Penalty Monitor for Violating Traffic Rules using Cloud Computing

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***Abstract*-Application to digitalize the paper receipt used by traffic police. To provide a better way of acknowledgement to the normal citizen to which they pay if they made any offence. The acknowledgement is provided by means of SMS which enhances the coverage of all the class of people. To monitor the individual police men during the working period by means of a mobile application. To establish a better way to maintain an entire database of offenders and offence with respect to the cops who caught the offenders. To provide a cloud computing connectivity to the department of police by which it facilitates better time efficiency. To provide a single cloud computing platform for both website and an application.**

Keywords-Cloud Computing, Android.

I. INTRODUCTION

The traffic rule is the most essential rule to be followed by every individual. Traffic rules are to be strictly followed for which various departments under the government are working. The traffic violators are fined based on their offence. There is different type of Indian penal code for different mode of traffic violations. There is a fine charged to the offender by the police. The charge may be paid instantly or by the court after a couple of days. The fine paid instantly is made with a paper receipt as an acknowledgement. This is the normal case for an offender. The police are subjected to maintain a large data of all offenders as a paper receipt which is a tedious process. The maintain of each police at different stations are also a big deal for an higher authority. The sections under the Indian penal code are to be made avail for a better secured nation. The police are working hard for the maintenance of proper traffic rules.

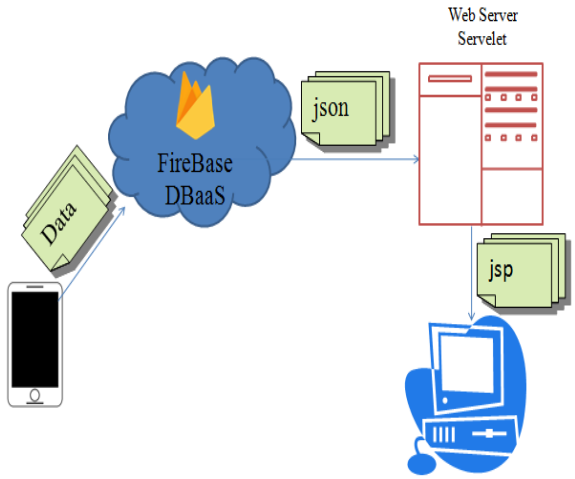
II. PROPOSED SYSTEM

The normalized manual method of fine collection and maintenance of traffic police is digitalized in this proposed system. The method by which paper receipt used is been replaced by digitalized method. The replacement is done by an android application and a website. The android application is used by the police for fine collection from the offender. There is a web site at with updating is made dynamic. The offender information and the fine collection are updated dynamically. The web site is a centralized system where the information on android application at various stations is updated. The proposed system has the capability to send acknowledgement via SMS system for every offender. The SMS system is proposed by means to cover all the class of people. The acknowledgement provides a better way to know about the fine at which they pay. The centralized system is also updated simultaneously. The updated data provide the understanding about the number of offenders and the amount of fine collected per day.

ADVANTAGES**:**

- Acknowledgement is received to every offender.
- The rate of offence rate can be calculated more easier.
- Maintaining the centralized cloud database is achieved.
- Monitoring of traffic police at station level is made avail.

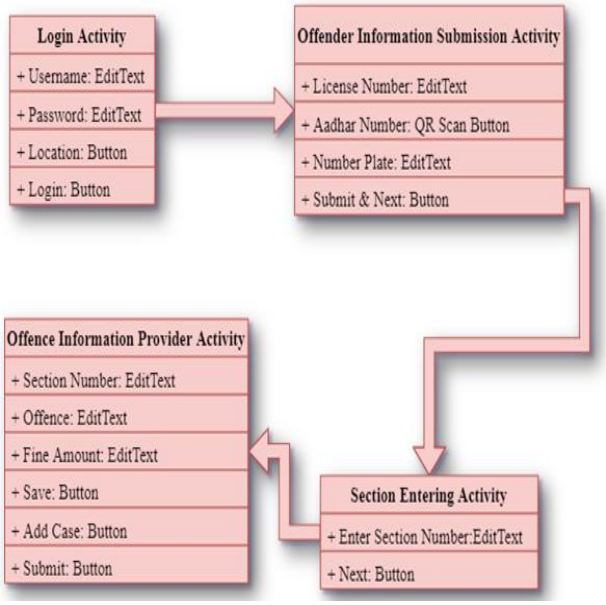
III. SYSTEM ARCHITECTURE:



IV. MODULE DESCRIPTION:

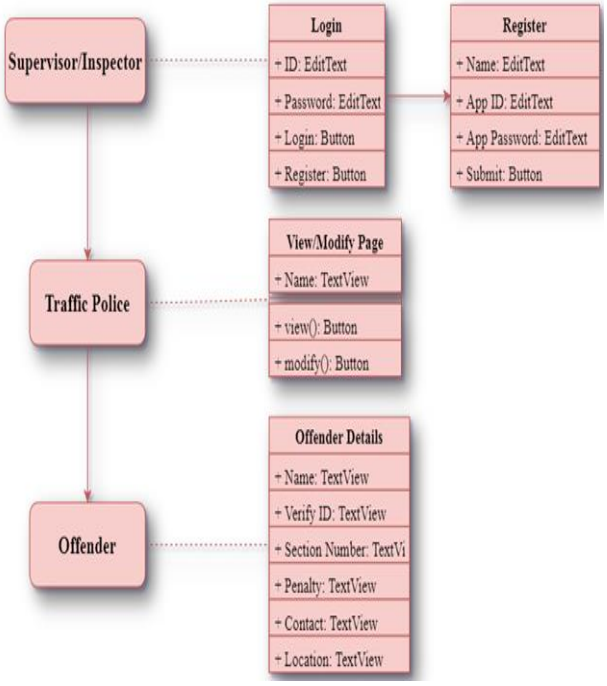
Application module:

This module is used by the traffic police as an android application. The traffic police is made avail with a separate username and password by which they can login to their account. The login is made in accordance with the centralized cloud server. The police man can use the application to store the offender details and record the offence. The details such as the license number, aadhar number or number plate can be noted for offender reference. After this reference the section number for the offence can be entered by the traffic police. The process takes till the final module where the fine is collected. The data entered here are updated simultaneously at the website module. The data are collected and stored by means of a cloud server.



Website module:

This module is based on the server side where all the data is stored. The system is made under cloud databases. In the cloud database environment, the cloud providers of server, storage and other infrastructures are responsible for the maintenance and availability of all the centralized data stored. In the DBaaS environment of cloud computing, the service providers are responsible for maintaining and operating database software, leaving the DBaaS users responsible only for their own respective data. This enables the centralized server maintenance more easy for the cops. This module is the essential module for the maintenance of cops in several stations. It also provides the offender and offence details under different cops.



The different level of supervisor inspector, traffic police and the offender details are made as a database using the cloud computing database. The website is monitored by a supervisor inspector where there will be many traffic police under his control level. The number of offenders and the rate

of offence in a particular region can be monitored more easily at the server end website. The module enables better data base maintenance for several years.

IV. Conclusions

In this paper, we presented an interactive approach to digitalize the traffic fine system. The problem of normal receipt system is replaced by the digital system by means of the android application. Effective solution for acknowledgment from the traffic police is made through an SMS to the offenders. The main aim is to maintain a complete database for the maintenance of the cops and offence details at a large quantity. As the early system has challenges in maintenance of receipted data this proposed project may provide a better enhancement using with the cloud computing.

V. References

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