

Automatic Penalty Charging for Violation of Traffic Rules

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ABSTRACT: The project titled “QR BASED AUTOMATIC PENALTY CHARGING FOR VIOLATION OF TRAFFIC RULES” is designed using Standard Android 4.0.3 platform. The platform used to develop the application is Eclipse IDE (Mars) with Java 1.7 Standard Edition. The project is concerned with managing traffic violation penalty information through mobile app. The project contains license details, vehicle details, penalty details, and accident information processing through this app. The project will also focus on mobile application which will help to know information about the traffic violation penalty tracked by QR code on road. This application will also send the message to the particular vehicle owner about the rule broken by them and fine according to the rule and also proof of breaking the rule in the form of image capture by mobile camera, date and time of breaking the rule and accurate amount receiving by their bank account as fine paid for breaking the rule.

KEYWORDS: Advanced wireless services, Spot billing machine, JDK

I. INTRODUCTION

This project is being developed as an android application and aimed to help traffic police to document all road traffic offences incurred by the road users. This work is aimed at developing an android application that depicts smart traffic offence analysis tool. To facilitate e-payment using QR. To facilitate authenticated user access. To develop an application this is faster, efficient and manageable and aims to prepare complete, integrated solution for traffic offence management.

II. SCOPE OF THE PROJECT

To store the vehicle details in QR code. To provide QR code to every registered vehicles. To make a quick view of vehicle details during verification. This project helps in controlling traffic offence. All these can be achieved by scanning the QR code which had been printed in the Vehicle Owner’s license. On scanning the QR code all the essential information of the vehicle driver can be extracted from the database. While using this kind of e-transactions, it must reduce corruption. The monitoring task would be made easier with this when comparing with the usual way of collecting fines from the persons who are violating the traffic rules. There must be more transparency between the citizens and government on collecting penalty charges.

III. RELATED WORKS

Market research is defined as “function that links the consumer, customer, and public to the marketer through information – information used to identify and define market opportunities and problems to generate, refine and evaluate marketing actions to monitor marketing performance, and to improve understanding of marketing process. Marketing research specifies information required to address their issue, design the method for collecting information, manages and implements the data collection process, analyses, and communicates the finding and their implications”.

1. This digital ordering system uses two different approaches: 1) Customers app 2) Counter side. The customer’s app is made exclusively for customers and is identified by the seat number on which the QR code is register

2. Now these days, a QR code is applied in different application streams related to marketing, security, academics etc. and gain popularity at a really high. Day by day more people are getting aware of this technology and use it accordingly. The popularity of QR code grows rapidly with the growth of Smartphone users and thus the QR code is rapidly arriving at high levels of acceptance worldwide.

3. This paper presents an integration of wireless communication technologies and web services technologies to realize a wireless food ordering system. In this system, it implements wired and wireless data access to the servers and food ordering functions through both desktop PCs and mobile devices such as PDAs over a wired/wireless integrated local area network. To ensure the security of the system, the secure web service architecture and some security strategies to ensure mobile communication security are discussed. Web services-based wireless applications on mobile devices provide a means of convenience, improving efficiency and accuracy for theaters by saving time, reducing human errors, etc.

IV. EXISTING SYSTEM

The existing system is offline. Traffic violation penalty information is written in printed charge sheet. Hard copies are maintained in traffic police department. Users need to pay to traffic police on the spot. This increases the time and corruption. The existing system has several drawbacks, such as traffic problems, complexity, cost, etc. The maintenance of the traffic offence management system is difficult by using the existing spot billing machine (SBM), which increases the paperwork. Therefore, the problem stated above can be overcome using proposed application.

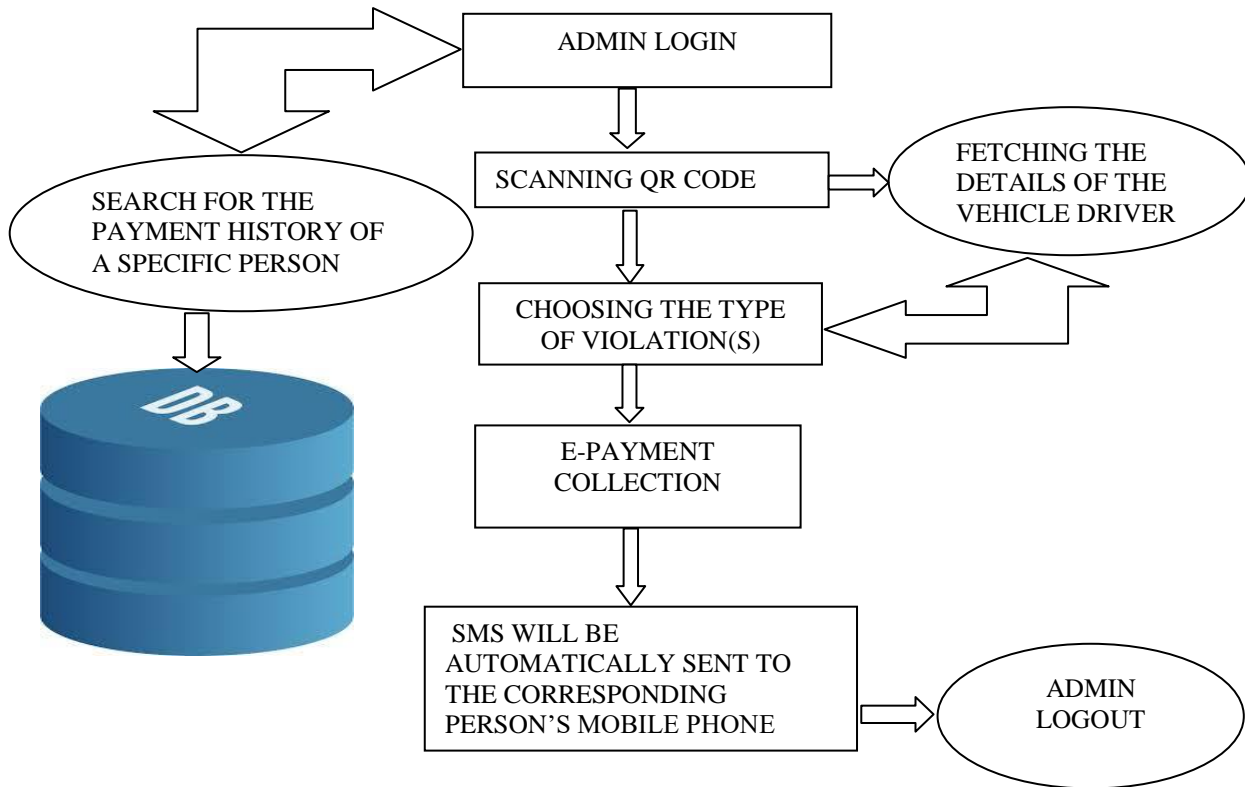
Due to traffic and corruption problem and many other issues are created. All system work manual and does not receive the fine automatically due to this corruption increases. It increases the paper work.

V. PROPOSED SYSTEM

The proposed system is android based. The proposed system will reduce all the issues related to traffic rule violation on road. In this system there are automatic traffic rules violation fine collection through QR code, message sending and automatic fine receiving from owner's bank account.

In this system, QR reader will read the QR tag which is given to the specific vehicle while purchasing or passing the vehicle driving license received by RTO which will be mandatory. The user can view fine details through mobile. Message alert is possible so that user can find information even in busy schedule. Past information can be easily retrieved with few key words search. This project will reduce the traffic problems and minimize the traffic rules violation on road. With the help of automatic fine detection reduction the fine is easily paid to the owners account by rule broker. It helps to maintain the clear between peoples and government due to which there is reduction in corruption in the world.

ARCHITECTURE DIAGRAM



MODULE DESCRIPTION

USER MODULE

In this module, only authorized users can login into our application using their username and password. A number of username and password are saved in the database and of which one of the username, password need to be given.

QR GENERATION

In this module, the administrator generates QR code along with vehicle information and owner details based on the information registered.

PENALTY ADDITION

In this module, penalty details about the vehicle are added. It includes information such as person license number, name, address, penalty amount and kind of rule breaking. After the penalty addition is updated, SMS about the details of the penalty is sent to vehicle owner.

E-PAYMENT COLLECTION

In this module collect penalty amount from vehicle owner bank account. It includes information such as person license number, name, address, penalty amount and kind of rule breaking. After the penalty collected from vehicle owner, details are sent by SMS.

SEARCH

In this module, vehicle no or keyword based search is provided. The administrator enters vehicle no or type few words and search the past information.

VI. CONCLUSION

This project ensures of creating smart environment which include automatic fine collection from bank account .Completely legal cash flow without any bribes. This will make the people obey the traffic rules which will decrease the number of accidents occur. From this project, the issues related to traffic rule on road get reduced. This interface helps not only to control the traffic rule violation but also to control the corruptions. This project includes the feature to collect fine easily by using automatic fine reduction from owner's bank account. Since the application is designed as android application, any user can have the application by downloading or sharing this application. This application is tested well and users satisfaction is found to be more.

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