



## Vehicle Theft Online Complaint System Application

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### ABSTRACT:

At present days with increase in number of vehicles, vehicle thefts are also increasing in large numbers it is a challenging task for the owners to protect the vehicles, to overcome the theft of the vehicles an anti-theft system is designed which is easier, useful and cost effective to protect the vehicles. The purpose of Vehicle Theft Management System is to automate the existing manual system by the help of computerized equipment's and full-fledged computer software, fulfilling the requirements of all policemen, so that their valuable data/information can be stored for a longer period with easy accessing of the same. The main aim of this project is to notify each and every policeman about the release of any vehicle theft cases, including details, such as, criminal's id, name, type of release and so on. In this system all these activities (like registration of the complaint, updating information) are managed that saves time. Additionally, this project to develop if user will sold the old vehicle to any another party they must be register with the police vehicle register because it will newly register with new buyer named. This application is for the police stations that provide facilities for reporting vehicle thefts, filing FIR and maintaining prisoner records. It provides better prospective for the enhancement of organization regarding quality and transparency.

### I. Introduction

In many situations, time is wasted before proper medical attention is provided to the people affected in an accident. In many cases the accidents are severe enough to leave the victims incapacitated and they fail to summon help. In most cases fellow human beings on the road communicate with the Police, but the response time increases during the night. In AUTOVeCoN, the design tries to minimize the response time using mobile tower location of both the Collided Vehicle and Policemen. The Civilian Vehicle consists of a collision detector and in case of a collision the detector would provide a signal to an embedded processor which shall generate a steady amplified digital feedback to the owner's cell-phone. The owner's cell-phone, with the help of its custom software would notify the Police Control Room Server. The Police Control Room Server which would receive regular update from the mobile phones carried by its personnel (to keep a track of the latest position) would use its Decision Support Software to inform (as a SMS Order) the nearest police personnel from the accident location. Also under certain circumstances, Policemen are out of the Vehicle attending to Law & Order Problems, and to make sure that they do not miss out the communication, Short Messages (SMS) would record all information passed on from the Control Room Server, which again would serve as a Log. Computer Algorithms would be implemented in the Control Room Server, to select the nearest three Officers who are in a Location nearest from the BTS (Base Transceiver Station) of the accident area. A totally automatic calculation would thin out manual error totally and help in efficient deployment. In order to appreciate a quick response time, once an "SMS Order" have been generated, the Control Room Serve would wait for the location of those Officers to match that of the Action Area and update the response time accordingly and completely automatically, which later would help Superior Officers to check, if problems were attended by the right vehicle at the right time. Base Transceiver Station ID or commonly known as CellID based location detection varies largely depending on the cellsize ranging from 100 metres to over 3000 metres but in theCity (Kolkata) it has been statistically found out by the Authoursusing Field Strength Meters, that the cell radius is around 200-300 metres. That means, that an Officer is within around 300metres of a Base Transceiver Station whose ID is updated inthe Control Room Server.A 100% accurate position of Police Vehicles is not requiredto get a quick response, and a relatively inaccurate locationsystem can decrease response time significantly, which in caseof AutoVeCoN is within a 200-300 metres radius if not less.The implementation cost of AutoVeCoN is comparatively a lotcheaper with practically very little Hardware cost as a CellPhone is very common to every one.

### II. Literature view

Quick medical & police response as well as efficient policedeployment is a major concern in both Developing as well asDeveloped Countries to decrease fatality rate and also to tackleLaw & Order problem. Manual modes of communication havea significant effect in response time as it has to pass throughdifferent departments and varies with the level of manpowerpresent. Very few works have been carried out to minimize humanintervention and automate collision response to emergency service providers. Some researchers tried to develop a collisionnotification system using wireless networks [1][2] but indeveloping countries such as India, on road wireless networksare not very common.

Other works that have been done are designing of location awareness devices using Map and GPS services to help police vehicles reach the location of activities, and take pictures to send them back to the HQ [4]. These kinds of systems are known as LAS and are also used for receiving short messages from the HQ to the Police Vehicle.

Remote Fleet Management is also a new area where work is being done but is mostly used for obtaining vehicle position and status, determining the Officer Safety and monitors the fleet wirelessly [3][5]. Various deployment algorithms have also been discussed in [6][7] which help in decision support to deploy vehicles at strategic locations close to important accident prone areas. They also discuss models of deployment based on traffic densities, shift time and numbers of cars assigned. In another work [8], Greedy Algorithm has been used to deploy Police vehicles efficiently using parameters like cost, capability of response and deterrent capability.

I. In this paper [1] titled "A Real-Time Records Management System for National Security Agencies", Oludeli Awodeli, Onulri Ernest. E focus on the implementation of criminal records management system. It is database system in which the police keep the record of criminals who have been arrested, to be arrested, or escaped. This will help the police department in enhanced management of information. The main entities in the whole process include: the petitioner (the person who files a First Incident Report (FIR)), victim, accused or criminal, case and investigating officer.

II. In this paper [2] titled "Criminal Report Management System", Sourav Bhowmick developed a web based application that provides managing the data and various information about the criminals and their crimes. Not only this but also it provides the information and current status about the police stations. It stores the GD, FIR, number of cases and each and every detail of the criminals. This system also provides a search facility to know if there is any criminal record about any person.

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### III. Proposed Methodology

The purpose of this paper is to develop an android application for crime area detection and store criminal records. It provides an application for the user that would provide an alternate path for the users passing by crime area. It allows user to report incidents and get it verified by the police officials. It will consist of an application for police officials which can perform database operations on criminal record and allows efficient retrieval of required information from the centralized database present on Cloud. The application targets general public and police officials for managing the incidents and crime without consuming much time. This proposed system will be divided into three major modules.

In this proposed system, vehicle theft management system using from the vehicle thief. Police officer will record the all theft vehicle complaints with proof photos and then, in this project, old vehicles sale to another person that will also to recorded. It will easy process for complaint registering and maintaining the records at any time. Once complaint was solved means police officer will updated the status for complaint register public.

#### System Modules

##### Admin

- Login
- Add area
- Add division/ add category
- Add police
- Update police
- View all vehicle theft complaints
- View status

##### Public

- Register
- Login
- Create complaint
- View complaints status
- Old vehicle sales
- View old vehicle sales
- My profile

##### Police

- Login

- View complaints
- Update complaint status
- View old vehicle sales
- Update status

## **MODULES DESCRIPTION**

### **Admin**

#### **Login**

The main activities in the application are the admin login page for admin. The other modules are followed by this login page. This module records only admin and password of the admin.

#### **Add Area**

An admin will create area and town is based on the city. It will use of upload the compliant for vehicle with the particular area or town to be mentioned. Then police can handle the report easily.

#### **Add category**

An admin can be create category for every vehicle theft places and create a category of records.

#### **Add division**

An admin can be creating a division for an every city and sub division also. It based on records will be uploaded.

#### **Add police user**

Admin can create a police user with the personal information like police name, which department, address, Mobile number, city and area to be uploaded. Then admin can give the police user login id and password.

#### **Update police user**

Admin will manage the user database if any modification admin can change the police details. If police officer will transfer to anywhere to be modified in their profile.

#### **View all vehicle theft complaints**

Admin can view all vehicle theft the compliant report. Police officer will take the action for the complaint and update the status. Admin will verify the process of status.

#### **View status**

Admin will view all status for all registered complaints. Admin will check all updated complaints which are completed complaints and non-completed complaints, undertaken process of complaints.

### **Police**

#### **Login**

A police officer will login the page with admin created login id and password to be used.

#### **View complaints**

Police officer once login the page, officer will view all the registered complaints from the public. Police officer will take the action for all complaints.

#### **Update status**

Police officer once complete the process of investigation and action of every complaints. Then, officers will update the status for their based on situations like completed, force completed, under process.

#### **View old vehicle sales**

Public will sold the old vehicle to any other persons. Public will registered with their details. Police officer will view all old vehicles sale and check their details also.

#### **Update status**

Once updated the all old vehicle sales details. Police officer will check their details and update the status for old vehicle sales like it will theft or not.

## Public

### Register

Another main function of our proposed system is registration, in order to register with the unique application details such as name; password, email, place and time are required.

### Login

The main activities in the application are the user login page for user. The other modules are followed by this login page. This module records only user and password of the user.

### Create complaint

A user will create a complaint for vehicle theft contain the complainer name, address, vehicle name, number and location of complaint everyone is fill the complaint registry of FIR.

### View complaint status

Public will registered their complaints with base details of vehicle name, number, etc. once police officer check the complaints, take the action. Once it will completed. Officer will update the status public will check status for their complaints.

### Old vehicle sale

If public will sale their vehicle to some another person. That details are necessary to registered with buyer details vehicle number, name.

### View Old vehicle sale

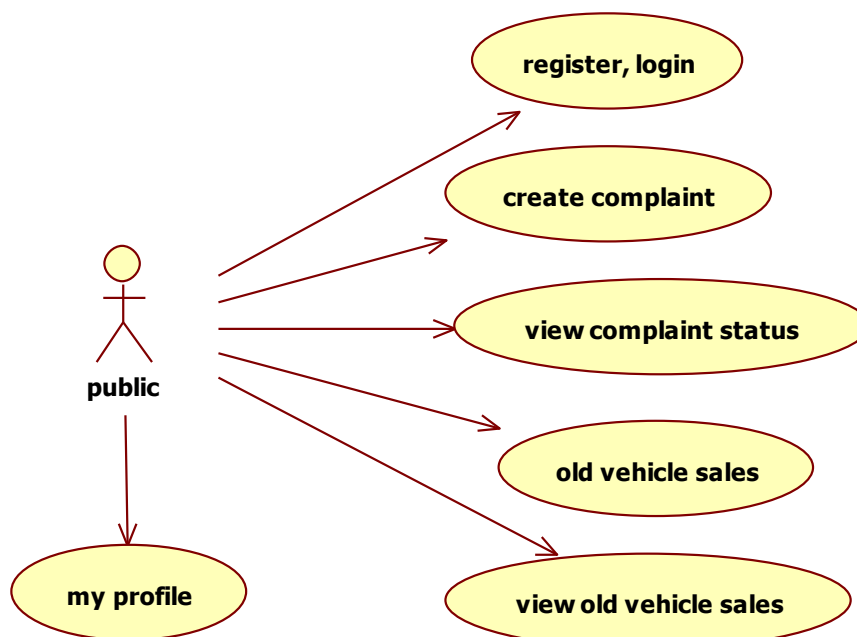
Public once register the old vehicle sales, public view their sold vehicles view and check their details.

### My profile

User view their profile and if the user can update the profile details and then, the terminate their account.

## IV. System Design

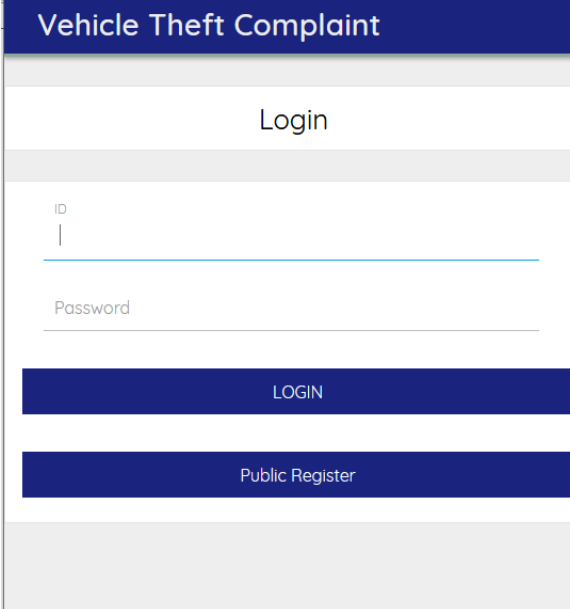
### Use case Diagrams



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## V. Result

In this section, analyze the results of the proposed system. The screenshots are the Results of the system.



The screenshot displays a web interface for a 'Vehicle Theft Complaint' system. At the top, there is a dark blue header with the text 'Vehicle Theft Complaint' in white. Below the header is a light gray bar with the word 'Login' centered. The main content area is white and contains two input fields: 'ID' and 'Password'. The 'ID' field has a vertical cursor on the left. Below the 'Password' field is a dark blue button labeled 'LOGIN'. At the bottom of the form is another dark blue button labeled 'Public Register'. The entire form is set against a light gray background.

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## VI. Conclusion

In the modern world, the use of computers and mobile phones is becoming rampant. As a result, the vehicle theft recording system needs to embrace the new technologies. This application will present a simple, convenient, cost-effective and efficient online vehicle theft recording system with a sensitive and intelligible web interface, thereby it reduces the amount of manual data entry. It is software which helps the policemen to work with the vehicle thefts and criminals easily. Additionally, it notifies the registered policemen about the release of criminals.

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## VII. Future work

The problem of reporting fake vehicle thefts will be overcome as this application will need the verification of police to report incidents reported by user to broadcast it to other users using the same application. In future, some other security algorithms can be used to provide better security measures for the criminal database. The only challenge of this proposed system is that GPS and the Internet connection has to be activated 24x7. Future research can be dedicated for these challenges.

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## VIII. References

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