DIGITAL VEHICLE – LICENSE, INSURANCE AND RC BOOK TRACING FOR POLICE

A report on major project work

Submitted in partial fulfillment of the

requirements for the award of the degree of

BACHELOR OF TECHNOLOGY

In

COMPUTER SCIENCE AND ENGINEERING

By

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CERTIFICATE

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DECLARATION

We declare that the work presented in this project report is original and has been carried out in the Department of Computer Science and Engineering, Kakatiya Institute of Technology and Science, Warangal, Telangana, and to best of our knowledge it has been not submitted elsewhere for any degree.

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ABSTRACT

The police forces around the world use vehicle number plate for legal vehicle authorization purposes, to check if a vehicle is registered or licensed. An application which will facilitate the user for not worrying about carrying the documents of their vehicle must be designed such that we can digitalize all documents which are taken care of with so much efforts and hard work. The aim is to design a website which takes the vehicle number manually, then the details retrieved from the number plate in text format is used to extract all the important information of the vehicle like, the name of the owner, address of the owner, date of registration of the vehicle etc. from the database. This application will make sure you have all the documents like PUC, RC Book; Insurance papers can be easily handled. This website can help you not to carry all the documents with you every time you drive a vehicle, which is used by the police only. For us, it is useful as we do not have to carry our documents to every place with the fear of losing them. The user login can be used by owner of the vehicle which extracts the information of his vehicle.

ACRONYMS

HTML	:	Hyper Text Markup Language
CSS	:	Cascading Style Sheets
PHP	:	Hyper Text Preprocessor
SQL	:	Structured Query Language
JS	:	Java Script

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

Day by day the human population is increasing and use of vehicles is also increasing due to increased human needs. Majority of people are habituated to travel on their own vehicle which includes cars, bikes, motor vehicles, etc. As a result of it, the control of vehicles is becoming a big complex problem system. Most of us keep the vehicle papers in the vehicle itself, which is not at all safe in case of theft. In today's world, it is not secure to carry our vehicle papers and wherever we go.

All over the world, as per the Motor Vehicles Act of the respective countries, it is compulsory to that citizens always carry the original hard copy of documents like (Registration certificates book, certificate vehicle Insurance policy). Many times citizens do not remember to carry the vehicle-related documents. When traffic police wanted to verify citizens documents at that time citizens need to carry these documents with them otherwise they need to face consequences. To overcome this problem, the proposed system will have a web interface, where all necessary documents of the vehicle documents are scanned and stored.

Fig. 1.1 Motor Vehicle Act

The Motor Vehicles Act was passed in the year 1988 and regulates almost all aspects of road transport vehicles. It provides detailed guidelines on licensing of the drivers and conductors, registration of motor vehicles, the provision on controlling their permits, traffic regulations, related insurances, liabilities, and penalties. The motor vehicle act makes it mandatory for any driver to have a valid driving license and no vehicle can be driven without being registered under the motor vehicle act. This also requires the registration of a vehicle under the Act, which has a 15-year validity duration and can be renewed for another 5-year period. The Motor Vehicle Act of 1988 includes not just licensing and registration, but also other aspects of road transport vehicles.

Hence, a system must be designed in which it is not necessary to carry our important documents to each and every place for verification. Number plate recognition is one of the methods that allow the extraction of number plate information. On the other side, the details of each and every vehicles details and owner details are stored in database that is accessible only by the police who catch a driver when they (the driver) break the traffic rules. Therefore, it is necessary for a cop to have a quick access to the database where any owner details can be retrieved. Now a day's everything is getting online, the web application becomes the easy way in serving majority of people so, Digital Vehicle is a web based application that can provided to every police and public to store and view the vehicle documents digitally.

1.2 OBJECTIVES

- Eliminating the need for citizens to maintain a hard copy of government issued documents (License, RC book, Insurance paper).
- Provide secure and consented access to the government issued document to user agencies.
- Reduce RTO admin overhead, and enabling the paperless transaction.
- In the existing system, there is no alert system notification system to citizens if his/her document expired.
- The main benefits are the citizens or Verifier Authority can access the documents anytime and anywhere.
- This project also reduces the human intervention in managing and collecting vehicle details.

1.3 OUTCOMES

- Police enter public vehicle details and can check those details at anytime and anywhere.
- These databases are maintained by user.
- User can update and enter new public document details.
- Useful in identifying vehicle's documents and getting information of vehicle's owner.
- Digitized and fast crime analyzer.

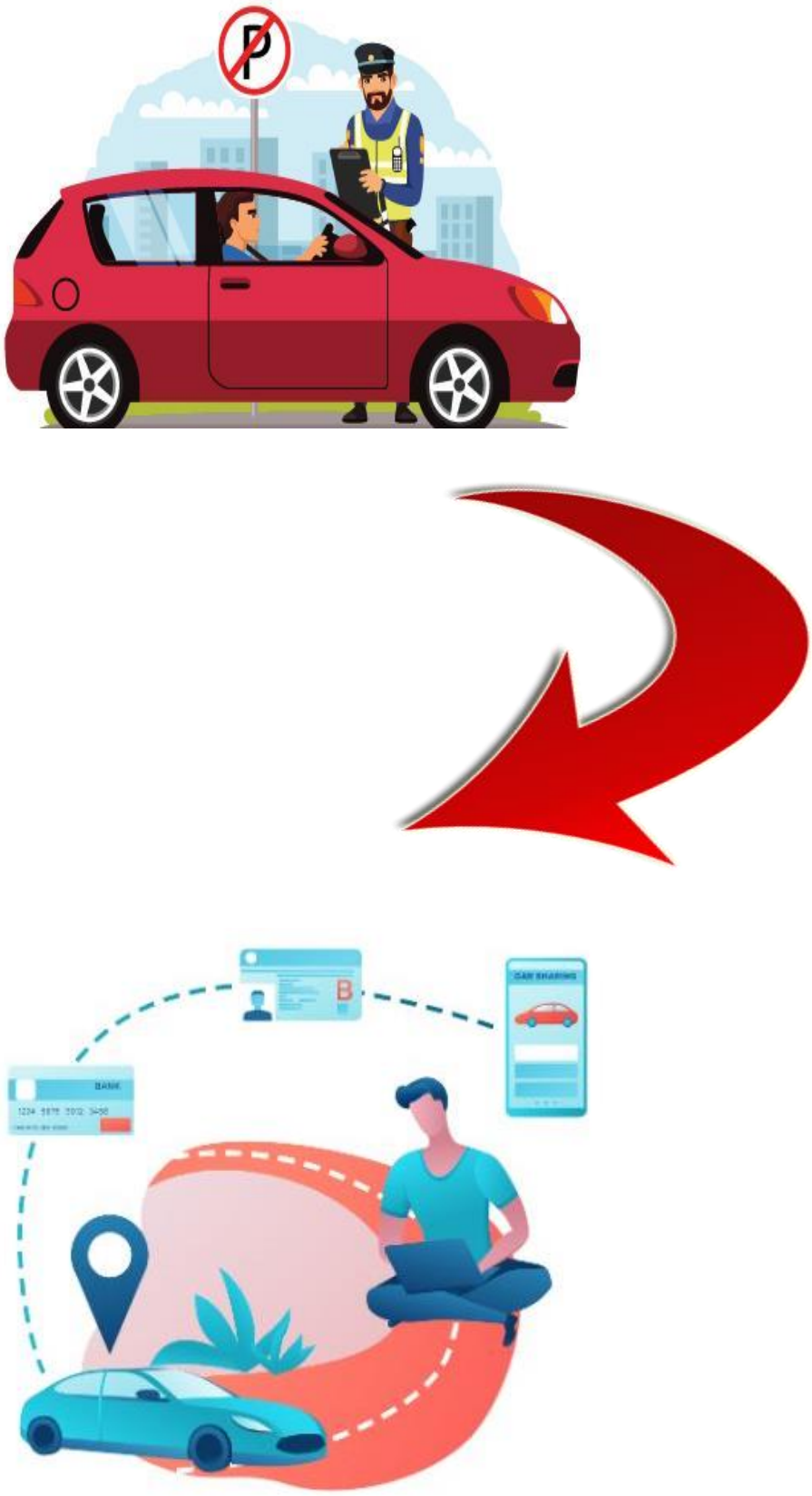

Fig. 1.2 Overview of Web Application

CHAPTER 2
LITERATURE SURVEY

2.1 OVERVIEW

In the last two decades, many solutions have been suggested to address the safety measures of vehicle documents. The literature survey gives various surveys conducted at various Universities that provide solution to the problem can be implemented in real life. All these provide accuracy and less time to view the documents of vehicle. So the analysis of already existed works improves the methodology and helps in improving accuracy, advantages by limiting the disadvantages over existed solutions.

i. **"Vehicle Information System" in (IJCSIT) International Journal of Computer Science and Information Technologies".**

   In 2015, Sanjeev Shelar and Shinde developed an application which will facilitate the user for not worrying about the documents of their vehicle. This application will make sure you have all the documents with you every time anywhere wherever you go. This approach provides the digitalized documents of the vehicles and used by any android user, hence there is no security for the data.

ii. **"Number Plate Recognition and Document Verification Using Feature Extraction OCR Algorithm, in International Conference on Intelligent Computing and Control Systems".**

   In 2017 Bhonsale Tejas et al. [4] designed a system to captures the image of the number plate of a vehicle using a camera and the details are being retrieved using the character segmentation which is done by a feature extraction optical character recognition algorithm (OCR). Then the details retrieved from the number plate in text format are used to extract all the important information of the vehicles. The above approach includes image processing hence it contains the disadvantages of image processing.

iii. "Digital License mv, is presented at the IEEE WiSPNET 2016 conference".

In 2016 R.Thirumalai Raj and S.Sivakumar [5] introduced a website called Digital License mv, which is used to access digitally stored license details of all users in MySQL database, which is retrieved as JSON objects through PHP scripts. It provides information only about the license no other details like vehicle license and registration are available.

CHAPTER 3
IMPLEMENTATION

In this section we discuss the explanation of proposed system and the software requirements.

3.1 PROPOSED SYSTEM

In the current scenario, the traffic police stop the vehicle if it has broken any traffic rule. Also in the existing system we have to carry our original documents with us. So there is fear of losing them. Existing system does not identify if the vehicle is insured or not. It also cannot identify if the vehicle is stolen. This system can help identify if the vehicle is stolen and all the related details of the vehicle. Also owner does not need to carry his documents.

And this proposed system increases the transparency about vehicle documents and also increase the chance of securely accessing the documents, save the amount of time of citizens and traffic police. When verifier authority wants to verify the documents of citizens he/ she first register and login into an application. And police can easily verify documents by simply giving the vehicle registration number.

The system proposed here has two different types of login. That means a user login along with the police login and each login has different set of actions to do.

3.2 SOFTWARE REQUIREMENT SPECIFICATION

SRS is a report that outlines all of the traits of a model carried out, piece of software. In a nutshell, the SRS document can be considered as a manual for the model developed that must be completed earlier than launching a model. An SRS report is frequently created for an assignment, or another kind of application.

When developing the SRS report, there are set of criteria which are to be carried out. It contains the scope, goal, functional also non functional necessities, also the software necessities. The record consists of clear statistics at the wished environmental conditions, privacy and protection requirements, and so on.

3.2.1 HARDWARE REQUIREMENTS:

- Processor : Min. Core i3 processor
- RAM : 2GB(Min.) or 8GB(Recommended)
- Hard Disk Space : 50GB+

3.2.2 SOFTWARE REQUIREMENTS:

- Front end : HTML, CSS, Bootstrap
- Back end : PHP, MySQL
- Control end : Angular JavaScript

3.2.3 TECHNOLOGY DESCRIPTION

3.2.3.1 HTML

HTML stands for HyperText Markup Language. It is used to design web pages using a markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between web pages. A markup language is used to define the text document within the tag which defines the structure of web pages. This language is used to annotate (make notes for the computer) text so that a machine can understand it and manipulate text accordingly. Most markup languages (e.g. HTML) are human-readable.

HTML gives authors the means to:

- Publish online documents with headings, text, tables, lists, photos, etc.
- Retrieve online information via hypertext links, at the click of a button.
- Design forms for conducting transactions with remote services, for use in searching for information, making reservations, ordering products, etc.
- Include spread-sheets, video clips, sound clips, and other applications directly in their documents.

3.2.3.2 CSS

CSS is the language for describing the presentation of Web pages, including colours, layout, and fonts. It allows one to adapt the presentation to different types of devices, such as large screens, small screens, or printers. CSS is independent of HTML and can be used with any XML-based mark-up language. The separation of HTML from CSS makes it easier to maintain sites, share

style sheets across pages, and tailor pages to different environments. This is referred to as the separation of structure (or: content) from presentation.

CSS allowed several innovations to webpage layout, such as the ability to:

- Specify fonts other than the default for the browser
- Specify color and size of text and links
- Apply colors to backgrounds
- Contain webpage elements in boxes and float those boxes to specific positions on the page

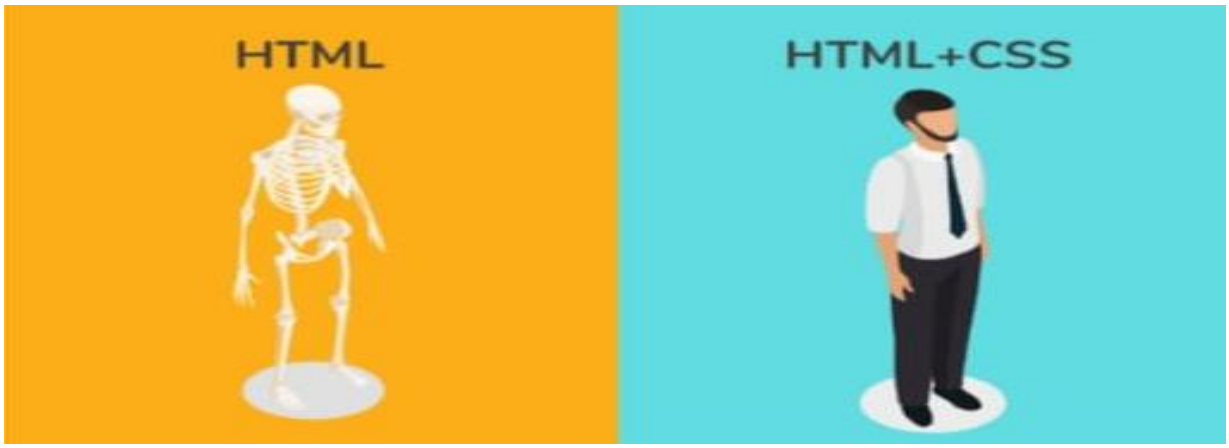

Fig. 3.1 Difference between HTML and CSS

3.2.3.3 BOOTSTRAP

Bootstrap is a free and open-source CSS framework directed at responsive, mobile-first front-end web development. It contains HTML, CSS and (optionally) JavaScript-based design templates for typography, forms, buttons, navigation, and other interface components.

Bootstrap is the most popular CSS Framework for developing responsive and mobile-first websites. Bootstrap 5 is the newest version of Bootstrap

Bootstrap makes responsive web design a reality. It makes it possible for a web page or app to detect the visitor's screen size and orientation and automatically adapt the display accordingly. The mobile-first approach assumes smartphones, tablets and task-specific mobile apps are employees' primary tools for getting work done. Bootstrap addresses the requirements of those technologies in design and includes UI components, layouts, JavaScript tools and the implementation framework. The software is available precompiled or as source code.

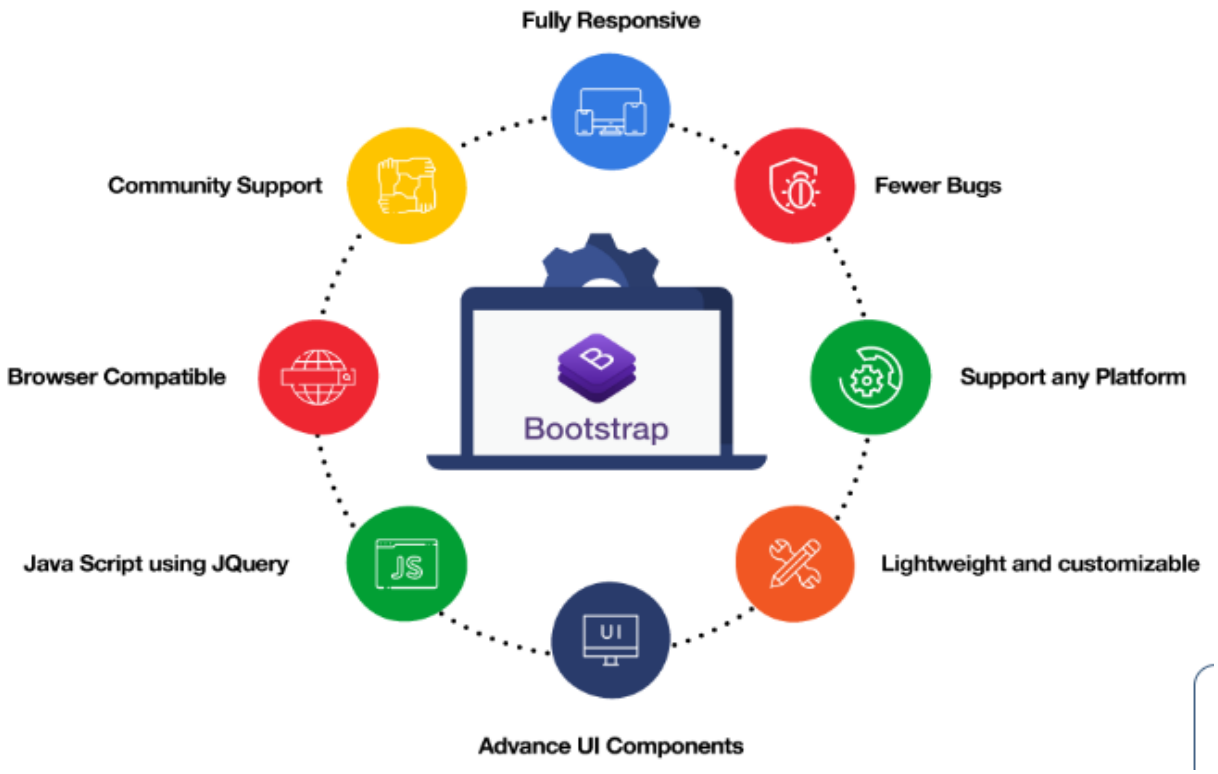

Fig. 3.2 Advantages of Bootstrap

3.2.3.4 PHP

PHP is an acronym for "PHP: Hypertext Pre-processor". PHP is a widely-used, open source scripting language. PHP scripts are executed on the server. PHP is free to download and use.

PHP files can contain text, HTML, CSS, JavaScript, and PHP code. PHP code is executed on the server, and the result is returned to the browser as plain HTML. PHP files have extension ".php"

PHP can generate dynamic page content. PHP can create, open, read, write, delete, and close files on the server. PHP can collect form data. PHP can send and receive cookies. PHP can add, delete, and modify data in your database. PHP can be used to control user-access. PHP can encrypt data

With PHP you are not limited to output HTML. You can output images, PDF files, and even flash movies. You can also output any text, such as XHTML and XML.

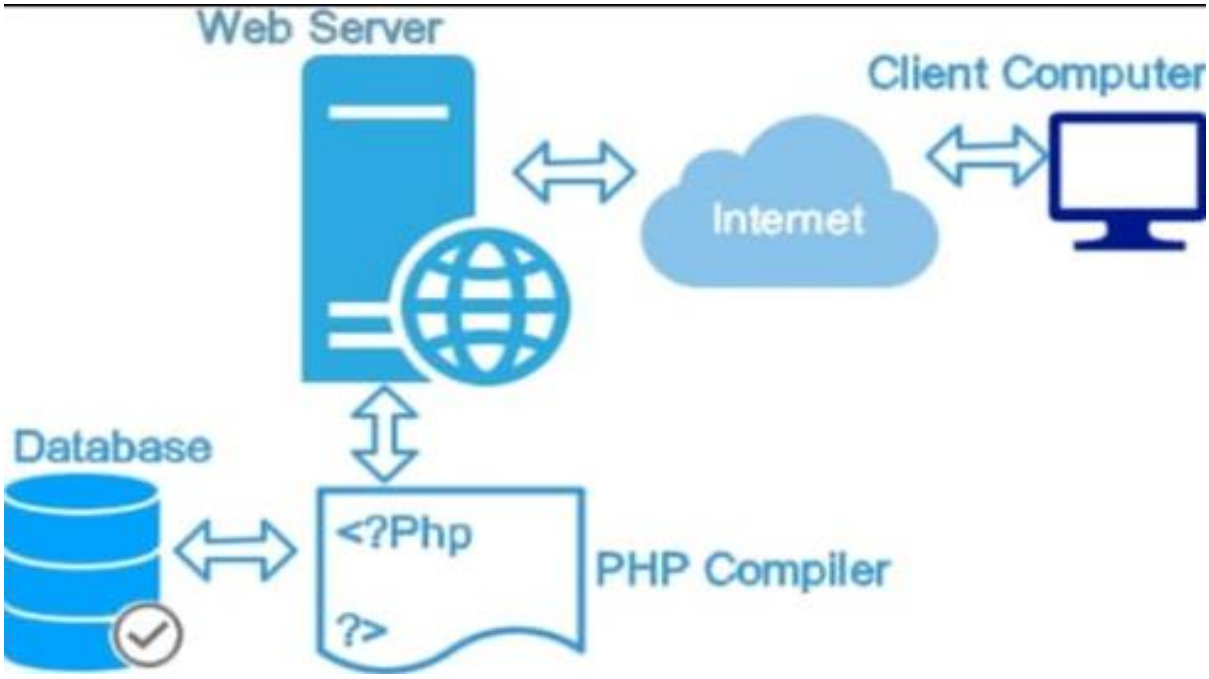

Fig. 3.3 Working of PHP

3.2.3.5 MySQL

MySQL is an open-source SQL relational database management system from Oracle. As a relational database, the data is stored in smaller storage areas called tables. This makes it easier to locate the data you need, but more importantly, it helps organize data.
MySQL is developed, distributed, and supported by Oracle Corporation.

- The data in a MySQL database are stored in a table which consists of columns and rows.
- MySQL is a database system that runs on a server.
- MySQL is ideal for both small and large applications.
- MySQL is very fast, reliable and easy to use database system. It uses standard SQL
- MySQL compiles on a number of platforms.

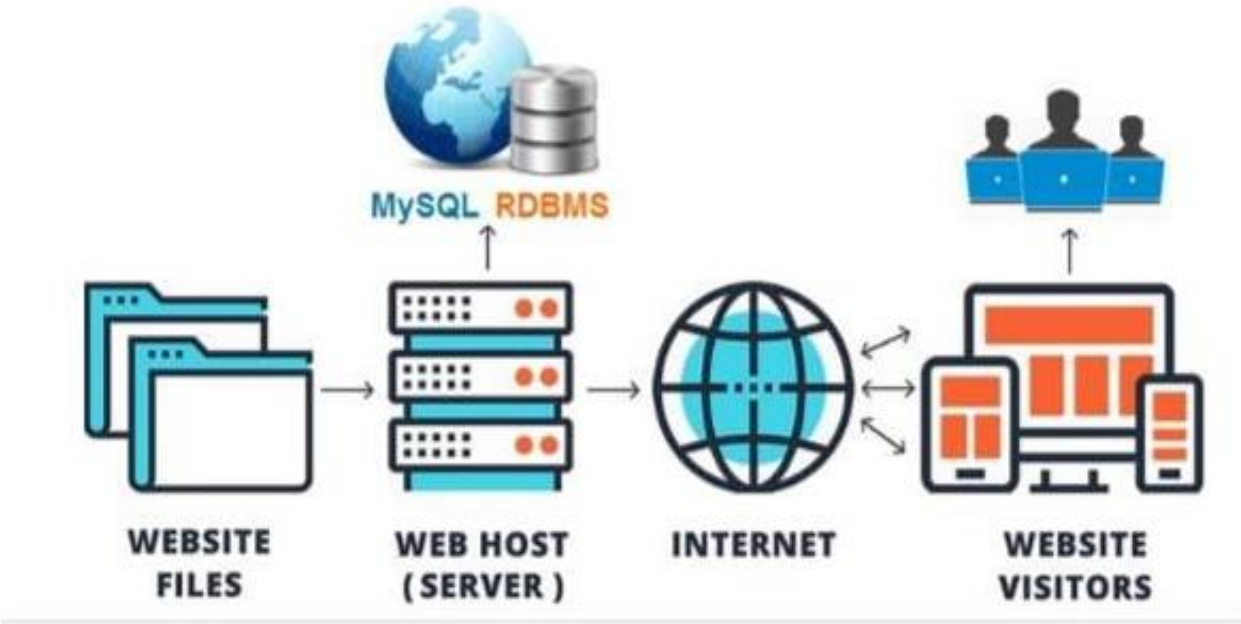

Fig. 3.4 Working of MySQL

3.2.3.6 ANGULAR JAVASCRIPT

AngularJS is a **JavaScript framework**. It can be added to an HTML page with a <script> tag. AngularJS extends HTML attributes with **Directives**, and binds data to HTML with **Expressions**. AngularJS is a toolset for building the framework most suited to your application development. It is fully extensible and works well with other libraries. Every feature can be modified or replaced to suit your unique development workflow and feature needs.

AngularJS is an open-source web application framework. It was originally developed in 2009 by Misko Hevery and Adam Abrons. It is now maintained by Google. Its latest version is 1.2.21.

- AngularJS is a efficient framework that can create Rich Internet Applications (RIA).
- AngularJS provides developers an options to write client side applications using JavaScript in a clean Model View Controller (MVC) way.
- Applications written in AngularJS are cross-browser compliant. AngularJS automatically handles JavaScript code suitable for each browser.
- AngularJS is open source, completely free, and used by thousands of developers around the world. It is licensed under the Apache license version 2.0.

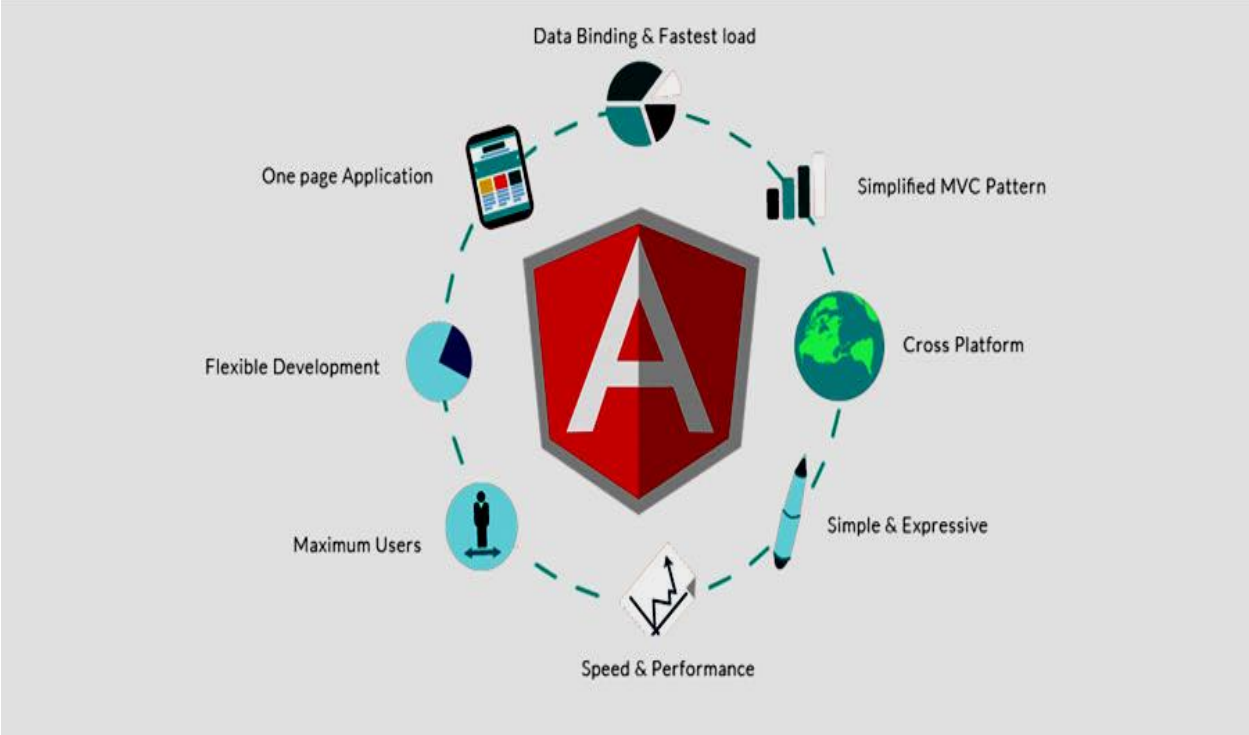

Fig. 3.5 Angular JavaScript uses

3.3 DESIGN MODULES

The police login design consists of following modules:

- Login/ Register
- Search for Record.
- View License
- View Insurance
- Check RC Book
- Upload document details (if any client or user approaches)

The user login design consists of following modules:

- Login
- Upload documents
- Maintain Database (settings if any).

3.3.1 ARCHITECURE DIAGRAM

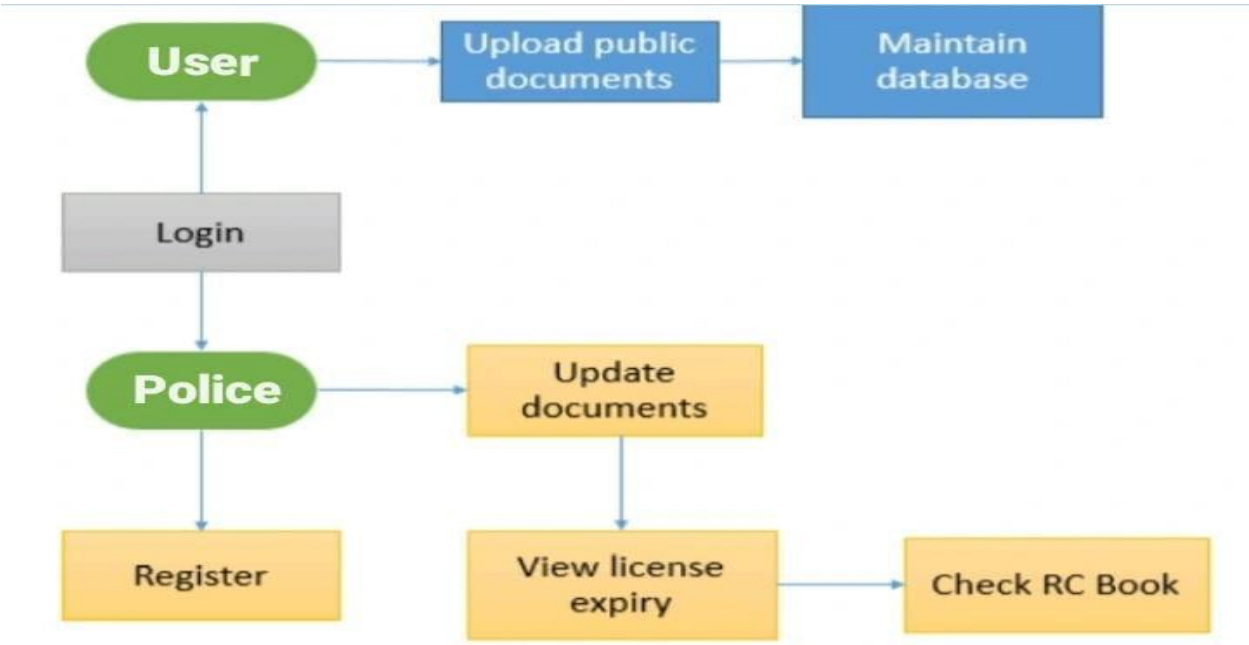

Fig. 3.6 Architectural diagram

3.3.2 SYATEM ARCHITECTURE WITH DATABASE FUNCTIONS

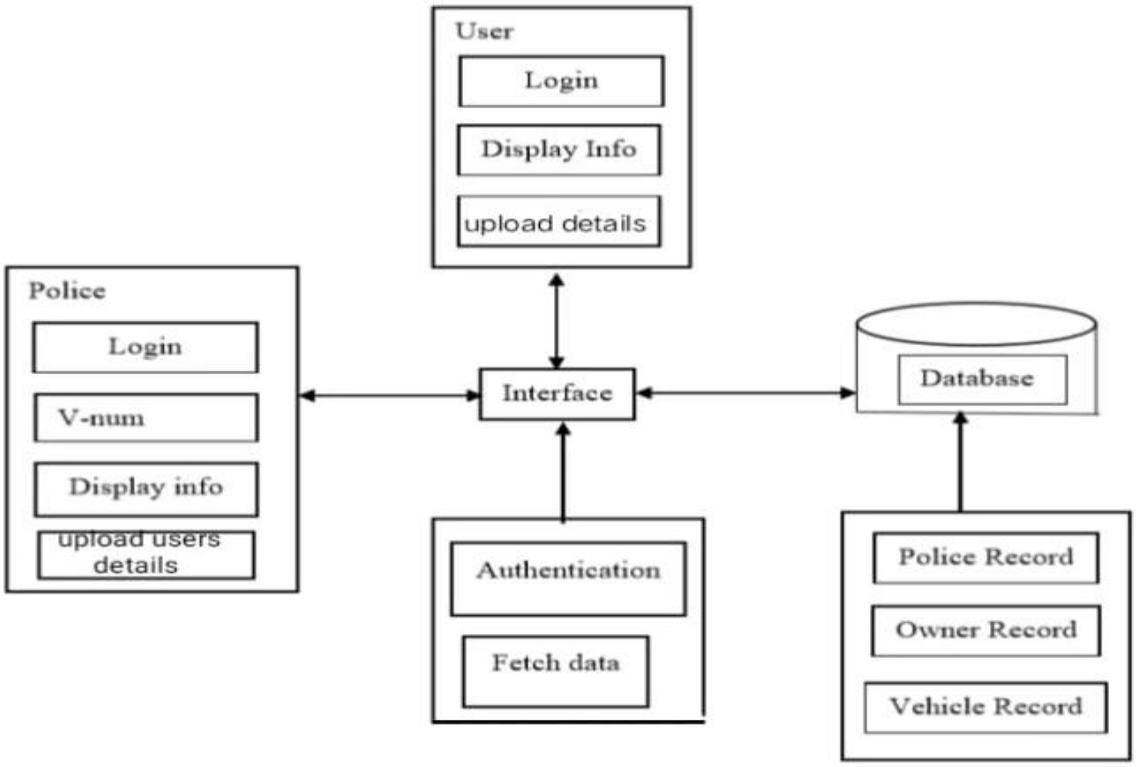

Fig. 3.7 System Architecture

3.3.3 USE CASE DIAGRAMS

USER

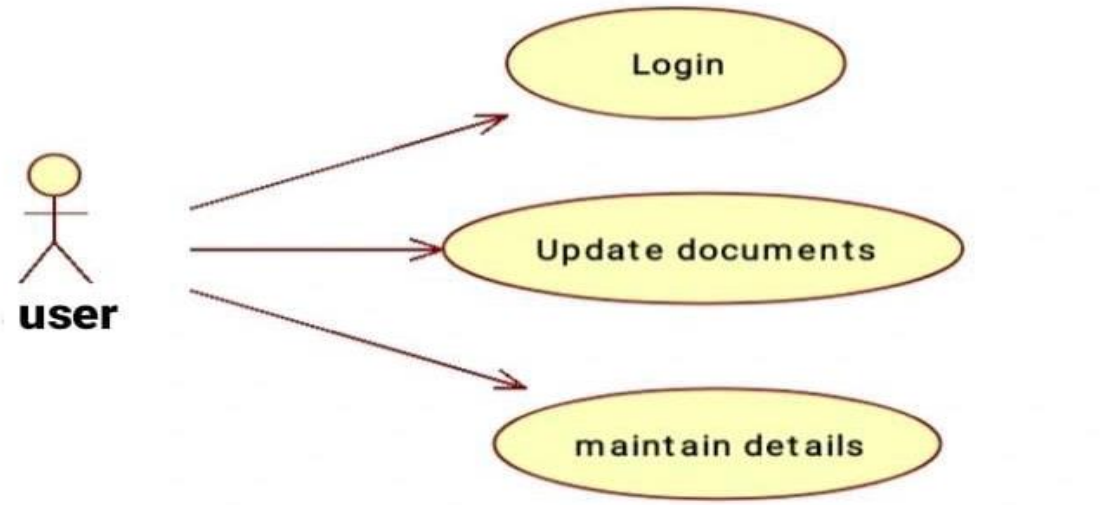

Fig. 3.8 Use case diagram of User

POLICE

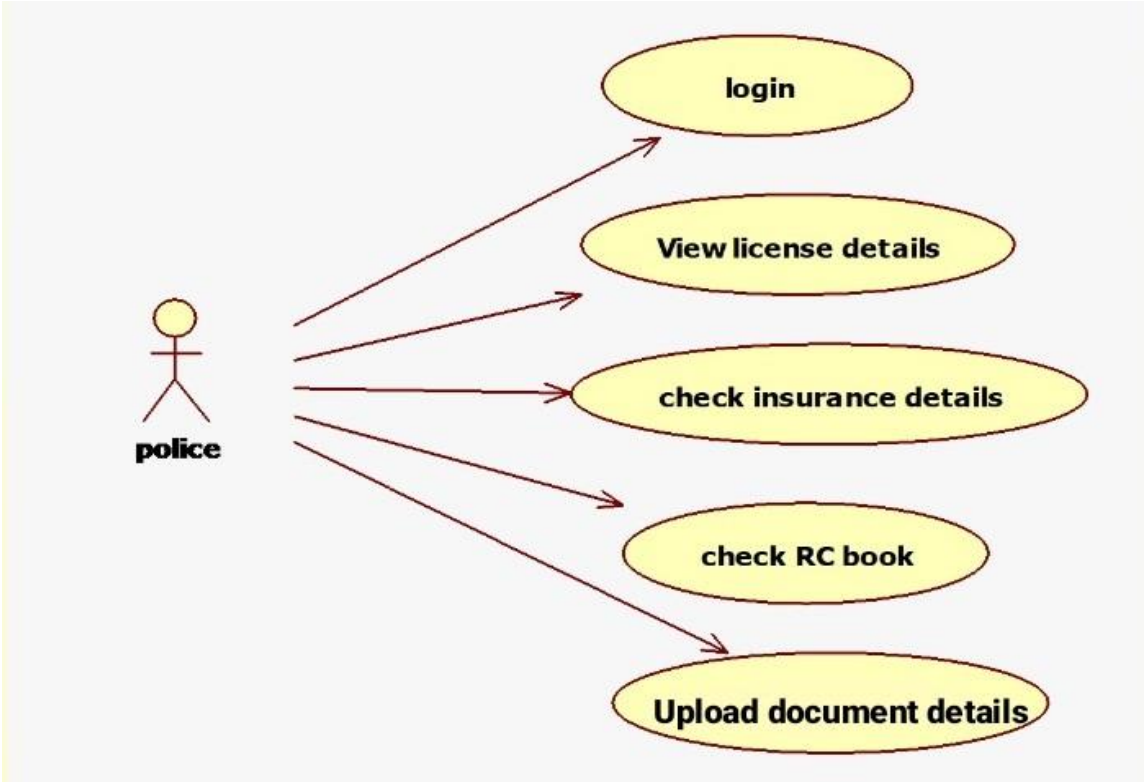

Fig. 3.9 Use case diagram of Police

3.3.4 WORKFLOW DIAGRAM FOR WEB APPLICATION

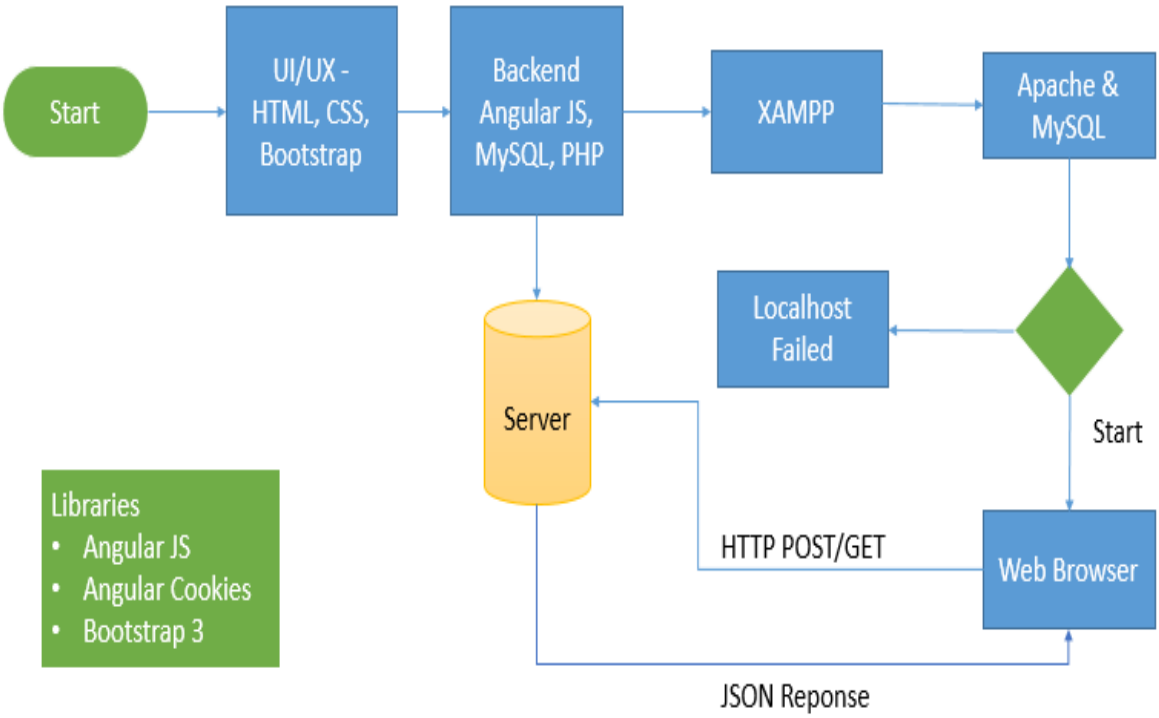

Fig. 3.10 Workflow diagram for web application

CHAPTER 4

EXPERIMENTATION AND RESULTS

4.1 EXPERIMENTAL WORK

The methodology used in designing and developing this Application is through HTML, CSS, Bootstrap and basic PHP. The database being used is SQL for the records and track of the Owner Vehicle Detail.

The Registration processes for each cop are done through a webpage that stores Cop's ID and other such details in a MySQL database table. To maximize security, standard encryptions have been done over the server side. The cop simply needs to login into the website by providing their login credentials.

Once the cop successfully logged in into his account by providing the police id and password, the complete access to the vehicle details database table and website features are provided to the webpage. Therefore, cop can check documents and details by simply providing vehicle number. Similarly, owner details can beaccessible.

The police login page layout consists of following modules:

- Input Vehicle Number.
- Searching for the Record.
- Displaying the Record.
- Upload Document details (if any client or user approaches).
- Verify license, insurance and RC book details

The user login page layout consists of following modules:

- Upload document details.
- View the User personal Record.
- View the User vehicle Record
- Edit the mobile number.
- Login details of User.

This web application has both front-end and back-end. These are the results of implementing front-end using HTML, CSS, and Bootstrap.

4.1.1 IMPLEMENTATION OF HOME PAGE

```
<?php
session_start();
error_reporting(0);
include('includes/config.php');?>
<!doctype html>
<html>
<head>
<title>Digital Vehicle|| Home Page</title>
<script type="application/x-javascript"> addEventListener("load", function() { setTimeout(hideURLbar, 0); }, false); function hideURLbar(){ window.scrollTo(0,1); } </script>
<link href="css/bootstrap.css" rel="stylesheet" type="text/css" media="all">
<link href="css/style.css" rel="stylesheet" type="text/css"/>
<script src="js/jquery-1.11.0.min.js"></script>
<script src="js/bootstrap.js"></script>
<link href='//fonts.googleapis.com/css?family=Open+Sans:300,300italic,400italic,400,600,600italic,700,700italic,800,800italic' rel='stylesheet' type='text/css'>
<link rel="stylesheet" type="text/css" href="css/default.css" />
<link rel="stylesheet" type="text/css" href="css/component.css" />
<script src="js/modernizr.custom.js"></script>
<script type="text/javascript" src="js/move-top.js"></script>
<script type="text/javascript" src="js/easing.js"></script>
<script type="text/javascript">
jQuery(document).ready(function($) {
$(".scroll").click(function(event){
event.preventDefault();
$('html,body').animate({scrollTop:$(this.hash).offset().top},900);});});</script>
</head>
<body>
<?php include_once('includes/header.php');?>
```

```
<div class="banner">
<div class="container">
<script src="js/responsiveslides.min.js"></script>
<script>
$(function () {
$("#slider").responsiveSlides({
auto: true,
nav: true,
speed: 500,
namespace: "callbacks",
pager: true,});}); </script>
<style>
h1 {text-align: center; color:white; font-size:300%;}
p{ padding-right: 15px;padding-left: 15px; margin-right: auto; margin-left: auto;
font-family:'Times New Roman', serif; color : grey; background: #000;  font-size:30px; }
</style><br><br>
<h1><b>DIGITAL VEHICLE - LICENSE, INSURANCE AND RC BOOK TRACING FOR POLICE</b></h1>
<div class="slider">
<div class="callbacks_container">
<ul class="rslides" id="slider">
<div class="welcome">
<div class="container">
<?php
$sql="SELECT * from tblpage where PageType='aboutus'";
$query = $dbh -> prepare($sql);
$query->execute();
$results=$query->fetchAll(PDO::FETCH_OBJ);
$cnt=1;
if($query->rowCount() > 0){
foreach($results as $row){ ?>
<h2><?php  echo htmlentities($row->PageTitle);?></h2>
```

```
<p><?php  echo ($row->PageDescription);?></p><?php $cnt=$cnt+1;}} ?></div></div>
<div class="welcome">
<div class="container"></div></div>
<?php include_once('includes/footer.php');?>
</body>
</html>
```

4.1.2 IMPLEMENTATION OF ABOUT PAGE

```
<?php
session_start();
error_reporting(0);
include('includes/config.php');?>
<!doctype html>
<html>
<head>
<title>Digital Vehicle|| About Us Page</title>
<script type="application/x-javascript"> addEventListener("load", function() { setTimeout(hideURLbar, 0); }, false); function hideURLbar(){ window.scrollTo(0,1); } </script>
<link href="css/bootstrap.css" rel="stylesheet" type="text/css" media="all">
<link href="css/style.css" rel="stylesheet" type="text/css"/>
<script src="js/jquery-1.11.0.min.js"></script>
<script src="js/bootstrap.js"></script>
<link href='//fonts.googleapis.com/css?family=Open+Sans:300,300italic,400italic,400,600,600italic,700,700italic,800,800italic' rel='stylesheet' type='text/css'>
<script type="text/javascript" src="js/move-top.js"></script>
<script type="text/javascript" src="js/easing.js"></script>
<script type="text/javascript">
jQuery(document).ready(function($) {
$(".scroll").click(function(event){
event.preventDefault();
$('html,body').animate({scrollTop:$(this.hash).offset().top},900);});});
```

```
</script>
</head>
<style>
p{ padding-right: 15px; padding-left: 15px; margin-right: auto; margin-left: auto;
font-family:'Times New Roman', serif; color : grey; background: #ffffff; font-size:30px;}
h2{text-align : center; color : white; font-size:50px; }</style>
<body>
<?php include_once('includes/header.php');?>
<div class="banner banner5">
<div class="container"><br><br><br>
<h2><b>About</b></h2><br></div></div>
<div class="about">
<div class="container">
<div class="about-info-grids">
<div class="col-md-5 abt-pic">
<img src="img/about_logo.png" class="img-responsive" alt=""/></div>
<div class="text">
<p>
Digital vehicle is based on Web Application. Nowadays there is rapid increase in usage of vehicles . But most of the public are not following any Rules and Regulation. So this website is used to store public vehicle details in database. Police can view and check that details like (License, Insurance and RC Book).Once police enters public details those details are updated to license. Police can check Insurance Expiry date and RC book validation details.
</p></div>
<div class="clearfix"> </div></div></div></div></div>
</body>
</html>
```

4.1.3 IMPLEMENTATION OF CONTACT PAGE

```
<?php
session_start();
error_reporting(0);
include('includes/config.php');?>
```

```
<!doctype html>
<html>
<head>
<title>Digital Vehicle || Contact Us Page</title>
<script type="application/x-javascript"> addEventListener("load", function() { setTimeout(hideURLbar, 0); }, false); function hideURLbar(){ window.scrollTo(0,1); }</script>
<link href="css/bootstrap.css" rel="stylesheet" type="text/css" media="all">
<link href="css/style.css" rel="stylesheet" type="text/css"/>
<script src="js/jquery-1.11.0.min.js"></script>
<script src="js/bootstrap.js"></script>
<link href='//fonts.googleapis.com/css?family=Open+Sans:300,300italic,400italic,400,600,600italic,700,700italic,800,800italic' rel='stylesheet' type='text/css'>
<script type="text/javascript" src="js/move-top.js"></script>
<script type="text/javascript" src="js/easing.js"></script>
<script type="text/javascript">
jQuery(document).ready(function($) {
$(".scroll").click(function(event){
event.preventDefault();
$('html,body').animate({scrollTop:$(this.hash).offset().top},900);});});</script>
</head>
<style>
p{padding-right: 15px; padding-left: 15px; margin-right: auto; margin-left: auto;
font-family:'Times New Roman', serif; color : grey; background: #ffffff; font-size:30px;}
h2{text-align : center; color : white; font-size:50px;}
h3{background: #ffffff; font-family:'Times New Roman', serif; color : grey;}
</style>
<body>
<?php include_once('includes/header.php');?>
<div class="banner banner5">
<div class="container"><br><br><br>
<h2><b>Contact</b></h2></div></div>
```

<h1 style="color:white" class="c-text">Feel Free to contact with us!!!</h1>

<h3>Phones :</h3>
9876543210

<h3>E-mail :</h3>
digitalvehicle@gmail.com

</body>
</html>

4.1.4 IMPLEMENTATION OF FAQ PAGE

<?php
session_start();
error_reporting(0);
include('includes/config.php');?>
<!doctype html>
<html>
<head>
<title>Digital Vehicle || FAQ Page</title>
<script type="application/x-javascript"> addEventListener("load", function() { setTimeout(hideURLbar, 0); }, false); function hideURLbar(){ window.scrollTo(0,1); }</script>
<link href="css/bootstrap.css" rel="stylesheet" type="text/css" media="all">
<link href="css/style.css" rel="stylesheet" type="text/css"/>
<script src="js/jquery-1.11.0.min.js"></script>
<script src="js/bootstrap.js"></script>
<link
href='//fonts.googleapis.com/css?family=Open+Sans:300,300italic,400italic,400,600,600italic,700,700italic,800,800italic' rel='stylesheet' type='text/css'>

```
<script type="text/javascript" src="js/move-top.js"></script>
<script type="text/javascript" src="js/easing.js"></script>
<script type="text/javascript">
jQuery(document).ready(function($) {
$(".scroll").click(function(event){
event.preventDefault();
$('html,body').animate({scrollTop:$(this.hash).offset().top},900);});});</script>
</head>
<style>
p{padding-right: 15px; padding-left: 15px; margin-right: auto; margin-left: auto;
font-family:'Times New Roman', serif; color : grey; background: #ffffff; font-size:30px;}
h2{text-align : center; color : white; font-size:50px;}
h3{font-family:'Times New Roman', serif; font-size:25px;}
</style>
<body>
<?php include_once('includes/header.php');?>
<div class="banner banner5">
<div class="container"><br><br><br>
<h2><b>FAQ</b></h2></div></div>
<div class="contact">
<div class="container">
<p>Find answers to your Queries!!!<br><br>
<b>Q. What document details can we upload here?</b><br>
Insurance, License and RC Book<br>
<b>Q. How can we login into user account?</b><br>
Users can login using their email id<br>
<b>Q. Can a user login directly?</b><br>
Users need to register first then he/she can login user credentials<br>
<b>Q. Can we change the password?</b><br>
Users can change passoword <br>
<b>Q. Can police check the registered users?</b><br>
Yes the database updates automatically<br>
```

Q. Can User check his/her login activities?
Users can check using access log
</p>

</body>
</html>

4.1.5 IMPLEMENTATION OF POLICE LOGIN PAGE

```
<?php
session_start();
include('includes/config.php');
if(isset($_POST['login'])){
$username=$_POST['username'];
$password=$_POST['password'];
$stmt=$mysqli->prepare("SELECT username,email,password,id FROM admin WHERE (userName=?|| email=?) and password=? ");
$stmt->bind_param('sss',$username,$username,$password);
$stmt->execute();
$stmt -> bind_result($username,$username,$password,$id);
$rs=$stmt->fetch();
$_SESSION['id']=$id;
$uip=$_SERVER['REMOTE_ADDR'];
$ldate=date('d/m/Y h:i:s', time());
if($rs){
// $insert="INSERT into admin(adminid,ip)VALUES(?,?)";
// $stmtins = $mysqli->prepare($insert);
// $stmtins->bind_param('sH',$id,$uip);
//$res=$stmtins->execute();
header("location:admin-profile.php");}
else{
echo "<script>alert('Invalid Username/Email or password');</script>";}}?>
<!doctype html>
<html lang="en" class="no-js">
<head>
```

```
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1, minimum-scale=1, maximum-scale=1">
<meta name="description" content="">
<meta name="author" content="">
<title>Police login</title>
<link rel="stylesheet" href="css/font-awesome.min.css">
<link rel="stylesheet" href="css/bootstrap.min.css">
<link rel="stylesheet" href="css/dataTables.bootstrap.min.css">
<link rel="stylesheet" href="css/bootstrap-social.css">
<link rel="stylesheet" href="css/bootstrap-select.css">
<link rel="stylesheet" href="css/fileinput.min.css">
<link rel="stylesheet" href="css/awesome-bootstrap-checkbox.css">
<link rel="stylesheet" href="css/style.css">
</head>
<body>
<div class="login-page bk-img" style="background-image: url(img/dv1.jpg);">
<div class="form-content">
<div class="container">
<div class="row">
<div class="col-md-6 col-md-offset-3">
<h1 class="text-center text-bold text-light mt-4x">DIGITAL VEHICLE - Insurance, License, RC Book Tracing for Police</h1>
<div class="well row pt-2x pb-3x bk-light">
<div class="col-md-8 col-md-offset-2">
<form action="" class="mt" method="post">
<label for="" class="text-uppercase text-sm">Your Username or Email</label>
<input type="text" placeholder="Username" name="username" class="form-control mb">
<label for="" class="text-uppercase text-sm">Password</label>
<input type="password" placeholder="Password" name="password" class="form-control mb">
<input type="submit" name="login" class="btn btn-primary btn-block" value="login" >
```

```
</form></div></div></div></div></div></div></div>
<script src="js/jquery.min.js"></script>
<script src="js/bootstrap-select.min.js"></script>
<script src="js/bootstrap.min.js"></script>
<script src="js/jquery.dataTables.min.js"></script>
<script src="js/dataTables.bootstrap.min.js"></script>
<script src="js/Chart.min.js"></script>
<script src="js/fileinput.js"></script>
<script src="js/chartData.js"></script>
<script src="js/main.js"></script>
</body>
<div class="foot"><footer>
<p> Brought To You By <a href="https://code-projects.org/">Code-Projects</p>
</footer> </div>
<style> .foot{text-align: center; border: 1px solid black;}</style>
</html>
```

4.1.6 IMPLEMENTATION OF USER REGISTRATION PAGE

```
<?php
session_start();
include('includes/config.php');
if(isset($_POST['submit'])){
$regno=$_POST['regno'];
$fname=$_POST['fname'];
$mname=$_POST['mname'];
$lname=$_POST['lname'];
$gender=$_POST['gender'];
$contactno=$_POST['contact'];
$emailid=$_POST['email'];
$password=$_POST['password'];
$query="insert into  userRegistration( regNo, firstName, middleName, lastName, gender, contactNo, email, password) values(?,?,?,?,?,?,?,?)";
$stmt = $mysqli->prepare($query);
```

```
$rc=$stmt->bind_param
('sssssiss',$regno,$fname,$mname,$lname,$gender,$contactno,$emailid,$password);
$stmt->execute();
echo"<script>alert('User Succssfully registered');</script>";}?>
<!doctype html>
<html lang="en" class="no-js">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1, minimum-scale=1,
maximum-scale=1">
<meta name="description" content="">
<meta name="author" content="">
<meta name="theme-color" content="#3e454c">
<title>User Registration</title>
<link rel="stylesheet" href="css/font-awesome.min.css">
<link rel="stylesheet" href="css/bootstrap.min.css">
<link rel="stylesheet" href="css/dataTables.bootstrap.min.css">>
<link rel="stylesheet" href="css/bootstrap-social.css">
<link rel="stylesheet" href="css/bootstrap-select.css">
<link rel="stylesheet" href="css/fileinput.min.css">
<link rel="stylesheet" href="css/awesome-bootstrap-checkbox.css">
<link rel="stylesheet" href="css/style.css">
<script type="text/javascript" src="js/jquery-1.11.3-jquery.min.js"></script>
<script type="text/javascript" src="js/validation.min.js"></script>
<script type="text/javascript" src="http://code.jquery.com/jquery.min.js"></script>
<script type="text/javascript">
function valid(){
if(document.registration.password.value!= document.registration.cpassword.value){
alert("Password and Re-Type Password Field do not match  !!");
document.registration.cpassword.focus();
return false;}
```

```
return true;}
</script></head>
<style>
body{background-image: url('img/dv1.jpg'); background-repeat: no-repeat;
background-attachment: fixed; background-size: cover;}
h1 {text-align: center; color:white; font-size:300%;}
h2 {text-align: center;}</style>
<body>
<?php include('includes/header.php');?>
<div class="ts-main-content">
<div class="content-wrapper">
<div class="container-fluid">
<div class="row">
<h1 class="text-center text-bold text-light mt-4x">DIGITAL VEHICLE - Insurance, License, RC Book Tracing for Police</h1>
<h2 style="color:white" class="page-title"><b>User Registration </b></h2>
<div class="row">
<div class="col-md-12">
<div class="panel panel-primary">
<div class="panel-heading">Fill all Info</div>
<div class="panel-body">
<form method="post" action="" name="registration" class="form-horizontal" onSubmit="return valid();">
<div class="form-group">
<label class="col-sm-2 control-label"> Registration No : </label>
<div class="col-sm-8">
<input type="text" name="regno" id="regno" class="form-control" required="required" ></div></div>
<div class="form-group">
<label class="col-sm-2 control-label">First Name : </label>
<div class="col-sm-8">
```

<input type="text" name="fname" id="fname" class="form-control" required="required" >

<label class="col-sm-2 control-label">Middle Name : </label>

<input type="text" name="mname" id="mname" class="form-control">

<label class="col-sm-2 control-label">Last Name : </label>

<input type="text" name="lname" id="lname" class="form-control" required="required">

<label class="col-sm-2 control-label">Gender : </label>

<select name="gender" class="form-control" required="required">
<option value="">Select Gender</option>
<option value="male">Male</option>
<option value="female">Female</option>
<option value="others">Others</option>
</select>

<label class="col-sm-2 control-label">Contact No : </label>

<input type="text" name="contact" id="contact" class="form-control" required="required">

<label class="col-sm-2 control-label">Email id: </label>

<input type="email" name="email" id="email" class="form-control" required="required">

<label class="col-sm-2 control-label">Password: </label>

```
<div class="col-sm-8">
<input type="password" name="password" id="password" class="form-control" required="required"></div></div>
<div class="form-group">
<label class="col-sm-2 control-label">Confirm Password : </label>
<div class="col-sm-8">
<input type="password" name="cpassword" id="cpassword" class="form-control" required="required"></div></div>
<div class="col-sm-6 col-sm-offset-4">
<button class="btn btn-default" type="submit" >Cancel</button>
<input type="submit" name="submit" Value="Register" class="btn btn-primary">
</div>
</form></div></div></div></div></div></div></div></div></div></div>
<script src="js/jquery.min.js"></script>
<script src="js/bootstrap-select.min.js"></script>
<script src="js/bootstrap.min.js"></script>
<script src="js/jquery.dataTables.min.js"></script>
<script src="js/dataTables.bootstrap.min.js"></script>
<script src="js/Chart.min.js"></script>
<script src="js/fileinput.js"></script>
<script src="js/chartData.js"></script>
<script src="js/main.js"></script>
</body>
<script>
function checkAvailability() {
$("#loaderIcon").show();
jQuery.ajax({
url: "check_availability.php",
data:'emailid='+$("#email").val(),
type: "POST",
success:function(data){
$("#user-availability-status").html(data);
```

```
$("#loaderIcon").hide();},
error:function (){
event.preventDefault();
alert('error');}});}
</script>
</html>
```

4.1.7 IMPLEMENTATION OF USER LOGIN PAGE

```
<?php
session_start();
include('includes/config.php');
if(isset($_POST['login'])){
$email=$_POST['email'];
$password=$_POST['password'];
$stmt=$mysqli->prepare("SELECT email,password,id FROM userregistration WHERE email=?
and password=? ");
$stmt->bind_param('ss',$email,$password);
$stmt->execute();
$stmt -> bind_result($email,$password,$id);
$rs=$stmt->fetch();
$stmt->close();
$_SESSION['id']=$id;
$_SESSION['login']=$email;
$uip=$_SERVER['REMOTE_ADDR'];
$ldate=date('d/m/Y h:i:s', time());
if($rs){
$uid=$_SESSION['id'];
$uemail=$_SESSION['login'];
$ip=$_SERVER['REMOTE_ADDR'];
$geopluginURL='http://www.geoplugin.net/php.gp?ip='.$ip;
$addrDetailsArr = unserialize(file_get_contents($geopluginURL));
$city = $addrDetailsArr['geoplugin_city'];
$country = $addrDetailsArr['geoplugin_countryName'];
```

```
$log="insert into userLog(userId,userEmail,userIp,city,country) values('$uid','$uemail','$ip','$city','$country')";
$mysqli->query($log);
if($log){header("location:dashboard.php");}}
else{ echo "<script>alert('Invalid Username/Email or password');</script>";}}?>
<!doctype html>
<html lang="en" class="no-js">
<head>
<meta charset="UTF-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1, minimum-scale=1, maximum-scale=1">
<meta name="description" content="">
<meta name="author" content="">
<meta name="theme-color" content="#3e454c">
<title>DIGITAL VEHICLE</title>
<link rel="stylesheet" href="css/font-awesome.min.css">
<link rel="stylesheet" href="css/bootstrap.min.css">
<link rel="stylesheet" href="css/dataTables.bootstrap.min.css">>
<link rel="stylesheet" href="css/bootstrap-social.css">
<link rel="stylesheet" href="css/bootstrap-select.css">
<link rel="stylesheet" href="css/fileinput.min.css">
<link rel="stylesheet" href="css/awesome-bootstrap-checkbox.css">
<link rel="stylesheet" href="css/style.css">
<script type="text/javascript" src="js/jquery-1.11.3-jquery.min.js"></script>
<script type="text/javascript" src="js/validation.min.js"></script>
<script type="text/javascript" src="http://code.jquery.com/jquery.min.js"></script>
<script type="text/javascript">
function valid(){
if(document.registration.password.value!= document.registration.cpassword.value){
alert("Password and Re-Type Password Field do not match  !!");
document.registration.cpassword.focus();
```

```
return false;}
return true;}
</script>
</head>
<style> h2 {text-align: center; style="color:blue";}</style>
<body>
<div class="login-page bk-img" style="background-image: url(img/dv1.jpg)">
<div class="ts-main-content">
<div class="content-wrapper">
<div class="container-fluid">
<div class="row">
<h1 class="text-center text-bold text-light mt-4x">DIGITAL VEHICLE - Insurance, License, RC Book Tracing for Police</h1>
<h2 style="color:white"  class="page-title"><b>User Login </b></h2>
<div class="row">
<div class="col-md-6 col-md-offset-3">
<div class="well row pt-2x pb-3x bk-light">
<div class="col-md-8 col-md-offset-2">
<form action="" class="mt" method="post">
<label for="" class="text-uppercase text-sm">Email</label>
<input type="text" placeholder="Email" name="email" class="form-control mb">
<label for="" class="text-uppercase text-sm">Password</label>
<input type="password" placeholder="Password" name="password" class="form-control mb">
<input type="submit" name="login" class="btn btn-primary btn-block" value="login" >
</form></div></div>
<div class="text-center text-light"><a href="forgot-password.php" class="text-light">Forgot password?</a>
</div></div></div></div></div></div></div></div> </div></div></div>
<script src="js/jquery.min.js"></script>
<script src="js/bootstrap-select.min.js"></script>
<script src="js/bootstrap.min.js"></script>
<script src="js/jquery.dataTables.min.js"></script>
```

<script src="js/dataTables.bootstrap.min.js">
</script><script src="js/Chart.min.js"></script>
<script src="js/fileinput.js"></script>
<script src="js/chartData.js"></script>
<script src="js/main.js"></script>
</body>
</html>

4.2. RESULTS AND DISCUSSION

Home Page:

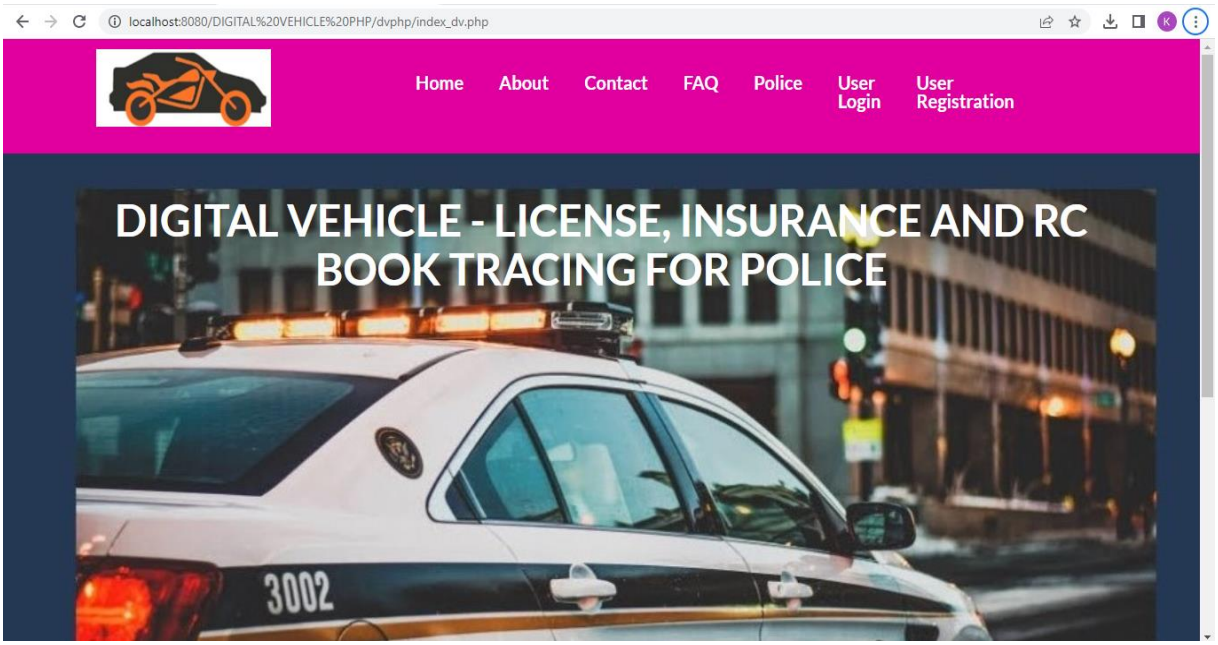

Fig. 4.1 Home Page

This website home page contains various hyperlinks for About, Contact, FAQ (Frequently Asked Questions), Police login and User Login.

Once you click on the 'About' hyper link it directs to another page in the same website describing about what actually Digital Vehicle – License, Insurance, RC Book Tracing for Police website is and what are the functionalities of this website.

About Page:

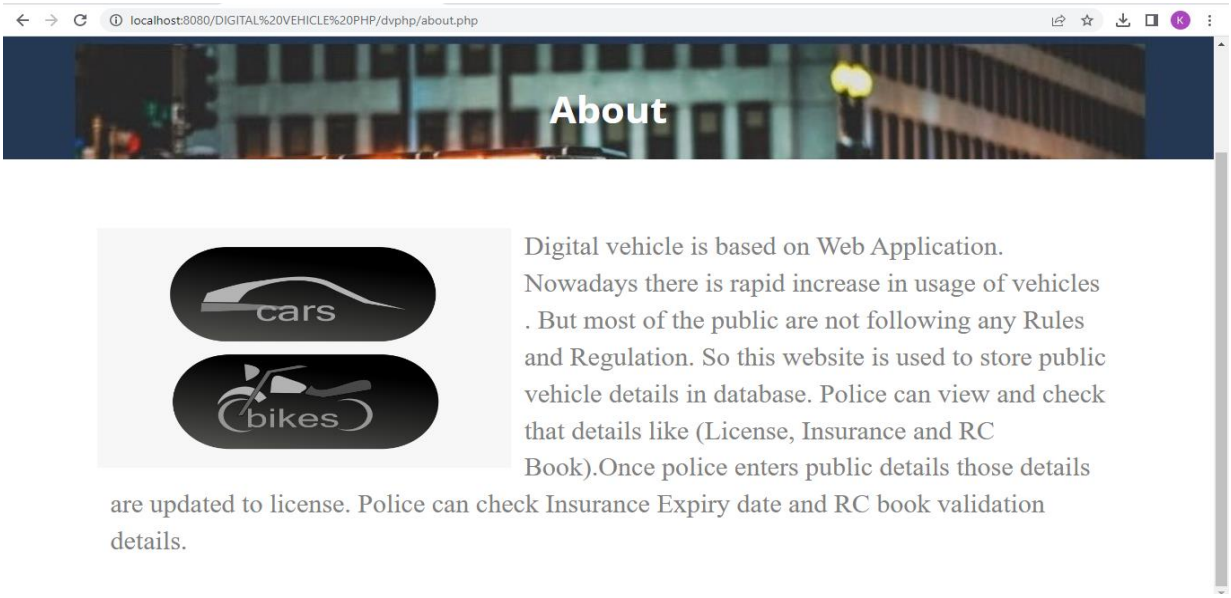

Fig. 4.2 About Page

Conatct Page:

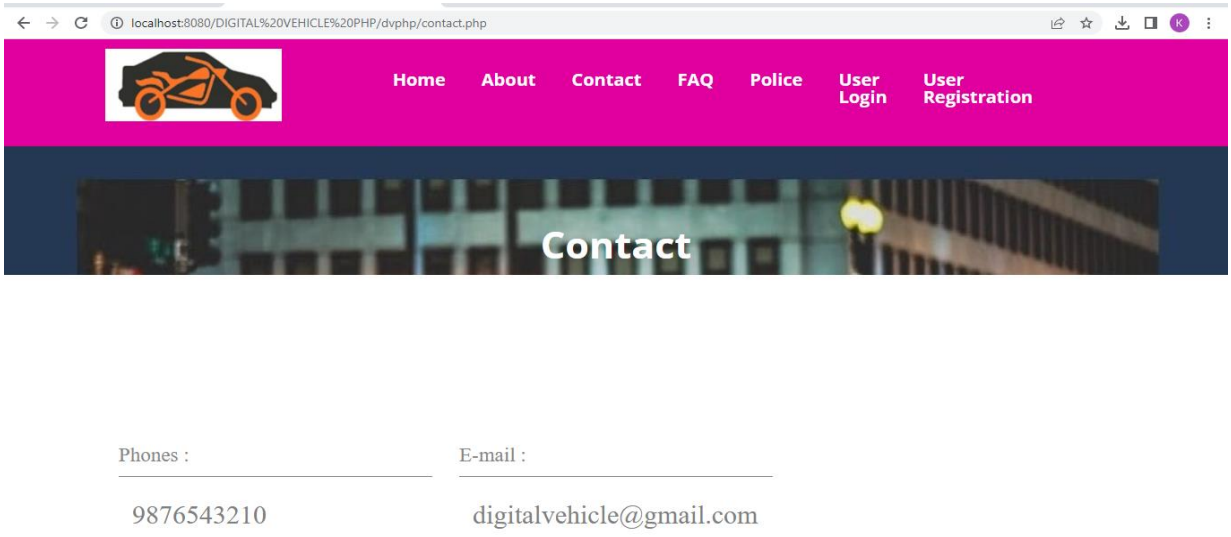

Fig. 4.3 Contact Page

FAQ Page:

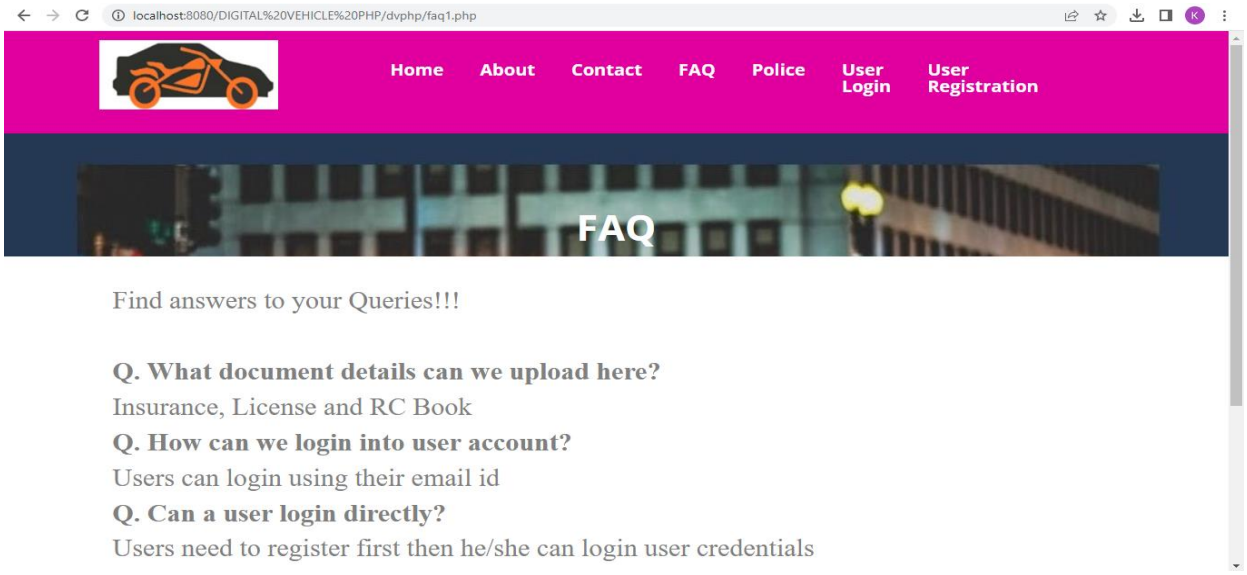

Fig. 4.4 FAQ Page

Police Login Page:

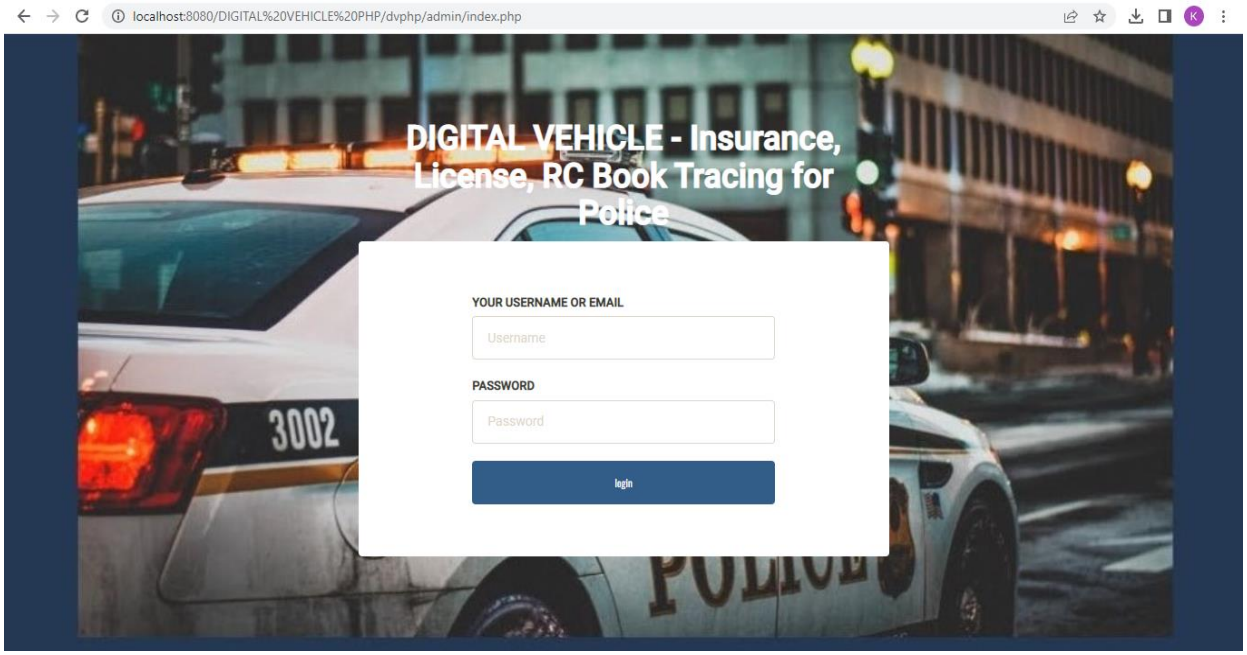

Fig. 4.5 Police Login Page

After successful login police can view his details and can change the password. The dashboard contains the actions that police can perform.

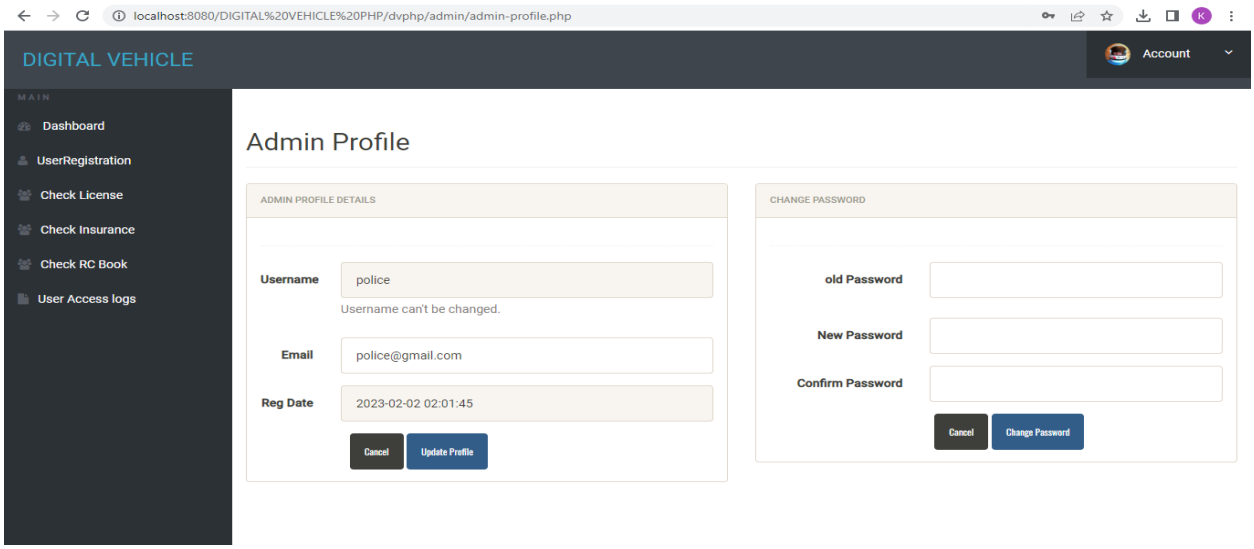

Fig. 4.6 List of options for a Police

Police can view registered vehicle data and registered users data.

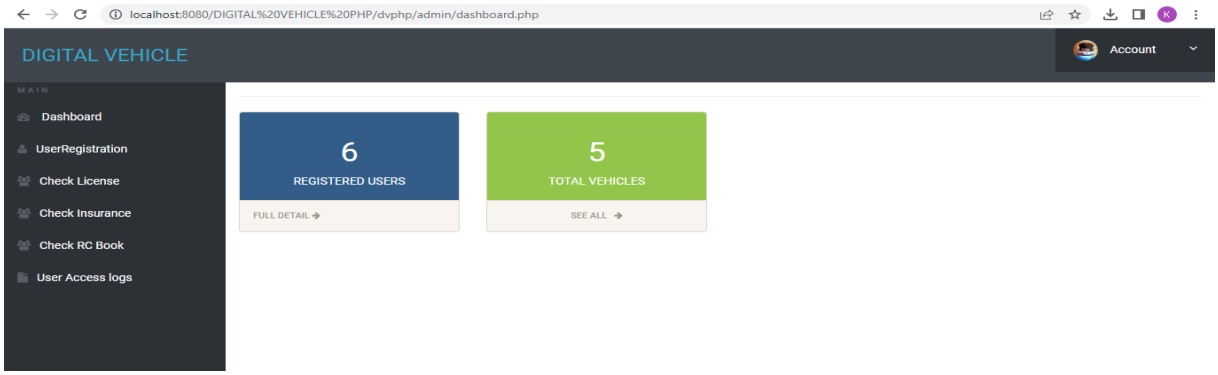

Fig. 4.7 Dashboard of police login page

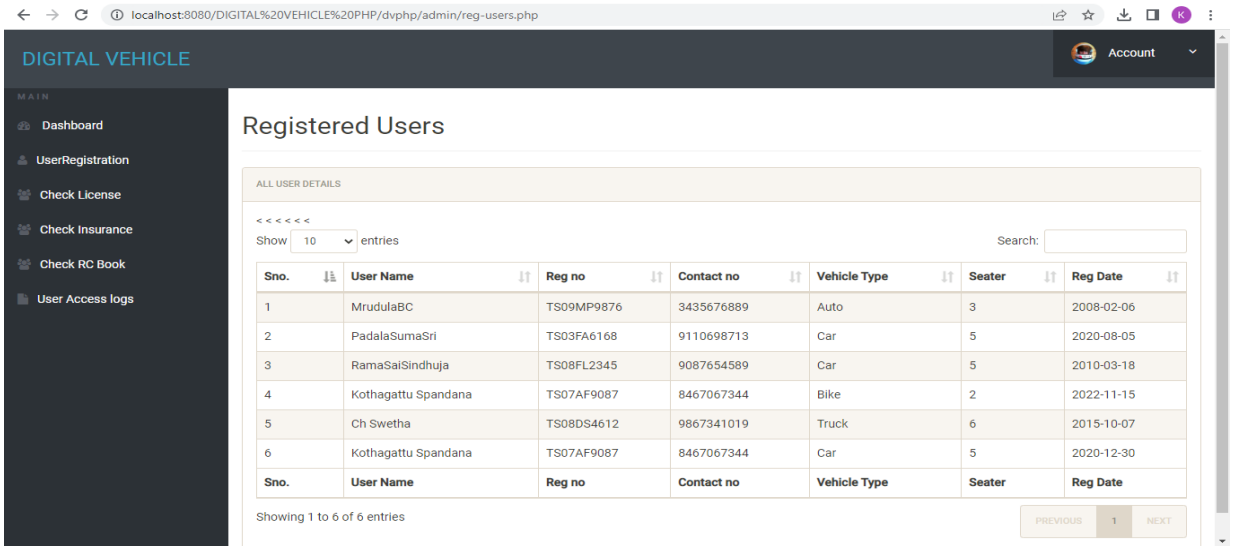

Fig. 4.8 Registered Users details

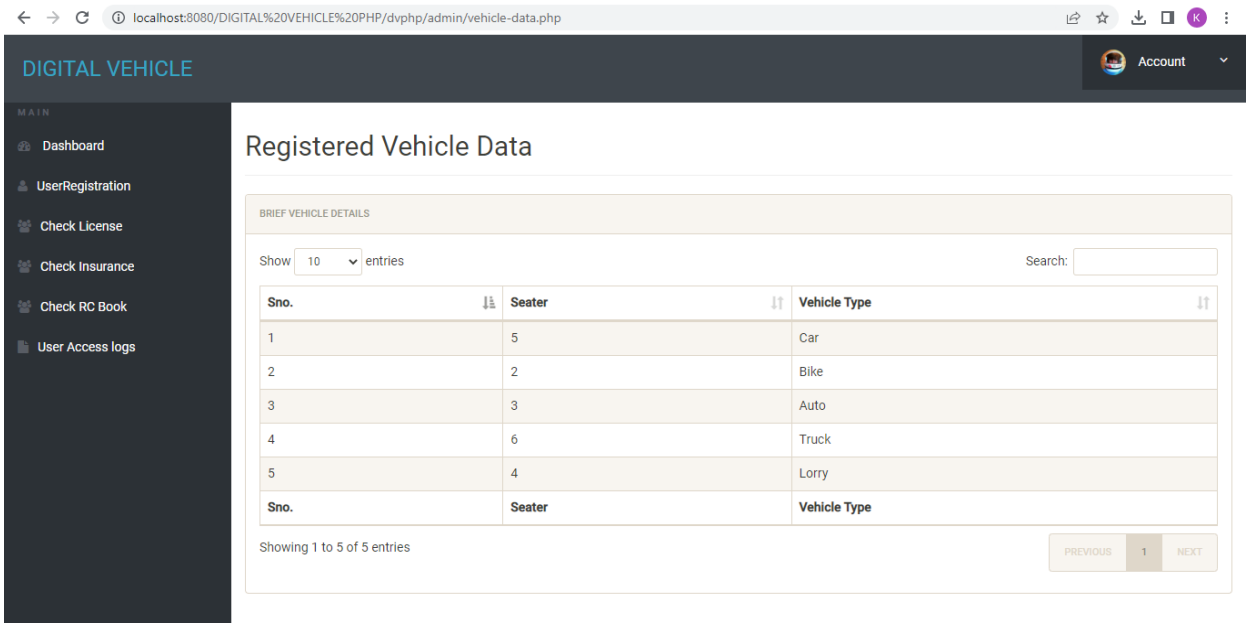

Fig. 4.9 Registered Vehicles details

Police can also enter the vehicle owner's details as a part of vehicle registration if any user approaches him.

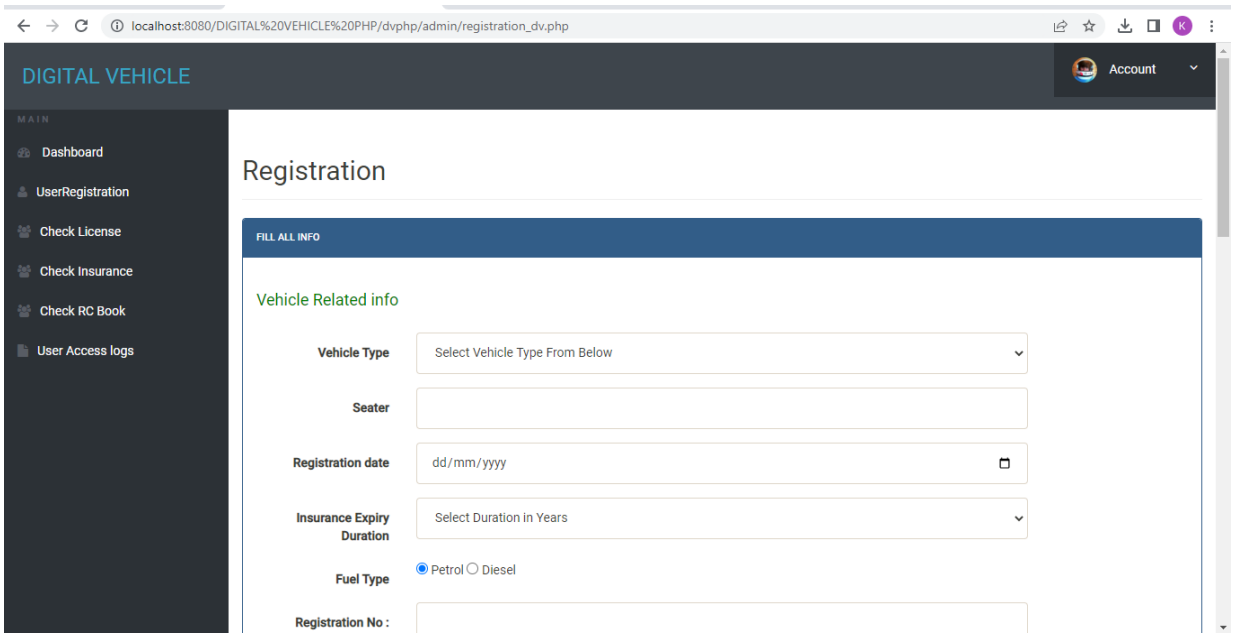

Fig. 4.10 Vehicle Registration Page

Police can check owner's License, Insurance, RC Book individually just by searching name or vehicle number in the search bar.

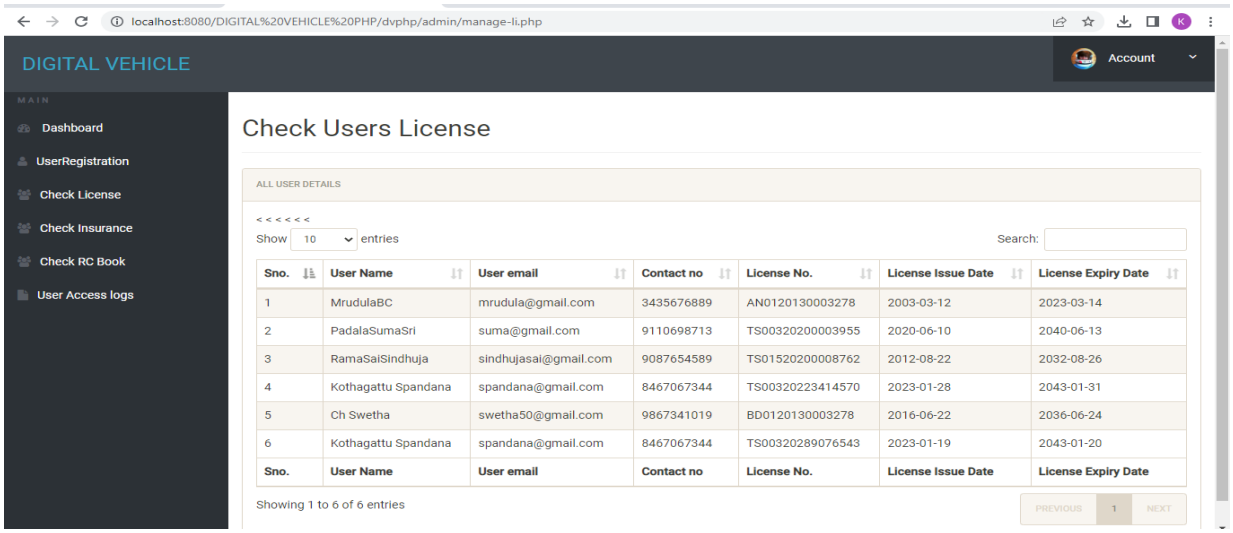

Fig. 4.11 Users License Details

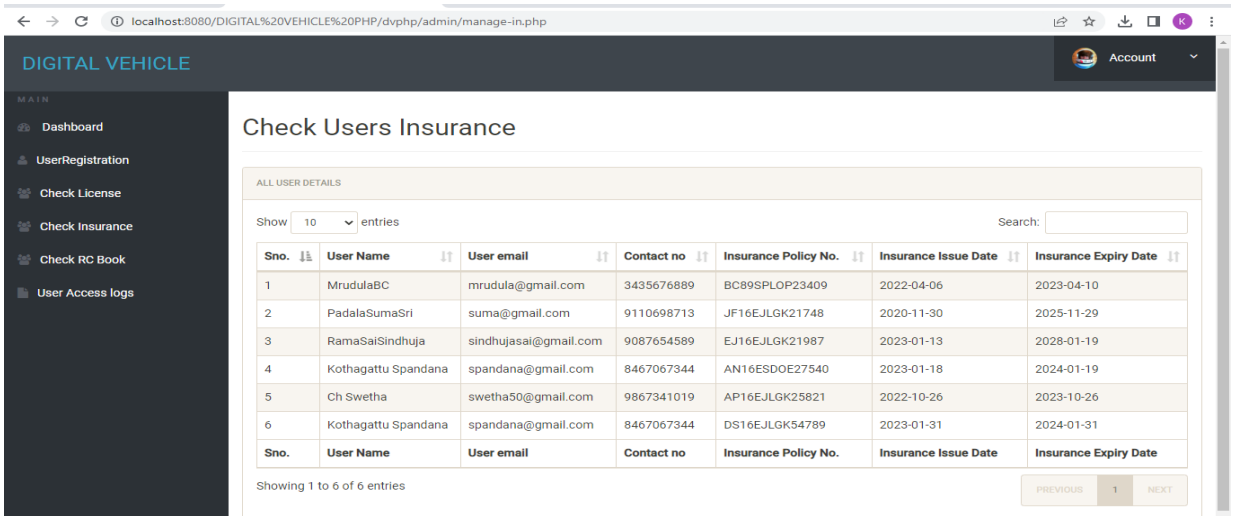

Fig. 4.12 Users Insurance Details

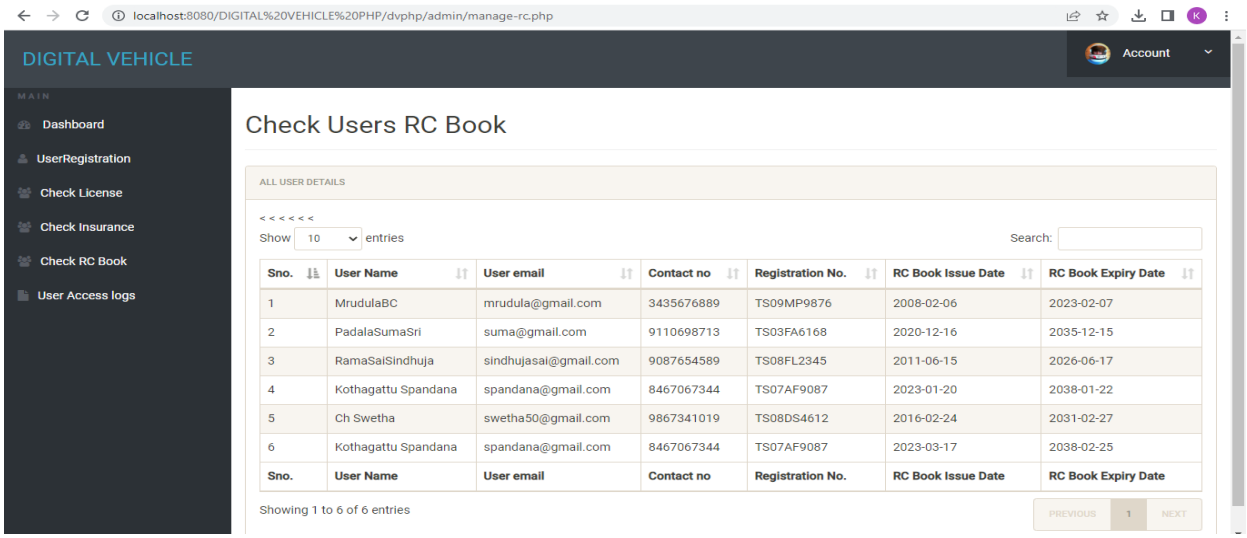

Fig. 4.13 Users RC Book Details

Police can also check the login activities of users along with the login times.

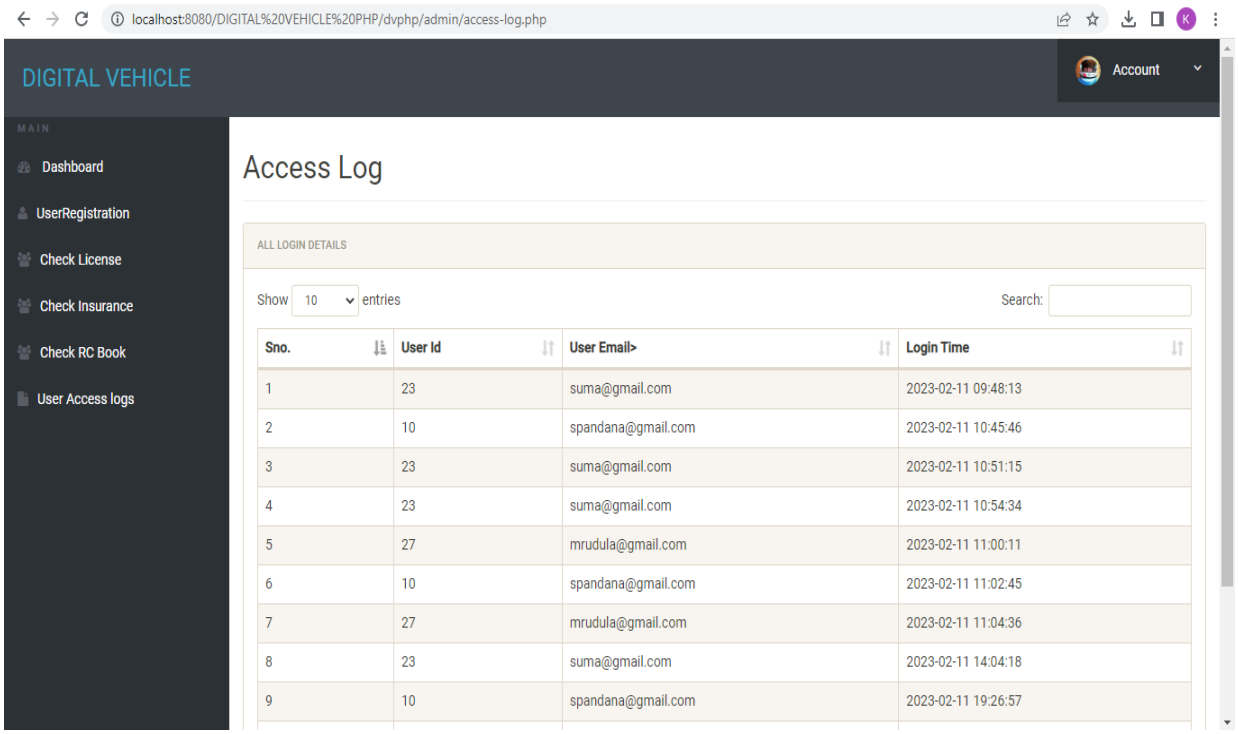

Fig. 4.14 Users Access Details

Police can also check his profile in the ‘my account’ page and can logout from the page.

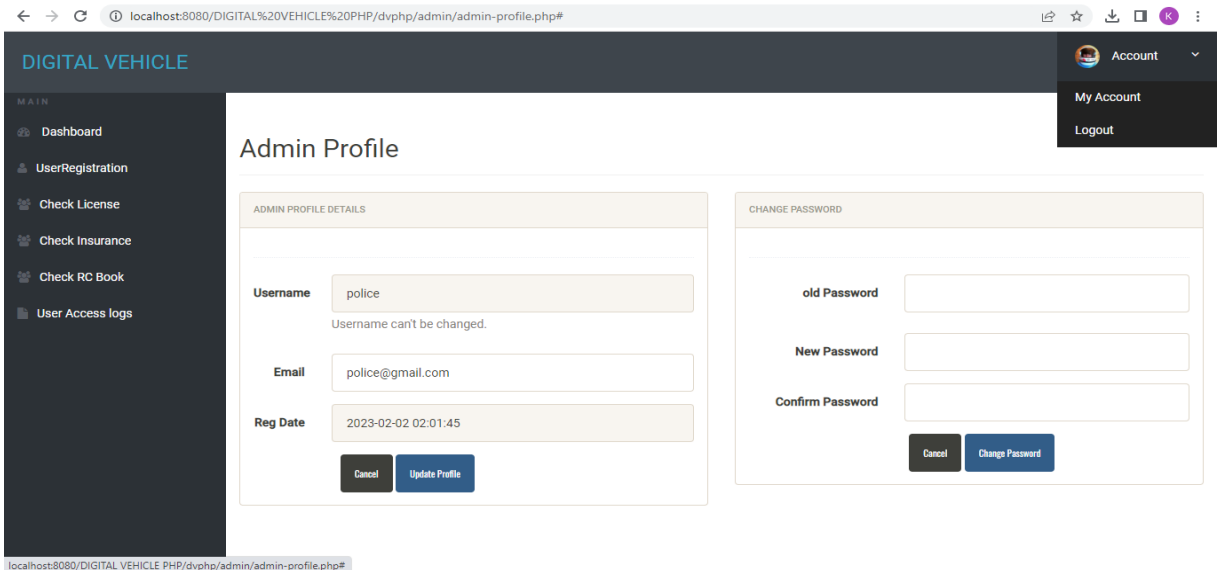

Fig. 4.15 Police account details and Logout option

User Registration Page:

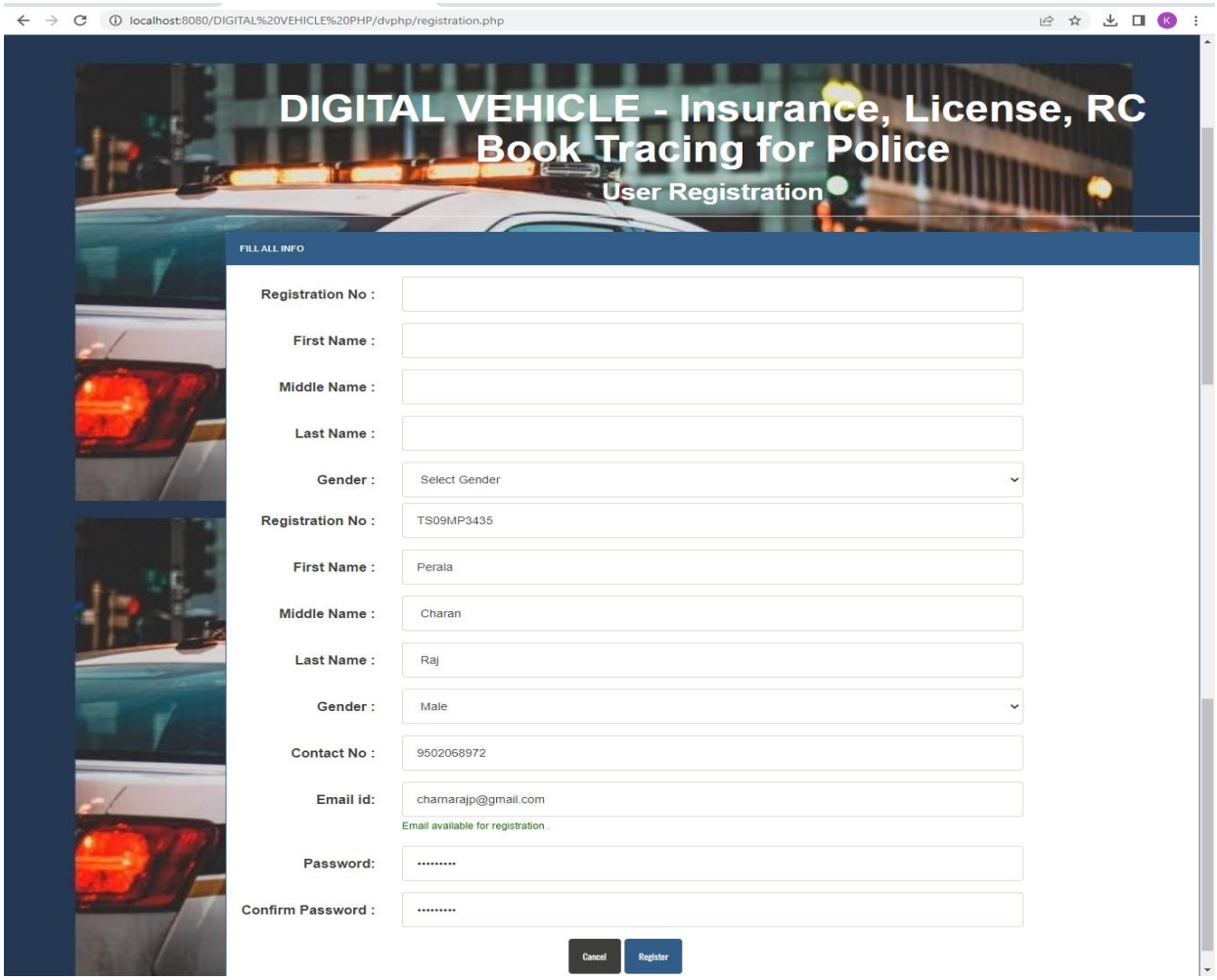

Fig. 4.16 Users Registration page

After successful registration users can see the pop up message.

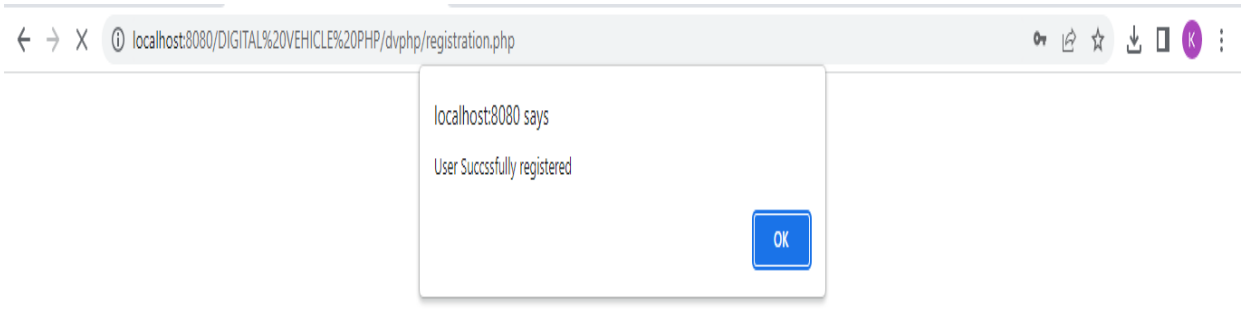

Fig. 4.17 Registration successful message

User Login Page:

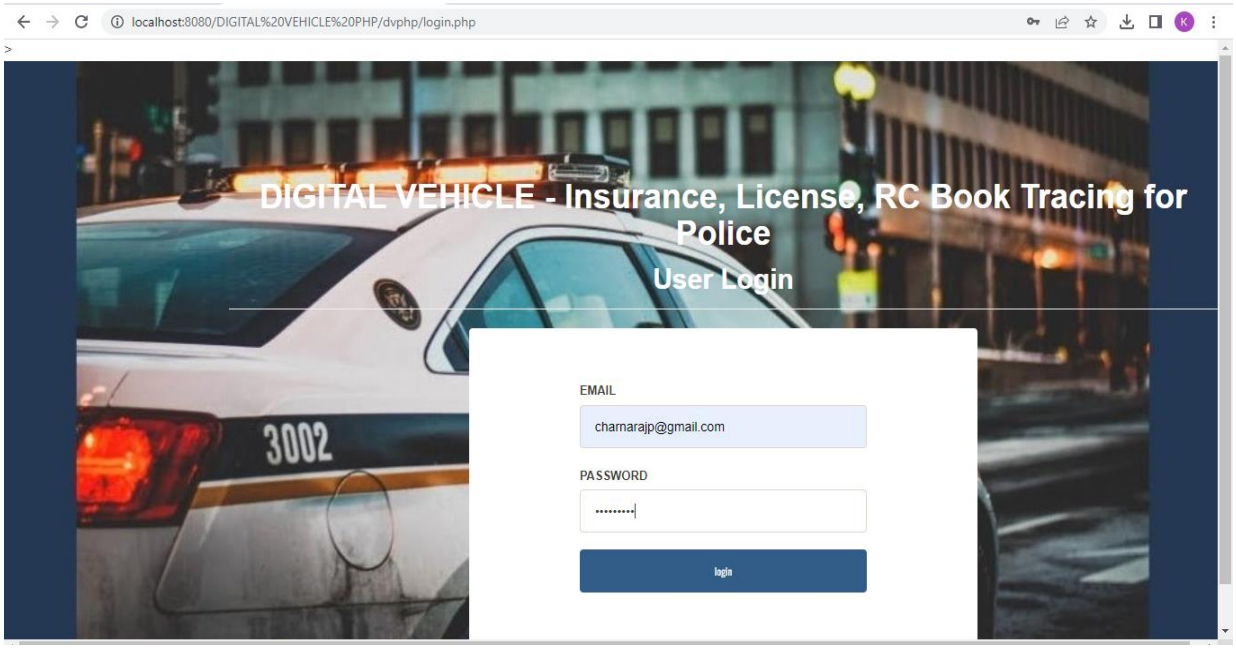

Fig. 4.18 User Login Page

After successful login users can see their personal data and vehicle data and can also change their password.

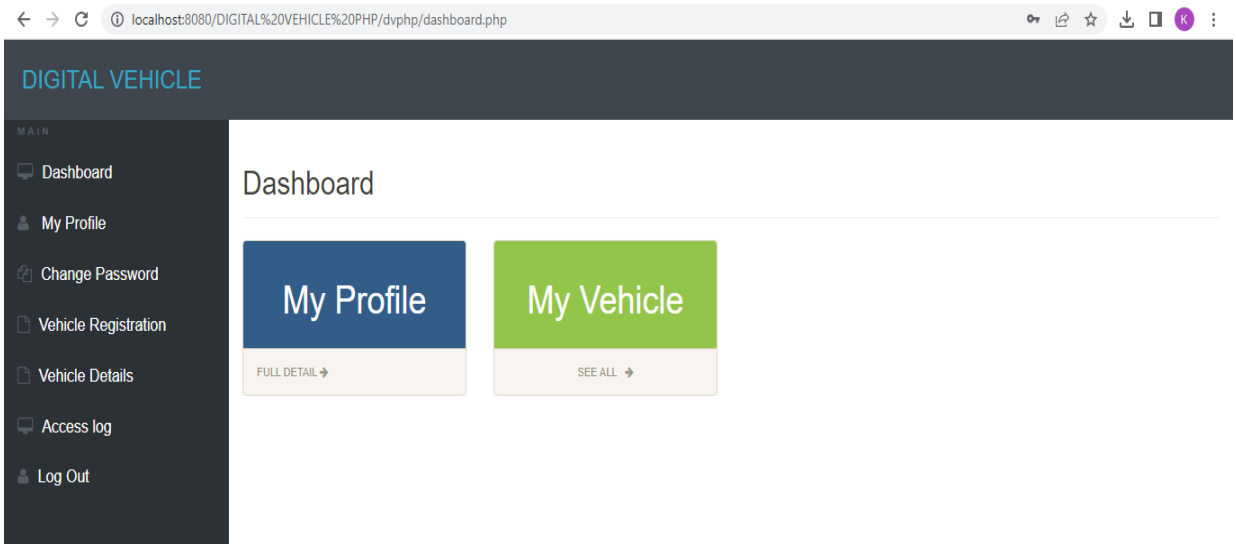

Fig. 4.19 Dashboard of User login page

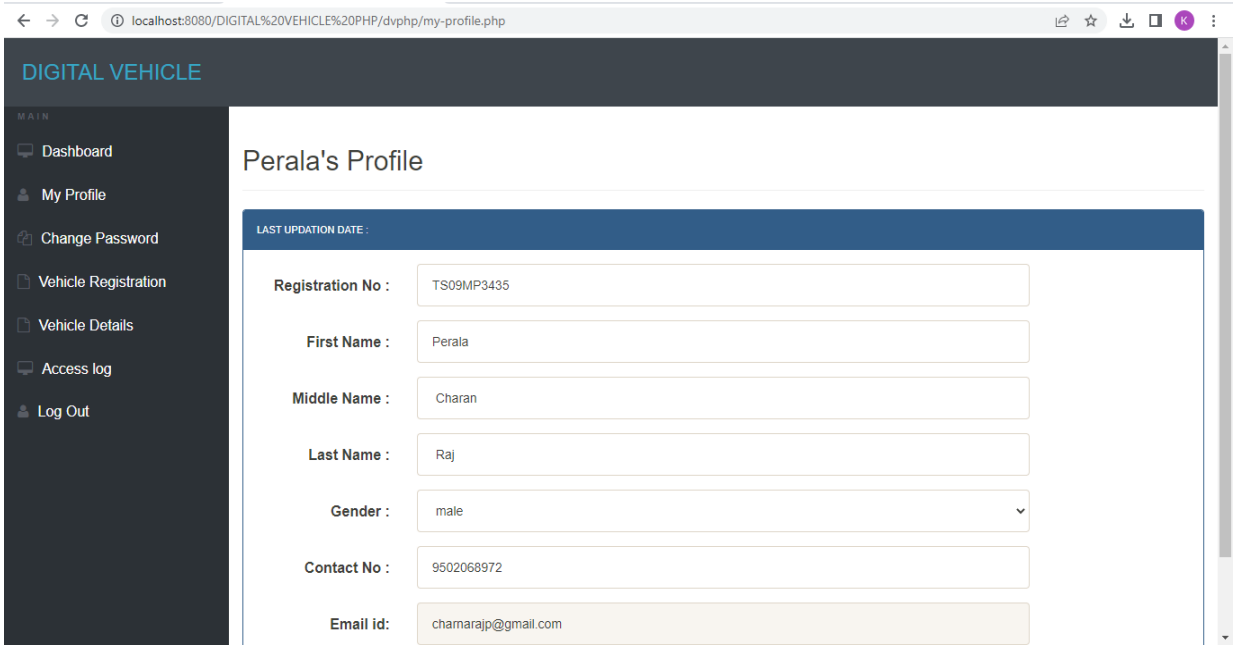

Fig. 4.20 Personal Details of User

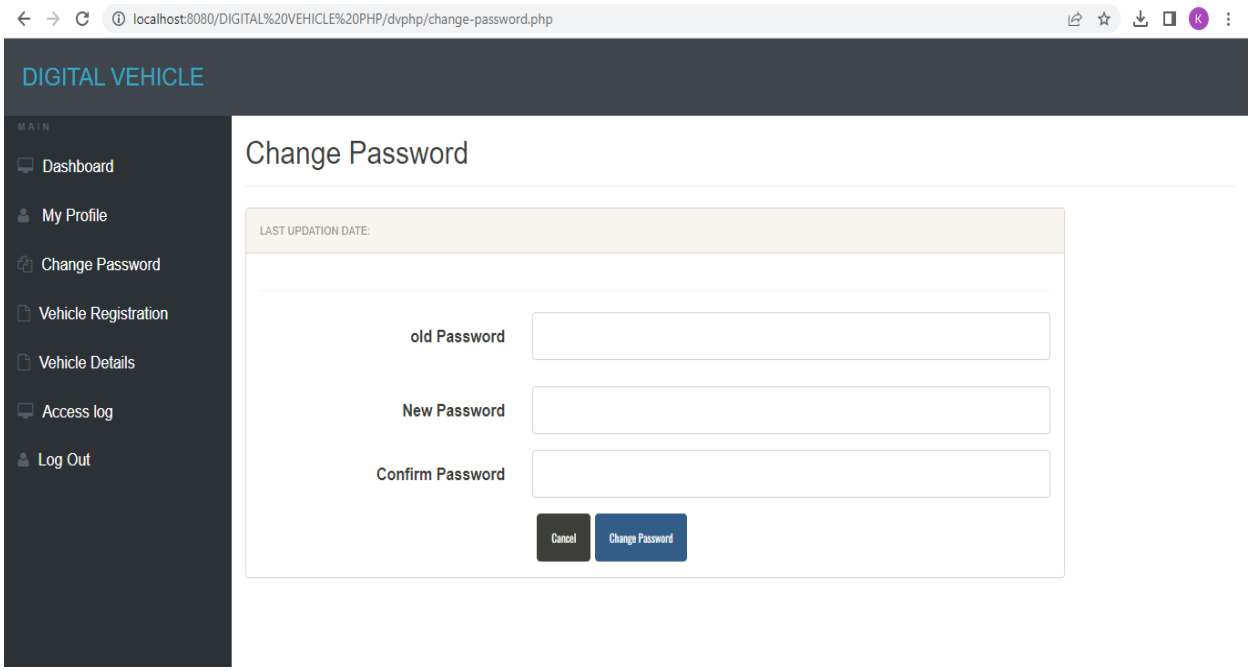

Fig. 4.21 Password changing option

Users need to register their vehicle by providing the required details.

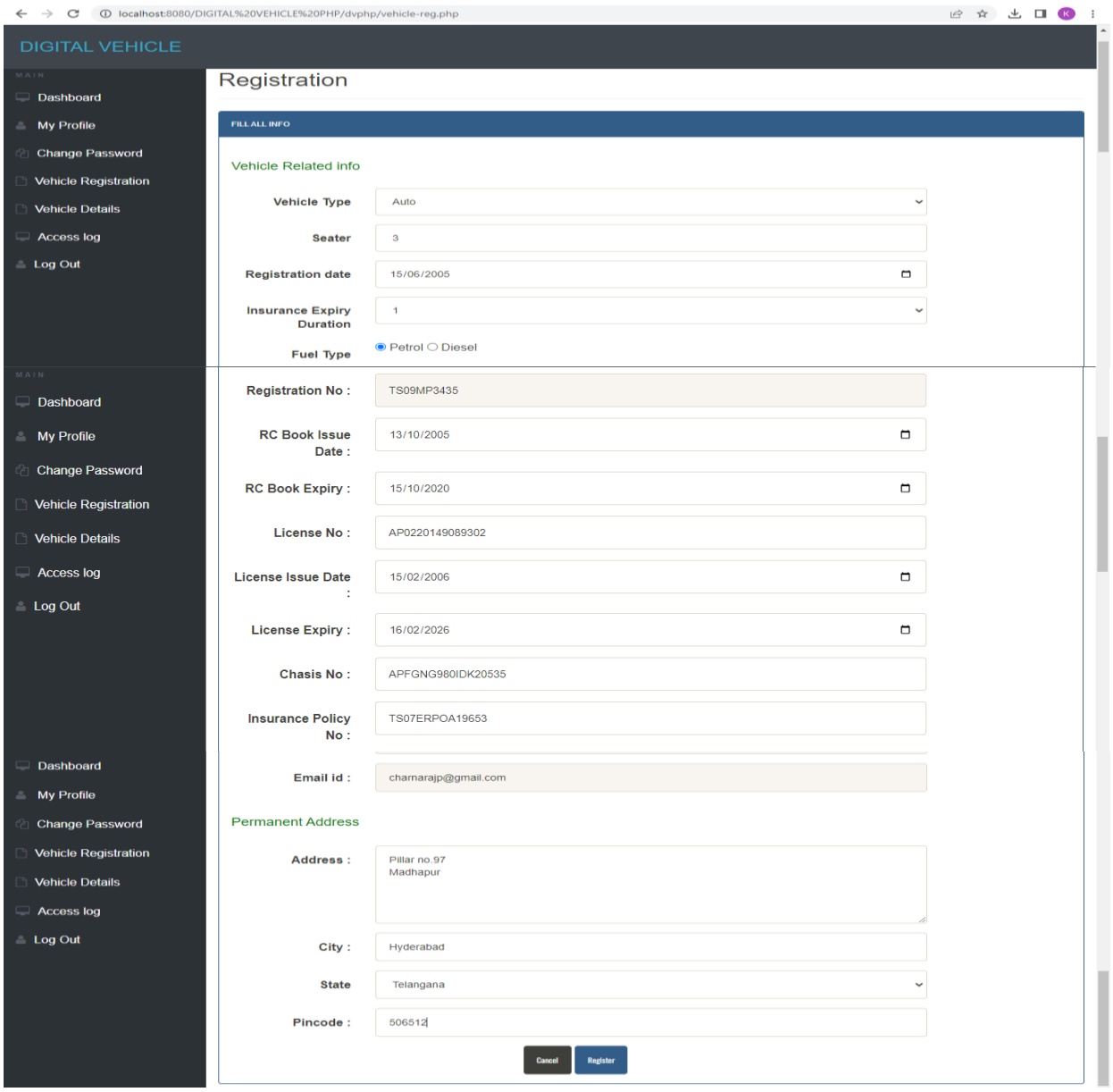

Fig. 4.22 Vehicle Registration Page

After successful registration users can see the pop up message.

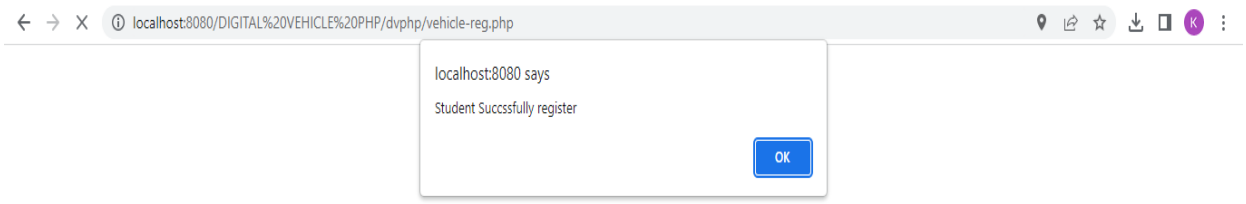

Fig. 4.23 Registration successful message

Users can view the entered data and can also see their login activities. Once they completed their work they can simply logout by clicking the logout button in the dashboard.

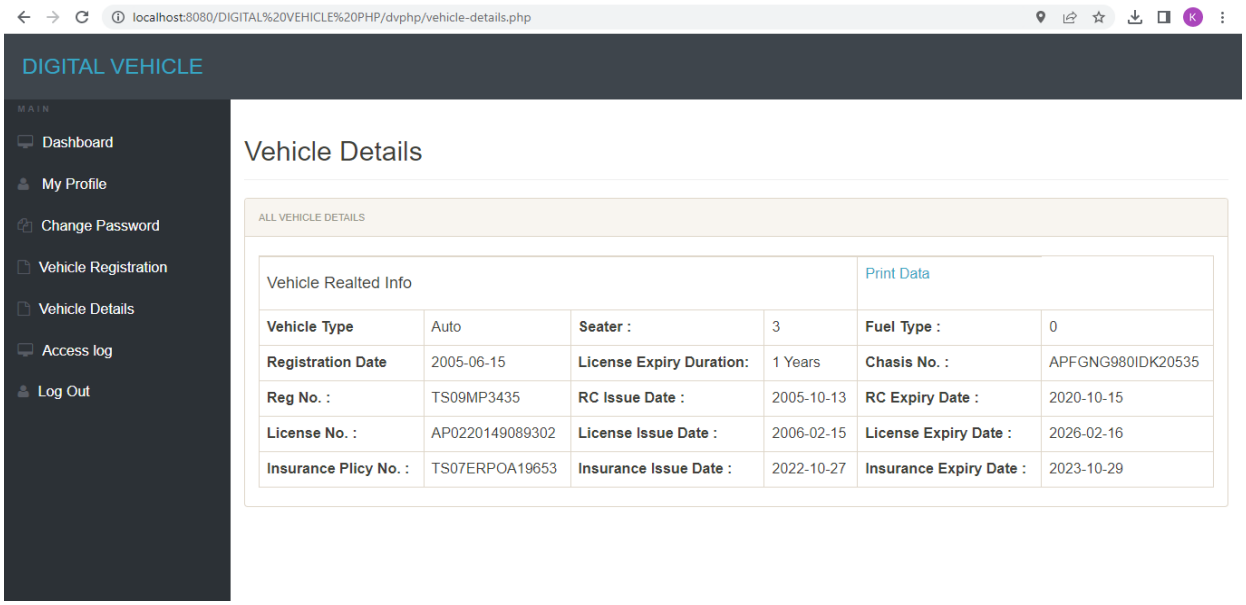

Fig. 4.24 Registered vehicle Details of user

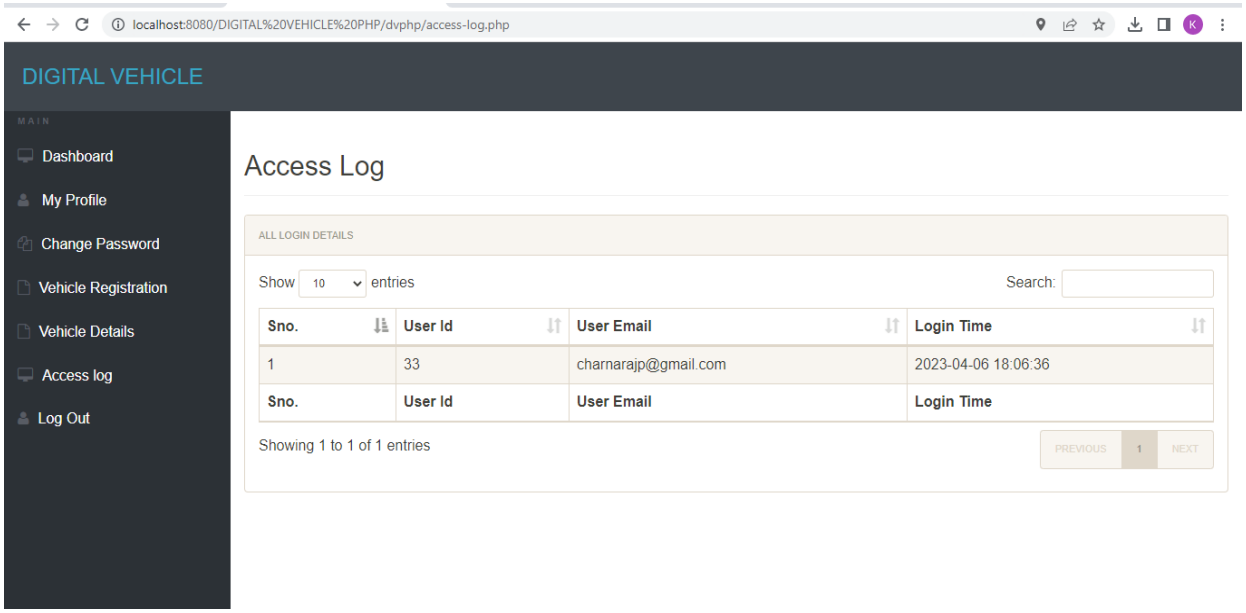

Fig. 4.25 Access Details of user

CHAPTER 5

CONCLUSION AND FUTURE SCOPE

5.1 CONCLUSION

In recent years the major advancement in mobile technology has led to the development of smart phones and in turn it has led to the rise of various miscellaneous applications serving different utilities. This RTO application aims to serve the people with digitalized documents like PUC, License, RC Book for easy use as these documents can be lost. This process intends to help the customer in saving their time if these documents are misplaced somewhere and lost. It is use full for the policeto see the details of the driver.

The number of documents frauds and forgeries can bereduced or completely eliminated with the help " Digital Vehicle - License, Insurance and RC Book Tracing for Police". The vehicle documents are very crucial and important in order to drive motor vehicles on public roads. It is more to forget documents at home or workplace, or pretend to forgetting documents at home to escape from Cops. This Digital Vehicle Website is simple and powerful to manage and access details of all vehicles digitally and securely by providing vehicles and owner details database reference to organizations, organization people can verify the authenticity of applicant with ease. It will be trusted source and effective when RTOdepartment adopts this system to provide service across many places.

"Digital Vehicle - License, Insurance and RC Book Tracing for Police" is a very unique Web Application that will be providing the Owners details with the vehicle detail to police. Since mobile phones especially smart phones areused on a large scale in recent times this application tends to serve majority of the people. This website will be very handy in use and is also user friendly. It is a light-weight website and does not incur much data charges as only textual data are retrieved across network.

5.2 FUTURE SCOPE

Digital Vehicle – License, Insurance and RC Book Tracing for Police is in its initial stage and focuses only on driver's details and vehicles details. This website can be upgraded to manage other facilities like vehicle location tracking. Website features can be extended for the crime branch usage. Since the website is in initial stage, it is designed to be used by authorized persons (traffic sergeant) and not available to the public with more features. But the next release can be a user website, with more features. This user website also generates a QR code for a license, which can be scanned by the cop-mobile to check itsvalidity.

In future work the one new feature will be adding which is wallet system when the fine penalty will be required, it will cut the amount of transaction from user android application wallet, gives fine penalty details for a particular user through GPS to RTO cloud server. The main benefit of future work is to remove frauds.

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Digital Vehicle-License,Insurance,RC Book tracing for Police By Kothagattu Spandana

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Digital Vehicle – License, Insurance and RC Book Tracing for Police I. INTRODUCTION Now-a-days there is huge population growth and also the utilization of motor vehicles is rising as the people needs are increasing. Most of people are adapted to go on their personal vehicle which includes bikes, cars, motor vehicles, etc. As a consequence of it, there is no control over vehicles and it is becoming a very complex problem in the society. Majority of us place all the related papers of vehicle in their vehicle itself, that is not safe in all the cases. In present world, carrying vehicle papers is not a secure task wherever we go. Across the world, According to the Motor Vehicles Act of the particular countries, it is mandatory to the citizens that they always need to carry the original copy of vehicle documents like (Registration certificate book, , vehicle Insurance policy, license document). When the traffic police wants to verify owner's documents at that time owners need to have these documents along with them if not they have to face the consequences. To overcome such problem, we proposed a system that has a web interface, where all required vehicle documents are scanned and also stored securely. Hence, a solution that enables us to avoid carrying crucial documents to every location for verification must be created. A technique that enables the extraction of vehicle information is license plate recognition. Hence, it is compulsory for a police to get a speedy access for the records of database. Now-a-days everything is getting online, the web application becomes the easy way in serving majority of people so, Digital Vehicle is a web- based application that can provided to every police and public to store and view the vehicle documents digitally. II. LITERATURE SURVEY In the last two decades, many solutions have been suggested to address the safety measures of vehicle documents. The literature survey gives various surveys conducted at various Universities that provide solution to the problem can be implemented in real life. All these provide accuracy and less time to view the documents of vehicle. So the analysis of already existed works improves the methodology and helps in improving accuracy, advantages by limiting the disadvantages over existed solutions. "Vehicle Information System" in (IJCSIT) International Journal of Computer Science and Information Technologies". Shelar, Sanjeev, and Shinde created an application in 2015 that will help users avoid carrying their registered vehicle's paperwork. By using this app, you can be sure that you always have all of your vehicle's paperwork with you. There is no security for the car data because this system gives the digitalized vehicle paperwork and is used by every android user. "Number Plate Recognition and Document Verification Using Feature Extraction OCR Algorithm, in International Conference on Intelligent Computing and Control Systems". In 2017, BhonsaleTejas created a system that uses a camera to take a picture of the car number, and then uses feature extraction using an optical character recognition algorithm to character segment the image and extract the relevant information (OCR). Then, the text-formatted information that was extracted from the plate is helpful in gathering all the important details about the automobiles. The approach mentioned above uses image processing, hence it also uses all of image processing's drawbacks. "Digital License mv, is presented at the IEEE WiSPNET 2016 conference ". A web application called Digital License mv, created in 2016 by R.Thirumalai Raj and S.Sivakumar , is used to access user licensing information that is digitally stored in a MySQL database and obtained as JSON objects from PHP scripts. Only the number is provided; no information regarding registration or auto insurance is given. III. PROPOSED METHOD In the current scenario, if the car has broken any traffic laws, the police will pull it over. The necessary fine is subsequently administered, and a receipt is issued. The present system also requires us to bring the original vehicle papers. Therefore there might be a danger that they become lost. The current method cannot determine if the car is insured or not. It is impossible to determine whether the car is stolen. This technique does not assist in determining whether the vehicle is a theft and in determining all pertinent information about the vehicle. Owner also need not carry his vehicle's paperwork. In this proposed system there is increased transparency about the vehicle documents and also it increases securely accessing of the documents, saves the time of both the citizens and the traffic police. When verifying authority wants to check the documents of vehicle owners then he/ she first register and then logs in into the application. And police also can easily confirm documents by searching simply with the vehicle registration plate number. The system proposed here has two different types of login. That means a user login along with the police login and each login has different set of actions to do. HTML, CSS, JavaScript - Using this we can design a web interface which can be used by the users to interact easily and perform the required tasks. It is helpful for the users to know the functions available in the software. HTML helps to structure the webpage in the required manner. CSS is used to style the webpage arranging the things at right place. JavaScript is used to monitor the behavior of the webpage. BOOTSTRAP - Bootstrap is an open- source and free CSS framework that is directed at reactive, mobile-first and front-end web development. It containsHTML, (optionally) JavaScript and CSS - based designing templates for navigation, typography, buttons, forms and other various interface components. Bootstrap also makes interactive websites. The mobile-first approaches assume tablets, smart phones and task-specific android apps are primary tools for getting employees' work done. MySQL - MySQL is an free and open-source SQL RDBMS from Oracle. As a relational record of database, the information is storedin minor storage areas which are called as tables. This makes easier to identify the data that is needed, but more notably, it helps in organizing the data. MySQL is distributed, developed and supportedbytheOracleCorporation. ANGULAR JAVASCRIPT – A JavaScript framework is Angular JS. Any HTML page can have it by adding a <script> tag. In addition to adding binds and directives to HTML attributes, Angular JS also uses expressions to bind data to HTML. Moreover, Angular JS is a toolkit for creating the framework best suited for any application development. It may be entirely extended, and it integrates well with many other libraries. Every Angular JS functionality can be changed to suit specific development, workflow, and feature requirements. Fig 1. System Architecture Fig 2. Use-case diagram for user login Fig 3. Use-case diagram for police login IV. IMPLEMENTATION This

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Abstract
In order to verify whether a car is registered or licensed, police departments around the world urge the general people to use the license plate. We must build an application that allows users to not worry about carrying their vehicle's documentation so that we may digitize all of the documents that are kept safely with so much work and effort. The goal is to provide a solution by creating a website that manually captures the vehicle license plate number. After that, the pertinent information is extracted in text format from the plate and used to gather all the necessary details about the vehicle, such as the registered owner's name, address, date of registration, etc. from the database's records. This service also enables users to drive without constantly carrying all necessary documents. This web tool is helpful to us because we no longer have to worry about carrying our vehicle documentation with us everywhere. The owner of the car can visit the user login page and upload the data for his vehicle.

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Digital Vehicle – License, Insurance and RC Book Tracing for Police

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***Abstract* - In order to verify whether a car is registered or licensed, police departments around the world urge the general people to use the license plate. We must build an application that allows users to not worry about carrying their vehicle's documentation so that we may digitize all of the documents that are kept safely with so much work and effort. The goal is to provide a solution by creating a website that manually captures the vehicle license plate number. After that, the pertinent information is extracted in text format from the plate and used to gather all the necessary details about the vehicle, such as the registered owner's name, address, date of registration, etc. from the database's records. This service also enables users to drive without constantly carrying all necessary documents. This web tool is helpful to us because we no longer have to worry about carrying our vehicle documentation with us everywhere. The owner of the car can visit the user login page and upload the data for his vehicle.**

Keywords - License, Insurance, RC Book, PHP, JavaScript, Bootstrap, MySQL.

I. INTRODUCTION

Now-a-days there is huge population growth and also the utilization of motor vehicles is rising as the people needs are increasing. Most of people are adapted to go on their personal vehicle which includes bikes, cars, motor vehicles, etc. As a consequence of it, there is no control over vehicles and it is becoming a very complex problem in the society. Majority of us place all the related papers of vehicle in their vehicle itself, that is not safe in all the cases. In present world, carrying vehicle papers is not a secure task wherever we go.

Across the world, According to the Motor Vehicles Act of the particular countries, it is mandatory to the citizens that they always need to carry the original copy of vehicle documents like (Registration certificate book, , vehicle Insurance policy, license document). When the traffic police wants to verify owner's documents at that time owners need to have these documents along with them if not they have to face the consequences. To overcome such problem, we proposed a system that has a web interface, where all required vehicle documents are scanned and also stored securely.

Hence, a solution that enables us to avoid carrying crucial documents to every location for verification must be created. A technique that enables the extraction of vehicle information is license plate recognition. Hence, it is compulsory for a police to get a speedy access for the records of database. Now-a-days everything is getting online, the web application becomes the easy way in serving

majority of people so, Digital Vehicle is a web-based application that can provided to every police and public to store and view the vehicle documents digitally.

II. LITERATURE SURVEY

In the last two decades, many solutions have been suggested to address the safety measures of vehicle documents. The literature survey gives various surveys conducted at various Universities that provide solution to the problem can be implemented in real life. All these provide accuracy and less time to view the documents of vehicle. So the analysis of already existed works improves the methodology and helps in improving accuracy, advantages by limiting the disadvantages over existed solutions.

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A web application called Digital License mv, created in 2016 by R.Thirumalai Raj and S.Sivakumar, is used to access user licensing information that is digitally stored in a MySQL database and obtained as JSON objects from PHP scripts. Only the number is provided; no information regarding registration or auto insurance is given.

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HTML, CSS, JavaScript - Using this we can design a web interface which can be used by the users to interact easily and perform the required tasks. It is helpful for the users to know the functions available in the software. HTML helps to structure the webpage in the required manner. CSS is used to style the webpage arranging the things at right place. JavaScript is used to monitor the behavior of the webpage.

BOOTSTRAP - Bootstrap is an open- source and free CSS framework that is directed at reactive, mobile-first and front-end web development. It contains HTML, (optionally) JavaScript and CSS - based designing templates for navigation, typography, buttons, forms and other various interface components. Bootstrap also makes interactive websites. The mobile-first approaches assume tablets, smart phones and task-specific android apps are primary tools for getting employees' work done.

MySQL - MySQL is an free and open-source SQL RDBMS from Oracle. As a relational

record of database, the information is stored in minor storage areas which are called as tables. This makes easier to identify the data that is needed, but more notably, it helps in organizing the data. MySQL is distributed, developed and supported by the Oracle Corporation.

ANGULAR JAVASCRIPT – A JavaScript framework is Angular JS. Any HTML page can have it by adding a <script> tag. In addition to adding binds and directives to HTML attributes, Angular JS also uses expressions to bind data to HTML. Moreover, Angular JS is a toolkit for creating the framework best suited for any application development. It may be entirely extended, and it integrates well with many other libraries. Every Angular JS functionality can be changed to suit specific development, workflow, and feature requirements.

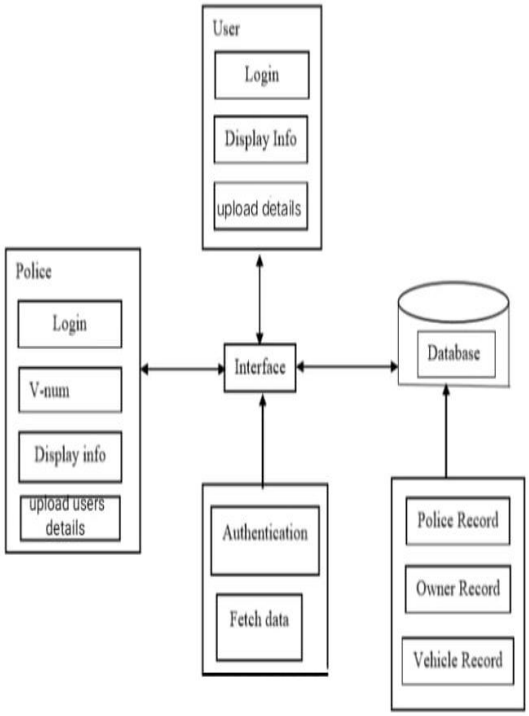

Fig 1. System Architecture

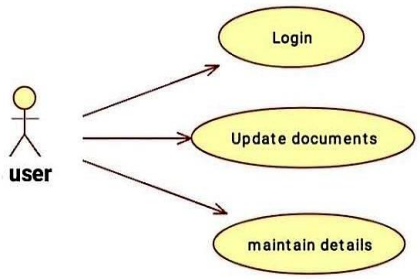

Fig 2. Use-case diagram for user login

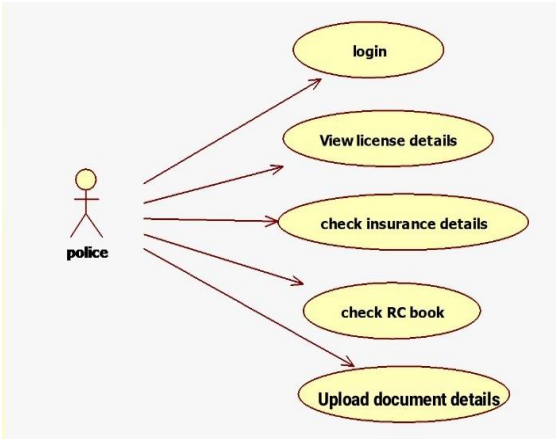

Fig 3. Use-case diagram for police login

IV. IMPLEMENTATION

This application's development and design process makes use of HTML, Angular JS, Bootstrap, CSS, and simple PHP. SQL is the database being utilized in this instance to hold records and track Owner and Vehicle Information. A website that contains police identification numbers and other information in tables in a MySQL database serves as the registration platform for each and every police officer. Standard encryptions have been made on the server side to boost security. By entering their login information, the cops can easily access the website.
Once the cop successfully signs into his connected account by giving the police his username and password, the police have full access to the vehicle data that is stored in database tables. Therefore, the cop can verify documents as well as details by providing vehicle registration number. Similarly, owner details can be accessible.

The police login page layout consists the below given modules:

- Input Vehicle Number.
- Searching for the Record.
- Displaying the Record.
- Upload document details (if any client or user approaches)
- Login details of police
- View license, insurance and RC book details

The user login page layout consists the below given modules:

- Upload document details.
- Viewing the User personal Record.
- View user vehicle Record.
- Edit the mobile number.
- Login details of User.

V. CONCLUSION

A significant advancement in computer and mobile technology over the past few years has served as the foundation for the creation of smart phones, which in turn has fueled the growth of numerous online and other applications that provide a variety of utilities. The majority of the population will be served by this RTO web application's digitalization of papers. And the license and RC Book documents are kept here for convenient access as these car documents could go misplaced. This process aims to make things easier for the customer and save them time in the event that these car documents are lost or misplaced. Knowing the driver's information is helpful to the police.

The web application designed here can fully eliminate or significantly reduce the frequency of frauds and document forgeries. The paperwork is absolutely necessary in order to operate a car on free, public highways. By supplying owner and vehicle facts from a database relating to organizations, this Website is both easy to use and powerful for managing car details digitally and securely. The organization personnel can also easily determine the legitimacy of the user. When it comes to the RTO department, they use this system because it is efficient and dependable in order to offer a variety of services in numerous locations.

VI. FUTURE SCOPE

The first step, Digital Vehicle - License, Insurance and RC Book Tracing for Police, concentrates on the driver's information as well as vehicle information. This web application can be improved to handle more services like tracking the location of the vehicle, but in a later release, a user website with more functionality may be made available. Also, each license can have a QR code generated by this user's website that the police mobile device can read to confirm its validity.

As future work one more new feature can be added that is wallet system which means when any penalty is required, it cuts the transaction amount from the user's android application app wallet, that gives fine details for every particular user by GPS to RTO cloud server. This new feature removes the frauds.

VII. REFERENCES

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