies, missing persons, announcement regarding city or state can be viewed
- To record improvement and decline the rules and regulation activities of the Country
- To keep record of criminals details for future investigation
- To keep record of criminal's crime activities
- Reduce manual and redundant records keeping
- Facilitate interaction and sharing of information among police departments, districts, state/headquarters and other police agencies
- Building security and monitoring control to ensure only authorized personal have access to the criminal information

1.2 Problem Statement:

In many communities, traditional methods of managing and preventing crime lack efficiency and effectiveness due to outdated technology and inefficient processes. Law enforcement agencies often struggle with coordinating efforts, accessing relevant data in real-time, and implementing proactive measures to deter criminal activities. Additionally, the increasing complexity and diversity of criminal behavior require sophisticated tools and strategies to address emerging threats effectively. Therefore, there is a pressing need for the development of an advanced Crime Management System that integrates cutting- edge technologies such as data analytics, and real-time monitoring to enhance law enforcement capabilities, improve response times, and ultimately reduce crime rates within communities.

1.3 Objective Of Project:

The primary objective of the Suraksha Net project is to design, develop, and implement a comprehensive and technologically advanced platform that enhances the capabilities of law enforcement agencies in managing and combating crime effectively.

Specific objectives include:

- Enhanced Data Management: Develop a centralized database system to consolidate and manage various types of crime-related data, including incident reports, criminal records, suspect profiles, and forensic evidence, ensuring easy access, organization, and retrieval of information
- Real-time Monitoring and Analysis: Implement real-time monitoring tools and analytical capabilities to identify patterns, trends, and anomalies in criminal activities, enabling law enforcement agencies to

proactively deploy resources and interventions to prevent and respond to incidents promptly.

- **Improved Collaboration and Communication:** Facilitate seamless communication and collaboration among law enforcement agencies, government entities, and community stakeholders through the integration of communication channels, sharing of information, and coordination of efforts to address crime effectively.
- **Crime Prediction and Prevention:** Utilize predictive analytics and machine learning algorithms to forecast potential crime hotspots, anticipate criminal behavior, and develop proactive strategies to prevent crimes before they occur, thereby reducing overall crime rates and enhancing public safety.
- **Efficient Case Management:** Streamline case management processes, including evidence collection, investigation progress tracking, suspect identification, and case resolution, to improve efficiency, transparency, and accountability in handling criminal cases.
- **User-friendly Interface:** Design an intuitive and user-friendly interface for law enforcement personnel to access and interact with the Suraksha Net, incorporating customizable dashboards, advanced search functionalities, and reporting tools to support informed decision-making and operational efficiency.
- **Scalability and Flexibility:** Build a scalable and flexible architecture that can accommodate future expansions, updates, and integration with emerging technologies, ensuring the longevity and adaptability of the Suraksha Net to evolving crime trends and regulatory requirements.
- **Data Security and Privacy:** Implement robust security measures and compliance protocols to safeguard sensitive crime-related data, prevent unauthorized access or tampering, and uphold the privacy rights of individuals involved in criminal investigations.

CHAPTER 2

Literature Survey

2.1 EXISTING SYSTEM:

In the existing system people who want to file a complaint must go to the police station all by themselves which is time consuming. Police people usually maintain records manually which is again time consuming and it is difficult to manage those records. There can be loss of records and important crimes issued which needs to be solved quickly may get delayed. Major limitations are

- Time consuming
- Paper work needed
- Loss of records
- Information about criminals and common people are not properly maintained

2.2 Limitation of existing system:

- The existing system is time consuming and not very user friendly.
- Sometimes the complaints may be ignored by the police.
- Even an efficient officer may not be able to handle more than one case at a time.
- As we all know, a covered truth, bribery plays an important role in the existing system any cases were piled up in the corners, due to lack of commitment in the job.
- In most of the cases, the innocent are accused in the existing system.
- As per our jurisdiction, “Let thousand criminals escape not a single innocent be punished “As a result of this and other factors that influence investigation, such as bribery, the innocent becomes accused in several situations in the eyes of Justice.
- The existing system is criticised for being inefficient, time consuming, poorly managed, and lacking flexibility Because of the large number of serious crimes, minor complaints may be ignored

2.3 Proposed System:

- The focus of this project is to enhance the organization's performance by addressing weaknesses and elevating standards. To ensure a fair evaluation, the report will primarily highlight areas that require improvement while acknowledging the benefits of collaborative efforts. The organization believes that partnering with others is crucial.

CHAPTER 3

METHODOLOGY

3.1 Background / Overview of Methodology

The methodology of a crime management system involves systematic processes for collecting, analyzing, and reporting crime data to support law enforcement operations effectively.

Here is an overview based on the provided sources:

- **Data Collection:** Law enforcement agencies participating in the Uniform Crime Reporting (UCR) Program forward crime data to state UCR Programs or directly to the FBI. The UCR Program receives data from various law enforcement agencies, including city, university, county, state, tribal, and federal agencies.
- **Criteria for State Programs:** State UCR Programs must conform to national UCR standards, have effective quality control procedures, cover a percentage of the population equal to the national UCR, and provide detailed data regularly collected by the FBI.
- **Data Completeness and Quality:** The FBI reviews individual agency reports for completeness and quality. Training programs are conducted to assist contributors in accurate reporting. The FBI also conducts audits of state UCR data collection procedures every three years.
- **Population Estimation:** Population estimates are crucial for crime rate calculations. The FBI computes individual rates of growth for cities/towns and counties based on Census data to derive accurate population estimates.
- **Transition to NIBRS:** The National Incident-Based Reporting System (NIBRS) is set to become the UCR data standard by January 1, 2021. NIBRS captures detailed information on each crime incident, providing richer data than summary reports.

3.2 Functionalities and Features Functionality:

➤ **Cop Account:**

- This module allows station admin to add all cop details like name, address, designation, etc into the system. This can also edit or modify.
- Admin is the main user of the system. Cops can login to the system by entering User Name and password. Different types of users like Inspector, Sup inspector, Constable, etc can be maintained in the system. Cops can update their profile details and they can change password.

➤ **Location:**

- This module helps admin to store state, city records. Even admin can add police station records for each station.

➤ **Complainer:**

- This module stores complainer profile details. Complainer needs to register to the system. After the login complainer can file or lodge complaint in the complaint section. Complainer can view complaint status, fir status, crime details, charge sheet details, etc.

➤ **Complaint:**

- Any public members can file complaint through online by entering Complaint reason, evidence, complaint details, complaint type, etc. Even police department can file complaint from their account if anyone gives complaint directly by visiting police station.

➤ **FIR:**

- If complaint is cognizable then it goes to FIR. This module enters details of first information report(FIR).

➤ **Charge Sheet:**

- This module adds charge sheet details based on FIR.

➤ **Legal Case:**

- Once the investigation like FIR, Charge sheet completes, all the details are submitted to the court. So the court hearing details will be added into the system.

➤ **Criminal:**

- Once the court finalize the judgment it will be sent to the criminal Records list.

➤ **Features:**

- Our proposed idea would increase the transparency of process between user and department.
- Increase in interactivity would further lead to the development of mutual trust which will help department and public to build mutual trust and understanding.
- Crimes addressing would be easier and faster.
- Apart from development cost, no cost is involved once the software gets ready other than further maintenance and evolution.
- Easy to use by common man as well as department officials.

3.3 Proposed Methodology

- This is a police dashboard where the police can accept the absolute information using a login password. To access the online criminal management system, we need to Add on users (police office bearers along with the background screening agencies) and allocate their various levels of entitlements. Verify user login particulars and also make sure user level prerogatives to data. Stock as well as recover all the data about crime and criminals. Execute search tasks on the grounds of some defined standards. Execute crime inspection and analysis along with the statistics to generate adequate reports.

3.4 Project Modules

There will be three module which will be there in our project which act as a main role in Website/Web-Application

- Police
- Admin
- Citizen

Police:

- Police will handle the incoming complains and the service request from the citizen. They will also have access to know the required information of the complainer. They may take the required authorized action regarding the complain and perform an legal action.

Admin:

- Admin will be handling the programming part as well as the user interface and provide the seamless experience to both of them police and the citizen. They can see the complains and also can change the interface as per required.

Citizen(User):

- Citizen are the people of city which can apply for a service or can register a complain regarding any problem in the city. They need to do a registration for a service regarding the updation of the service and for security. Once they have register a complain then police must have to take an action regarding that complain.

Model:

- Incremental Model: The incremental model offers a practical approach for developing a Suraksha Net. It allows for quicker deployment, reduced risk, and continuous improvement based on user feedback.

3.5 Diagrams Of Suraksha Net

- Use Case Of Suraksha Net

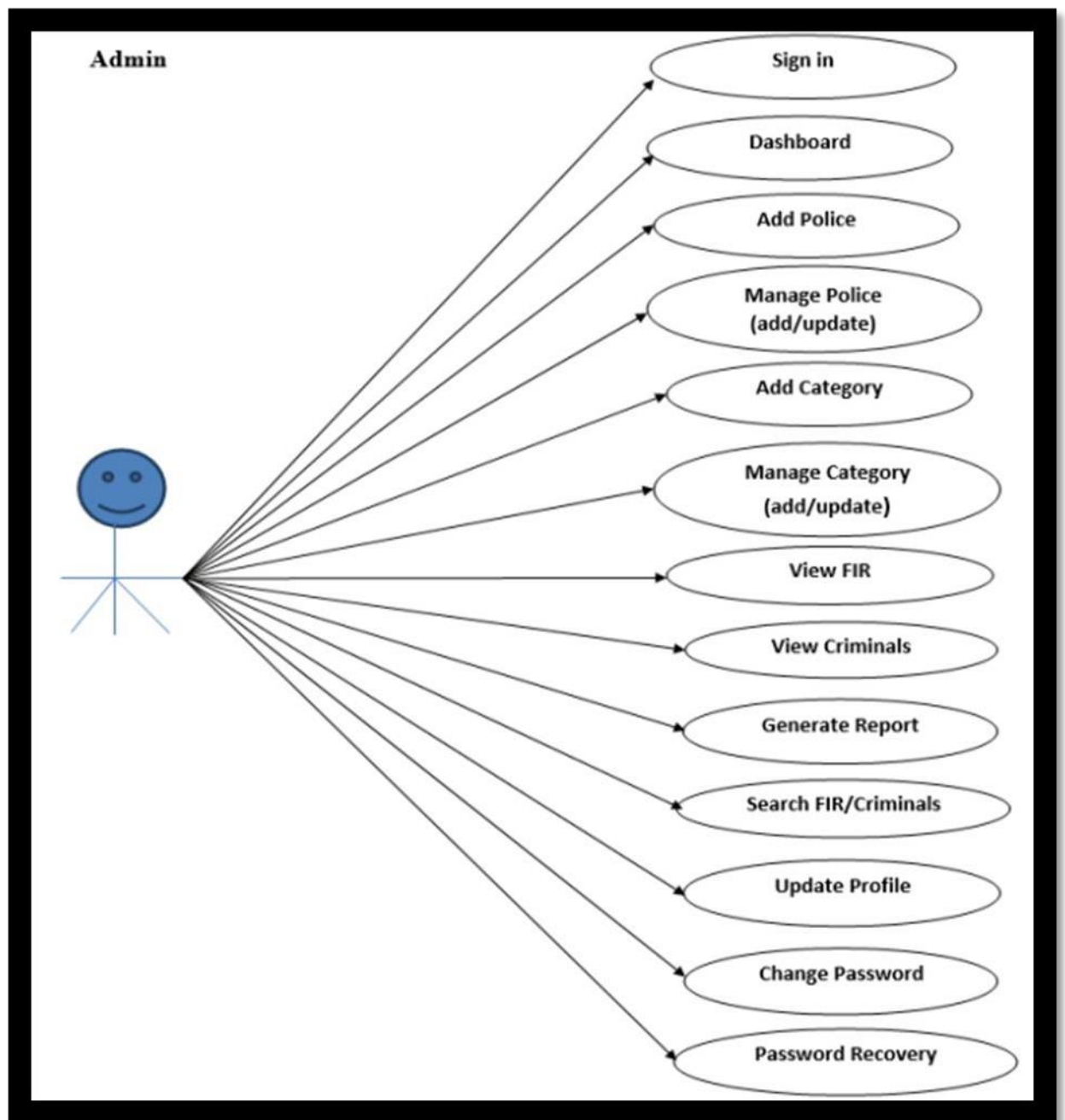


Figure 1.1: Use Case (Admin Module)

Police

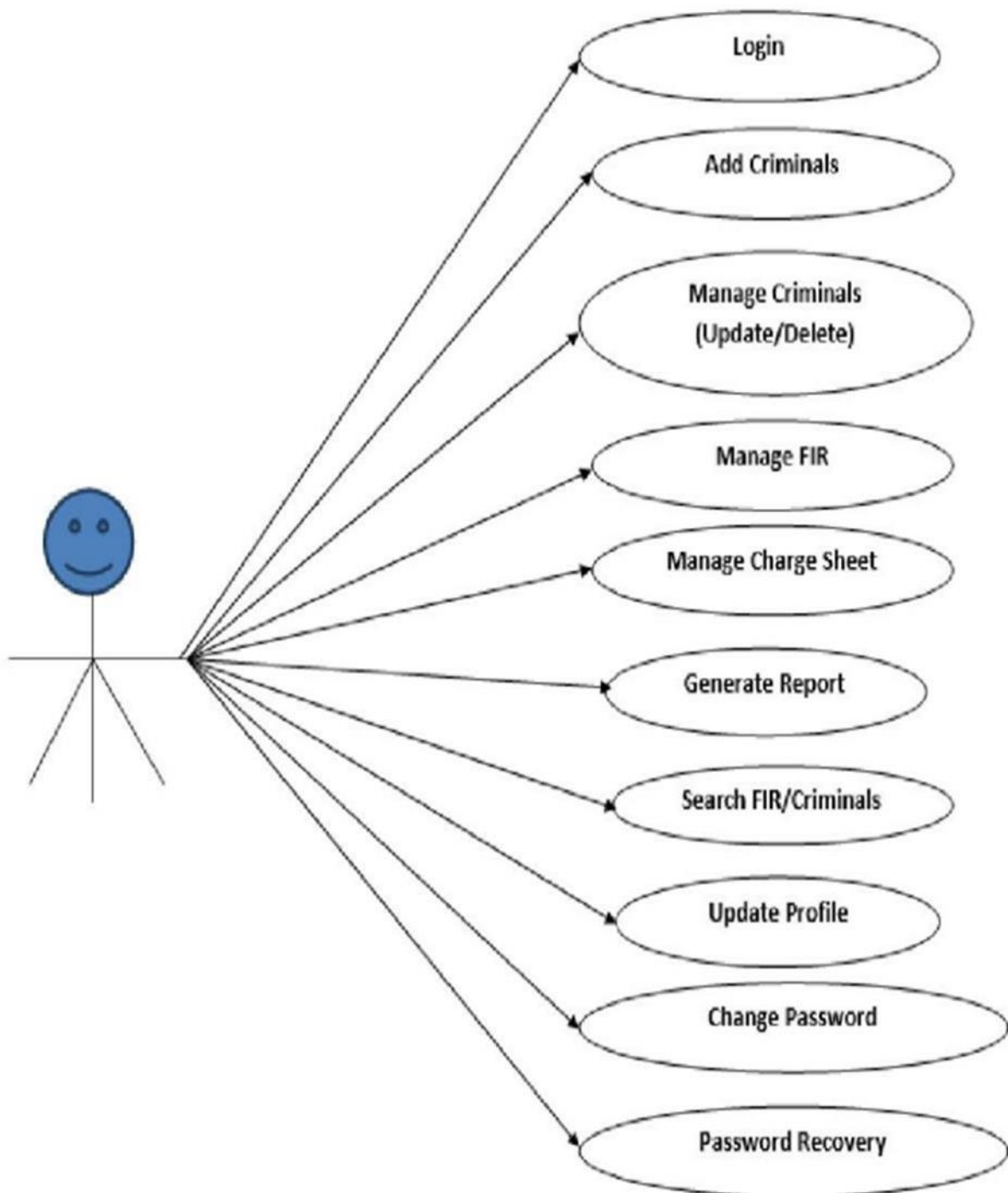


Figure 1.2: Use Case (Police Module)

Users

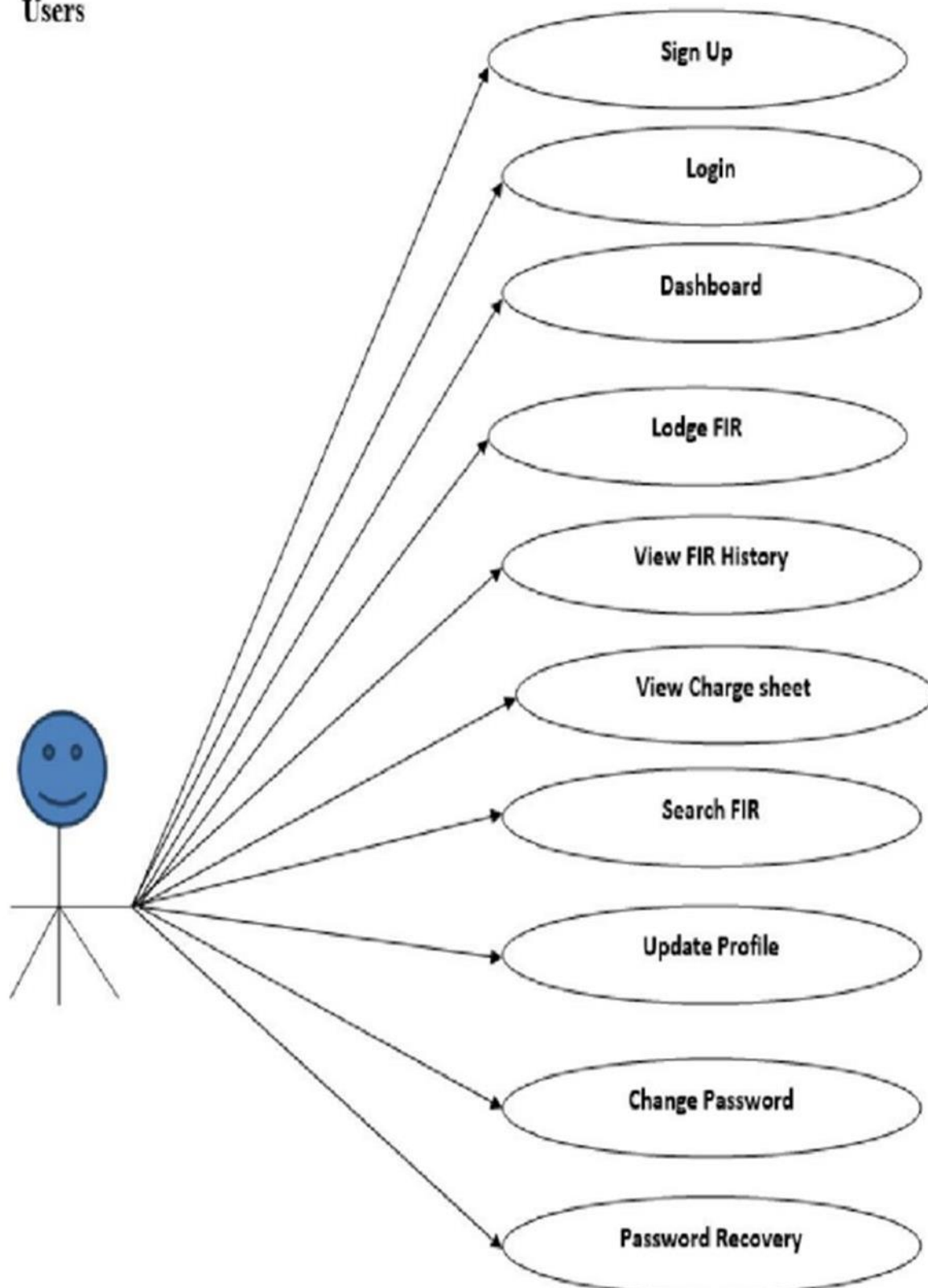


Figure 1.3: Use Case (User Module)

- Er-Diagram Of Suraksha Net

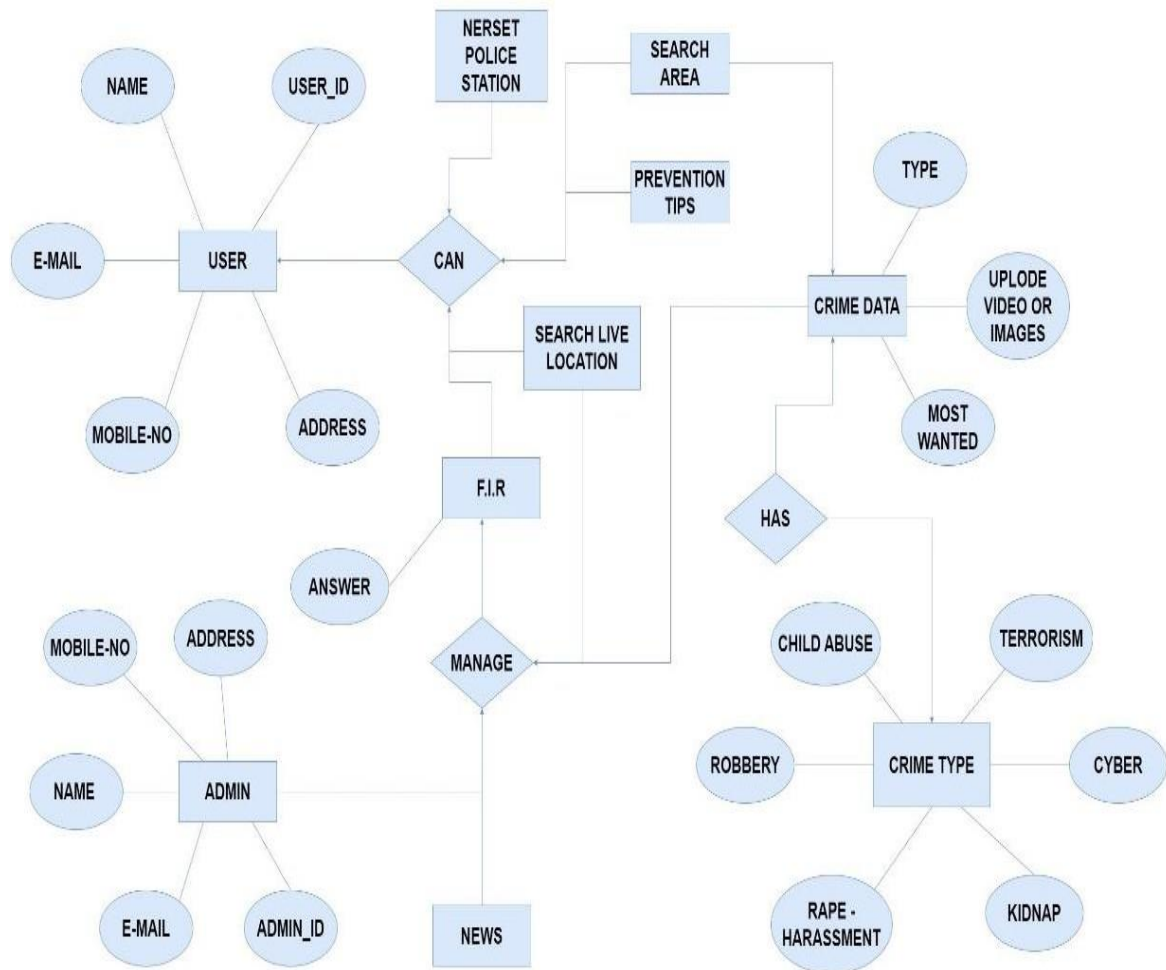


Figure 2: Er-Diagram Of Suraksha Net

CHAPTER 4

System Requirements

4.1 Software Requirements Operating System:

- Server: Linux-based operating system (e.g., Ubuntu Server, CentOS) or Windows Server for hosting the application and database.
- Client Devices: Cross-platform support for web-based access (compatible with major web browsers such as Chrome, Firefox, Safari).
- **Web Server:**
 - Web server software to host and serve the web application to client devices.
 - Examples include Apache HTTP Server, Nginx, Microsoft Internet Information Services (IIS).
- **Security Software:**
 - Encryption protocols (e.g., SSL/TLS) for secure data transmission over the network.
 - Intrusion detection/prevention systems (IDS/IPS) to monitor and protect against unauthorized access and attacks.

4.2 Hardware Requirements Server:

- High-performance server hardware to host the central database and application. Multi-core processor (e.g., Intel Xeon) for handling concurrent requests.
- Sufficient RAM (e.g., 16GB or more) to accommodate database operations and application caching.
- Storage capacity (e.g., SSD drives) for storing large volumes of data securely.
- **Networking Equipment:**
 - Reliable network infrastructure to ensure seamless communication between the server and client devices.
 - Switches, routers, and firewalls to manage network traffic and ensure security.
- **Client Devices:**
 - Desktop computers, laptops, or mobile devices for accessing the Suraksha Net interface.
 - Standard specifications for web browsing and data input/output.

CHAPTER 5

Expected Outcomes

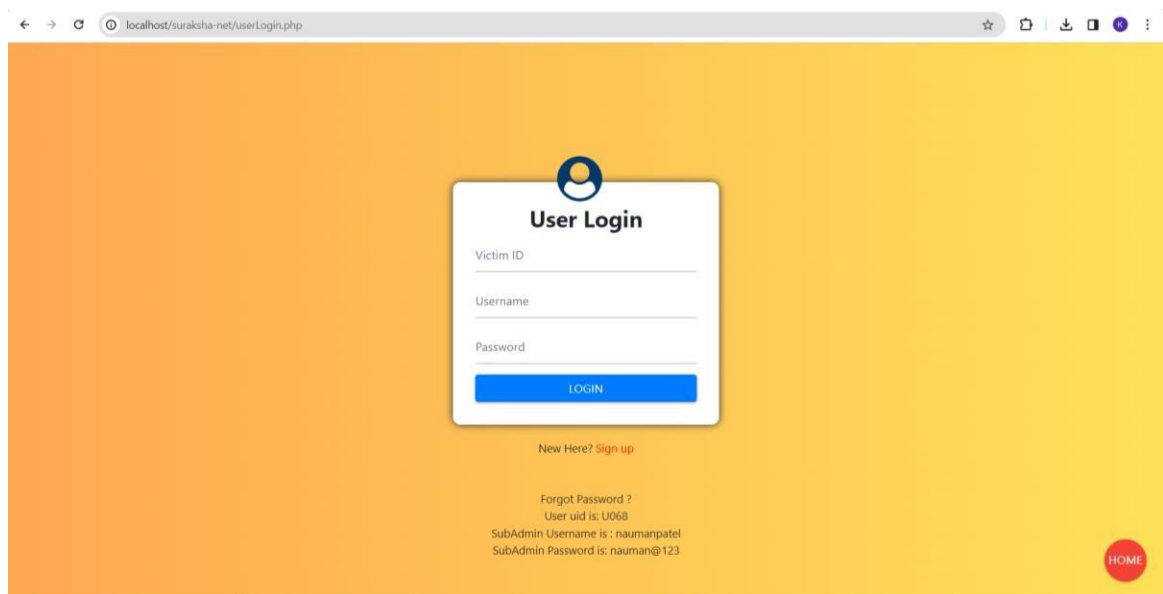


Figure 3.1: Login Page Screen Shot

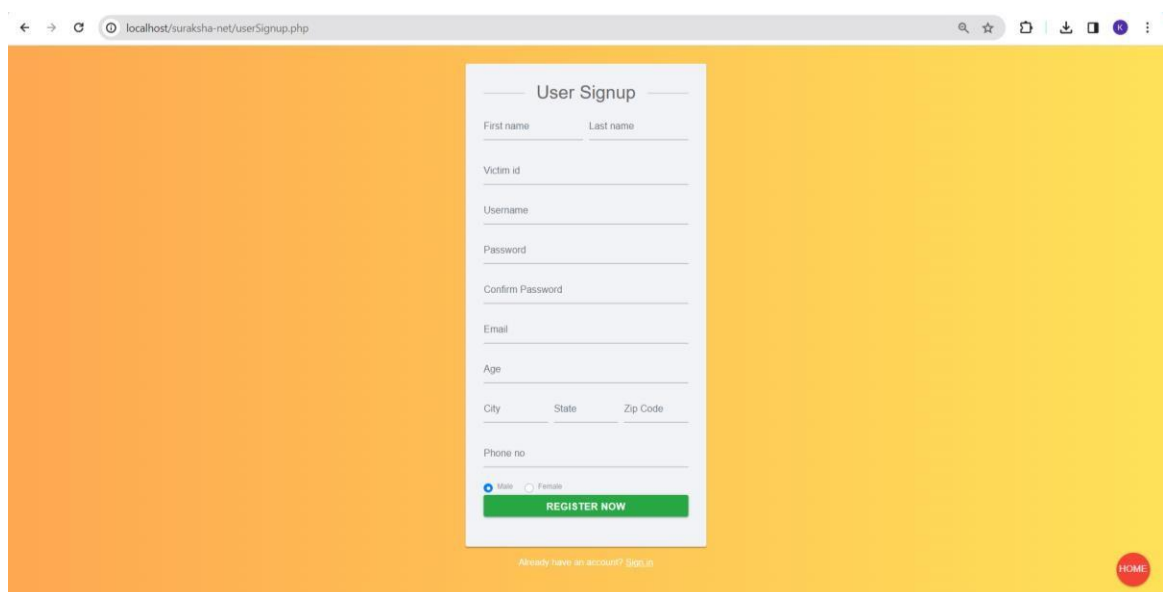


Figure 3.2: Create Account Screen Sort

CHAPTER 6

Conclusion & Future Scope

6.1 Conclusion

The developed software has proven to be efficient and effective in taking timely action against reported crimes. It has simplified the process of obtaining accurate information, and its user-friendly interface allows even non-experts to use it with a login password. The organization values the benefits of partnership work in reducing crime and disorder. Additionally, the software's design allows for easy implementation of future changes. In summary, these observations suggest that the project's development has yielded positive results.

- Increased productivity can be achieved through complete automation of the system.
- The system offers an intuitive graphical user interface, which outperforms the current system.
- Access to the system is granted based on user permissions, ensuring appropriate usage by authorized personnel.
- Communication delays are effectively eliminated through system automation.
- Updating information becomes a simple and effortless process.
- System security, data security, and reliability are standout features of the system.
- The system has sufficient flexibility for future modifications if required.

6.2 Future Work

The scope of the project includes that what all future enhancement scan be done in this system to make it more feasible to us:

- Databases for different products range and storage can be provided.
- Multilingual support can be provided so that it can be understandable by the person of any language.
- Additional features will be added for the blind people.
- More graphics can be added to make it more user friendly and understandable.
- Manage & backup versions of documents online.
- Facial Recognition Software: If implementing facial recognition for identification assistance, specialized software or APIs for facial detection and matching.

CHAPTER 7

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10. Cyber Crime Coordination Centre (I4C): <https://i4c.mha.gov.in/> - A Government of India initiative to tackle cybercrime through various components like a national reporting portal and investigation teams.
11. National Cyber Crime Reporting Portal: <https://cybercrime.gov.in/> - Enables online reporting of cybercrimes in India, particularly those against women and children.
12. Crime in India 2021 (NCRB Report): <https://ncrb.gov.in/en/Crime-in-India-2021> - Provides detailed data and analysis on crimes reported in India during 2021. You can find similar reports for previous years as well.
13. "Cybercrime in India: A Study of Legal Framework and Challenges" by International Journal of Recent Scientific Research: [This source seems to be behind a paywall. Look for similar free, reputable sources] - Explores the legal framework for tackling cybercrime in India.

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[This source seems to be behind a paywall. Look for similar free, reputable sources] - Discusses the benefits of online FIR filing in India.
15. "Challenges of Online Crime Management in India" by [News source in India] (replace with a credible Indian news source): - Many Indian news publications discuss these challenges. Look for recent articles on the topics.