A PROJECT REPORT ON PARKING MANAGEMENT SYSTEM

ARYABHATTA COLLEGE, UNIVERSITY OF DELHI

Course: B. Sc. (H) Computer Science, II Year, IV Semester

Submitted by:

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Submitted to:

Professor Deepak Sharma

ACKNOWLEDGEMENT

It is our privilege to express my regards to my Software Engineering professor, **Deepak Sharma**, for his invaluable inputs, able guidance, encouragement, whole-hearted cooperation and constructive criticism without which this project would not have been able to sail through. I deeply feel honoured and blessed for getting this opportunity of being guided by him. I express my sincere thanks to him for being there constantly for help and supporting, encouraging and guiding us to successfully complete and present this project on the topic "**Parking Management system**".

Signature (Deepak Sharma)

CERTIFICATE

This is to certify that Ronit and Harsh Verma have successfully carried out the completion of the project entitled "Parking Management System". The project has been submitted as per the requirements of Lab based on Software Engineering in the fourth semester of B.Sc. (H) Computer Science.
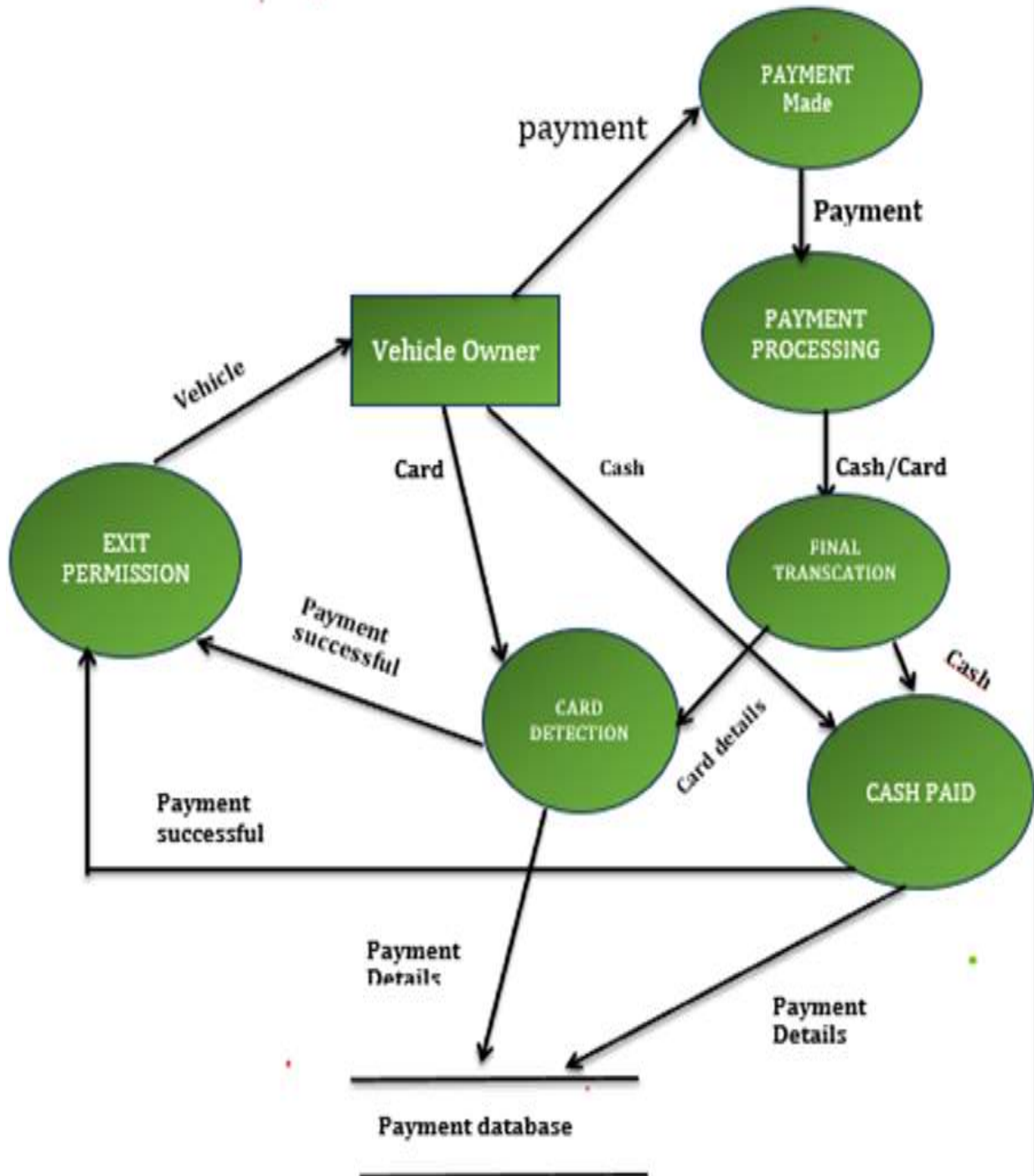
Signature(RONIT)   Signature(Harsh Verma)

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LEVEL 2 DFD

RISK TABLE

Risk is a probabilistic event i.e. it may occur or may not occur. We frequently have optimistic tendency to simply not see risk or wish they will not occur, which later on leads us to trouble. Hence it is advisable to identify the critical areas, assess their probabilities, estimate the impact and plan the contingency plan. The first step is Risk identification. Next each risk is analysed to determine the likelihood that it will occur and the damage it will do if it occurs. Risks are then, ranked by probability and impact. Finally, a plan is developed to manage those risks with high probability, moderate as well as low impact.

These risk analysis activities assist us in developing a strategy for dealing risks. An effective strategy is the RMMM plan.

It Includes:

- Risk identification
- Risk monitoring
- Risk management and contingency plan

Impact Values:

- Negligible (4)
- Marginal (3)
- Critical (2)
- Catastrophic (1)

Risk	Category	Probability	Impact	RMMM or Management
1) Loss of Database	Software Quality Risk	30.00%	1	• The data can be restored from the backup database. • The data concerned with the database has to be monitored closely whenever a new user logins or whenever the software is being updated. • The backup database needs to have close monitoring.

2)Size of product	Software Risk	30.00%	3	• Upper bound of storage space is specified before-hand
3)Congestion risk	Software Performance Risk	40.00%	3	• Proper internet facility should be available. • The system should be able to recover instantly if any fault occurs.
4)Technolog y expectations are not met	Software Requirement Risk	30.00%	1	• Technical analysis of the software with testing. • Prototyping and basic design architecture
5) Customer risk	Customer is usable to attract the targeted audience	40.00%	4	• Usage of proper marketing strategy and advertising
6) Login Risk	Software Performance Risk	20.00%	4	• User has to store the password at some safe place that can be revisited. • Re-register facility
7) Development personnel	Low-skilled staff	3.0%	2	• Deployment of personnel having best possible skills appropriated to the project.

PSEUDOCODE

```php
<?php
session_start();
error_reporting(0);
include('includes/dbconnection.php');
error_reporting(0);
if (strlen($_SESSION['vpmsaid']==0)) {
  header('location:logout.php');
  } else{ ?>

<!DOCTYPE html>
<html>
<head>
        <meta charset="utf-8">
        <meta name="viewport" content="width=device-width, initial-scale=1">
        <title>VPS</title>
        <link href="css/bootstrap.min.css" rel="stylesheet">
        <link href="css/font-awesome.min.css" rel="stylesheet">
        <link href="css/datepicker3.css" rel="stylesheet">
        <link href="css/styles.css" rel="stylesheet">

        <!--Custom Font-->
        <link
href="https://fonts.googleapis.com/css?family=Montserrat:300,300i,400,400i,500,500i,600,6
00i,700,700i" rel="stylesheet">
        <!--[if lt IE 9]>
        <script src="js/html5shiv.js"></script>
        <script src="js/respond.min.js"></script>
        <![endif]-->
</head>
<body>
    <?php include 'includes/navigation.php' ?>

    <?php
            $page="dashboard";
            include 'includes/sidebar.php'
            ?>

      <div class="col-sm-9 col-sm-offset-3 col-lg-10 col-lg-offset-2 main">
            <div class="row">
                  <ol class="breadcrumb">
                        <li><a href="#">
                              <em class="fa fa-home"></em>
                        </a></li>
                        <li class="active">Dashboard</li>
                  </ol>
```

```html
            </div><!--/.row-->

            <div class="row">
                <div class="col-lg-12">
                    <h1 class="page-header"><?php include
'includes/greetings.php'?></h1>
                </div>
            </div><!--/.row-->

            <div class="panel panel-container">
                <div class="row">
                    <div class="col-xs-6 col-md-3 col-lg-3 no-padding">
                        <div class="panel panel-teal panel-widget border-
right">
                            <div class="row no-padding"><em class="fa fa-
xl fa-car color-blue"></em>
                                <div class="large"><?php include
'counters/parking-count.php'?></div>
                                <div class="text-muted">Total Vehicles
Parked</div>
                            </div>
                        </div>
                    </div>
                    <div class="col-xs-6 col-md-3 col-lg-3 no-padding">
                        <div class="panel panel-blue panel-widget border-
right">
                            <div class="row no-padding"><em class="fa fa-
xl fa-toggle-on color-orange"></em>
                                <div class="large"><?php include
'counters/invehicles-count.php'?></div>
                                <div class="text-muted">Vehicles
IN</div>
                            </div>
                        </div>
                    </div>
                    <div class="col-xs-6 col-md-3 col-lg-3 no-padding">
                        <div class="panel panel-orange panel-widget border-
right">
                            <div class="row no-padding"><em class="fa fa-
xl fa-toggle-off color-teal"></em>
                                <div class="large"><?php include
'counters/outvehicles-count.php'?></div>
                                <div class="text-muted">Vehicles
OUT</div>
                            </div>
                        </div>
                    </div>
                    <div class="col-xs-6 col-md-3 col-lg-3 no-padding">
                        <div class="panel panel-red panel-widget ">
```

```html
                                                <div class="row no-padding"><em class="fa fa-
xl fa-clock-o color-red"></em>
                                                        <div class="large"><?php include
'counters/current-parkingCount.php'?></div>
                                                        <div class="text-muted">Parking Done
within 24 hrs</div>
                                                </div>
                                        </div>
                                </div>
                        </div><!--/.row-->
                </div>


                <div class="row">
                        <div class="col-md-6">
                                <div class="panel panel-default">
                                        <div class="panel-heading">
                                                Highlights - IN | OUT

                                                <span class="pull-right clickable panel-toggle
panel-button-tab-left"><em class="fa fa-toggle-up"></em></span></div>
                                        <div class="panel-body">
                                        <div class="canvas-wrapper">
                                                <canvas class="chart" id="myChart"
height="160" ></canvas>

                                        </div>

                                </div>
                                </div>
                        </div>


                        <div class="col-md-6">
                                <div class="panel panel-default">
                                        <div class="panel-heading">
                                                Highlights - Vehicle Category

                                                <span class="pull-right clickable panel-toggle
panel-button-tab-left"><em class="fa fa-toggle-up"></em></span></div>
                                        <div class="panel-body">
                                        <div class="canvas-wrapper">
                                                <canvas class="chart" id="myChart2"
height="160" ></canvas>

                                        </div>

                                </div>
                                </div>
                        </div>
                </div> <!-- /.row -->
```

```php
<?php

include 'includes/dbconn.php';
$ret=mysqli_query($con,"SELECT count(ID) id1 from vehicle_info where
Status=''");
$row5=mysqli_fetch_array($ret);

$ret=mysqli_query($con,"SELECT count(ID) id2 from vehicle_info where
Status='Out'");
$row6=mysqli_fetch_array($ret);

$ret=mysqli_query($con,"SELECT count(ID) as id1 from vehicle_info
where VehicleCategory='Two Wheeler'");
$row=mysqli_fetch_array($ret);

$ret=mysqli_query($con,"SELECT count(ID) as id2 from vehicle_info where
VehicleCategory='Four Wheeler'");
$row2=mysqli_fetch_array($ret);

$ret=mysqli_query($con,"SELECT count(ID) as id4 from vehicle_info where
VehicleCategory='Three Wheeler'");
$row4=mysqli_fetch_array($ret);

?>
```

```php
<?php include 'includes/footer.php'?>
    </div> <!--/.main-->

    <script src="js/jquery-1.11.1.min.js"></script>
    <script src="js/bootstrap.min.js"></script>
    <script src="js/chart.min.js"></script>
    <script src="js/chart-data.js"></script>
    <script src="js/easypiechart.js"></script>
    <script src="js/easypiechart-data.js"></script>
    <script src="js/bootstrap-datepicker.js"></script>
    <script src="js/custom.js"></script>
    <script
src='https://cdnjs.cloudflare.com/ajax/libs/Chart.js/2.2.2/Chart.min.js'></script>
    <script>
        window.onload = function () {
// var chart1 = document.getElementById("line-chart").getContext("2d");
// window.myLine = new Chart(chart1).Line(lineChartData, {
// responsive: true,
// scaleLineColor: "rgba(0,0,0,.2)",
// scaleGridLineColor: "rgba(0,0,0,.05)",
// scaleFontColor: "#c5c7cc"
// });

    var ctx = document.getElementById("myChart").getContext('2d');
```

```
var myChart = new Chart(ctx, {
type: 'pie',
data: {
labels: ["Vehicle In-Time","Vehicle Out-Time"],
datasets: [{
backgroundColor: ["#30a5ff","#33cccc"],
data: [<?php echo $row5['id1']; ?>,<?php echo $row6['id2']; ?>]
}]
}
});

var ctx = document.getElementById("myChart2").getContext('2d');
var myChart = new Chart(ctx, {
type: 'pie',
data: {
labels: ["Two Wheeler","Four Wheeler", "Three Wheeler"],
datasets: [{
backgroundColor: ["#f55d42","#f5c542", "#6b6b6b"],
data: [<?php echo $row['id1']; ?>,
       <?php echo $row2['id2']; ?>,
       <?php echo $row4['id4']; ?>

       ]
}]
}
});
};
</script>
</body>
</html>

<?php } ?>
```

TESTING
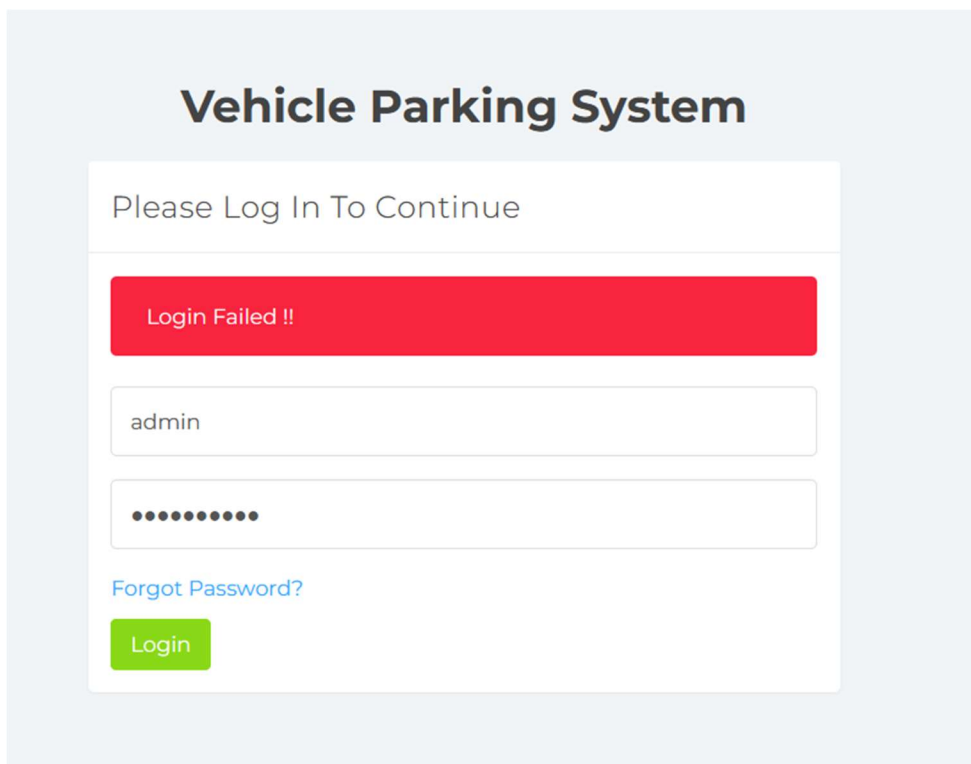
Test case 1:

   Admin enters user name and password

     1. If both are correct then the software goes to dashboard
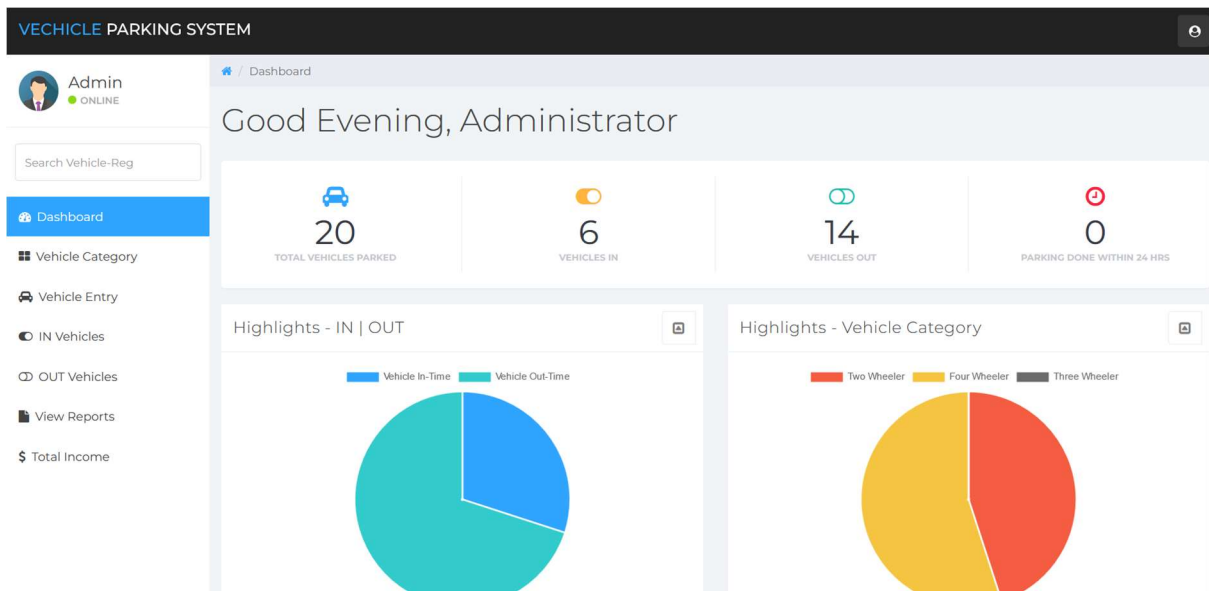
     2. If either of them is wrong then say login fail
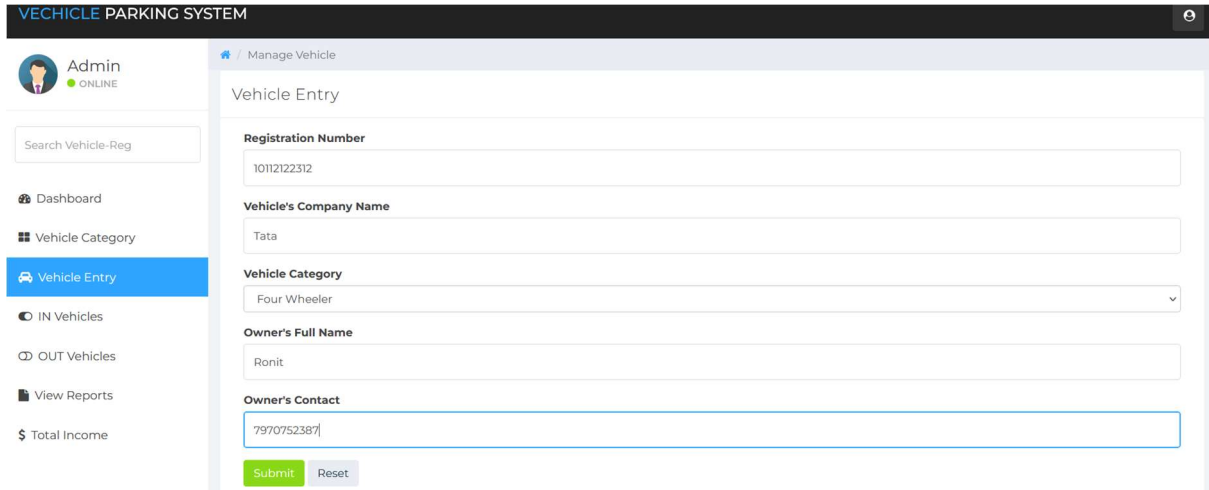
Test case 2 :

To enter details of the car and owner by admin

1. If all are correct then the software enters it to database
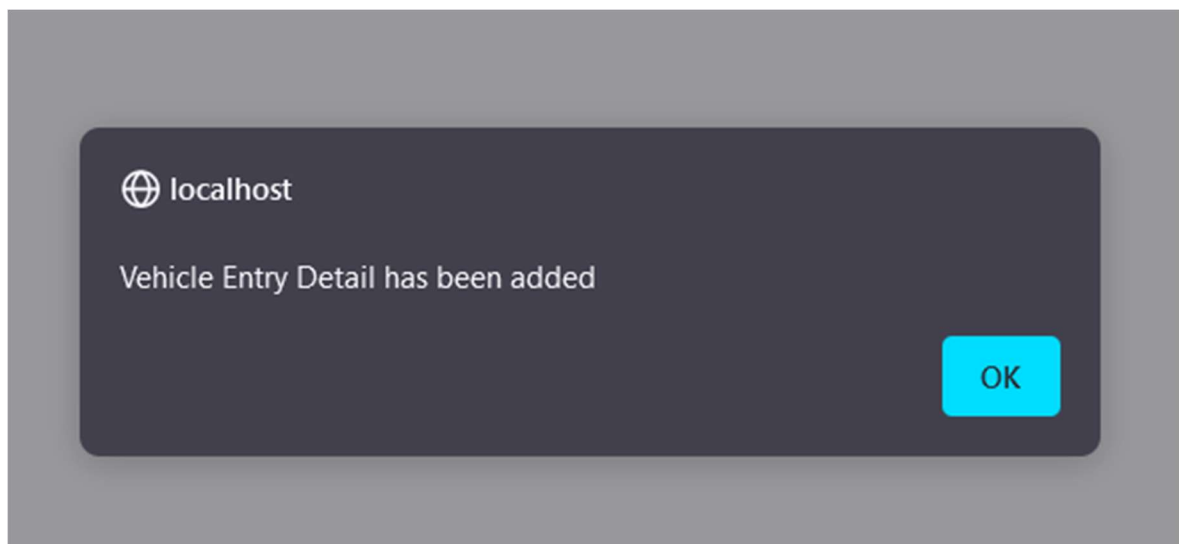
2. Else it says to enter the correct details

REFERENCES

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2. Aggarwal, K. K., & Singh, Y. (2007). Software Engineering. 3rd edition. New Age International Publishers.
3. https://www.mantratec.com/
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9. https://www.orbility.com
10. https://www.researchgate.net/