**INTRODUCTION**

The increase in number of vehicles and change in license plate are also serving reasons for increase in various crimes that are associated with it. Various cases of theft, hit and run, robbery, kidnapping, smuggling, on-road fatalities, etc. remain unsolved because the vehicles involved could not be recognized accurately. Manual Monitoring of vehicles is cumbersome and error prone because of weak and unreliable human memory. Thus, there is a need of a robust mechanism such as an automated vehicle recognition system to handle this task efficiently.

Recently, the need for Web-based License Plate Number identification has increased very significantly. This need is very much motivated given that many security and road traffic applications are based on web based vehicle license plate number identification. This technology is gaining popularity in security and traffic installations since each vehicle is uniquely identified by its number plate.

A web based vehicle license plate identification is a system designed to identify plate number with the vehicle owner and identify each plate number with the particular vehicle.

**PROJECT GOAL AND OBJECTIVES**

The goal of this project is to develop a web based license plate identification and replacing the age old traditional method of identifying Vehicle License Plate.

Objectives of the presented work aims at the following aspects.

1. Develop a structured database for the registered number plate to aid the automatic recognition.
2. Build a system that delivers optimal performance both in terms of speed and accuracy.
3. Reduce the stress encountered during the manual process of identifying vehicle license plate.

**STATEMENT OF THE PROBLEM**

There are several problems facing Vehicle License Plate Identification (VLPI). These problems have been in existence and are yet to be addresses fully. The following are some of the problems being faced.

1. Time taking for manual Registration
2. Stress
3. Error proximity

**PROJECT DESIGN**

The project is to design a full scaled remote database of vehicle and user information that is a central source that other researcher, security, developer etc to be used in order to increase the field of study that involves Vehicle identification. Still the solution will be based on web technology, an API will be consumed and interacted with more with security cause of sensitivity of the storage data, a more defined language and framework will be used based on PHP Framework – LARAVEL, which has more feature to make the development of the solution be close to perfection 98% still there is no application without version.

List of Laravel feature:

* Bundles provide a modular [packaging system](https://en.wikipedia.org/wiki/Application-level_package_manager)
* Eloquent ORM ([object-relational mapping](https://en.wikipedia.org/wiki/Object-relational_mapping))
* Query builder
* Application logic
* Reverse routing
* Restful controllers
* Class auto loading
* Blade [templating engine](https://en.wikipedia.org/wiki/Web_template_system" \o "Web template system)
* IoC containers
* Migrations
* [Database seeding](https://en.wikipedia.org/wiki/Database_seeding)
* [Unit testing](https://en.wikipedia.org/wiki/Unit_test)

**PROJECT TIMELINE**

The solution to the stated problem is a robust one, so completion of solution depend on the functionality to be implemented and the available resource like Electricity and data to limit the problem that can hinder the success of the solution completion.

­­­

**SCOPE OF THE STUDY**

This work will focus on identification of vehicle license plate using web base and the developed system will be tested using Nigeria Vehicle License Plate. The system will be designed to identify license plates, supply the information of the vehicle owner and identify the vehicle with its plate number. Input to the system is the number plate digits and the corresponding output are personal information (Name, Address, Phone No, Email), vehicle information (plate number, chassis number, vehicle identification number), insurances information (insurance company Name, insurance number, types of insurance, expire date).