**ONLINE BUS RESERVATION SYSTEM**

A MINI PROJECT REPORT

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**ABSTRACT**

The online bus reservation system is a web-based platform designed to simplify and enhance the process of booking bus tickets for passengers. This system provides an intuitive interface where users can search for available routes, compare prices, select preferred seats, and make secure online payments. By automating the ticketing process, it aims to reduce manual errors, minimize wait times, and offer a more efficient and user-friendly experience for both passengers and bus operators. Key features include user registration, route management, seat reservation, ticket cancellation, real-time seat availability updates, and mobile integration. The system also includes an administrative dashboard for operators to manage schedules, track bookings, and generate reports. The overall goal is to create a seamless, accessible, and reliable bus booking system that enhances operational efficiency and customer satisfaction.

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**CHAPTER – 1**

**INTRODUCTION**

**1. INTRODUCTION**

The online bus reservation system is designed to streamline the booking process for bus services by offering users a convenient, user-friendly platform to view schedules, book tickets, and manage reservations from anywhere. By digitizing this process, the system aims to replace traditional, time-consuming manual methods and eliminate inefficiencies. The project emphasizes ease of use, security, and reliability, improving customer satisfaction and service provider operations.

**2. SCOPE OF THE WORK**

This project encompasses the design, development, and implementation of a web-based bus reservation system. It includes features such as user registration, bus schedule management, seat selection, ticket booking, payment processing, and ticket cancellation. The system will also provide administrative capabilities for managing routes, schedules, and user data. The scope is limited to enhancing user experience and streamlining operations for mid-sized bus service companies.

**3. PROBLEM STATEMENT**

The traditional methods of bus ticket booking often involve long queues, limited operational hours, and human errors. These challenges result in inefficiencies, customer dissatisfaction, and loss of business. Existing digital solutions may be fragmented or lack a cohesive user experience. The problem is the need for a centralized, efficient, and reliable online system that meets modern users' expectations and supports both customers and operators effectively.

**1.4 AIM AND OBJECTIVES OF THE PROJECT**

The aim of this project is to develop an online bus reservation system that simplifies and automates the process of booking bus tickets, while enhancing user convenience and improving operational efficiency for service providers. The project seeks to create a robust, secure, and feature-rich platform that facilitates seamless ticket booking and management.

**CHAPTER – 2**

**SYSTEM SPECIFICATIONS**

**2.1 HARDWARE SPECIFICATIONS**

|  |  |  |
| --- | --- | --- |
| Processor | **:** | Intel i5 |
| Memory Size | **:** | 8GB (Minimum) |
| HDD | **:** | 1 TB (Minimum) |

**2.2 SOFTWARE SPECIFICATIONS**

|  |  |  |
| --- | --- | --- |
| Operating System | **:** | WINDOWS 10 |
| Front – End | **:** | Html |
| Back - End | **:** | Php |
| Language | **:** | Html,Php |
|  |  |  |

**CHAPTER - 3**

**MODULE DESCRIPTION**

This application consists of two modules. When the program runs, it will ask for a confirmation to the login window. The person who interacts can login as an Administrator or as a User. The description of the modules are as follows:

**1.Admin login**

When the person who interacts tries to login as Admin then he needs to login with his username and password. The administrator only has the power to change and manipulate the data in the database.

2. **User login**

When the person tries to login as a user then he/she will be prompted to enter

the number of symptoms and the final result will be printed in the form of table.

**CHAPTER - 4**

**CODING**

Sample code for Html:

<html>

<head>

<title>Online Bus Ticketing</title>

<link rel="title icon" type="image/x-icon" href="favicon.ico" />

<!-- Bootstrap -->

<link href = "bootstrap/css/bootstrap.min.css" rel = "stylesheet">

<link rel="stylesheet" href="styles.css">

</head>

<body>

<div id="wrapper">

<!-- Sidebar -->

<div id="sidebar-wrapper">

<nav id="spy">

<ul class="sidebar-nav nav">

<li>

<a href="#anch1" data-scroll>

<span class="fa fa-anchor solo">Anchor 1</span>

</a>

</li>

<li>

<a href="#anch1" data-scroll>

<span class="fa fa-anchor solo">Anchor 1</span>

</a>

</li>

<li>

<a href="#anch2" data-scroll>

<span class="fa fa-anchor solo">Anchor 2</span>

</a>

</li>

<li>

<a href="#anch3" data-scroll>

<span class="fa fa-anchor solo">Anchor 3</span>

</a>

</li>

<li>

<a href="#anch4" data-scroll>

<span class="fa fa-anchor solo">Anchor 4</span>

</a>

</li>

<li>

<a href="#anch1" data-scroll>

<span class="fa fa-anchor solo">Anchor 1</span>

</a>

</li>

<li>

<a href="#anch2" data-scroll>

<span class="fa fa-anchor solo">Anchor 2</span>

</a>

</li>

<li>

<a href="#anch1" data-scroll>

<span class="fa fa-anchor solo">Anchor 1</span>

</a>

</li>

<li>

<a href="#anch2" data-scroll>

<span class="fa fa-anchor solo">Anchor 2</span>

</a>

</li>

</ul>

</nav>

</div>

</body>

</html>

Sample Code for Php:

<?php

// pass from session

$role\_id = "943340196v";

$link = mysqli\_connect("localhost", "root","","busticketing");

$sql = "SELECT \* FROM bookings WHERE role\_id='$role\_id' ";

$result = mysqli\_query( $link,$sql) or die('Could not look up user information; ' . mysqli\_error($link));

?>

<!DOCTYPE html>

<html>

<head>

<meta charset="utf-8">

<title>Booking list</title>

<!-- Bootstrap Core CSS -->

<link href="../style/css/bootstrap.min.css" rel="stylesheet">

<!-- Custom CSS -->

<style>

body {

padding-top: 70px;

/\* Required padding for .navbar-fixed-top. Remove if using .navbar-static-top. Change if height of navigation changes. \*/

}

table{border-collapse: collapse;}

td,th{border: 1px solid black; padding: 10px;}

</style>

<!-- HTML5 Shim and Respond.js IE8 support of HTML5 elements and media queries -->

<!-- WARNING: Respond.js doesn't work if you view the page via file:// -->

<!--[if lt IE 9]>

<script src="https://oss.maxcdn.com/libs/html5shiv/3.7.0/html5shiv.js"></script>

<script src="https://oss.maxcdn.com/libs/respond.js/1.4.2/respond.min.js"></script>

<![endif]-->

<div class="container">

<!-- jQuery Version 1.11.1 -->

<script src="../style/js/jquery.js"></script>

<!-- Bootstrap Core JavaScript -->

<script src="../style/js/bootstrap.min.js"></script>

<body>

<h2>Booked seats</h2>

<div class="container">

<nav class="navbar navbar-inverse navbar-fixed-top" role="navigation">

<div class="container">

<!-- Brand and toggle get grouped for better mobile display -->

<div class="navbar-header">

<button type="button" class="navbar-toggle" data-toggle="collapse" data-target="#bs-example-navbar-collapse-1">

<span class="sr-only">Toggle navigation</span>

<span class="icon-bar"></span>

<span class="icon-bar"></span>

<span class="icon-bar"></span>

</button>

<a class="navbar-brand" href="bookbus.php">Home</a>

</div>

<!-- Collect the nav links, forms, and other content for toggling -->

<div class="collapse navbar-collapse" id="bs-example-navbar-collapse-1">

<ul class="nav navbar-nav">

<li>

<a href="#">About</a>

</li>

<li>

<a href="#">Services</a>

</li>

<li>

<a href="#">Contact</a>

</li>

<li style="position: absolute; right: 50px; top: 0 ;">

<a href="../index.html" >SignOut</a>

</li>

</ul>

</div>

<!-- /.navbar-collapse -->

</div>

<!-- /.container -->

</nav>

</div>

<table class = "table table-hover">

<thead>

<tr>

<th>Bus Number</th>

<th>Date</th>

<th>Time</th>

<th>Seats</th>

</tr>

</thead>

<tbody>

<?php while ($row = mysqli\_fetch\_array($result,MYSQLI\_ASSOC)):?>

<tr>

<td><?php echo $row['bus\_id'] ?></td>

<td><?php echo $row['date'] ?></td>

<td><?php echo $row['time'] ?></td>

<td><?php echo $row['seats'] ?></td>

</tr>

<?php endwhile ?>

</tbody>

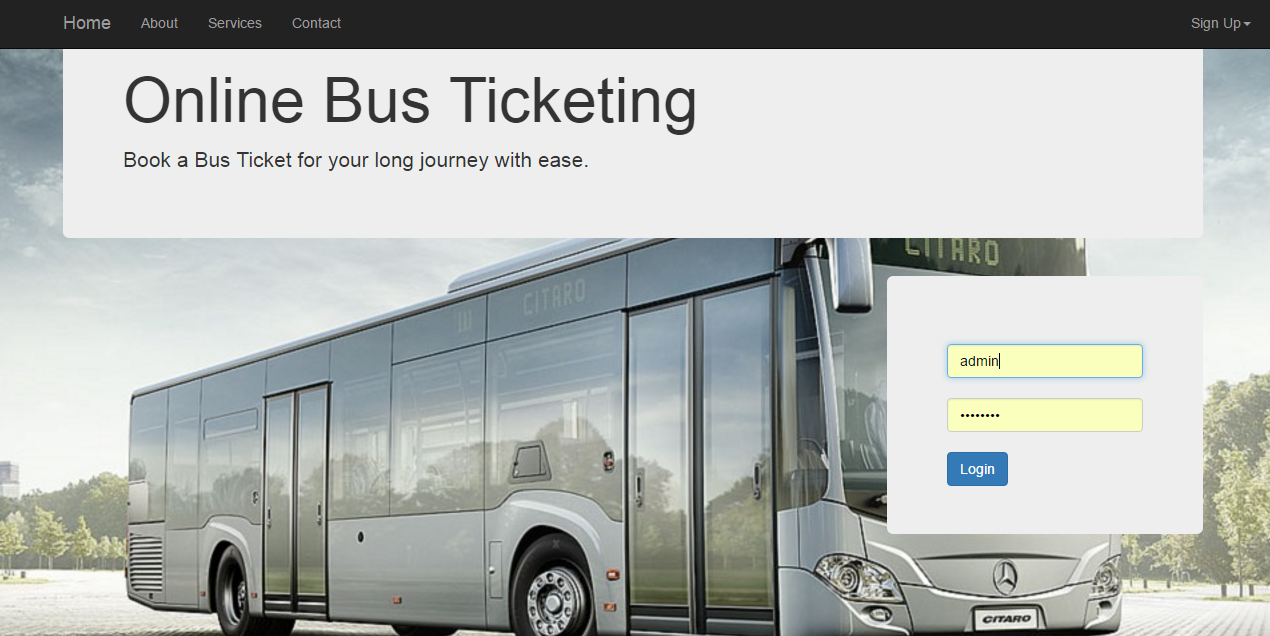
</table>

</body>

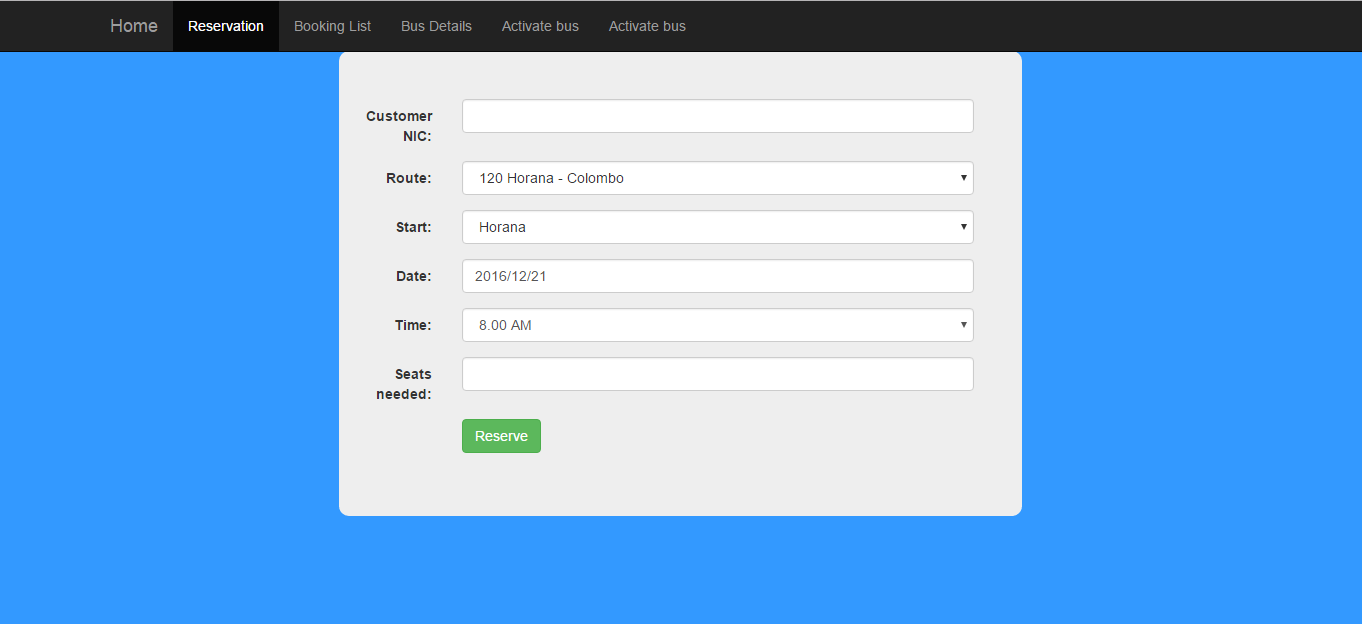
</html>

**CHAPTER - 5**

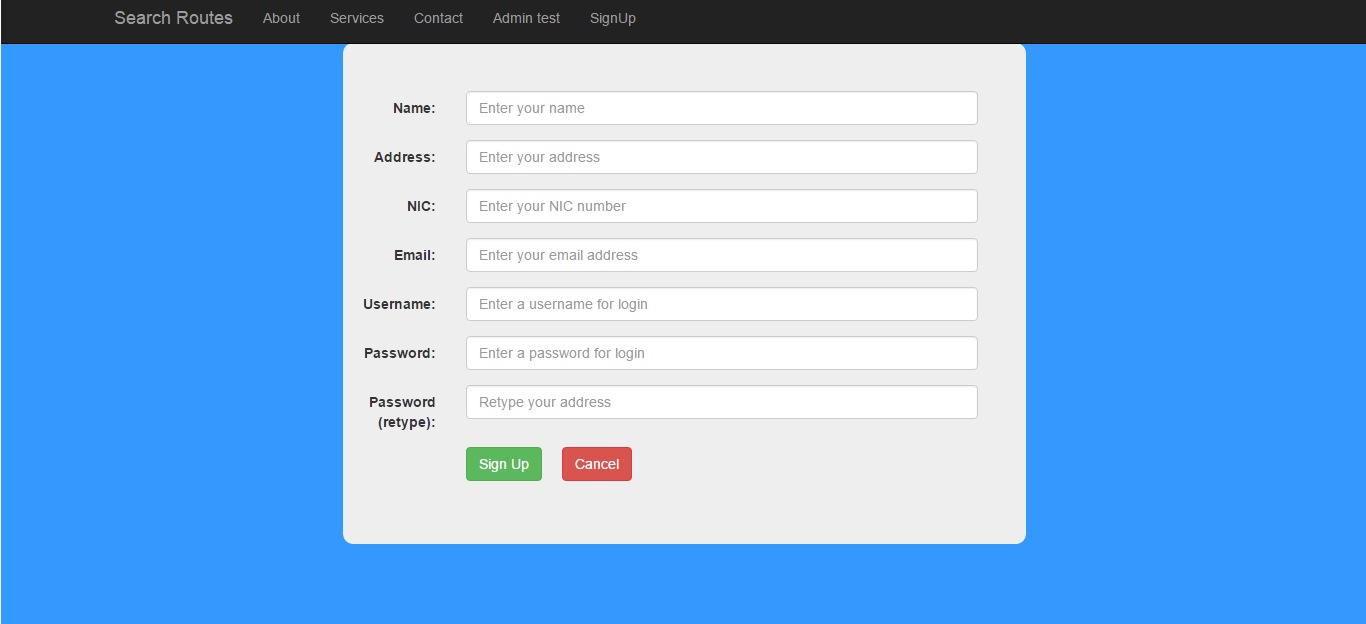
**SCREEN SHOTS**



**Fig 5.1 Introduction page**



**Fig 5.2 Customer details**



**Fig 5.3 Booking Log**

**CHAPTER 6**

**CONCLUSION AND FUTURE ENHANCEMENT**

In conclusion, an online bus reservation system streamlines the booking process by offering a user-friendly platform for customers to plan and purchase tickets efficiently. This system enhances customer satisfaction through real-time seat availability, automated payments, and notifications. For future enhancements, incorporating AI-driven predictive analytics for dynamic pricing, integrating multilingual support, and ensuring better security with advanced encryption can further improve user experience and accessibility. Adding features like loyalty programs, offline booking capabilities, and mobile app integration can help widen the user base and enhance system reliability.

**CHAPTER – 7**

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