

A Web-based Criminal Record System Using Mobile Device

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Abstract— Mobile devices have become an important part of human life. In the present day, one of the easiest ways to share information or news is through smart phones. The growth of new technologies, such as hardware, software and services, has increased the performances of mobile device used in diverse purposes. The mobile positioning capability, the service that identify the location of mobile device, has become a captivate feature used in various applications in the social network. The purpose of Mobile CRS is to develop a web application for the general public awareness of the crime situation of their area and to provide them crime locations on the Google map. This will provide another venue for reporting crime incidents. This application will also help general public to report a crime to law enforcement agency. Therefore, the web-based criminal record system aims to improve the traditional system of police station. The proposed application facilitates the police to record the location of crime using location-based services embedded in the mobile device. The application is made available to the common people in order to track down the safest path to reach their destination by giving notifications when a crime affected area is chosen.

Keywords — Mobile positioning; criminal record system; crime mapping.

I. INTRODUCTION

Crime Report is a written account of an incident observed from one or more sources. It can also be defined as the communication of information arranged in an accurate, concise, clear and complete manner, which then becomes a record of a given incidents to an interested party for decision to be made. There are many types of crimes, criminals and victims. There are serious crimes and small offences.

There are professional criminals and ordinary people who occasionally break the law.

There are crimes which have obvious victims and there are the so-called victim-less crimes. Crime reporting has to be as up-to-date as possible. Crimes involve people, as criminals and victims. The so-called victim-less crime does not really exist. The motorist parked in a No Parking zone at the very least may inconvenience other people and at worst may cause an accident. This module help the user to View Missing Persons by helping the user to view all the missing person details. And helps to view all most wanted persons

which can be given by the administrator. It also helps the user to view all types of Latest News and to see list of Lost and Found Items. Along with viewing of crime details, the location of occurrence of the crime can also be displayed.

In these days, mobile devices, such as mobile phones or tablets, are rapidly becoming a part of life that facilitate the various needs of human. The growth of new technologies, such as hardware, software and services, has increased the performances of mobile device used in diverse purposes.

The web-based criminal record system (CRS) aims to use mobile devices in place of traditional GPS devices in order to facilitate the police to record the location of the committed crime. Despite from the location-based service, the CRS offers the police to describe the detail and simultaneously attach the images or multimedia files. The online crime reporting system has been developed to override the problems prevailing in the practicing manual system. This software is supported to eliminate in some cases reducing the hardships faced by the existing system.

The rest of this paper contains related works in section II, and section III contains conclusion.

II. RELATED WORK

Web-based Criminal Record System Using Mobile Device is been implemented so that when the crime is committed, the location of crime must be recorded [1]. This will provide another venue for reporting crime incidents. The idea draws its motivation from the inconvenience of going to the police station, personal belief of the weak investigative capabilities of the authorities to resolve petty crimes and limited dissemination of crime information to the community from the authorities.

The system used Google Maps to present crime information accessible through a browser. In this way, people may report crimes using a location pointed on the map before providing detailed information. It enables an automatic method for displaying information on the map because the respondents itself identify the location. In addition, the actual location of the incidents can also be identified which gives an idea to the community about the location where common crimes happened. The willingness of the police to use the

system and their recognition of its usefulness is enough to try the system for community use. Timely mapping of crime locations and accurate detection of spatial concentrations of crime help to identify where crime tends to concentrate in space and time and thus provide important information for law enforcement crime reduction efforts [3].

The main objective is to design and implement a Web-based Geographic Information System (GIS) [2] for crime mapping and decision support. The kernel density mapping is implemented in the system. The system is a rich Internet application and is entirely based on open source software, making it affordable and efficient for many small and medium-sized police departments in developing countries. Results from the prototype development demonstrate that for a Web-based crime hotspot mapping system, rich Internet application technology in combination with open source software is an effective solution. A context-aware recommender system recommends the items of the current contexts such as time, location or weather that are relevant to the user.

Self Help Groups (SHGs) are widely recognized as the hubs for information dissemination within villages and entry points for financial institutions as well as consumer goods organizations [6]. A system that uses voice as a medium to percolate knowledge through the thick layers of illiteracy and to overcome barriers of reach, this system enables low cost financial services to be comprehended and adopted by the SHGs while empowering them to raise concerns and undertake active participation. User profile disambiguation system can help security analysts compare and analyze two different social networks.

Organizations measure their social audience based on the number of users, fans, and followers on social media. Every social media platform has its user identity and a single user is present across varied platforms. [7] Explore the feature space across social media that can be leveraged for intelligent user identity aggregation.

Online Social Networks (OSNs) witness a rise in user activity whenever a news-making event takes place. [8] Proposed an extensive feature set based on entity profile, textual content, metadata, and URL features to automatically identify malicious content on Facebook in real time. This model was used to create a REST API and a browser plug-in to identify malicious Facebook posts in real time.

Mobile community based crime reporting (CBCR) services have emerged as a cost is more effective and pervasive approach to encouraging users to submit crime reports to law enforcement agencies in resource constrained environments. In that there is two contributions to facilitate effective and efficient CBCR and crime data mining as well as to address the user privacy concern. The popularity of mobile phone usage in these environments has inspired campaigns aimed at encouraging the use of mobile technologies for crime reporting.

The users can interact with the application both as first and third party reporters with the goal being to create safe communities by nurturing trust relationships. The security of the communicated reports is handled with a public-private key protocol. Each user encrypts the report that is transmitted with the law enforcement agency's public key and because the private key is known only to the law enforcement agency, the reported data can only be decrypted and read by law enforcement officers with the "correct" private key. They developed a framework for crime reporting and proposed a modified k-anonymity algorithm to facilitate fast anonymization of the data for processing and/or analysis by a third-party data mining service provider.

CryHelp App developed to enable residents of a university community situated in technology resource constrained environment to facilitate secure and covert crime reporting [4]. Also justified that there is a need for a system that will facilitate the report of crime in a secured and covert way. Therefore, implemented a mobile crime reporting system because according to [4], [5], [6], the use of mobile phones aid in securely reporting a crime. The final solution of CryHelp mobile application was evaluated against users, stakeholders, and heuristics and user requirements. The overall response from all of the above was very positive and validates that a digital crime reporting solution could be brought onto the mobile platform with reasonable success.

The system interface can be considered as successfully usable. However the results of final evaluation suggest that improvements on implementation and functionality could further enhance positive feedback. To solve crimes, investigators often rely on interviews with witnesses, victims, or criminals themselves. Investigators may need to interview multiple people and then analyze the narrative reports. There are several difficulties with this process. Interviewing people is time consuming, the interviews when testing our modules with police and witness narratives. Plan to collect additional witness narratives using crime video system to further test our system and test the question interaction components. Online crime reporting system people can use to report crime anonymously, that will encourage people to recall more crime information, and will provide a meaningful summary and a graphical result for police investigators to solve crimes.

III. CONCLUSION

This study proposes a web-based criminal record system (CRS) that apply the location-based services in mobile devices to determine the location of the crime. The CRS mainly aims to use the mobile devices in place of the traditional GPS devices. Despite from the GPS devices, the proposed mobile CRS allows the police to describe the detail and simultaneously capture and attach the images or multimedia files of the crime using camera of the mobile devices.

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