TRAFFIC OFFENSE MANAGEMENT SYSTEM

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ABSTRACT :

Traffic offense management system which helps the police as well as the police by means of time and efficiency. With the increasing importance of corruption has become major factor to be considered as a result the number of vehicles and the rapid development of population are growing in our everyday life. Existing system makes the use of pen and paper that is a challans that are given to the offender on breaking the traffic rules.

As the system consist of paperwork the papers are mostly gets damaged or tempered. Due to this hard time for RTO office to maintain the proper records.

During patrolling if an offender commits a crime and is caught it is difficult to find out if the license is fake or real and in the same manner it is difficult for common people to find out if the officer who is pretending to be anofficial authority is fake or real one.

There are many cases where the user runs away after being caught and the police person can't take the appropriate action on the offender. Even there are many cases where the vehicles possess fake number plate and the police officers can't recognize it. So to overcome this loophole in the existing system we have proposed a new system to help us to solve the issues. Since the proposed framework is digitalized and android based, it will serve as handier instrument and helpful option implies for traffic. And Web application is provided to traffic police to retrieve vehicle information, fine details.

System Modules:

User

- Register
- Login
- View Challan
- View Case Filed
- (Google map link)
- (Should be able to see the police updates of traffic)

Police

- Login
- Rules
- Create Case
o Upload proof photos
- (Uploading bike number and person photo)
- Manage
o Live information of traffic report - New updates
- Google map traffic - Link

Admin

- Manage Police Login
- (Creating area ,street,city)
- View Daily Report

MODULE DESCRIPTION :

Admin

Admin module allows system administrator to set up back end systems and basic system configurations and it maintains all the module information and valid registration process. Admin module has two sub process. They are as follows,

1. **Admin Login**

In log in page, admin can manage all information. They can update or edit any information.

2. **Upload public documents and Maintain database**

Admin Can upload the xlsx data base of all digital vehicle.

POLICE MODULE

Police Module is one of the main module in this application. Here, the police can only able to login in to this module using their respective username and password. There are several sub process can be used by the police based on their requirements. The sub processes are Police login , Search vehicle details, apply fine, check the vehicle documents like license and rc book, and View the fine details of the public people.

Firstly, Using username and password police can able to login to this application. After the login process police can able to see the dashboard which consist of several options like search vehicle and view fine. Based on the police wish, he can able to choose their option and do the process.

In this module, there is an option called „search vehicle‟ , by clicking that, the police can able to search the vehicle details of the public people using vehicle registration number. It will produce the details of the respective vehicle, which the police want to check. After the checking process, if there are any issues occurs means, the police can able to apply fine on the respective vehicle, using the button called „apply fine‟.

1. **Police Login**

In log in page, police can only view the shared information.

2. **Search vehicle**

Police can search and view the vehicle details like RC Book and license expiry date details

3. **Update punishment.**

Police can update fine details for public.

4. **View punishment**

Police can view the fine details and also checks the status of applied fine, whether the fine amount is paid or not.

PUBLIC MODULE

Public module is the main module of this application. Using the username and password public can able to login in to this application. Before the public login process public should register their details with this application using the option called „Public Register‟. After the registration only the public can able to get an access to use this application in an essential manner.

There are various options are available in the public module. They are Fine details, view fine, report, complaint. If the public select the File details option, it will show the list of fine names and their amounts, which is used to know the general fine details followed by the government. Then the next option called, „view fine‟, by clicking that the public can able to check, whether there is any fine or offense applied on his vehicle or not. Then the next option is called „report‟
,through this option public can able to report to the crime police about the stolen vehicle. The next option is called „complaint‟ through that public can able to check the status of the applied complaint. The status of the stolen vehicle report will be updated by the crime police.

1. **Login**

Using the user id, the user login to the application.

2. **fine details**

User can view all general fine details on the vehicle and also their own vehicle‟s fine detail.

3. **Report**

User can Report stolen vehicle to notify the nearest police.

4. **Check complaints**

User can check any unpaid complaints on his vehicle.

AIM OF THE PROJECT :

In the current scenario, the key issue faced by public while travelling is to deal with the inefficiency and discrepancy in the traffic system and the people involved in managing the same. On being caught by the police, the commuter must submit his driving license, RC Book and/or other vehicle documents for verification. In case the commuter forgets/misplaces the documents, he is unnecessarily fined. In case a vehicle is booked for any traffic violations, the details are uploaded onto a website. The owner is not updated with this information. If he fails to check this website regularly, he may not be aware

of any pending traffic violations on his vehicles. In case a vehicle is stolen, the owner must contact the nearest police station. The process to lodge a complaint and subsequent response is slow and inefficient. In this age of science and technology, where the internet is in the palm of everyone's hands, a better system for managing the above process can be set up which would greatly reduce the burden on the daily commuters as we as the traffic police.

OVERVIEW OF THE PROJECT :

Now a day's population has become a major factor to be considered as a result the number of vehicle's are growing by increasing problems of vehicle registration, license registration, emission testing and insurance validity for RTO departments and vehicle related documents verification by traffic police. RTO employees having lot of work burden of making registration, license issue, transfer etc., which requires lot of paper work.

Police can view and check that details like (License, Insurance and RC Book) and they can enter their punishment also. These databases are handled by RTO admin. Once police enter public punishment those details are updated to license. Police can only enter punishment details and check Insurance Expiry date and RC book validation details. So, it will be reduced time consuming for police.

EXISTING SYSTEM :

In the existing level, due to the population the number of vehicle"s are growing by increasing problems of vehicle registration, license registration, emission testing and insurance validity for RTO departments and vehicle related documents verification by traffic police. RTO employees having lot of work burden of making registration, license issue, transfer etc., which requires lot of paper work.

Also, the existing system mainly focuses on providing the information only to thetraffic police officers. It consists of vehicle information and license information's and It also generates the fine.

DISADVANTAGES

Drawbacks of the existing system are as follows

- Manual work will not give accuracy.
- It will take more time for traffic police as well as public people to complete the process.

PROPOSED SYSTEM

The proposed system overcomes these issues in the current scenario by implementing a web server which uses a database to store, update and access the above-mentioned documents with a user-friendly front-end web application, tailored to the needs of the appropriate users. The application also allows users to report a stolen vehicle and check unpaid offences on his vehicle, all in the click of a button. The application for the police allows him to review earlier driving offences by the rider and also report any current offence committed by him.

The main theme of this proposed system is to allows users to report a stolen vehicle details to the crime police. This can help notify the police in the nearby locality faster and help track the vehicle in a more efficient manner. It provides a web page to users to update the stolen status of vehicle for investigation purpose. Push notification can be used to send stolen vehicle reports to the police.

ADVANTAGES:

- Police can view and check the details like License, and RC Book and also enter their punishment easily.
- It will reduce time consuming for police as well as public people.
- At anywhere anytime police can view public documents.
- This application also allows users to report a stolen vehicle and check unpaid offences on his vehicle.
- Public can able to check the status of their complaints, if any theft occurs on their vehicle.

SYSTEM SPECIFICATION :

HARDWARE SPECIFICATION

- Processor   : Core i3
- RAM Capacity   : 1GB
- Hard Disk   : 160 GB
- Mouse   : Logical Optical Mouse
- Keyboard   : 104 Keys
- Monitor   : 16 inch
- Mother Board   : Intel
- Speed   : 2GHZ

SOFTWARE SPECIFICATION

- Operating System : Windows 10
- Front End : HTML, CSS
- Backend : SQLite
- Language : Python with Django