SURVEY ON REAL-TIME SMART DIGITIZATION OF POLICE SYSTEM

(Supriya Pawar, Sanket Dalvi, Sachin Kondare, Akash Shivale)¹
Prof. Baban H Thombre²

¹Department of Computer Engineering, University of Pune, India
²Assistant Professor, Department of Computer Engineering, University of Pune, India
¹(supriyapawar588@gmail.com, dalvisanket7@gmail.com, sachinkondare@gmail.com, akashshivale500050@gmail.com)
²(babanthombre@gmail.com)

Abstract: Studies have found requirement of an application for the police to effectively manage the police personnel and to get updates quickly about impending traffic rule breakers and in a better manner. There is distinct need of this application for the police to be smart in smart city scenario, we have implemented this application to help the police in better manner and quickly have good solving of the problem and doing police duties in a proper way. The resultant draws attention to the problems faced by police officers and creates effectiveness in the working of this system. Solving the problem of corruption is the primary end result of this project. We provide a survey base paper for understanding and judging the requirement for the police personnel and present the required solution.

Keywords: Police, suspect, identification

I. INTRODUCTION

The role of police in society is very important for that purpose. Police is a government institution and responsible for the security of the lives and wealth of the public. Now a days where mobile and information technology are become fast and easy it provides digitalized features. With increase in crime and corruption so police system needs smartness in police investigation work is necessary. Digitizing system will improve the efficiency of the system. This system help to surveyor in them work for handling such accounting part of fine pay and policemen location to know surveyor. This application will be useful for the remote access of criminal data which will be helpful for the investigations carried by police department. Also, it will provide the general users with the facilities like reporting any incidents which would lead to traffic jam. Moreover, it will also provide an alternate safe path on user’s demand before entering the crime area. The database for this project will be stored on cloud to gain remote access. For avoiding any false incidence to be notified to other user, the information provided will be first verified by the police officials. After approval of the information it will be broadcasted to other users using the application. A new area where mobile integrated with technology is useful for reporting policemen since readily accessible information is not available at any point of managing to policemen which on duty or on which they are allocated for work. From this surveyor get to help to manage accounts of fine and policemen work. This application easy to access and help for police department.
II. REVIEW OF RELATED LITERATURE

A. Online presence of police

Police have online presence using the official web site of the government typically it is updated periodically for details about absconding or captured suspects pertaining for a particular crime. The web site being online also contains events, history, achievement of police for a singular region. Police also have a Facebook page to give the latest updates regarding any police program[5].

B. Conceptual Framework

Several factors indicating usage of technology to achieve transparency, openness in dealing with rule breakers with respect to traffic and traffic violation is require for effective implementation and generation of the singular point of contact is the most important point to be solved using this project. The effectiveness of this project can be felt using one touch based modules which help to quickly get the detail of the rule violator and accept the fine with acknowledgement[4].

Identification of the casual entity of the violation is the primary focus of this exercise. Analysis indicates violator abscond when caught and make it difficult for police to track or trace the rule breakers. There also instance of corruption between police officers to let go of the violator. The violator pays cash and also no acknowledgement is taken by the violator. We aim to stop this corruption and give relief to the commuters[3].

III. RESEARCH METHODOLOGY

The methodology use are the following.

A. Interaction with police personnel

The interaction between us and the police personnel was done to identify multiple need of the police and get the vision to undertake the task of development in an easy manner. We found the requirements of the personnel were a bit deferment from expectation. Following are the multiple requirement from the police personnel

1. Creation of break based time structure to get some time as break hour.
2. Quick implementation of the App to quickly accept and update users.

B. Police active users

There is an expectancy of at least 100+ users/ surveyor who will using this application to catch the rule violator and get exact collection of data for a particular month. This we generate quick result and the decision can be taken quickly we have the quality and integrity for effective deployment of the application.

C. Issues and Challenges

Followings are the issues and challenges which are faced to implement in India-police system.
1) Inadequate ICT Infrastructure across the nation.
2) Inadequate access to ICT by citizen.
3) Lack of awareness of police personnel an citizens about ICT.
4) Lack of adequate training programs in India
5) Inadequate ICT-trained people.
6) Lack of reliable maintenance an sustainability.
7) Lack of mother language standardization.
8) Insufficient of electricity across the nation.
9) High-cost an low-reliability of Internet access.
10) Lack of awareness of future development.
IV. SYSTEM ARCHITECTURE

A. Basic Architecture

Fig. 1 shows a complete architecture of application which gives the basic idea of the project and the modules to be considered. It paints the picture to gives a basic idea of the application and how it works for the users.

There is a web portal which will be used to understand and interpret the data and get the result in graphical format. The android application will be used to send the data to the web server and create a data base which will contain the information about the suspect in a simple manner.

The cloud will be use to deploy this application on the web.

B. Activity diagram

Activity diagram is another important diagram in UML to describe dynamic aspects of the system. Activity diagram is basically a flow chart to represent the flow form one activity to another activity. The activity can be described as an operation of the system.

Fig to show the activity diagram which represents the multiple activities to be undertaken by the admin and the surveyor to produce the graph based structure for effective decision making. The activity diagram also indicates action to be taken in event of captured of a suspect.
V. DISCUSSION

Every single application for police should be critically encrypted and secured for better usage. Police now multi smarter and use latest technological tools for quicker captured of suspect incidentally the usage and upgradation of police system is done with priority the result of study indicate that the factors affecting the intention of usage are highly reliable in the intention due to the advancing technology era. As overall result the intention of using the application leads to better performance.

VI. CONCLUSION

From this application we try to overcome the problem of examine policemen work and consuming time on this work so we are developing android application to managing and give every detailed work to surveyor to examine through application. And from this police department time is saving for managing policemen works. This project will definitely help the police system in making the police work more efficient through equipping the police with modern ICT solutions it aims to ensure solutions and means for the police officers that support their main activity and it will be interesting for audience in the context of law and order situation in India.

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REFERENCES