



## CopFriendlyApp - ESeva

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**Abstract:** : With the increasing importance of corruption has become a 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 process of RTO is a very time consuming process. Traffic management is a serious issue confronted by the city. As a result people cannot get things done at the right time. Since the proposed framework is digitalized and android based, it will serve as a handier instrument and helpful option for traffic. An android application is provided to traffic police to retrieve vehicle information, fine details.

## 1. INTRODUCTION

In this Project we have different modules in which they store different information and have different services. As the number of vehicles increasing on road the load on traffic police increases day by day. Their work has increased. Along with the increasing number of vehicles, the related problem has started to rise which include violation of rules, identifying the vehicle owners etc. as the number of rule violations increase, the fine collection also increases. Issue of information about license, which include application form and other information it helps for public awareness. Provide mail alerts for users and also registrations of complaints. The vehicle owner uploads the vehicle document and it will be stored in the database. Advantages of this application are: considerably reduced the corruption in the transport department. In case of an accident helps to identify the injured person and also ask for an ambulance from the medical team.

### 1.1 Existing System:

The current system that is used for the fine collection system has many flaws and loopholes in it. There is a need to overcome these loopholes in the existing system.

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 an official 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 plates and the police officers can't recognize them.

In case of an emergency, the traffic police officer have to call 108 and register the emergency by providing details of the location and the accident. This process can be lengthy and time consuming which may cause someone their life.

So to overcome these loopholes in the existing system we have proposed a new system to help us to solve the issues.

## 2. LITERATURE SURVEY

In existing traffic system, the storage of records of vehicles and civilians breaking traffic rules is not real time. Manual work also leads to many errors. Most of the work is done on paper. In proposed system, we will develop a dynamic android application which can be used to take real time data as well as location and transfer data to dynamic web application integrated with Google Map API. So we are reducing the manual work and errors in the system

## 3. PROPOSED SYSTEM

The proposed System is aimed to automate the major processes in the TRAFFIC police department.. The traffic police has right to register and add traffic police to the system. Server provides login id and password to every authentic traffic police officer and the fine details can be seen on the server. Officers can retrieve complete data of violators from it. The server consists of a database manager which keeps all the records of the user who violated the rules and also keeps complete details like vehicle number.

App is developed with all the functions required for traffic police for fine collection. Traffic officers will select fine & rules violated and generate fines for violators. The client will collect the fine generated by the server and will update the details on the server. The client or a citizen will pay the fine then.

App is also developed to register an emergency or accident to call an ambulance from the medical rapid force team. The police officer will be able to report any emergency with a single click and the ambulance will reach the accident scene with the help on GPS(Geological Positioning System).

## 4. FIGURES & DIAGRAM

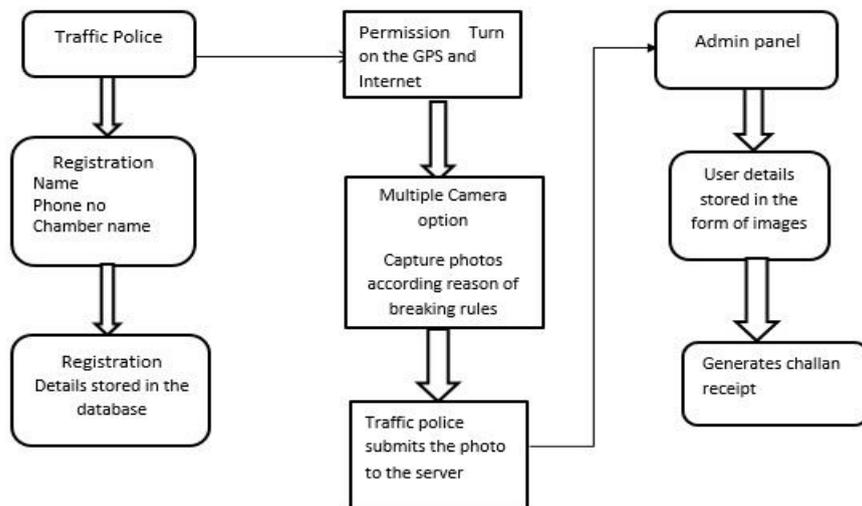


Fig: Flowchart of CopFriendly App

## 5. TECHNOLOGY & PROGRAMMING LANGUAGES

Front End	Angular 9+ Google Material Design BootStrap / Bulma
Server Side	Spring Boot Spring Web (Rest Controller) Spring Security Spring AOP Spring Hibernate
Core Platform	OpenJDK 11
Database	MySQL

## 6. CONCLUSION AND FUTURE SCOPE

The applications of traffic information have become more popular with improvement of the condition of the wireless network, mobile devices and so on. It also can get the real time traffic information which improves the efficiency of traffic service and management. System provides a faster way of information collection for traffic police, reporting an accident and also a secure method for citizens.

It also maintains complete information about the user who committed the crime and fine generated. Here we are developing such a type of module which helps to reduce RTO work manually and it helps to save time. Considerably reduce the corruption in the transport department. The Operating System of smartphone is android which helps in interfacing with embedded systems.

This is an effort to automate the current system in the fine collection System. Therefore enhanced penalties would be imposed for repetition of violation of traffic rules. Fake registration plates, if any, would be detected immediately. The medical rapid force team saved a number of lives due to its GPS feature which helps the ambulance driver reach to the exact location without wasting time, hence saving so many lives.

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