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ABSTRACT

Traffic management system allows RTO to register new vehicles, transfer a vehicle and generate report. It allows Police to add an offence against a vehicle, clear offence and clerk can generate offence report.

It is a system that manages the road traffic in a city automatically by combination of algorithms, equipment's and communication networks without involvement of human personnel in decision making according to various kinds of situations of road traffic that arise in a city. The approach of this paper is traffic signaling at a crossing point by measuring traffic density in each road. Also, vehicles that will violate signals at crossing points can be tracked by this system. Sometimes, situations like road congestion and exceed of limit of maximum traffic capacity of a road can arise and this system can also take decisions automatically accordingly. Vehicles can never cross the speed limit under this system. The term traffic density means no. of vehicles on a road at a particular instant of time from its one end at a crossing point to its other end at another crossing point in either up or down direction. So, to measure traffic density of a road, some form of sensor is required that can detect the presence of a vehicle and an instrument is required for counting the total no. of vehicles on the road.

It will also provide perfect opportunity to install monitoring equipment to collect much more detailed traffic and journey data than we have now. Each set of traffic lights will have communication equipment that can be used to transmit vehicle data, either from cameras or Bluetooth detectors.

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CHAPTER 1

INTRODUCTION

1.1 INFORMATION CONSISTENCY

Creation of a Traffic Management System (TMS) that helps in registering a vehicle, transferring a vehicle, adding an offence and clearing an offence. It also helps in maintaining owner information. Admin manages all the roles and users. RTO deals with registration of vehicle, transfer of vehicle, RTO report generation and modification of vehicle and owner details.

Policeman is allowed to add and clear an offence. Traffic management system allows RTO to register new vehicles, transfer a vehicle and generate report. It allows Police to add an offence against a vehicle, clear offence and clerk can generate offence report.

It is a system that manages the road traffic in a city automatically by combination of algorithms, equipment's and communication networks without involvement of human personnel in decision making according to various kinds of situations of road traffic that arise in a city. The approach of this paper is traffic signaling at a crossing point by measuring traffic density in each road. Also, vehicles that will violate signals at crossing points can be tracked by this system. Sometimes, situations like road congestion and exceed of limit of maximum traffic capacity of a road can arise and this system can also take decisions automatically accordingly. Vehicles can never cross the speed limit under this system. The term traffic density means no. of vehicles on a road at a particular instant of time from its one end at a crossing point to its other end at another crossing point in either up or down direction. So, to measure traffic density of a road, some form of sensor is required that can detect the presence of a vehicle and an instrument is required for counting the total no. of vehicles on the road.

1.2 PROBLEM DEFINITION

Urban Road are network of wide roads and intersections While accidents between Vehicles are encountered at intersections, pedestrian suffer accidents while crossing the

road, these two spots are selected for the study. The traffic movement at the spots was studied and the reason for accidents is found to be encountering a large number conflict points (High Crossing N number of the Graph). Accordingly, we have taken up minimize/eliminate the conflict points using the methods of Mathematical Modeling of Topological Graph Theory. The Graphs of Intersection and Pedestrian crossing were prepared. Traffic Management is the direction, control, and supervision of all functions incident to the procurement and use of freight and passenger transportation services. Traffic management measures include for example lane closure or opening (e.g. HOV lanes, peak lanes), intersection control, ramp metering, dynamic speed limits, etc. In relation to security issues, you can think of re-routing, route closure, traffic information provision, reverse laning, etc. Traffic management is normally performed by traffic management centres.

1.3 PROJECT PURPOSE

Purpose of this project is to reduce everyday congestion markedly, by smoothing traffic flows and prioritizing traffic in response to demand in real time. It will also provide perfect opportunity to install monitoring equipment to collect much more detailed traffic and journey data than we have now. Each set of traffic lights will have communication equipment that can be used to transmit vehicle data, either from cameras or Bluetooth detectors, and CCTV feeds (where appropriate). Traffic Management is mainly improvised for looking after the Set off data of a region to manage the Traffic along that area and implement various useful technologies which are been required by various persons like vehicle owners, pedestrians, police officers etc....Mainly the purpose of traffic management system is to give the details which can be used and they can be implemented in their daily life. The problems which have been occurred at their presence can be solved by this Traffic.

1.4 PROJECT FEATURES

- Mobile application for every citizen in the city with unique identification registration.
- Application features : – Input upcoming travel route, and get traffic data to reach the destination efficiently. – Report any traffic violations, road blocks, emergency. – Contact other citizen police, assistance. This system provides a smooth, hassle free and less time consuming process to aid the RTO officials and the police to regulate traffic and obstruction of rules caused .
- Each model is given special credentials by which they are deemed to perform specific tasks.
- The RTO officials and the police play a major role in regulating the offences caused by the vehicle user and fining them based on the offences.
- Offences are based on the verification of primary documents following which the offences committed while commuting is fined for.

1.5 MODULES DESCRIPTION

1.5.1 ADMIN

Here the admin will have the first module to operate the system. He will have the password and his own username. After that the admin will login to his admin home. Where the admin can manage the manages roles and manage the user for he people sitting in the RTO. And then the report will be generated for the every user work that they have done.

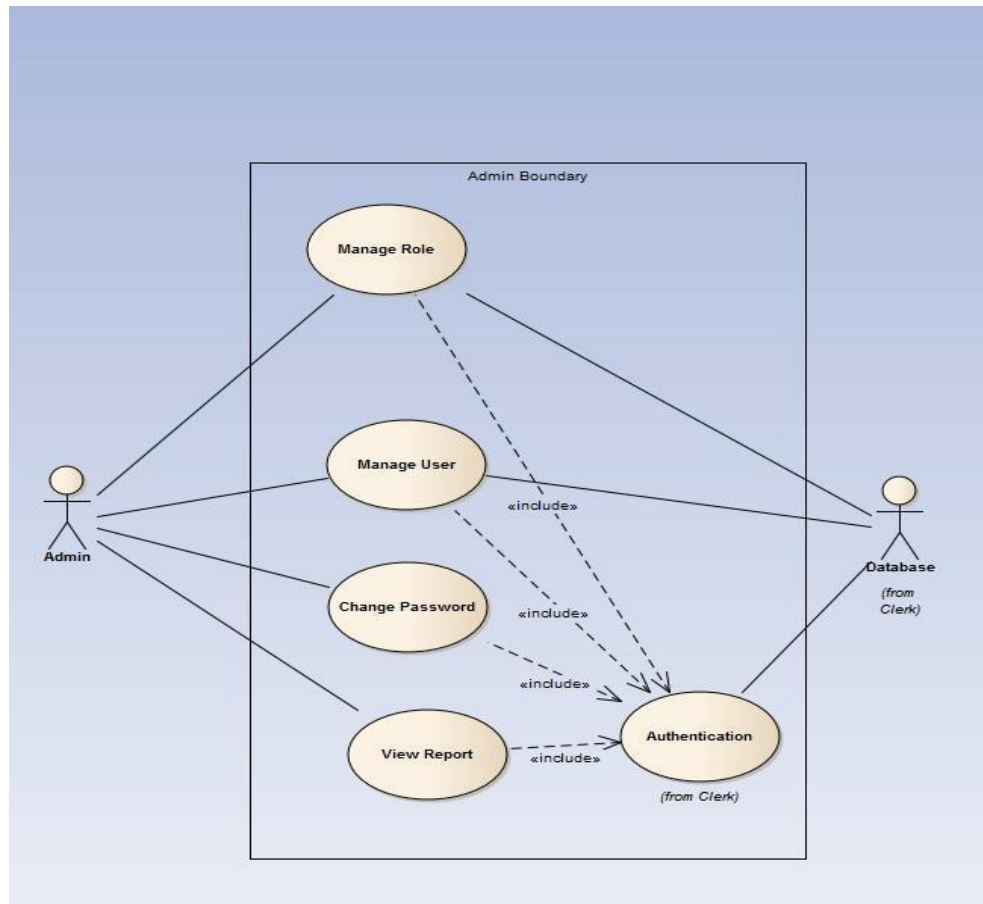


Figure 1.5.1 :- use case diagram of admin

1.5.2 RTO

This RTO module will register the vehicles for the users and also will scrap the vehicle for the user if the vehicle crosses 15 years of time. It will add the vehicles and also the owner of that vehicle. It will also the update the owner of the vehicle .it will also update the offences which are against the owner.

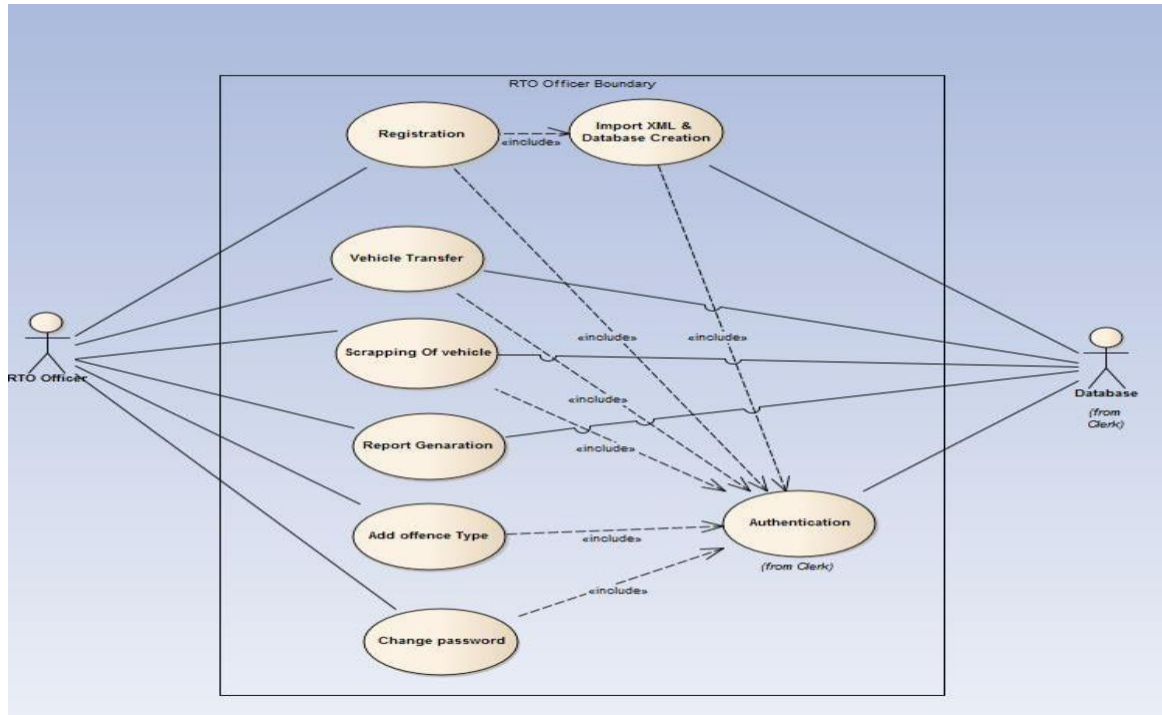


Figure 1.5.2 :- use case diagram of RTO

1.5.3 POLICE

Police module only have authority to add the offences against the vehicle. police can also clear the offence if the challan payment is done by the owner. One report will be generated showing that how many offences that particular owner have for his vehicle.

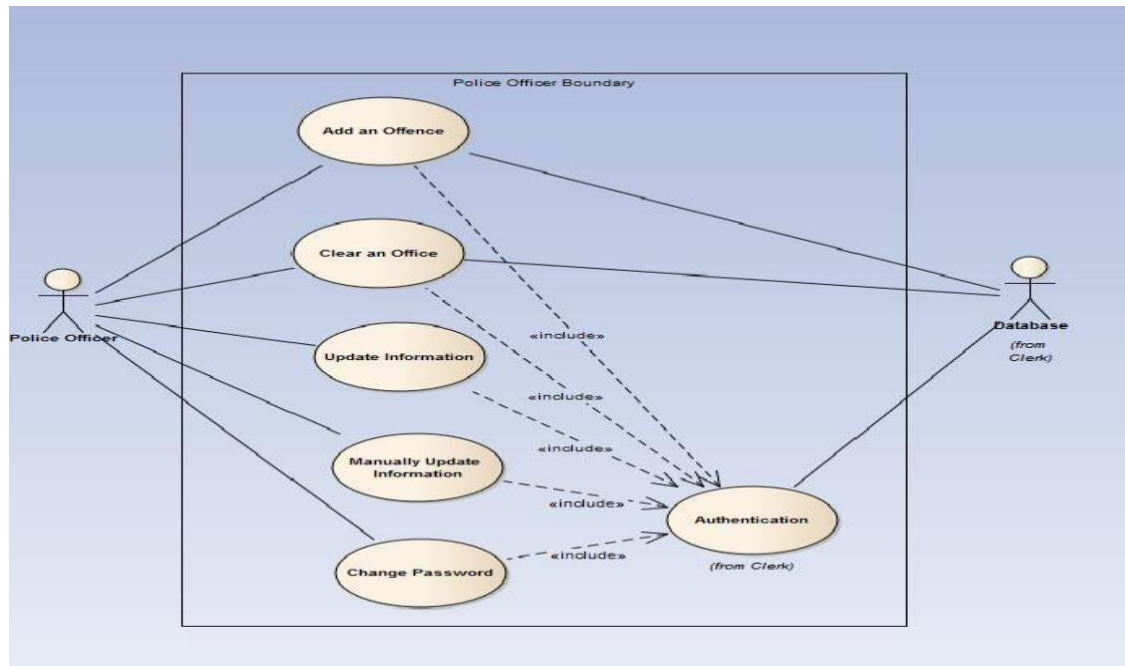


Figure 1.5.3:- use case diagram for police

1.5.4 Clerk

Here the clerk is none other than but the clerks which are available in police stations. Here the job of clerk is to add an offence in the absence of the police. He can also clear the offences and also the report generation will be there for the reference of police station.

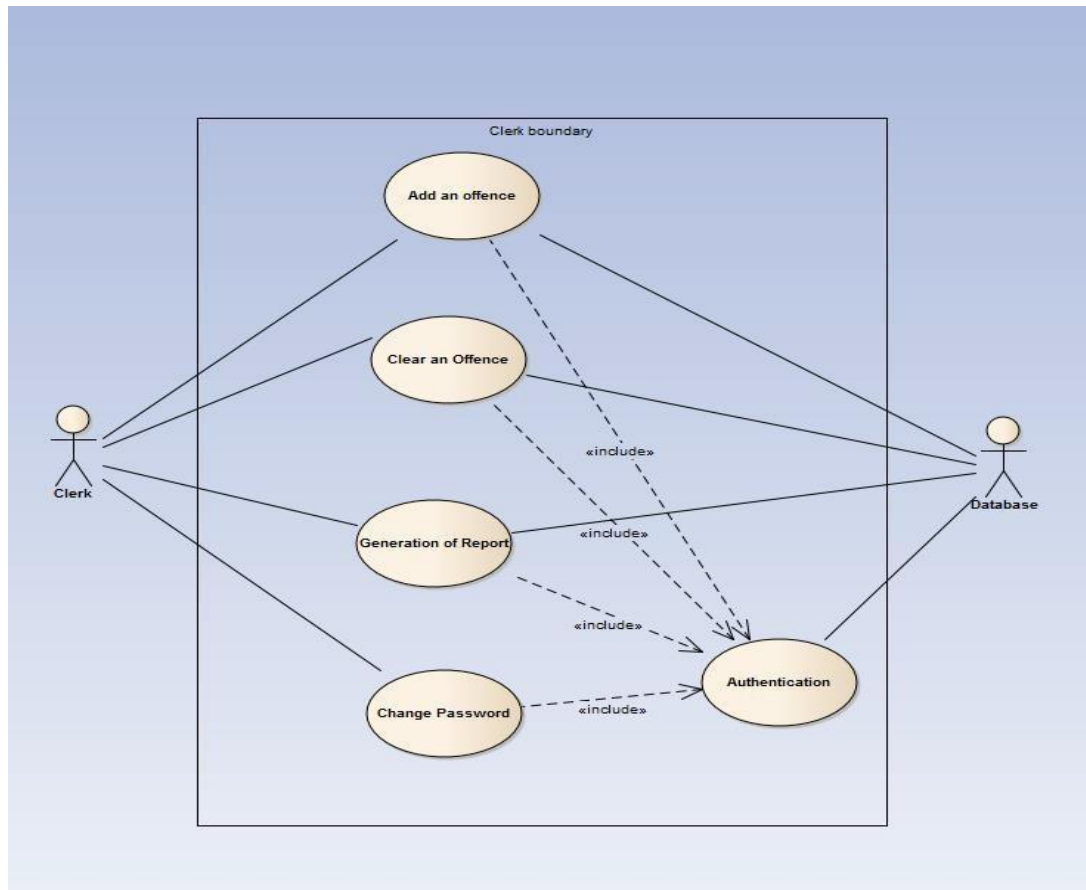


Figure 1.5.4:- use case diagram of clerk

CHAPTER 2

LITERATURE SURVEY

Literature survey is the most important step in software development process. Before developing the tool it is necessary to determine the time factor, economy and company strength. Once these things are satisfied, then next steps is to determine which operating system and language can be used for developing the tool. Once the programmers start building the tool the programmers need lot of external support. This support can be obtained from senior programmers, from book or from websites. Before building the system the above consideration are taken into account for developing the proposed system.

2.1 VISUAL STUDIO

Visual Studio is an integrated development environment (IDE) from Microsoft. It is used to develop computer programs, as well as websites, web apps, web services and mobile apps. Visual Studio uses Microsoft software development platforms such as Windows API, Windows Forms, Windows Presentation Foundation, Windows Store and Microsoft Silverlight. It can produce both native code and managed code.

Visual Studio includes a code editor supporting IntelliSense (the code completion component) as well as code refactoring. The integrated debugger works both as a source-level debugger and a machine-level debugger. Other built-in tools include a code profiler, forms designer for building GUI applications, web designer, class designer, and database schema designer. It accepts plug-ins that enhance the functionality at almost every level—including adding support for source control systems (like Subversion and Git) and adding new toolsets like editors and visual designers for domain-specific languages or toolsets for other aspects of the software development lifecycle (like the Team Foundation Server client: Team Explorer).

Visual Studio supports 36 different programming languages and allows the code editor and debugger to support (to varying degrees) nearly any programming language, provided a language-specific service exists. Support for other languages such

as Python, Ruby, Node.js, and M among others is available via plug-ins. Java (and J#) were supported in the past.

Like any other IDE, it includes a code editor that supports syntax highlighting and code completion using IntelliSense for variables, functions, methods, loops, and LINQ queries. IntelliSense is supported for the included languages, as well as for XML, Cascading Style Sheets, and JavaScript when developing web sites and web applications. Autocomplete suggestions appear in a modeless list box over the code editor window, in proximity of the editing cursor. In Visual Studio 2008 onwards, it can be made temporarily semi-transparent to see the code obstructed by it. The code editor is used for all supported languages.

Visual Studio includes a debugger that works both as a source-level debugger and as a machine-level debugger. It works with both managed code as well as native code and can be used for debugging applications written in any language supported by Visual Studio. In addition, it can also attach to running processes, monitor, and debug those processes.¹ If source code for the running process is available, it displays the code as it is being run. If source code is not available, it can show the disassembly. The Visual Studio debugger can also create memory dumps as well as load them later for debugging. Multi-threaded programs are also supported. The debugger can be configured to be launched when an application running outside the Visual Studio environment crashes.

2.2 EXISTING SYSTEM

In order to properly conduct any system evaluation, detailed knowledge of the existing conditions is required. There are many components to the various traffic management system assets – multiple types of equipment, products, technical specifications, and annual purchase contracts for infrastructure, in addition to annual maintenance logs, and work orders. As such, getting a pulse of these current system components – age, condition, compatibility, and operational characteristics, reveals information about the overall system health. A major effort was undertaken in 2014 to improve upon the records and asset management of this system information. What started as a plethora of

hard copy data and unknowns in folders and cardboard boxes, was updated into a fully electronic, GIS mapping and database effort, with web-based tools to store all valuable information.

Asset Management is a key component of any complex system. By vastly improving upon the data access, knowledge, and condition status of these systems in 2014-2015, the Traffic team has revamped maintenance programs and workflow. More is known about the system components and communications network (both historical and new items) than ever before. Information sharing via web-based GIS tools, field techs logging work and system updates on mobile tablets, and efficiencies in troubleshooting via automated notifications – are all items that have improved with a focus on this asset management.

2.3 PROPOSED SYSTEM

Here the proposed system is about five modules which is admin, rto user, police, clerk, owner of that vehicle. All of the modules have different behavior. Here if the person needs to buy the vehicle will be added by the rto user. And if afterwards any kind of offence is there by the vehicle that will be added by the police or clerk in the absence of police. RTO can also scrap the vehicle if the time of the vehicle crosses its 15 years. Here the owner can pay the money by cash or online for clearing his offence. Offence will only be cleared by the police or clerk.

2.3.1 ADVANTAGES

- It saves the time of the owner and the police.
- To pay the offence owner no need to have to go the police station in the absence of cash as he can pay online
- Owner can check the details of his vehicle whether he have any offence.
- Owner can also see the report which will be generated related to his offences and his paid money.

2.4 SOFTWARE DESCRIPTION

2.4.1 .NET FRAMEWORK PLATFORM ARCHITECTURE

Microsoft .NET is a set of Microsoft software technologies for rapidly building and integrating XML Web services, Microsoft Windows-based applications, and Web solutions. The .NET Framework is a language-neutral platform for writing programs that can easily and securely interoperate. The .NET framework provides the foundation for components to interact seamlessly, whether locally or remotely on different platforms. It standardizes common data types and communications protocols so that components created in different languages can easily interoperate.

ASP.NET	Windows Forms
XML WEB SERVICES	
Base Class Libraries	
Common Language Runtime	
Operating System	

Fig 2.1 NET Framework Architecture

The .NET Framework has two main parts:

1. The Common Language Runtime (CLR).
2. A hierarchical set of class libraries.

The CLR is described as the “execution engine” of .NET. It provides the environment within which programs run. The most important features are:

- Conversion from a low-level assembler-style language, called Intermediate Language (IL), into code native to the platform being executed on.
- Memory management, notably including garbage collection.

- Checking and enforcing security restrictions on the running code.
- Loading and executing programs, with version control and other such features.

Common Type System

The CLR uses something called the Common Type System (CTS) to strictly enforce type-safety. This ensures that all classes are compatible with each other, by describing types in a common way. CTS define how types work within the runtime, which enables types in one language to interoperate with types in another language, including cross-language exception handling.

As well as ensuring that types are only used in appropriate ways, the runtime also ensures that code doesn't attempt to access memory that hasn't been allocated to it.

Common Language Specification

The CLR provides built-in support for language interoperability. To ensure that you can develop managed code that can be fully used by developers using any programming language, a set of language features and rules for using them called the Common Language Specification (CLS) has been defined. Components that follow these rules and expose only CLS features are considered CLS-compliant.

THE CLASS LIBRARY

.NET provides a single-rooted hierarchy of classes, containing over 7000 types. The root of the namespace is called System; this contains basic types like Byte, Double, Boolean, and String, as well as Object. All objects derive from System. Object.

As well as objects, there are value types. Value types can be allocated on the stack, which can provide useful flexibility. There are also efficient means of converting value types to object types if and when necessary.

2.4.2 SQL-SERVER

The OLAP Services feature available in SQL Server version 7.0 is now called SQL Server 2000 Analysis Services. The term OLAP Services has been replaced with the term Analysis Services. Analysis Services also includes a new data mining component. The Repository component available in SQL Server version 7.0 is now called Microsoft SQL Server 2000 Meta Data Services. References to the component now use the term Meta Data Services. The term repository is used only in reference to the repository engine within Meta Data Services SQL-SERVER database consist of following type of objects:

1. TABLE
2. QUERY
3. FORM
4. REPORT
5. MACRO

TABLE:

A database is a collection of data about a specific topic.

VIEWS OF TABLE:

We can work with a table in two types,

1. Design View
2. Datasheet View

Design View

To build or modify the structure of a table we work in the table design view. We can specify what kind of data will be hold.

Datasheet View

To add, edit or analyses the data itself we work in tables datasheet view mode.

QUERY:

A query is a question that has to be asked the data. Access gathers data that answers the question from one or more table. The data that make up the answer is either dynaset (if you edit it) or a snapshot (it cannot be edited).

2.4.3 Jscript

JScript is Microsoft 's extended implementation of ECMAScript (ECMA262), an international standard based on Netscape's JavaScript and Microsoft's JScript languages. JScript is implemented as a Windows Script engine. This means that it can be "plugged in" to any application that supports Windows Script, such as Internet Explorer, Active Server Pages, and Windows Script Host. It also means that any application supporting Windows Script can use multiple languages - JScript, VBScript, Perl, and others.

JScript (and the other languages) can be used for both simple tasks (such as mouseovers on Web pages) and for more complex tasks (such as updating a database with ASP or running logon scripts for Windows NT).

Windows Script relies on external "object models" to carry out much of its work. For example, Internet Explorer's DOM provides objects such as 'document' and methods such as 'write()' to enable the scripting of Web pages.

JScript supports conditional compilation, which allows a programmer to selectively execute code within block comments. This is an extension to the ECMAScript standard that is not supported in other JavaScript implementations.

2.4.4 ASP or ACTIVE SERVER PAGES

Active Server Pages (ASP), also known as Classic ASP, was introduced in 1998 as Microsoft's first server side scripting engine. ASP is a technology that enables scripts in web pages to be executed by an Internet server. ASP pages have the file extension .asp, and are normally written in VBScript. ASP.NET is a development framework for building web pages and web sites with HTML, CSS, JavaScript and server scripting.

When a browser requests an ASP file, the ASP.NET engine reads the file, compiles and executes the scripts in the file, and returns the result to the browser as plain HTML. ASP.NET supports three different development models: Web Pages, MVC (Model View Controller), and Web Forms:

Web Pages Single Pages Model	MVC Model View Controller
1. Simplest ASP.NET	1. MVC
..	..

Fig 2.2 Development Models for ASP.NET

ASP.NET

ASP.NET is a new ASP generation. It is not compatible with Classic ASP, but ASP.NET may include Classic ASP. ASP.NET pages are compiled, which makes them faster than Classic ASP. ASP.NET has better language support, a large set of user controls, XML-based components, and integrated user authentication.

ASP.NET pages have the extension .aspx, and are normally written in VB (Visual Basic) or C# (C sharp). User controls in ASP.NET can be written in different languages, including C++ and Java.

Here are highlights of some of the new features:

Navigation: ASP.NET has a new higher-level model for creating site maps that describe your website. Once you create a site map, you can use it with new navigation controls to let users move comfortably around your website.

Master pages: With master pages, you can define a template and reuse it effortlessly. On a similar note, ASP.NET themes let you define a standardized set of appearance characteristics for controls, which you can apply across your website for a consistent look.

Data providers: With the new data provider model, you can extract information from a database and control how it's displayed without writing a single line of code. ASP.NET 2.0 also adds new data controls that are designed to show information with much less hassle (either in a grid or in a browser view that shows a single record at a time).

Portals: One common type of web application is the portal, which centralizes different information using separate panes on a single web page.

Administration: To configure an application in ASP.NET 1.x, you needed to edit a configuration file by hand. Although this process wasn't too difficult, ASP.NET 2.0 streamlines it with the WAT (Website Administration Tool), which works through a web page interface.

2.4.4 MVC (MODEL VIEW CONTROLLER)

Model–View–Controller (usually known as MVC) is an architectural pattern commonly used for developing user interfaces that divides an application into three interconnected parts. This is done to separate internal representations of information from the ways information is presented to and accepted from the user. The MVC design pattern decouples these major components allowing for efficient code reuse and parallel development.

Traditionally used for desktop graphical user interfaces (GUIs), this architecture has become popular for designing web applications. Popular programming languages like Java, C#, Python, Ruby, PHP have MVC frameworks that are used in web application development straight out of the box.

Model

The central component of the pattern. It is the application's dynamic data structure, independent of the user interface. It directly manages the data, logic and rules of the application.

View

Any representation of information such as a chart, diagram or table. Multiple views of the same information are possible, such as a bar chart for management and a tabular view for accountants.

Controller

Accepts input and converts it to commands for the model or view.

In addition to dividing the application into these components, the model–view–controller design defines the interactions between them. The model is responsible for managing the data of the application. It receives user input from the controller. The view means presentation of the model in a particular format. The controller responds to the user input and performs interactions on the data model objects. The controller receives the input, optionally validates it and then passes the input to the model.

MVC has been widely adopted as an architecture for World Wide Web applications in major programming languages. Several web frameworks have been created that enforce the pattern. These software frameworks vary in their interpretations, mainly in the way that the MVC responsibilities are divided between the client and server.

CHAPTER 3

REQUIREMENT ANALYSIS

3.1 FUNCTIONAL REQUIREMENTS

In software engineering, a functional requirement defines a function of a software system or its component. A function is described as a set of inputs, the behavior, and outputs. Functional requirements may be calculations, technical details, data manipulation and processing and other specific functionality that define what a system is supposed to accomplish. Behavioral requirements describing all the cases where the system uses the functional requirements are captured in use cases.

Here, the system has to perform the following tasks:

- Here the admin will enter the password and his username to login his page. Where the admin can manage the manages roles and manage the user for he people sitting in the RTO. And then the report will be generated for the every user work that they have done.
- There will be the users in the rto office who will register the vehicles for the owners and can also scrap the vehicle after 15 years of its completion. Rto users will also add the owner details and will also update the owner details .
- Police will have only authority to add the offence and to clear the offence. After that if the owner paid the money for the offence then the report will be generated for the owner and police reference.
- In the owner module,owner can look to his vehicle details to check whether his vehicle has any offence .

3.2 NON-FUNCTIONAL REQUIREMENTS

In systems engineering and requirements engineering, a non-functional requirement is a requirement that specifies criteria that can be used to judge the operation of a system, rather than specific behaviors. This should be contrasted with

functional requirements that define specific behavior or functions. The plan for implementing functional requirements is detailed in the system design. The plan for implementing non-functional requirements is detailed in the system architecture. Nonfunctional requirements describe how a system must behave and establish constraints of its functionality. This type of requirements is also known as the system's quality attributes. Attributes such as performance, security, usability, compatibility are not the feature of the system, they are a required characteristic. They are "developing" properties that emerge from the whole arrangement and hence we can't compose a particular line of code to execute them. Any attributes required by the customer are described by the specification. We must include only those requirements that are appropriate for our project.

Some Non-Functional Requirements are as follows:

- Reliability
- Maintainability
- Performance
- Portability
- Scalability
- Flexibility

3.2.1 ACCESSIBILITY:

Accessibility is a general term used to describe the degree to which a product, device, service, or environment is accessible by as many people as possible.

In social planning, accessibility refers to people's ability to use services and opportunities. ... For example, if transportation is evaluated based on vehicle travel conditions (traffic speeds, congestion delay, roadway Level-of-Service ratings), the only way to improve transport system quality is to improve roadways

3.2.2 MAINTAINABILITY:

In software engineering, maintainability is the ease with which a software product can be modified in order to:

- Correct defects
- Meet new requirements

New functionalities can be added in the project based on the user requirements just by adding the appropriate files to existing project using ASP.net and C# programming languages.

Since the programming is very simple, it is easier to find and correct the defects and to make the changes in the project.

3.2.3 SCALABILITY:

System is capable of handling increase total throughput under an increased load when resources (typically hardware) are added.

System can work normally under situations such as low bandwidth and large number of users.

3.2.4 PORTABILITY:

Portability is one of the key concepts of high-level programming. Portability is the software code base feature to be able to reuse the existing code instead of creating new code when moving software from an environment to another.

Project can be executed under different operation conditions provided it meet its minimum configurations. Only system files and dependant assemblies would have to be configured in such case.

3.2.5 RELIABILITY:

Software Reliability is the probability of failure-free software operation for a specified period of time in a specified environment. Software Reliability is also an important factor affecting system reliability.

3.3 HARDWARE REQUIREMENTS

Processor	: Any Processor above 500 MHz
RAM	: 512Mb
Hard Disk	: 10 GB
Input device	: Standard Keyboard and Mouse
Output device	: VGA and High Resolution Monitor

3.4 SOFTWARE REQUIREMENTS

- Operating system : Windows XP
- Front End : ASP.Net 2.0
- IDE : Visual Studio 2008
- Data Base : SQL Server Management Studio 2005
- Server : Internet Information Services
- Database Connectivity : ODBC Sources (with SQL Server)

CHAPTER 4

DESIGN

4.1 DESIGN GOALS

To enable secure outsourcing of file under the aforementioned model, our mechanism design should achieve the following security and performance guarantees:

4.1.1 INPUT/OUTPUT PRIVACY

No sensitive information from the owner's private data can be delivered to the users of the rto office and admin.

4.1.2 DESIGN SCOPE

Functionalities addressed in this system are:

- Vehicle registration
- Vehicle transfer
- Adding offence
- Clearing offence
- RTO Report generation
- Clerk Report generation
- Modifying owner, vehicle and offence details

4.2 DESIGN OVERVIEW

4.2.1 ADMIN PACKAGE

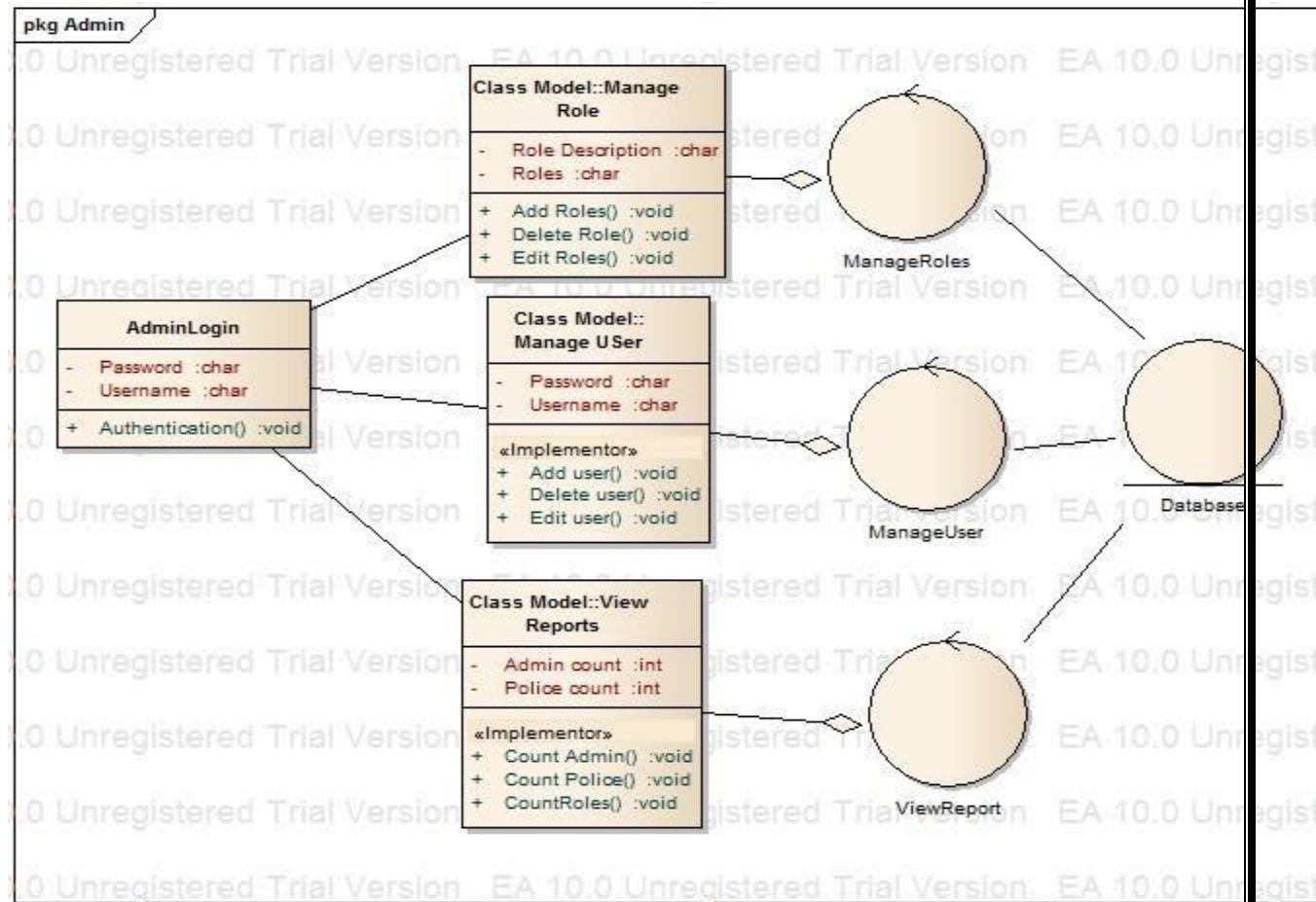


Figure 4.2.1 :- ADMIN PACKAGE

4.2.2. RTO PACKAGE

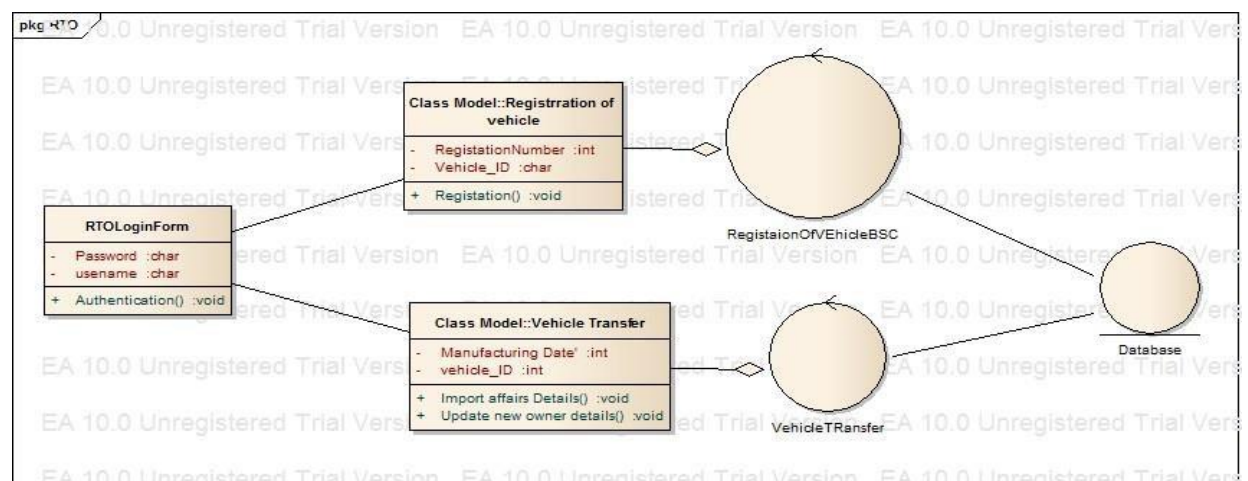


Figure 4.2.2:- RTO PACKAGE

4.2.3 POLICE PACKAGE

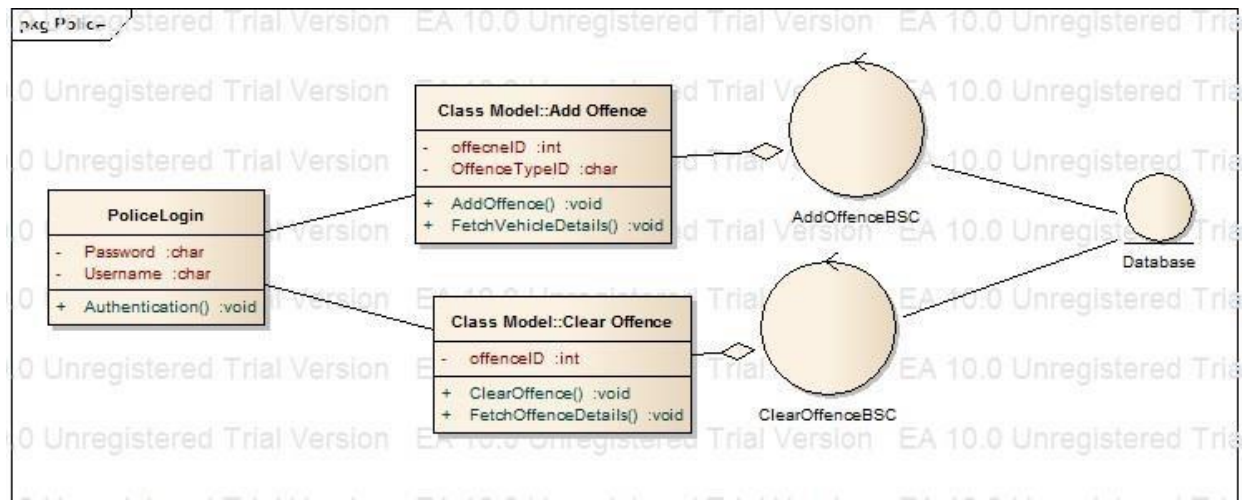


Figure 4.2.3:-POLICE PACKAGE

4.2.4 CLERK PACKAGE

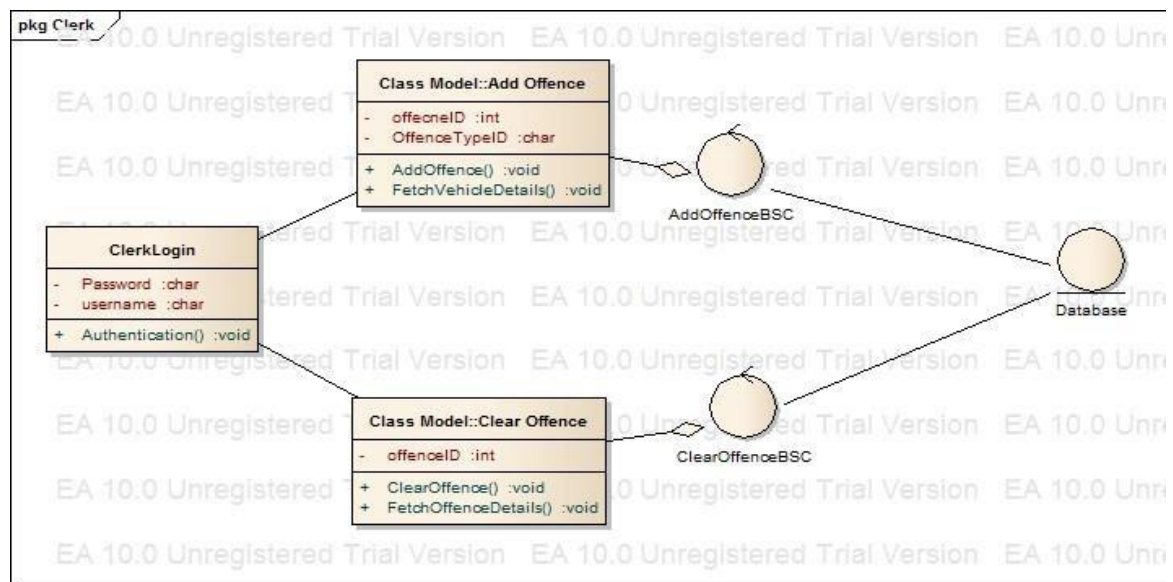


Figure 4.2.4:- CLERK PACKAGE

CHAPTER 5

IMPLEMENTATION

5.1 DATA DESIGN

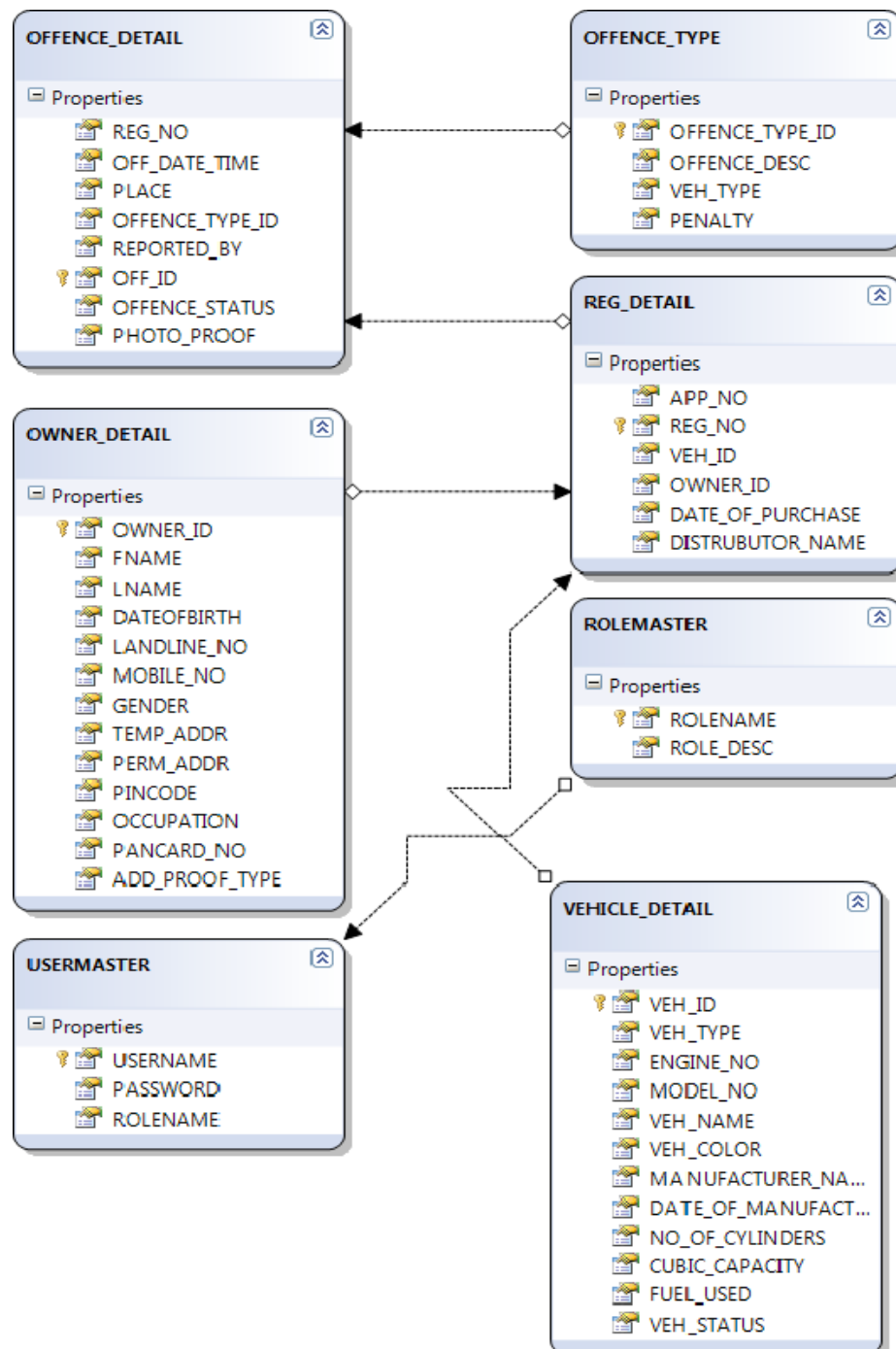


Figure 5.1.1:-DATA DESIGN FLOW

5.2 USE CASE MODEL

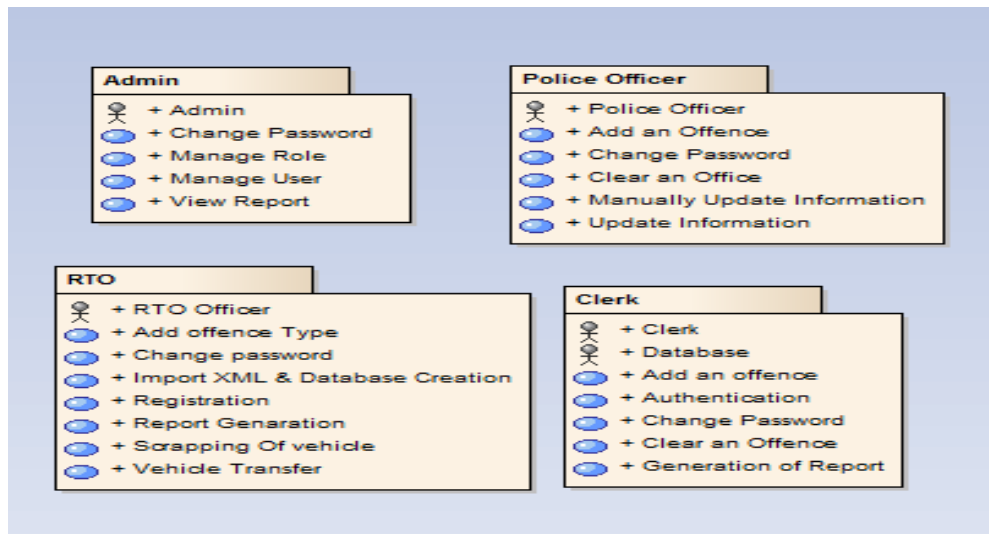
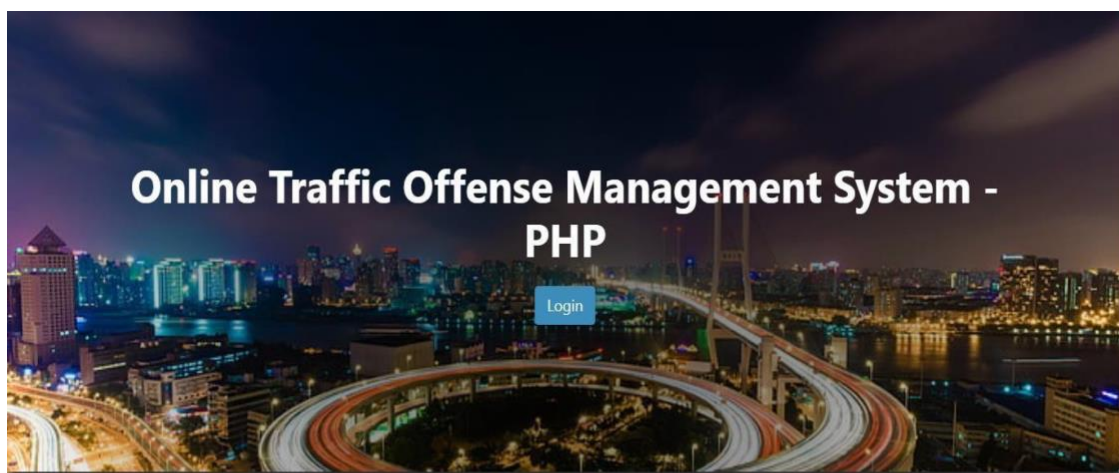


Figure 5.2.1:- USE CASE MODEL

5.3 UI SNAPSHOTS

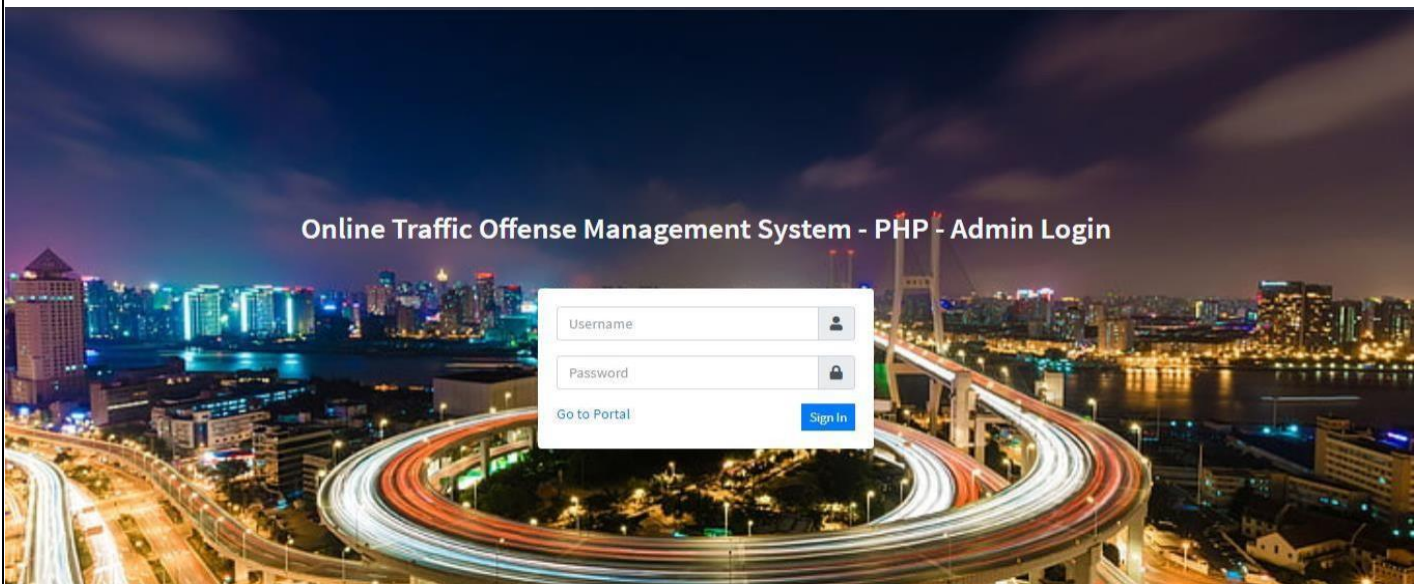
portal



About Us

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Login page



Dashboard



Traffic Offense Management System

Driver's Offense Ticket Details

Print Close

Ticket No: 123456789 DateTime: Aug 18, 2021 03:00 PM

License ID: CDM-062314

Driver's Name: Smith, Johnny D

Officer ID: OFC-789456123

Officer's Name: George Wilson

Ticket Status: Paid

Offense List

Code	Offense	Fine
OT-1001	Driving without License	650.00
TO-1002	Running Over Speed Limit	1,000.00
Total		1,650.00

Remarks:
Sample Traffic Offense Record Only.

OTOMS - PHP (by: oretnom23) v1.0

OFFENSE TICKET

CHAPTER 6

CONCLUSION AND FUTURE ENHANCEMENT

6.1 CONCLUSION

Continuous growth of population all over the world creates a great challenge to the transport management systems. The conventional methods are no longer effective enough for solving complex and challenging transportation management problems. More economical, more efficient and thus more intelligent methods have to be developed to deal with these challenging problems. Knowledge from different research areas is needed for developing these systems. Very often complex transportation systems require integration of different methods from different branches of science. Due to the increased amount of vehicles, it is necessary to take effective steps in order to control the traffic and hence avoid all types of losses that is caused due to traffic. Once we have predicted a high traffic density for a network segment, we can initiate strategies to avoid this problem. In case of a road network, navigation systems can try to bypass the critical zone.

6.2 FUTURE ENHANCEMENT

- The vehicle user will have the privilege of checking the cases which are pending and cases which are cleared against the vehicle.
- The vehicle documents which are produced as a soft copy will be scanned by the police module and can be accepted as a legal document.
- On an overall view, this project provides for a proper working system which makes the life easier on both end users.
- The project is controlled and worked digitally and hence the process is faster and can be depended upon

REFERENCES

1. www.w3schools.com
2. www.hotscripts.com/category/php/
3. www.apache.org
4. www.mysql.com/click.php?e=35050