Smart Crime Investigation Using Android Application

Kunal K. Gaonkar[1], Shrutika K. Kakad[2], Priyanka S. Patil[3], Sayali R. Chandwadkar[4], Prof. Kiran K. Patil[5]

[1, 2, 3, 4, 5] Department of Information Technology
[1, 2, 3, 4, 5] PVG's College of Engineering Nashik, Maharashtra

Abstract- From the information of national surveys most of the crimes are unreported. There are many reasons for this lack of reporting. Crime is the most important issue in modern society and it is need to possible that crime is reported 24/7. There are many options exist to reporting the crimes. Internet-based crime reporting systems is the best solution to report the crimes. This system allows victims and witnesses of crime to report incidents to police 24/7 from anywhere. The aim of this project is to develop an internet-based crime reporting application which is easily accessible to the citizens. The systems help residents to interact with each other more easily and to encourage them to report the suspicious behavior of crime. This system report the criminal activities or complaints through online which is send by the registered users and it is also helpful that the register user can complaint at anytime and from anywhere. This system also helps police department to catch the criminals and storing the evidence against criminal activities. The proposed crime reporting android application aims to assist the Nasik Police in their bid to solve crimes with less time and store useful information about criminals.

Keywords- Crime reporting, Incident-based, Android application, Security, Crime-Protection, Conviction.

I. INTRODUCTION

Crime is the most important issue of modern society. There are many reasons that no one of the citizens are trying to report the complaints. Reporting crime is need of the police departments. The registered crime must be more accurate and complete to decrease police departments' time. An online solution is very useful because the user can register the complaints at anytime and from anywhere. This characteristic of the online solution helps to police stations to share information about criminals and contact with each other. It also helps to improve the efficiency of work of department. Using this android application the information will be easily handled and solving cases will be fast. The modules involved are Report an incident module, Help me module, Emergency contacts module, My Zone module, PG Verification module and Travel Safe module, etc.

The main motive of online android application is that user can report the crime at anytime and from anywhere. User cannot check the progress of their complaints. From the national survey many of the citizens think that reporting crime in police station is waste of time because of unhelpful attitude of the officers. Victims and witnesses have many reasons for not reporting a crime. People may think it's a moral dilemma to call police. They don't want to accuse someone without evidence and feel like they're lacking substantial information or they don't have proof. People may think it's not their business to report crime. People may think it's not important to report crime. They don't want to bother the police. People don't want to get involved. They feel its part of something bad and they only want to be associated with good things in life.

Crime justice system is limited to control the crimes and because of this reason power of criminals or burglars increases day by day. Many police officers are corrupted and they are passing the information of the victims or witnesses to the criminals. Crime occurs at a specific place, specific time and for a specific reason. It can affect everyone and anyone at any time.

From the above reasons crime is very serious issue and because of that Information Technology (IT) industries and crime department are working on it from last 5 years and finding solutions on it.

II. LITERATURE REVIEW

A. Existing System

In previous existing system a victim has to go to police station for reporting crime. The victim has to firstly register the FIR (FIRST INVESTIGATION REPORT) which is approached by police. The victim has to face many difficulties before lodging FIR (FIRST INVESTIGATION REPORT). This is very crucial process.

Most of the times, criminal or burglar parties gave money to the corrupted officers for not to report the FIR. As a result victim was unable to report FIR. In most cases, victims are attacked or may be killed by criminal parties when victims are going to police station and court.

The existing system is not automatic. It is fully manual i.e. there are lots of paper works done by the officers as well as victims or witnesses.

There is one more reporting system called telephone reporting system. Telephone reporting system gives us toll-free number. The victim calls on toll-free number the call was answered by the voicemail or answering machine. The receiver asks the victim about the type of crime, location of the crime where it was happened. The information collected by receiver and then receiver send it to the nearest police station where the actual crime happened.

User can also report the crime through E-mail and websites. There are many drawbacks – setting up the web page or e-mail properly. Most of the police officers don't know how to handle the e-mails and websites.

III. SYSTEM ARCHITECTURE

The aim of this section is to describe the overall implementation of the online crime reporting android application. The main objective is to automate the whole system of crime reporting using online crime reporting system. The given model explains the flow of the system.

Each user must first register with the Android application. For the registration part each station has to register their details like station area, mobile no., station in-charge etc. and get a User Id from the Admin. Once the particular station registers they can use the existing records to check information. Each of the citizens, who have to register a complaint, must first register with the Android application. For the registration part each person enters their details like name, mobile number, E-Mail ID etc. To protect the account from the unauthorized person user has to enter the password which is created by him. Once the registration is complete, the citizen can sign-in to the application and register their complaint. Report Incident module is used for entering all details about the crime. It contains the complaint ID, date and time, evidence of crime in text, audio and video format, Nature of Crime, Location of the Crime and other description related to crime etc. Administrator will be focusing on the maintenance like Master Data Maintenance; here we are going to decreases the work of Administrator by automatically removing old and outdated data from the software etc. The data will not be removed completely but it will store on cloud storage because it will be used for future work also.

There are modules like Report an incident module, Help me module, My Zone module, PG Verification module, Travel Safe module and Emergency Module. We are also going inform to the ambulance and the fire-bridged it will totally depend on description of the crime (like Accident, Fire, Murder and Other).

Figure 1 System Architecture

1) List of Users

- Administrator: Administrator is the top most authority having the right to access the main cloud storage as well as departmental cloud storage.

- General User: This user has to register their information through android application who wishes to complain or notify.

- Contact of Concerned Authority: Contact details of the particular areas of police stations, ambulance and fire-bridged.

IV. RESULTS ANALYSIS

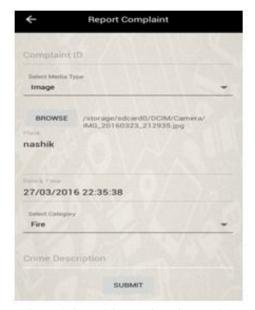In this section we are testing our application and get the expected output.

Figure 2 Complaint Registration module

Figure 2 shows the complaint module. In this module there are fields like complaint ID, media type, place, date and time, category of the complaint and last one is the crime description. By using complaint module user can register the complaint.

Figure 3 Help Me Module

Figure 5 Emergency Contacts module

Figure 3 shows Help Me module. It is specially designed for Ladies. The lady has to just enter three numbers of their relatives or friends and type the SOS message. When the lady is in danger she has to just push the Help Me button and the typed SOS message will be sent on three numbers which are registered.
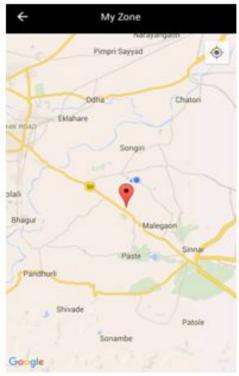
The module name suggests itself. This module shows the contact numbers of Fire-brigade office, Hospitals, Ambulance and Police station. We can also call in emergency.

V. CONCLUSION

The Android application will developed to be working efficiently and effectively. It results in regular and timely action against crime reported. It can be observed that the information can be obtained easily and accurately. The project provides much security and also helps to the citizens. The simplicity and friendliness are the advantages of this crime automation and reporting system project. The Software is made user friendly so that any user can run the software provided he could access to the system via the login password. It believes that partnership work is highly beneficial to the organization and that partnership work is the way forward to reduce crime and disorder.

ACKNOWLEDGMENT

Figure 4 My Zone module

This module shows the exact position of ours on Google maps.

REFERENCES

[1] Black (1984), "Crime as social control", in Toward a General Theory of Social Control, vol. 2, Selected Problems, ed.

[2] Zender (2003) "Too Much Security?", International Journal of the Sociology of Law, 31 (3): 155-184.

[3] BCS Thought Leadership Debate, 26 October 2004 [7] Harlow (1985), "Re-porting Crimes to the Police: Bureau of Justice Statistics Special Report NCJ-99432", US Government Printing O ce, Washington DC.

[4] Skogan (1984), "Reporting crimes to the police: The status of world research", Journal of Research in Crime and Delinquency, vol. 21, pp. 113-37.

[5] Chavez, Pendleton and Bueerman (2005),"The use of Knowledge Management framework in addressing crime prevention and security.

[6] Lyon (2005), "Global Positioning System Location Tracker".

[7] The Nigeria Dailies, (2009), "The Historical Background of Nigerian Police".