

Traffic Violator Monitoring System

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ABSTRACT

The traffic violator monitoring system helps to keep the record of the vehicle registered at RTO office. The web application is very useful for the traffic police to maintain separate records and to store the present action against the people who are violating the traffic rules. The main objective of this project is to develop an application for traffic police to maintain traffic violator's details in a consistent way. On entering the vehicle number the details are retrieved and the police can take necessary action on the spot.

Keywords : Traffic Violator Monitoring System, Trace Violator Vehicle, Identify Every Vehicle Uniquely

I. INTRODUCTION

The Traffic Violator monitoring system develops an application for traffic police to maintain traffic violators details in a consistent way. Breaking traffic rules and accidents on road is a major issue now a days. Due to large population and traffic congestion it is difficult to identify which vehicle has broken traffic rules or by which vehicle the accident has happened. This system is helps to keep the record of the vehicle registered at RTO office and insurance details of vehicles are networked.

The Traffic Monitoring system is very useful for the traffic police to maintain separate records and to store the present action against the people who are violating the traffic rules. The traffic police will note down the violators vehicle number to trace the details .On entering the violators vehicle number the details are retrieved and the police can send mail to the violators about his/her fine amount and warning messages. For this reason, the work of the traffic police will be simple and they maintain their workbook online and updated.

II. EXISTING SYSTEM

In Existing system still the Indian government are updating these details in manual only. It is very difficult for the traffic police to maintain and update the

violators information. For this reason, the work of the traffic police will be more.

2.1 Literature Survey

Guoyu Ou, Yang & Ying Liy.[1] describes the traffic violators and offences are becoming more and more serious as the traffic volume increasing , which may bring property damage and threaten personal safety. The lack of capability is to analyze high-throughput traffic monitoring stream and detect various types of violations in real-time. Thus, a real-time vehicular traffic violation detection system is in real demand. An optimization scheme as well as a well-design data structure is proposed to improve the performance of the parallel implementation. The real data and synthetic data are applied for the experimental results. Experimental results demonstrate that our proposed system can discover all the violations from the high-throughput

Nourdine Aliane,Javier Fernandez,Mario mata & serigo bemposta.[2] examine to detect some specific traffic violations,record data associated to these faults in a local data-base and also allow visualization of the spatial and temporal information of these traffic violations in a geographical map. The system is able to detect some specific traffic violations, record data associated to these faults in a local data-base, and also

allow visualization of the spatial and temporal information of these traffic violations in a geographical map using the standard Google Earth tool.

Govind Prasad Arya, Durga Prasad Chauhan, Vishal Garg.[3] examine the automatic intelligent system to identify culprit vehicle due to large population and traffic congestion it is difficult to identify which vehicle has broken traffic rules or by which vehicle the accident has happened. To monitor culprit vehicle manually is very difficult. Therefore, there is need to monitor these vehicles automatically. In today's time there are so many people breaking traffic rules without any fear, one of them is jumping red light signals. Sometimes due to this the vehicle meets an accident with another vehicle. The traffic monitoring authorities need to find new methods of overcoming this difficulty.

2.2 Disadvantages of the Existing System

The major disadvantages of the existing system are as follows

- Some people are not registered their vehicle details in RTO office.
- If theft occur also it is very difficult to trace the vehicle details

III. PROPOSED SYSTEM

The proposed outcome of the project is it will link the driving license and expecting it to help better track of unsafe drivers with multiple license in the latest technology. For this reason, the work of the traffic police will be reduced and they maintain their workbook online and they updated the violator's record. It is very easy to find and trace which vehicle has violated the traffic rules.

3.1 Advantages of the Proposed System

- The fraudulent of multiple license wont occur.
- Easy to trace the vehicle if theft occurs.
- The traffic police will note down the violators vehicle number to trace the details. On entering the violators vehicle number the details are retrieved and the police can send mail to the violators about his/her fine amount and warning messages.

IV. METHODOLOGY

The methodology adopted in this project is collecting user details who all are register their vehicles in RTO office and the admin will maintain all the registered details of vehicles, police information and the case booking details of the violators, it is very easy to the police to collect details from the RTO office about the violators and the police can send his/her fine amount and warning messages for the violators through mail. To enhance the driving and thereby safety , our approach consists in using a driver assistance system based on informing drivers about the traffic violations and faults they have committed. This approach may contribute to help drivers become more aware about their driving attitude and may persuade them to change their driving styles and , therefore ,prevent them from committing unnecessary faults. Figure 1 shows the hierarchical diagram of the system.

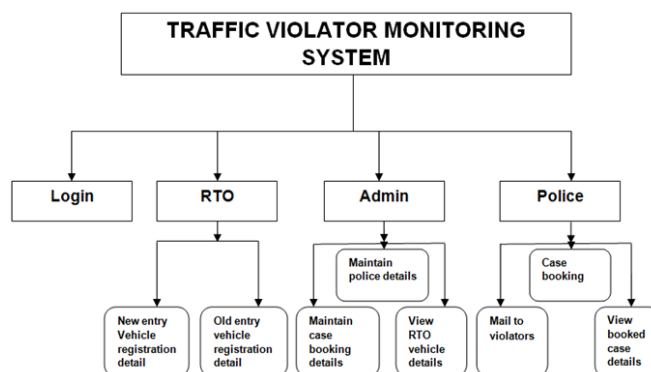


Figure 1. Hierarchical Diagram of the System

The system architecture will explain the entire concept of the project. It defines the structure of the developed system comprising different components or modules, the externally visible properties and the relationships among them. Figure 2 shows the overall architectural design of the system.

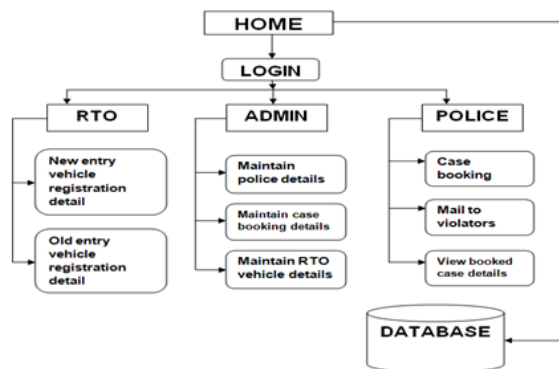


Figure 2. Overall Architectural Design of the System

V. DOUBLE HASHING ALGORITHM

- Step 1. In RTO module, the double hashing algorithm is used to hash tables to resolve hash collisions, with two different values to be searched to produce the same hash key.
- Step 2. The open addressing for the double hashing is classical data structure on a table, the number of elements stored in the database.
- Step 3. Double hashing approximates uniform open address hashing.
- Step 4. The function will start as randomly, uniformly and independently selecting two universal hash functions and to build a double hashing table
- Step 5. Represents a pseudo-random number generator, a device that produces a sequence of numbers that meet certain statistical requirements for randomness.
- Step 6. It initializes a new instance of the System. Random class, using a time-dependent default value or specified value.
- Step 7. A number used to calculate a starting value for the pseudo-random number sequence. If a negative number is specified, the absolute value of the number is used.
- Step 8. Fills the elements of a specified array of bytes with random numbers.
- Step 9. Returns a random number between 0.0 and 1.0.
- Step 10. The random number greater than or equal to 0.0, and less than 1.0.

5.1 SIMPLE MAIL TRANSFER PROTOCOL ALGORITHM:

- Step 1. In police module, through SMTP (Simple Mail Transfer Protocol) is a TCP/IP protocol used in sending email to the violators and we can receive emails also through this SMTP protocol.
- Step 2. It is limited in its ability to queue messages at the receiving end, it is usually used with one of two other protocols, POP3 or IMAP, that let the user save messages in a server mailbox and download them periodically from the server.
- Step 3. SMTP uses for sending e-mail and either POP3 or IMAP for receiving e-mail.
- Step 4. On Unix-based systems, send mail is the most widely-used SMTP server for e-mail.

VI. RESULT

The result of the project “TRAFFIC VIOLATOR MONITORING SYSTEM” is obtained as expected. This application is working successfully and the results are obtained as per the output requirements.



Figure 3. Shows The Home Page Of The Traffic Violator Monitoring System

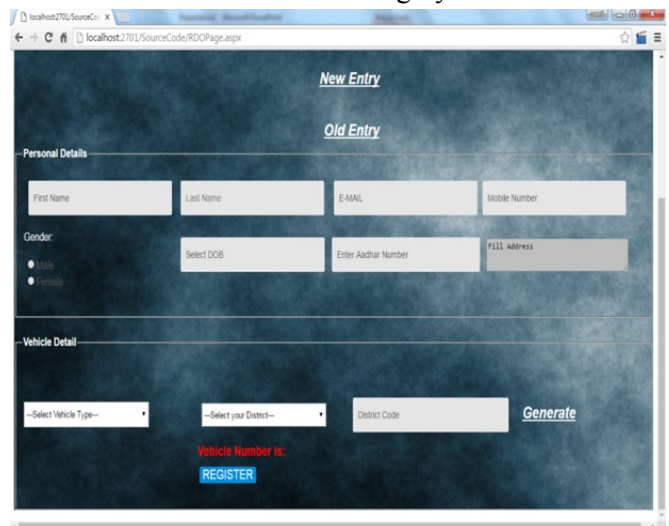


Figure 4. Screenshot for New Entry RTO vehicle registration page

In this work, the system is used to trace the violators vehicle details which breaks the traffic rules even if it is fitted with a fake registration number. It is very easy for the traffic police to trace the violators details and take further action on the spot.

VII. REFERENCES

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