

Implementation of Crime Recognition using Android Application

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Abstract - Today we are living in the world where technology is growing very fast and where mobile technology is become an integral part of our life. This field is getting more popular day by day as before people need to use computers or laptops for processing their work fast but today our smartphones have same capability of doing that like computers. And the smart cities where mobile technology is very useful in terms of human resource. In this paper we have developed an android application which is going to be used by the general people and the website which is used by the police station act as an admin for a particular city.

Keywords - *Android, Mobile Technology, Location Safety Aware, Crime Reporting.*

1. Introduction

With the great advancement in mobile phone technology, this technology can be used in many other fields and application such as Maps, Photography, videos, Gaming, Messaging, and so on [2]. With the introduction of high speed cellular network technologies like 3G/4G by most mobile network operators has improved the communication gap and increasing demands for mobile users [1]. With the consideration of above two factors in place, development of dedicated mobile platforms for displaying crime areas and reporting criminal activities is a great possibility [1].

The mobile application can be used to report crimes, view criminal activity areas, view crime areas on map, and stay updated on crimes in progress, SOS etc. In our project we are storing our database on remote server for easy access to data. While user posts any incidence, the information which is provided need to be first verified by the police officials. After approval from police officials the

information it will be posted to other users on the application. For police officials we are developing a website where they can view online users, crimes posted by user, add crime prone areas etc. over this website police officials verifies the crimes posted by the user.

2. Design

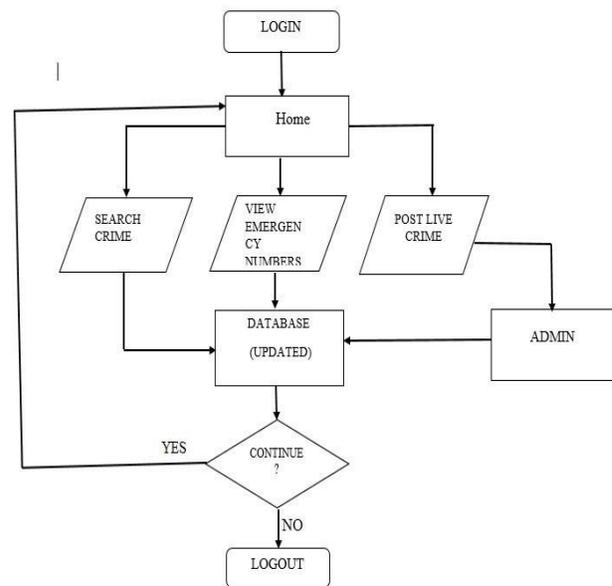


Fig 1. Android application flowchart

In android application user first need to register for crime watch and then user can login though its username and password. An android app has a major functions like search crime, view crimes by current location, register/post crime [3].

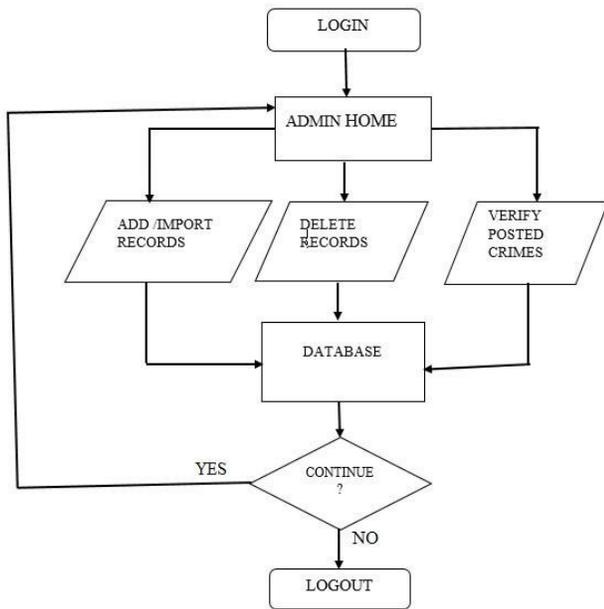


Fig 2. Web application flowchart

The website for a police officials have a logins for the police stations. The police stations can verify the registered crime, add new records, modify previous record and can also delete a records [3].

3. Implementation

The implementation is divided into two major parts such as an android application and the website.

3.1 Android Application

An android application basically have four major functions such as view crime by current location on google map with crime statistics, search crime by locations, post crime and the SOS service.

3.1.1 View Crime by Current Location

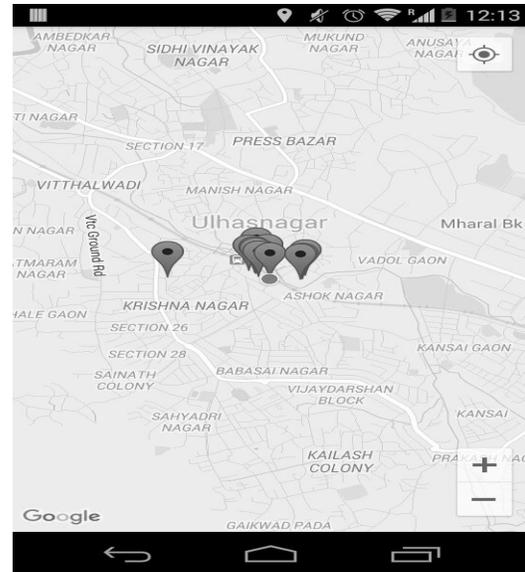


Fig 3. Crimes by location

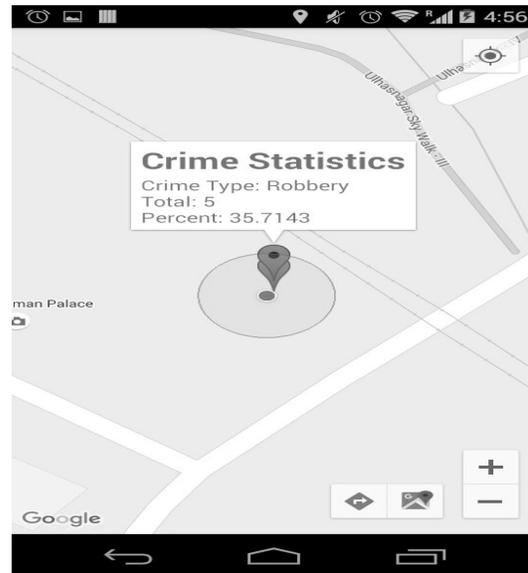


Fig 4. Crime statistics

This function automatically detects user’s location and show previously occurred crimes from that location to the user on google map with the crime statistics which shows the crime type and its frequency of occurring along with percentage of that crime from user’s location.

3.1.2 Register Crime

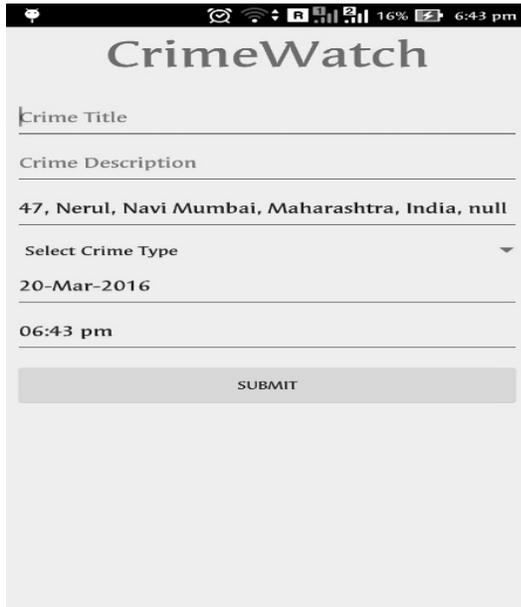


Fig 5. Register crime

This is the feature in which the user can actually inform the police officials by posting or reporting a crime scenario. Here the only registered user can post the crime message to the police. For reporting a crime user needs to invoke the register crime activity and fill the form. After invoking the activity the user's location is automatically traced by the android application.

3.1.3 Search Crime by Location and Type



Fig 6. Crimes by location
[1] [1] [1]

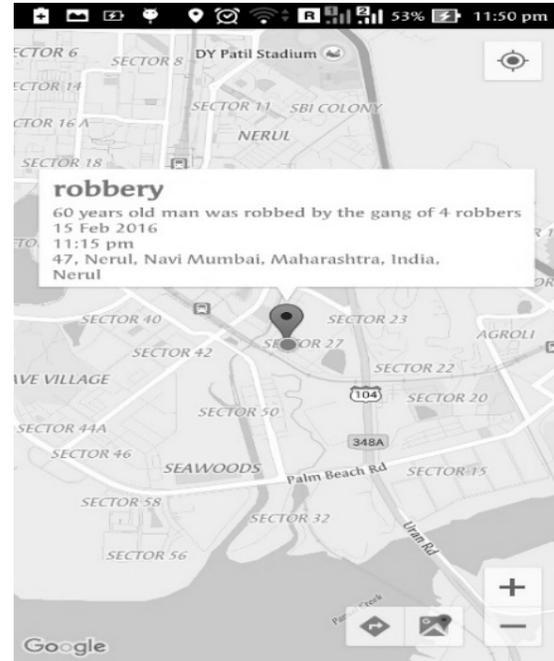


Fig 7. Searched crimes

This function of app provides the facility to user to search the crime by its type and the location irrespective of user's current location. User can search and get all the searched crimes and their details on the google map.

3.2 Website

The website is basically for the police officials only. They can do manipulations on the records and verify the registered crime of user.

3.2.1 Registered Police Station Details



View Registered Police Stations						
User Name	Mobile	Email	Location	Address	Delete	Update
VashiPO	2147483647	sharad@gmail.com	Vashi	Palm beach,vashi		
NerulPO	2147483647	w@yohoo.com	Nerul	Sect-9,Nerul		
SanpadPO	833334555	d3@gmail.com	Sanpada	Sect-6,Sanpada		

Fig 8. Registered police stations details

Every city has a single police official login which manages all the activity of that particular city only. There is a separate login for the main admin (Headquarter) which monitors all the police station logins.

3.2.2 View Crime Details

Crime Details								
Crime Date	Crime Title	Crime Desc	Crime Location	Posted Type	Is Active	Posted By	Delete	Edit
	Murder	xiii aaj do ek ek UK ever tti/ CIK	A-604,mahaarvir dapan,sector-27,Nerul,Navi Mumbai,400706	online	0	sohaib		
	Murder	xiii aaj do ek ek UK ever tti/ CIK	307, Ullhasnagar Sky Walk - III, Ramayan Nagar, Ullhasnagar, Maharashtra, India, 421002	online	0	sohaib		
17 Jan 2016	Murder	xiii aaj do ek ek UK ever tti/ CIK	307, Ullhasnagar Sky Walk - III, Ramayan Nagar, Ullhasnagar, Maharashtra, India 421002	online	0	sohaib		

Fig 9. Registered crime details

Fig 10. Add new record

Whenever the user registered/posted any crime by the android application, the user's details and the registered crime details are stored on the database. Initially all the

details are considered as the rough record and the record status is offline. After verifying the registered crime by the patrolling team of police the main police official modify the record that is they make the record online i.e. verified. And if police officials wants to add some records they can also add new records by clicking on "Add New Record" button.

4. Scope

Some of the enhancements that can be made in the system in near future are listed below:

1. The only challenge is that user need to connect with the internet all the time.
2. Some more security services can be implemented for safety purpose.
3. The crimes reported by the user to the police officials needs to be verify quickly as it takes time to verify the crimes by patrolling team of police; police officials can use the video surveillance system to verify crimes quickly.

5. Conclusion

We have developed an android application for the people (users) and website for the police officials. This minimizes the communication gap between the police officials and the people. By this app the user can alert each other and can help police by reporting the crime scenario to the police officials. This gives flexibility to user to register complain from anywhere.

References

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