

Crime Record Management system with React Native and Google Cloud Services(BeSafe)

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Abstract - Crime has always been a concern for both the Police and the citizens of India. With the increase in the population, the crime rate has also resulted in the increase of the risk factor for the safety of the citizens of India. India has always faced the threat of crime, which poses a significant risk to its citizens and the Police. The citizens of the dynamic country India must not only take the police's help but also understand and adapt to the various applications of technology that will help provide better safety to the citizens of the country. In order to quickly and effectively respond to a newly received criminal case, information regarding the type and severity of the case is crucial for authorities. This paper designs and develops a management system for reporting crimes for citizens and managing crime for the assigned police. In this designed technology, our goal is to take advantage of the opportunities technology offers and develop a crime management system that can store information regarding criminals, complaints, case histories, and so forth. We maintain the records of all these items in one database, and use web sockets to make the database conversation in real-time which can save time and money. Since it is a native application it works on both Android and IOS so it reduces the development work. The user-friendliness, multilingual support (multiple language support) and low cost of the designed app make it more convenient than existing similar systems

Key Words: Station Admin Police, Crime Record Management, Secure social environment, Report Complaint, Multilingual, Notifications .

1. INTRODUCTION

The increase in the population has also resulted in an increase in crime rates, which has led to an increase in the risk factor for the safety of citizens in India. A Secure social environment can be achieved if technology can be applied smartly. Nowadays smartphones have become increasingly common. This device can be used effectively if we want to live secure and smarter lives. The act of robbery has been increased. Keeping in mind the present situation, this paper proposes an app system i.e. the crime record management system helps in storing the records related to the criminals, cases, complaint records, case history, and so on. To deal with this, the citizens should understand the crime management system which helps

them file a complaint by searching his/her nearby police station, view the status of their cases, their complaint details, and their case histories. They should adapt to the application to help provide better safety for all the citizens living in dynamic India.

1.1 Purpose

In this project, our approach is to increase the security of our society by taking the opportunities of technologies. This allows a citizen to create a report, the Police station admin to verify the report, and the officer in charge to change the report status. The cloud database we maintain saves time and money and provides better data safety and security. To maintain security, users will only be able to access the App if they are authenticated by the system. The database allows us to collect information about the complaint and categorize it. The application will be one of the useful projects that the Police and Citizens can rely on. This Application can help in getting information of the criminals of many years back. This Application can help in getting the information of the criminals of many years back. It can also help in minimizing most of the work of the police.

1.2 Features

1) Complaints: This application includes a complaint form categorized by different types of cases. For guided support for users, we have created different forms for complaint registration, such as Missing Persons Search, Unidentified-Person Search, Missing/Stolen/Lost/Found, Report Complaint, etc.

2) Complaint Status/Update: We can view the status of complaints in the complaint panel and even the police can update the status.

3) Police Access management: We can maintain the details of the police in the particular police station through the Be Safe Admin website.

4) Station Admin: Station Admins are available for particular police stations and can assign complaints to police of their station.

5) The Application has multilingual support so users can choose any language, e.g. English, Hindi, or Marathi.

2. LITERATURE REVIEW

Using this proposal, users may be notified in different ways via their mobile devices, and the system could also function as a crime prevention method to increase security. Through the proposed system, a densely populated city can gain valuable insight into crime-prone areas. Mobile users receive pertinent information regarding the nearest Police Station and Community Precincts in case of an emergency. Furthermore, the system can alert users to the nearest risky areas, helping the average citizen stay alert and vigilant.[2] This paper demonstrates how to increase the safety of our society by using the opportunities provided by technological advancements. This paper demonstrates a simple approach that incorporates a smartphone application along with a small device that acts as an emergency switch button. [1]

3. EXISTING SYSTEM

In this paper the approach is to increase the security of our society by taking the opportunities of technologies. This paper demonstrates the simple method where there is a smartphone application along with a small device that acts as an emergency switch button. If someone falls in danger then s/he can press that button (which is connected with the phone via Bluetooth), and it sends a message about the danger to the emergency contact of the victim and notifies the nearby users who are using this app. There is a cancel button by which victims can cancel the request for help in case of misunderstanding. The designed app along with the hardware switch works as expected. The user-friendliness and low-cost of the designed app make it more convenient than existing similar systems.

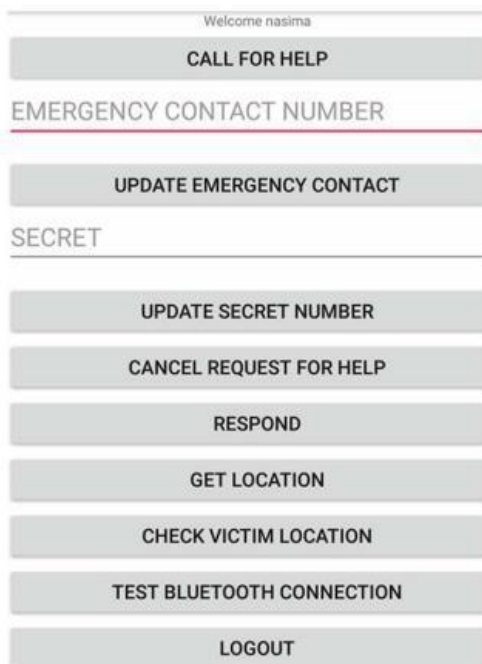


Fig-1: Diagram of the home screen

4. PROBLEM STATEMENT

Document maintenance is a difficult and cumbersome task. Everyday huge chunks of reports are filed and sometimes are misplaced or difficult to find. Due to improper handling of documents during and after their need. This must be very disruptive since there may be loss of confidential or important data which may potentially be harmful to any people. Citizens failed to report crime to the police station for fear that COVID-19 may directly affect them because police had to maintain direct contact with citizens as part of safety management. In this research paper we propose to develop Solution / Application to regulate the safety sector in India from exploiting people during criminal emergencies and pandemic situations.

5. OBJECTIVES

- We aim to develop a mobile app for citizens and police for crime record management, which can be accessed by both citizens and police easily.
- For guided support for users, we have created different forms for complaint registration, such as Missing Persons Search, Unidentified-Person Search, Missing/Stolen/Lost/Found, Report Complaint, etc.
- Our app has multilingual support so users can choose any language, e.g. English, Hindi, or Marathi.
- Citizens can monitor his profile and get updates about his registered complaint. The Station Administrator can assign complaints to the police officer with a suitable role in managing complaints. Assigned police officers can view and update the status of a complaint assigned to them by the station administrator.

Existing system drawbacks: Internet connection is necessary for this app.

- 1) Bluetooth connection must be turned on.
- 2) GPS system should be turned on in order to send the location.
- 3) The phone and the device both must be connected to each other via Bluetooth.

6. IMPLEMENTED SYSTEM

Our paper concerns itself with the safety of citizens and managing police databases, rather than existing systems that focus on user safety. Once an applicant registers as a citizen, he or she will be required to fill out all of their pertinent details in order to get access to the application. In addition, they will be required to submit a complaint. The person must include all incident details in the text or audio file of the complaint in order to register it. The complaint would not be processed if it lacks the necessary details. Immediately following registration of the complaint, the local police database will be updated with

your complaint information. Once registered, the police will process the complaint. Once they have completed the complaint, the police have the ability to modify the status of the complaint, i.e. in process or solved. When the status is solved, it will be updated in the solved complaints database with its unique id so that the complaint can be tracked back if any issues arise. For the police to register, the police officer has to provide his details with the office location and we will provide access to the database.

7. SYSTEM ARCHITECTURE

The Application has two main modules:

- 1) Police
- 2) Citizen.

And the Police is further divided into

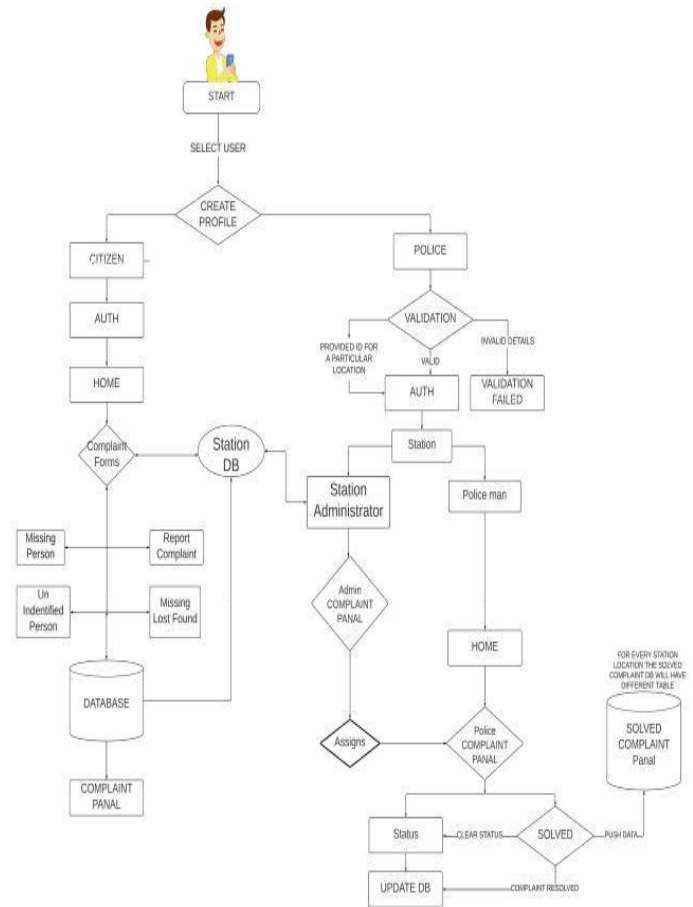
- 1) Station Administrator
- 2) Station police officer

Citizen: In this module, a citizen has to register with his valid details. After successful login, he/she can see their registered details and is eligible to file a complaint. **Police:** Only verified police can access the application. Every Police officer have to update his status in the Application when he/she is on or off duty. So complaints will be assigned to them. **A) Station Admin:** The complaints are categorized into different types and are first received by the admin and then further passed to a particular police officer suitable for the case. **B) Police officer:** Take over the complaint, manage the complaint and update the status of the complaint i.e. the complaint is 'SOLVED', 'INPROCESS', 'HOLD'.

8. METHODOLOGY

Initially, it was difficult to find out how to build the system to provide safety services to citizens and police officers for complaint registration and management. As the topic is about crime management, we searched for websites related to safety and we came across the Delhi police website, which has services for citizens and police-related to reporting complaints. It helped us to know the services we need to provide in our app. Now we have created two sections: police and citizen. And the Police are further divided into Station Administrator and Station police officer.

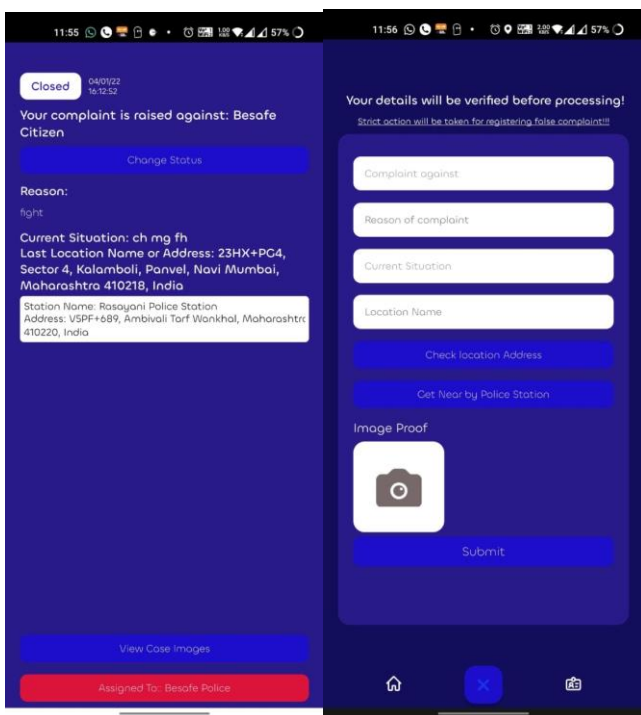
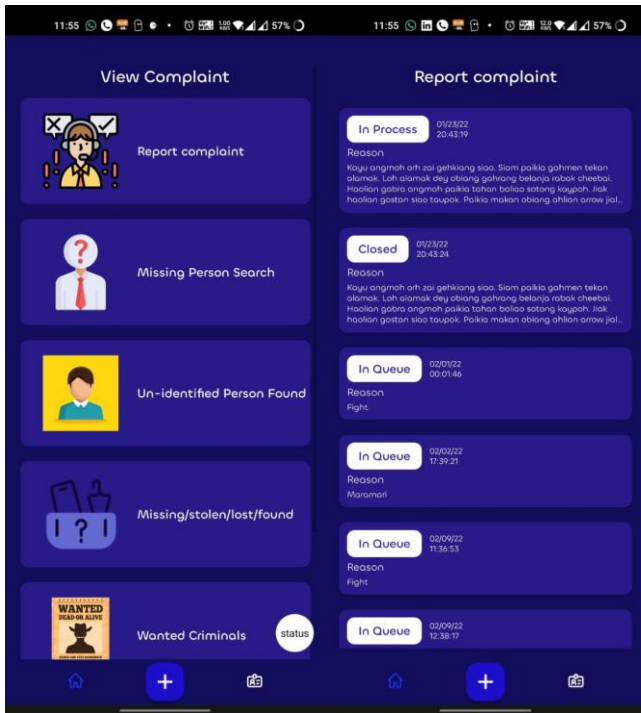
9. FLOWCHART



10. RESULT ANALYSIS

The existing solutions were only based on citizens safety whereas our system is based on citizens safety as well as a complaint management system for police

In the current scenario result the user get the nearby police station according to their current location. Can view his/her complaint according to the list of categories he/she has reported. Now citizen are able to report a complaint according to their scenario to their nearby police station of the incidence. Station admin can verify and assign complaint to suitable police according to the complaint based on their role and position. Police can view their assigned complaint, update the status of their assigned complaint, reopen the previous complaint from the history in case if needed.



11. FUTURE SCOPE

The project includes that we can do all future enhancements to this system to make it more workable for us:

- 1) We can store the fingerprints of criminals in a database.
- 2) We can manage and backup versions of documents online.
- 3) We can also add an emergency button (SOS).

4) We can make use of the latest blockchain technology for better security purposes.

5) We can make projects more powerful with the help of artificial intelligence like Google Assistant and Siri, for example. If you want to register a complaint regarding any person, or if you want any help regarding understanding the app, or if you want to add any feedback.

6) The posted crime takes time to be verified by local police, as it is still a manual process, so the solution to this is that police officers can take the help of a video surveillance system to verify the posted crime place and the current situation in that place.

7) Whether to grant bail or not is decided by a panel of judges when a suspect is under trial by an agent in the distant future. Therefore, date science can help predict whether the suspect will be in danger in the future or whether bail can be granted.

12. CONCLUSIONS

Nowadays, computers and mobile phones are used more and more in the modern world. A significant change has taken place in the way activities are accomplished due to recent developments in the IT industries. As a result, new technologies are needed to improve crime reporting systems. It has been presented here a simple, convenient, cost-effective system for online reporting crimes with a user-friendly, sensitive, and intelligible web interface. This system could be accessed from anywhere with an internet connection. As such, crime reporting systems must embrace the opportunities offered by these modern technologies. And our application (BeSafe) that can make a difference.

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