Tracking of the Owners of Unclaimed Vehicles

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Abstract

The aim of this paper is to create android application, tracking of the owners of unclaimed vehicles for Pune Police Department. Purpose is to identify the owners of unclaimed vehicles that are captured by the police. Every vehicle has a unique chassis number which is used to get information of the registered owner. This android application will make the process faster and serve as a convenient method for the police to locate and reach the owner of vehicle.
Keywords: Chassis number, unclaimed vehicle, Police, Owner

I. INTRODUCTION

In Today's world, crimes such as theft are increasing at an exponential rate. Especially, vehicle thefts make a major portion of this. Stolen vehicles are most of the time left unclaimed on the roads after using them for certain time by the thieves when they are not sold anywhere in the market. These unclaimed vehicles are then captured by the police and an attempt is made to find the true owner of the vehicle. If the police is not able to contact the owner of the vehicle then after a particular time period, the vehicle is brought to auction. The money from the auction is just a small portion of the actual value of these vehicles. Thus, there is an inconvenience for the police to locate the owner of the vehicle.

Every vehicle has a unique chassis number which is used to get information of the owner. Thus, an android application where the police can enter the chassis number of the vehicle and it will automatically search for the owner's contact information from its database and send a message to him giving details of the police station where the vehicle is kept.

II. RELATED WORK

The vehicles seized by Pune police are held for auction after a decided period of time. Till then the vehicles pile up at the police station using a lot of space and becoming a major headache for the officers. Thousands of vehicles go on auction every year and sold at a price way below their actual price. Pune police decided to take some steps and set up a website that would give information about the stolen vehicles, but the website is sometimes seen down and under maintenance.

The earlier system was all paper based and needed human interactions and efforts. Valuable time of police officers was spent on manually matching the entries of unclaimed or lost vehicles with their records. Also the system was not accessible by common people to get themselves satisfied with the efforts put in searching for the records of their vehicle.

Maintaining the records of all the lost and unclaimed vehicles would also increase the paper work of police officers. There are chances of the records being lost or misplaced.

III. PROPOSED SYSTEM

A. Functional Design

1) Policeman Side Service
Policeman would use the application to enter the chassis number of found vehicles. All the searching work would be done internally by the application and the owner of the vehicle would receive an alert message regarding the details of the vehicle i.e. at which police station is it kept, the fine imposed, last date of possessing the vehicle, etc.

2) Citizen Side Service
The citizens would use the Android Application to apply for the appointment for the Passport verification. An S.O.S. feature would be provided that can be used any time by a person who feels some danger around him/her and cannot use calling features.

The application would find the nearest police officer and send him the location of the person so that he can be helped as soon as possible.

IV. TECHNOLOGY

1) Android Studio IDE
2) Oracle 10g Database
3) 000Webhost Web Hosting Service

V. ALGORITHM

Linear search sequentially checks each element of the list until it finds an element that matches the target value. If the algorithm reaches the end of the list, the search terminates unsuccessfully [6].

Given a list L of n elements with values or records $L_0 ... L_{n-1}$, and target value T, the following subroutine uses linear search to find the index of the target T in L [7].

1) Set i to 0
2) If $L_i = T$, the search terminates successfully; return i.
3) Increase i by 1.
4) If $i < n$, go to step 2. Otherwise, the search terminates unsuccessfully.

VI. IMPLEMENTATION

User of the application will enter details of the lost or unclaimed vehicle depending or whether the user is a police officer or a citizen. The police officer would enter details of unclaimed vehicle whereas a citizen would enter details of her/his lost vehicle.

The input information can be in the form of registration number, engine number, chassis number or the FIR number. There would be an additional option of uploading an image of the vehicle thus making the process easier.

The information for the vehicle would be searched in a database that would contain information of vehicles and their corresponding owners. If an owner of a seized vehicle is found, she/he will immediately be contacted by sending an alert message stating all the necessary information regarding the vehicle.
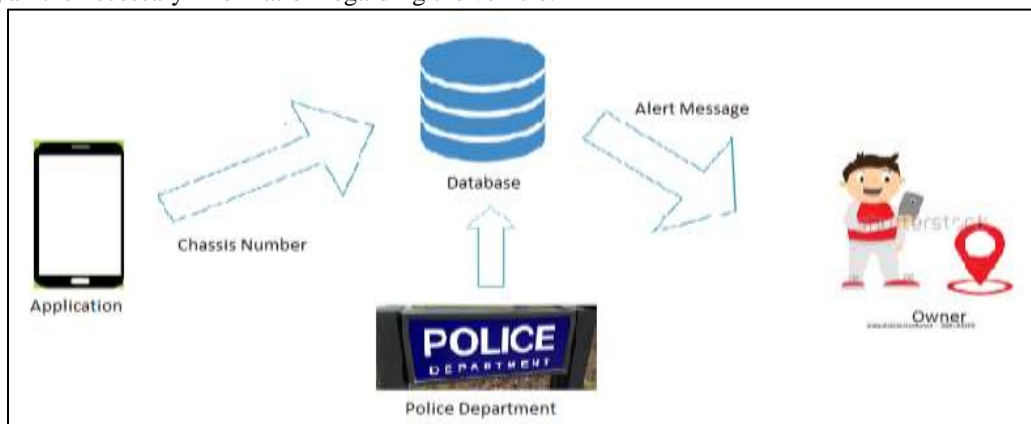

Fig. 1: Implementing architecture of Owners of Unclaimed Vehicles

VII. CONCLUSION

Tracking of the owners of unclaimed vehicles helps the citizens to locate their stolen vehicles with ease and convenience. The paper based and manual work done by the police officers till now can be greatly reduced. Locating and searching for the vehicles will be very fast and convenient. The process will be all digital and hence possibilities of errors will be greatly reduced.

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[6] Knuth 1998, §6.1 ("Sequential search").
[7] Knuth 1998, §6.1 ("Sequential search"), subsection "Algorithm B".