ABSTRACT

Nowadays road traffic has become real problem in one-tier and two-tier cities. There are several ways to make travelling safe and one is through the Traffic Police. Responsibility of the traffic Police regarding traffic management includes directing traffic, enforcing traffic rules and regulations and penalizing the driver in case of violating traffic rules

Another way of enforcing traffic discipline is frequent conduction of awareness program, from the Department of Traffic Police, based on the offence data collected. But the existing system do not have centralized repository for storing the penalized data, so this project i.e **ONLINE TRAFFIC OFFENSE MANAGEMENT SYSTEM** work is an attempt to develop an web application which will help the traffic police to record the penalty information in the centralized repository.

Application to be developed will also consist of analysis part of traffic offences based on which higher authorities can take necessary measures regarding traffic discipline.. No formal knowledge is needed for the user to use this system. Thus, by this all it proves it is user-friendly. This system allows to update the information for drivers and offenses. Also, the admin manages both drivers and offenses in the way such that the admin can access and update their information.

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CHAPTER -1
INTRODUCTION

1.1 Overview

This report discusses the result of the work done in development of "ONLINE Traffic POLICE Management System " on “HTML, CSS” Front-end Platform and “PHP, SQL” as back-end Platform.

At the development of an application HTML.CSS provides a good connecting facility between all pages, also the back-end PHP, SQL is most important to save all the data related the application.

1.2 Background and Motivation

In recent years, the quantity of motor vehicles increases rapidly and the burden of the management of the road traffic are increasingly heavy. There are several ways to make travelling safe and one is through the Traffic Police. Responsibility of the traffic Police regarding traffic management includes enforcing traffic rules and regulations and penalizing the driver in case of violating traffic rules. In today's information-rich society, everything is becoming smart. This project shows the design and development of smart traffic offence analysis tool with e-payment.

1.3 Meaning

Traffic offence management is a major concern in cities around the world. Mobilized Online Traffic Traffic System is a powerful web/mobile based application that records all the traffic offences committed citywide.

CHAPTER-2
SCOPE OF PROJECT

Online Traffic Police Management is easy to use and has a pleasant user interface. It requires system users' credentials in order for the management/staff to access the data and functionalities of the project. The system has 2 types of users which are the **Admin** and the **Staff**.

The **Admin** can access and manage all the data and features of the project while the **Staff** has only limited access. This system stores the list of traffic offenses and along with this data is the fine or penalty rate in each of these. In every traffic offense ticket, the violator can be fined for multiple offenses. This project also generates a printable **Driver's Info and Records, Traffic Offense Ticket, and Reports.**

2.1 Existing System

The existing system depends upon the maintenance of various ledgers or excel sheets at each point of this supply chain. It is rife with inconsistencies between two comparable records. A supervisor who supervises the loading of many different loads may find it easier to update many records at once at a later time and this can lead to inaccuracies.

2.2Disadvantage

The maintenance of the traffic offence management system is difficult in various paperworks.

2.3 Proposed System

Login: Only authorized users (traffic police) can login into our application using their userId and password Once the vehicle driver is caught, if his details are not available in the database then all the information regarding the offence committed are stored in the database for future reference .Once the vehicle driver is caught, if his/her details are already available in the database and if the offences committed by him has crossed the fixed limit then the police can either seize the vehicle or can refer to cancel the license of the vehicle rider.

Chapter 3
SOFTWARE REQUIREMENTS SPECIFICATION

3.1 SOFTWARE REQUIREMENTS

Frontend- HTML, CSS, Java Script, Bootstrap

- Google Chrome/Internet Explorer
- XAMPP (Version-3.7)
- Workspace editor: Visual Studio
- Operating System: Windows 10

3.2 HARDWARE REQUIREMENTS

- Computer with a 1.1 GHz or faster processor
- Minimum 2GB of RAM or more
- 2.5 GB of available hard-disk space
- 5400 RPM hard drive
- 1366 × 768 or higher-resolution display

CHAPTER-4

CONCEPTUAL DESIGN

4.1 ER DIAGRAM

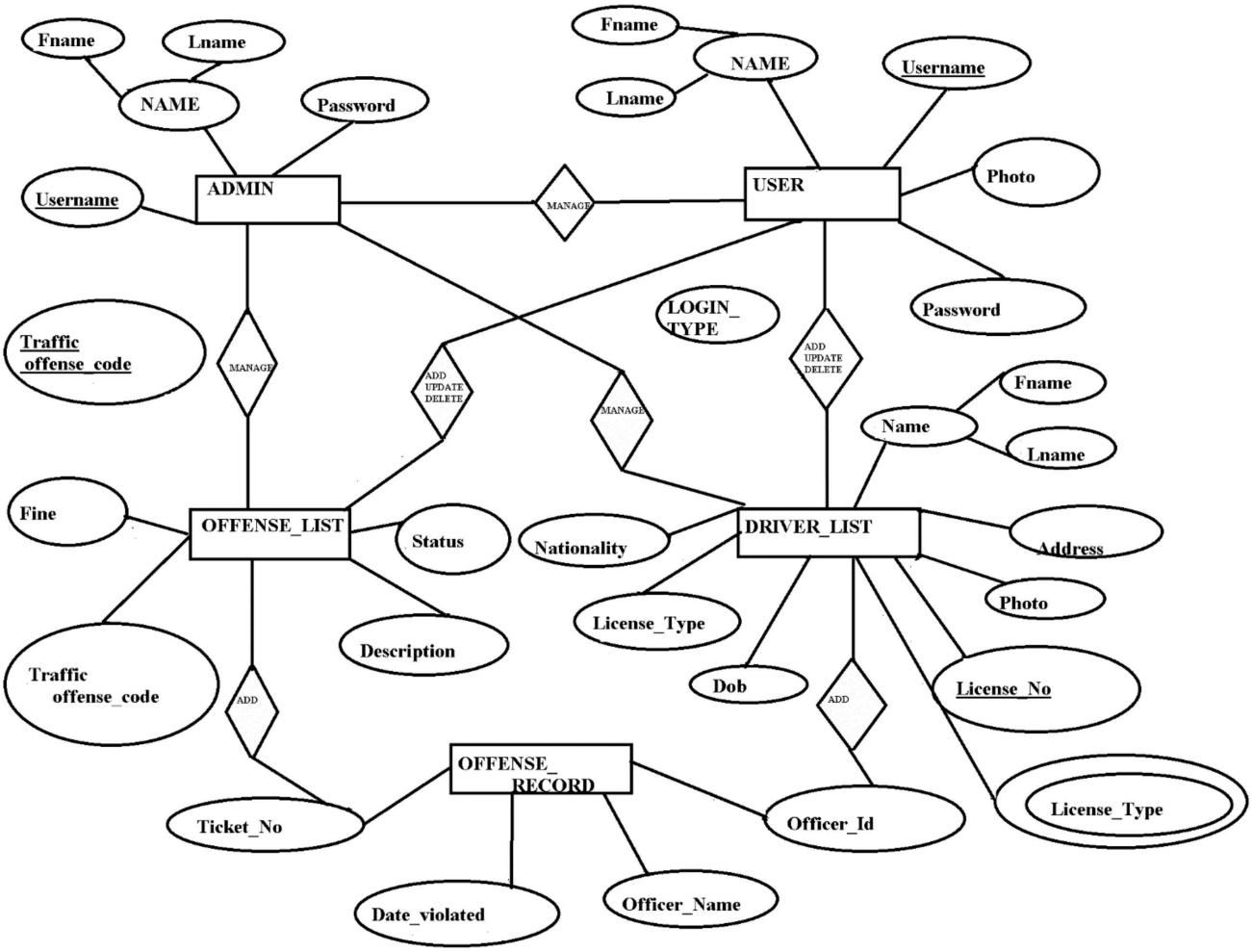

Figure 4.1: ER Diagram for online traffic offense management system

Figure 4.1 shows the representation of ER diagram of Online Traffic Offense Management System. It contains the connection i.e., relation between the entities and the participation ratio and the primary key is underlined as we see in figure and foreign keys are the keys that relate to primary key of another table represented by connecting to that table.

4.2 SCHEMA DIAGRAM

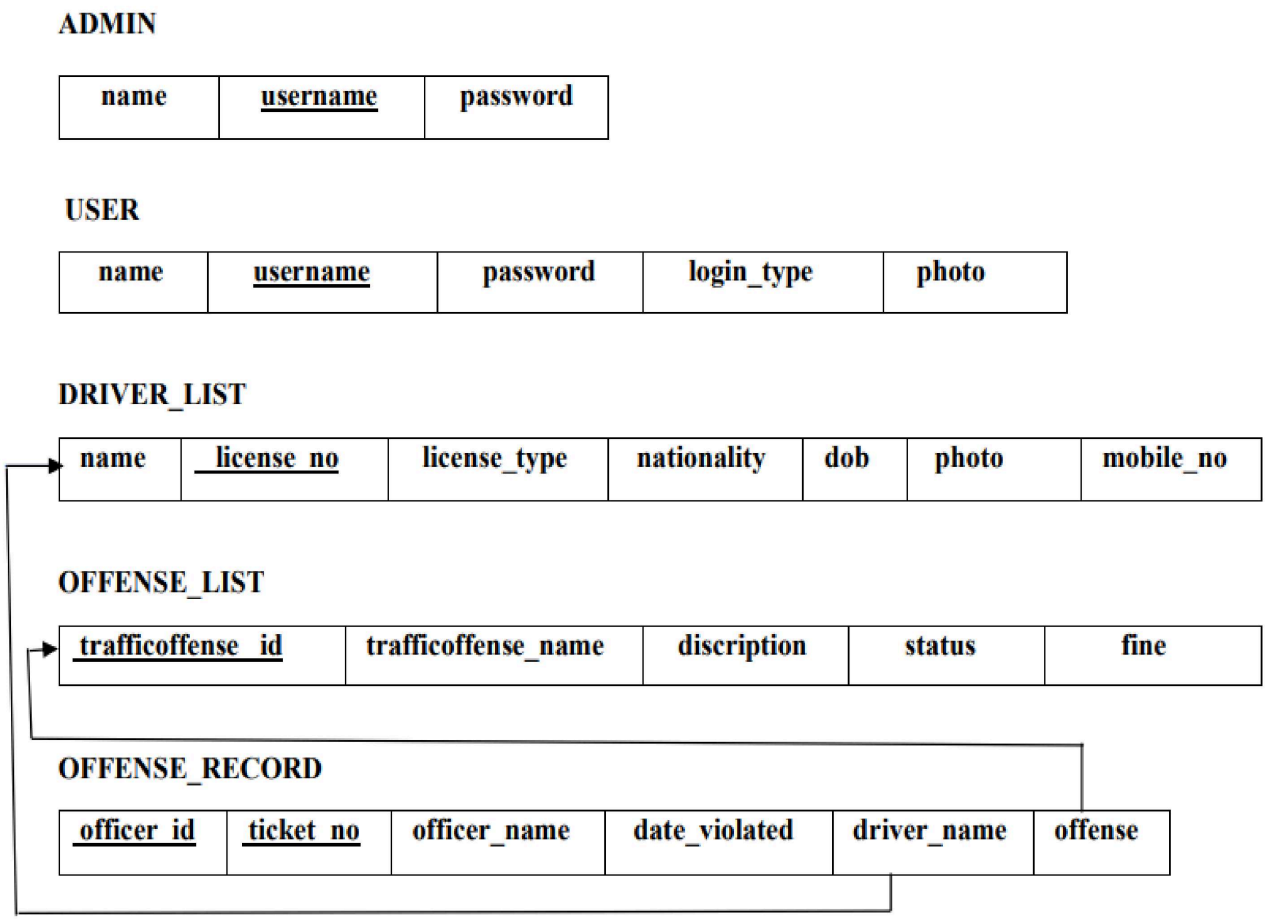

Figure 4.2: Schema Diagram for farm management system

Figure 4.2 shows the representation of a schema diagram which contains entities and the attributes that will define that schema. A schema diagram only shows us the database design. It does not show the actual data of the database. Schema can be a single table or it can have more than one table.

CHAPTER 5

IMPLEMENTATIONS

This chapter of the report describes the Functions, packages and modules used in the project:

5.1 LIBRARIES AND FRAMEWORKS

PHP

PHP is Hypertext Pre-processor is a general-purpose programming language originally designed for web development.

HTML

Hypertext Markup Language is the standard markup language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets and scripting languages such as JavaScript.

CSS

Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language like HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript. Functional Modules

JAVASCRIPT

JavaScript, often abbreviated as JS, is a high-level, interpreted scripting language that conforms to the ECMAScript specification. JavaScript has curly-bracket syntax, dynamic typing, prototype-based object-orientation, and first-class functions.

5.1 BACKEND (MySQL)

DATABASE:

A Database Management System (DBMS) is computer software designed for the purpose of managing databases, a large set of structured data, and run operations on the data requested by numerous users. Typical examples of DBMSs include Oracle, DB2, Microsoft Access, Microsoft SQL Server, Firebird, PostgreSQL, MySQL, SQLite, FileMaker and Sybase Adaptive Server Enterprise. DBMSs are typically used by Database administrators in the creation of Database systems. Typical examples of DBMS use include accounting, human resources and customer support systems. Originally found only in large companies with the computer hardware needed to support large data sets, DBMSs have more recently emerged as a fairly standard part of any company back office.

A DBMS is a complex set of software programs that controls the organization, storage, management, and retrieval of data in a database. A DBMS includes:

- A modeling language to define the schema of each database hosted in the DBMS,according to the DBMS data model.

- The dominant model in use today is the ad hoc one embedded in SQL, despite theobjections of purists who believe this model is a corruption of the relational model,since it violates several of its fundamental principles for the sake of practicality andperformance. Many DBMSs also support the Open Database Connectivity API thatsupports a standard way for programmers to access the DBMS.

- Data security prevents unauthorized users from viewing or updating the database.Using passwords, users are allowed access to the entire database or subsets of itcalled sub schemas. For example, an employee database can contain all the data aboutan individual employee, but one group of users may be authorized to view onlypayroll data, while others are allowed access to only work history and student data.

- If the DBMS provides a way to interactively enter and update the database, as well asinterrogate it, this capability allows for managing personal databases. However, itmay not leave an audit trail of actions or provide the kinds of controls necessary in amulti-user organization. These controls are only available when a set of applicationprograms are customized for each data entry and updating function

Structured Query Language (SQL)

SQL: Structured Query Language (SQL) is the language used to manipulate relational databases. SQL is tied very closely with the relational model.

- In the relational model, data is stored in structures called relations or tables. SQL statements are issued for the purpose of: online traffic offense management system
- Data definition: Defining tables and structures in the database (DDL used to create, alter and drop schema objects such as tables and indexes) .

5.2 STORED PROCEDURE

Routine name: proc

Type: procedure

Definition: Select * drivers_list;

5.3 TRIGGERS

It is the special kind of stored procedure that automatically executes when an event occurs in the database.

Triggers used :

1: Trigger name: on insert Table: register Time: after Event: insert INSERT INTO trig VALUES(null,NEW.id,'Driver Inserted',NOW())

2: Trigger name: on delete Table: register Time: after Event: delete Definition: INSERT INTO trig VALUES(null,OLD.id,'Driver Deleted',NOW())

3: Trigger name: on update Table: register Time: after Event: update Definition: INSERT INTO trig VALUES(null,NEW.id,driver updated,NOW())

CHAPTER-6
DATA TABLES

Table 6.1 User Table

Sl.No.	Field Name	Data type	Description
1	id	INT(50)	Store the user id.
2	firstname	VARCHAR(250)	Store the code.
3	lastname	VARCHAR(250)	Store the name.
4	username	TEXT	Store the description.
5	password	TEXT	Store the fine.
6	type	TINYINT(1)	Store the status.

Table 6.2 Driver List Table

Sl.No.	Field Name	Data type	Description
1	id	INT(30)	Store the user id.
2	license_id	VARCHAR(30)	Store the license id.
3	name	TEXT	Store the name.
4	status	TINYINT(1)	Store the status.

Table 6.3 Offense List Table

Sl.No.	Field Name	Data type	Description
1	id	INT(30)	Store the user id.
2	driver_id	INT(30)	Store the license id.
3	officer_name	TEXT	Store the name.
4	ticket_no	TEXT	Store the ticket no.
5	total_amount	FLOAT	Store the amount.
6	status	TINYINT(1)	Store the status

Table 6.4 Offenses Table

Sl.No.	Field Name	Data type	Description
1	id	INT(30)	Store the user id.
2	code	VARCHAR(50)	Store the code.
3	name	TEXT	Store the name.
4	description	TEXT	Store the description.
5	fine	FLOAT	Store the fine.
6	status	TINYINT(1)	Store the status.

Database Description

Description of the tables used in the project are shown in Table 6.1 through 6.4 respectively.

CHAPTER-7
USER INTERFACE

SNAPSHOTS

7.1 Login Portal

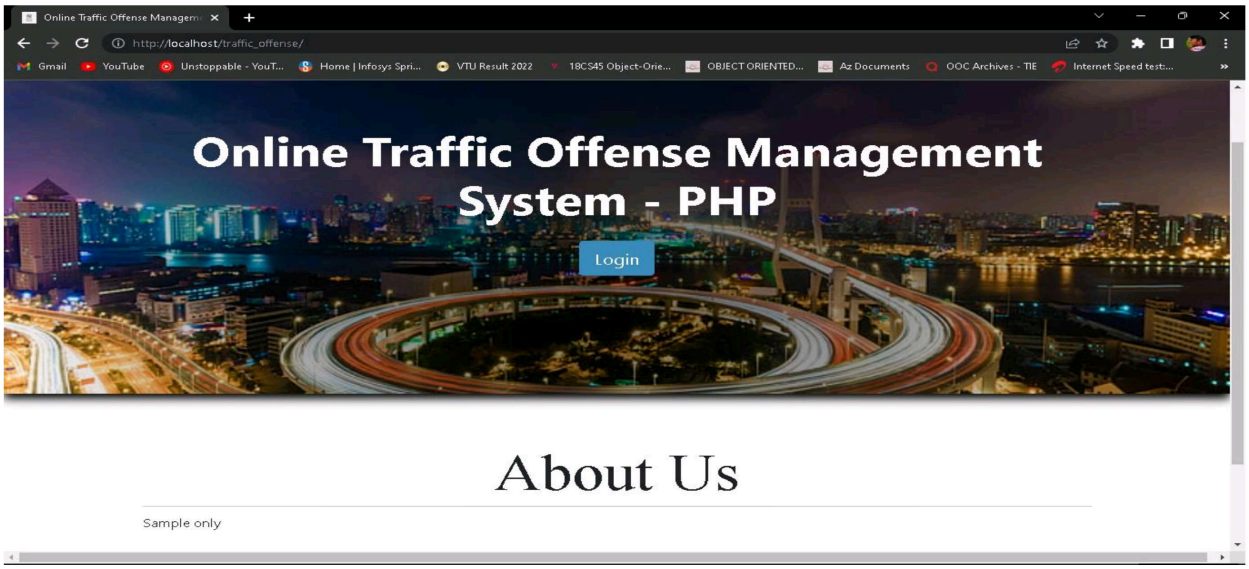

Figure 7.1 Login Portal

Figure 7.1and 7.2 represents Admin or User needs to enter User name and Password and press Login. If username and password correct then admin will be switched on to next page. If incorrect password then he is not able to log in.

7.2 Admin Login page

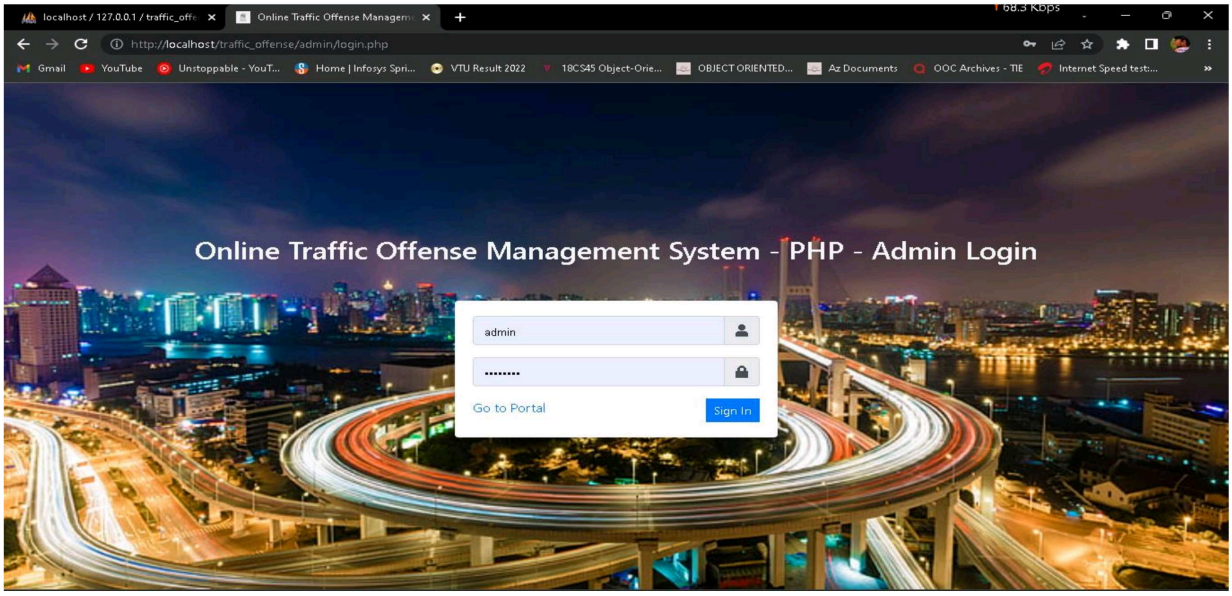

Figure 7.2 Admin Login page

7.3 Dashboard

Figure 7.3 shows a Dashboard of Our Project In this page Dashboard we will get all the information of Total offense's and Total driver's List . It is a Welcome page for Online Traffic Offense Management System

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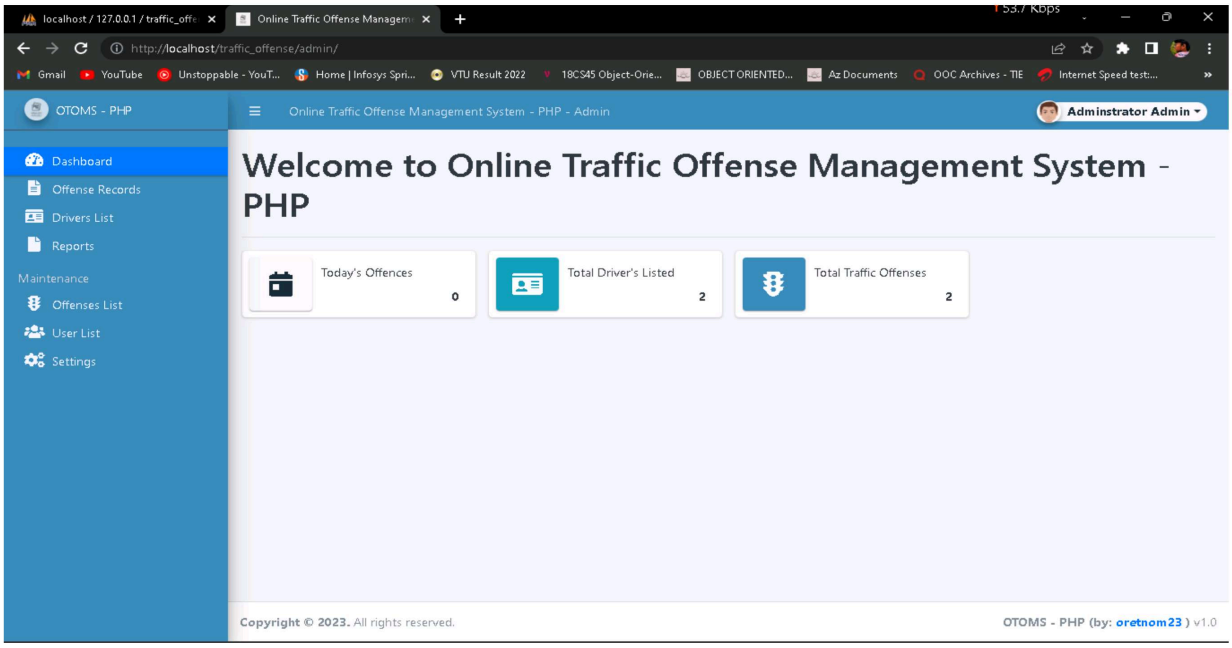

Figure 7.3 Dashboard

7.4 Creation of Offense Record

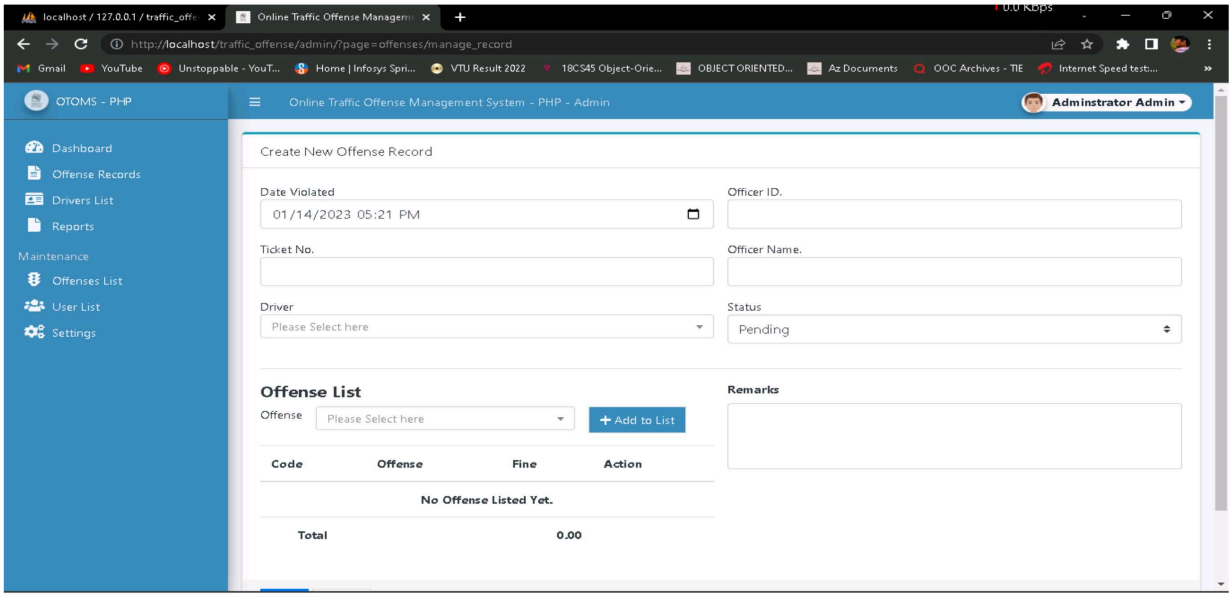

Figure 7.4 Creation of Offense Record

Figure 7.4 represents the creation of offense list into the offense entity. The admin can even logout of the session anytime by pressing the log out icon.

7.5 Creation of Driver List

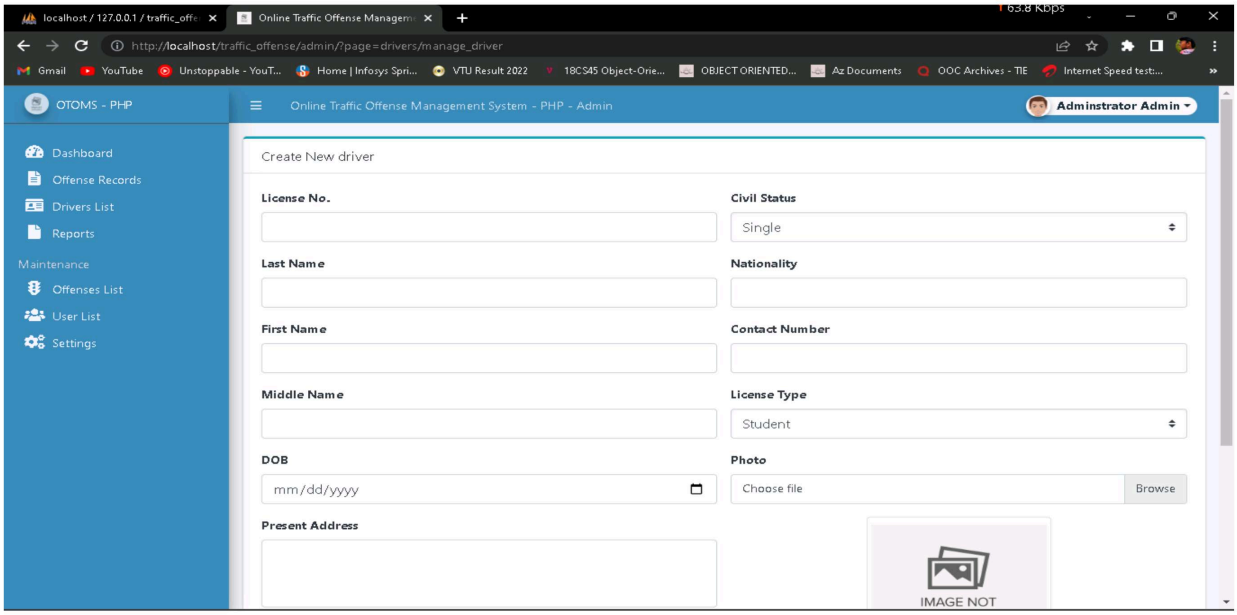

Figure 7.5: Creation of Driver List

Figure7.5 represents addition of new offense into the offense entity. Once added you get the message that "Driver added successfully".

7.6 Addition of New Offense

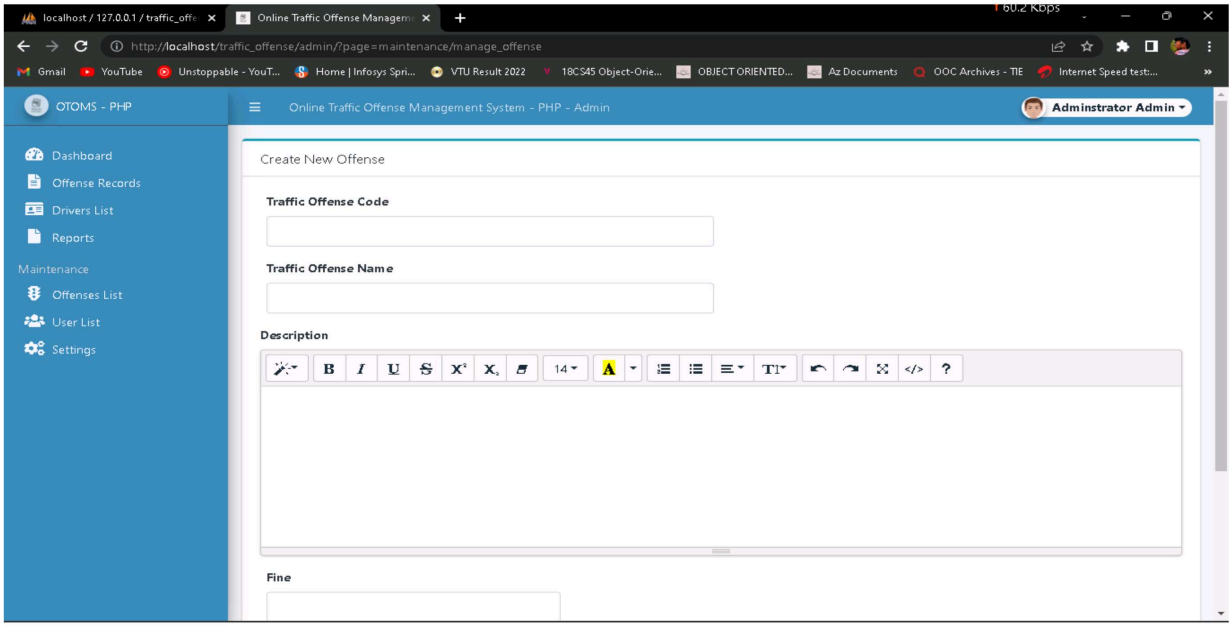

Figure 7.6:Addition of New Offense

Figure7.6 represents addition of new offense into the offense entity. Once added you get the message that "offense added successfully"

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7.7 List of Offense Record

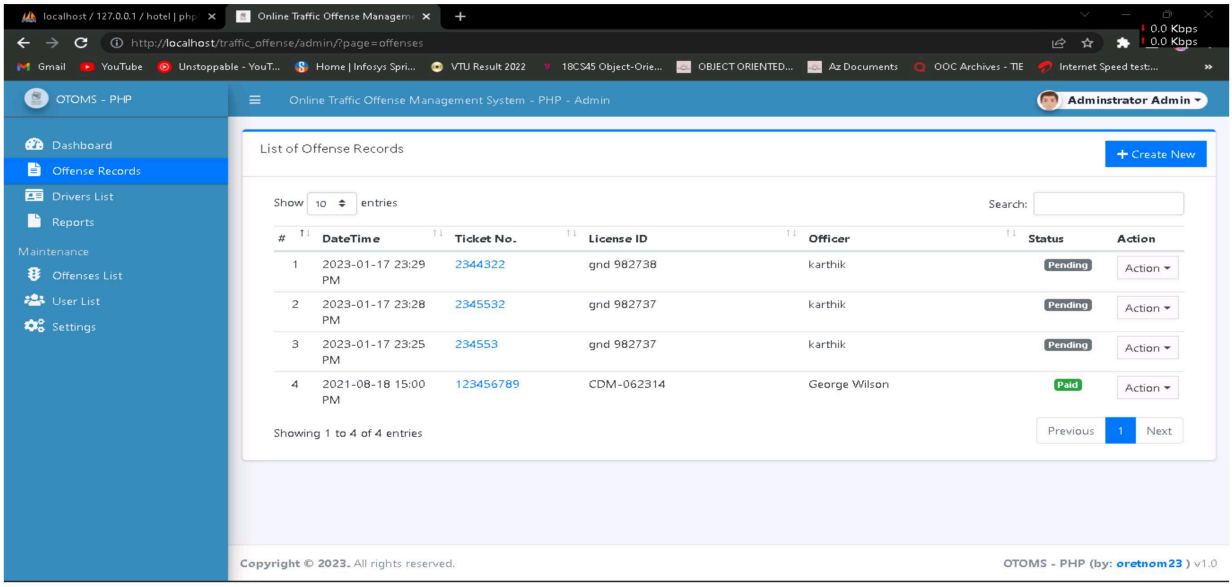

Figure 7.7 List of Offense Record

7.8 Driver's Information:

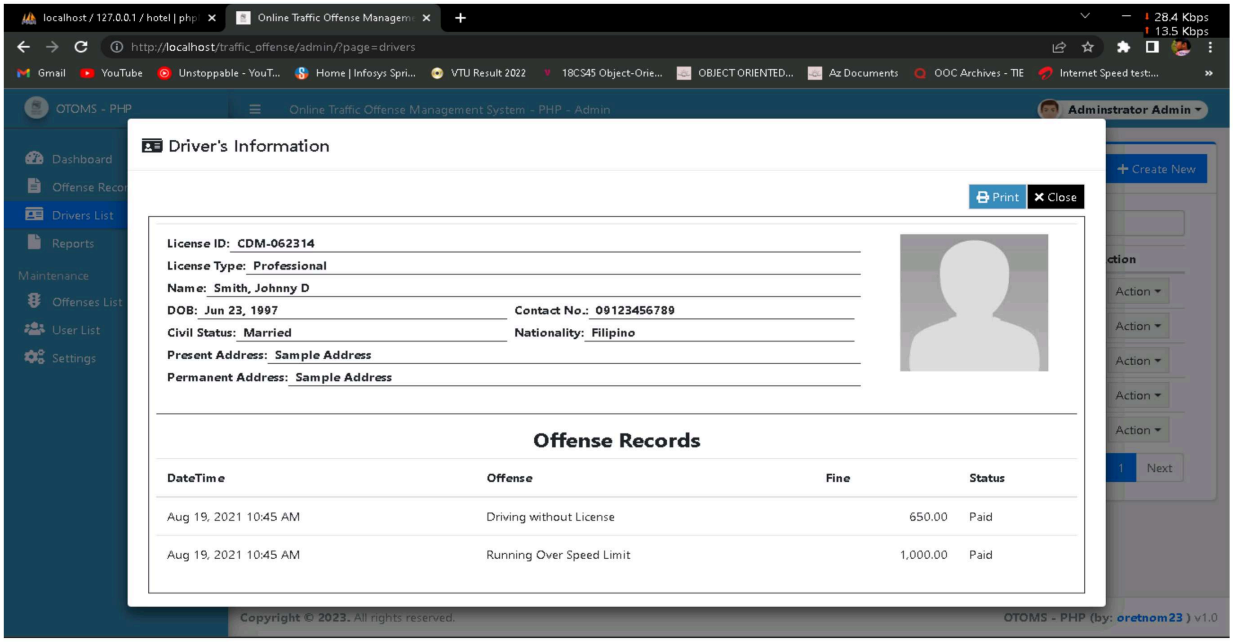

Figure 7.8 Driver's Information

Figure 7.8 shows a driver's information .if user click on view it will show the detail information of driver and their offense record .We can print the information if needed.

CONCLUSION

The following conclusions can be deduced from the development of the project

- Automation of the entire system improves the efficiency
- It gives appropriate access to the authorized users depending on their permissions.
- It effectively overcomes the delay in communications.
- Updating of information becomes so easier.
- System security, data security and reliability are the striking features.
- The System has adequate scope for modification in future if it is necessary.

'Online Traffic Offense Management' provide more efficient ways to manage a school it reduces manual paperwork in order to maintain traffic offense record . For implementing this system,PHP, HTML, CSS, JavaScript and MySql are used.

The system comprises of following features:

- Login Portal
- Secure Login/Logout
- Dashboard
- Manage Offense List
- Manage User List
- Manage Drivers List
- Manage Offense Ticket/Records
- Print Driver's Offense Ticket
- Print Driver's Information and Offense Records
- Generate a printable date-wise Report
- Update System Information

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