

Smart Traffic App Using Android Phone

^{#1}Mehra Varsha, ^{#2}Kodgire Nikita, ^{#3}Mehetre Komal, ^{#4}Prof. A.G.Baviskar

¹varshamehra8@gmail.com

²niksviko@gmail.com

³komal2921@gmail.com

⁴amolbav@gmail.com

^{#123}Student Department of Computer Engineering

^{#4}Prof. Department of Computer Engineering
JSPM's

BSIOTR, Wagholi, Pune.



ABSTRACT

There are becomes more and more serious issues of traffic offense and congestion in city because of the problems of traffic accidents as the increment of the city vehicles. However, there are limited traffic police, so traffic patrol and working at regular places are the former ways of working that cannot effectively solve the problems above any more. We designed and realized the mobile office system through the mobility characteristic of the traffic police working and the analysis of the large working scale, which could effectively solve the jam problem by learning the traffic jam Situation. the information of the traffics which deal with the traffic accidents and traffic offense can effectively collect by The system which could greatly helpful for improving the work efficiency of the traffic police.

Keywords : Android, Mobile office system, Traffic jam situation, Vehicle Details.

ARTICLE INFO

Article History

Received : 18th October 2015

Received in revised form :

18th October 2015

Accepted : 22th October , 2015

Published online :

23th October 2015

I. INTRODUCTION

Data In early days, for travelling and transportation there are approximately 55% peoples are road ways. Today everyone has his own vehicle. The traffic on the road is automatically get increased as the popularity of the vehicle increases. Due to which year by year, the offences are also being increased. Most of the times it has been observed that people get rid of paying the actual fine by giving bribes to the road traffic officers. Also, the problems of traffic accidents, traffic offense and congestion in city become more serious with the increase of the city vehicles. However, working at regular places and traffic patrol are the former ways of working which cannot effectively solve the problems above because, there are limited number of the traffic police.

The proposed system will be developed as an android app that can be installed on any android supported handset and thus can be used by all the traffic officers. There will be no need of carrying the laptops or heavy non portable systems. The proposed system will be not only used by public but also road traffic officers.

The real time controlling system is the most important part of this system, where the entries made using the app will be stored at the back end in real time Therefore the traffic police are urgent to require a mobile office system which is arrived and used conveniently as well as can solve the practical problems.

With the help of this system checking of driving license, searching and collecting the data information of the related people and vehicles in the working spot can be done. The research realized the functions of the location and searching real-time traffic information through analyzing the system architecture, by making use of the Google Map data, and by using the internet weather XML and the Google Weather API, it realized the functions of the searching real-time weather information and weather forecast. Hence, it realized the functions of the data importing, searching and modifying through the SQLite database.

Purpose

There is a need to shift all the government activities towards the digitized world as now the world has entirely digitized. Also most of the government activities being conducted fall prey to corruption. So for avoiding such things the proposed system aims to design and implement and application for one such government body of Road Traffic Office. Most of the times it has been observed that people get rid of paying the actual fine by giving bribes to the road traffic officers. Also, the issues like congestion, traffic offense and traffic accidents in city become increasing and more serious because of the vehicles increasing ratio. However, traffic patrol and working at regular places are the former ways of working which cannot effectively solve the above problems anymore because there are limited traffic police. Through the analysis of mobility characteristic of the traffic police

working and the large working scale the research designed and then realized the mobile office system, which could effectively solve the traffic jam problem. The information that deals with the traffic accidents and traffic offense can effectively collect the system which will greatly improve the work efficiency of the traffic police. The proposed system focuses on the problems faced by public. There is a necessary to shift all the government activities towards the digitized world as the world has entirely digitized now. Also most of the government activities being conducted fall prey to corruption. So to avoid such things the proposed system aims to design and implement and application for one such government body of Road Traffic Office. Most of the times it has been observed that people get rid of paying the actual fine by giving bribes to the road traffic officers. Also, the issues like congestion, traffic offense and traffic accidents in city become increasing and more serious because of the vehicles increasing ratio. However, traffic patrol and working at regular places are the former ways of working which cannot effectively solve the above problems anymore because there are limited traffic police. Through the analysis of mobility characteristic of the traffic police working and the large working scale the research designed and realized the mobile office system, which could effectively solve the traffic jam problem. The information of the traffics which deal with the traffic accidents and traffic offense can effectively collect the system which could greatly improve the work efficiency of the traffic police. The proposed system focuses on the problems faced by public as well as the road traffic officers as well as the road traffic officers.

II. EXISTING SYSTEM

In Having a distributed system and multi headed system, the process of controlling road traffic violation and the entire traffic system has a very out-dated procedure where there are lots of pitfalls where the system can become victim of the harmful cancer named as corruption.

An Application for public use in knowing traffic rules and information regarding various signage information and fines against the offence has been launched, but there are again a very few facilities that are provided as mentioned below:

1. User Manual for public
2. General Traffic rules
3. Rule violation and fines against offence
4. My Towed vehicle information
5. Current Traffic and etc.

The major disadvantage here is that there is no provision for avoiding the various frauds that can be corporates while on roads.

Thus there is a need to develop a system that will benefit common people as well as help traffic officers to manage the system centrally and have a track of the entire records throughout the city.

III. PROPOSED SYSTEM

The system which will be designed to develop an application which is used to solve the traffic problems. This can be used for checking the driving license, searching and collecting the data information of the related people and

vehicles in the working spot. The traffic offenses which are related with road and vehicles are increasing year by year with the development of the construction of traffic road and the popularity of the vehicles.

System working:

1. When the traffic police catch an offender, he/she logs onto the device by entering his/her username, password.
2. He/she then enters the vehicle information and license details.
3. The device displays a record of offender history committed by the commuter and basic details of the vehicle as well as the name and address of the license holder.
4. The officer registers the new offender. On the basis of the history, the traffic Officer will penalize the offender. The penalty for a first offender differs from the Penalty incurred in case of repeated offenders. When a fourth offender is registered under a commuter's name, his/her license is suspended.
5. Once the license is suspended, the user in order to unblock the license can be charged more i.e. 10 times the actual cost of the offender charge and it would be a lesson for the offender to not to do any offender again.
6. The officers has no need to tally their revenue by maintaining the receipts as the entry of the offender goes from android device to the server and so server end has the facility to analyse the revenue from the officers in the entire year.
7. When the officers and the vehicle parked in a no parking zone, the provision is provided that the officers will capture the images of the vehicle being actually parked in no parking zone as a proof and make an entry in the application regarding the location where the vehicle is being towed along with vehicle number.
8. As the officer makes the entry to the server, and when a user is supposed to search his/her towed vehicle, he/she has to type the vehicle number and get the towed vehicle information i.e. the location where it is actually towed and thereby get rid of searching the vehicle here and there.
9. The user if did not and the towed vehicle address, there are major chances that the vehicle has been stolen and so immediately he/she can lodge the complaint application from the pp itself so as to make the officers aware that a vehicle of so and so number has been stolen from so and so location and this helps the officers to catch the thieves with ease due to immediate intimation.

10. Once the stolen complaint is registered, the user can track the status whether the vehicle is being found or not or whether its still under process.

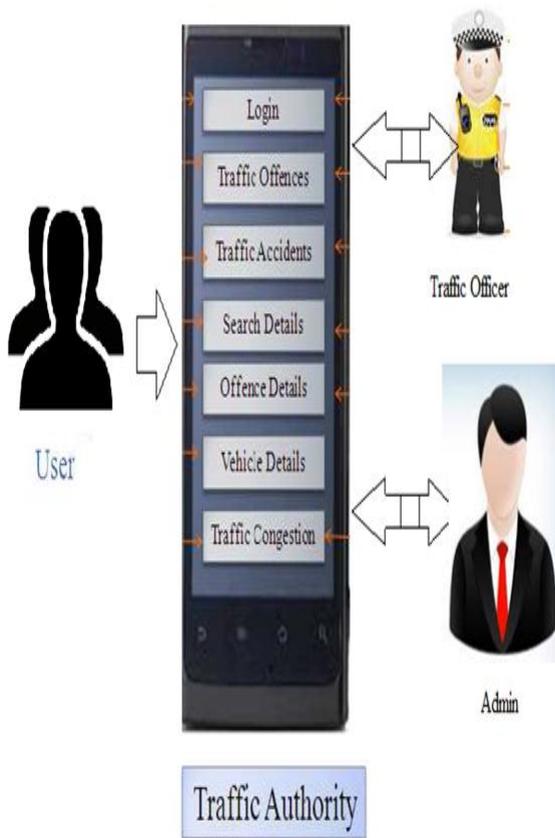


Fig 1. Block diagram of smart traffic app using android phone

IV. CONCLUSION

With the improvement in the condition of the wireless network, mobile devices and so on, the applications of the traffic information have become more popular from search of the mobile data to dealing with mobile professional work. By analysing system architecture, the research realized the functions of the location and searching real-time traffic information with the help of the Google Map data, the Google Weather API and the internet weather XML, it realized the function of the searching real-time weather information and weather forecast. Hence, it realized the functions of the searching, data importing, modifying through the SQLite database.

The Android based traffic police mobile office system can easily realize the communicating between traffic police work information and the traffic information, that offers a full temporal and spatial office. It improves the efficiency of the working of the traffic police. It can find the real-time traffic information, which meets the information requirement of the working and improving the efficiency of the traffic

management and service which can provide information source for managing and easing the traffic. Finally, it also realize the communication between traffic police and other kinds of police, which is very important for the security of the society.

REFERENCE

- [1] TunWang; Key Lab. of 3D Inf. Acquisition & Applica. OfMinist. of Educ., Capital Normal Univ., Beijing, China ; Jing Zhang ; Luqi Li ; Jia In Design and realization of the traffic police mobile office system based on Android”, Geoinformatics, 2011 19th International Conference on 24-26 June 2011.
- [2] B. Mahesh, K. Adaling, Dargude P.,”Design And Realization Of Traffic Police Mobile Office System Based On Android”, ASM’s E Journal of ongoing Research in Management and ITINCON13-IT-078 2013.
- [3] Y. Zhang, “Design web map service application for android mobile phone,” Nanchang University, 2010, pp.23-25.
- [4] X. Shu, “Mobile web map service design based on android,”Dalian Maritime University, 2009, pp.11-15.
- [5] Y. Jin and S. Yao, “The introduction and practice of the Google Android development,” Beijing: POSTS & TELECOM PRESS, 2009, pp.57-58.
- [6] Y. Li, “Police service retrieval system base on android mobile operating system platform,” Nanchang University, 2009, pp.8-10.
- [7] Google.<http://developer.android.com/reference/class.html>. accessed at December 7, 2010.
- [8] T. Zhu and H. Li, “The Synthesis of the Application Softwares Based on Android Operating System,” Computer & Telecommunication.Vol.1, 2014, pp. 42-43.
- [9] R. Meier, “Professional android application developments,” Indianapolis:Wiley Publishing, Inc.2009, pp.142-143.
- [10] J. Zhao, “Design and realization of the mobile location service based on android platform,” Modern Business Trade Industry, vol.20(20), 2010, pp.271-272.
- [11] F. Yang, “Android Unleashed,” Beijing: China Machine press, 2010, pp.339-340.
- [12] R. Li, “Analysis of Android-based XML Parsing Technology,” Computer Era, vol 12, 2010, pp.31-33.