Project report
on

Enhanced Online Bus Ticket Booking System

Project report submitted in partial fulfillment of the requirement for the award of the Degree of
BACHELOR OF TECHNOLOGY
IN
COMPUTER SCIENCE AND ENGINEERING
Submitted By

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Under the Esteemed Guidance of

Mrs. CH.Ratna Kumari , Head of the Department

RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES(AP IIIT)
R.K Valley, Vempalli, Kadapa(Dist) – 516330
Accredited by 'NAAC' with 'B+' Grade
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

2023-2024

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CERTIFICATE

This is to certify that the project report entitled "***Online Bus Ticket Booking System***" being submitted by **M.Divyaswarupa(R190529)** under my guidance and supervision and is submitted to **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING** in partial fulfillment of requirements for the award of degree of Bachelor of Technology in Computer science and engineering for the year 2023-2024 and it has been found worthy of Acceptance According to the requirements of the University.

INTERNAL GUIDE

Mrs. CH.Ratna Kumari,

HEAD OF THE DEPARTMENT

Mrs. CH.Ratna Kumari,
Head of the Department,
CSE, RGUKT, RK-Valley.

ACKNOWLEDGEMENT

I wish to express our sincere thanks to various personalities who were responsible for the successful completion of the main project.

I am thankful our Director **Dr. A V S S Kumara Swami Gupta,** for providing the necessary infrastructure required for my project.

I am thankful to our Dean **Mrs. CH.RATNA KUMARI**, for permitting and encouraging me in doing this project.

I am grateful to **Mrs. CH.RATNA KUMARI, Assistant Professor,** Head of the Department, for her motivation and encouragement in completing the project in specified time.

I express my deep felt gratitude to **Mrs. CH.RATNA KUMARI,** internal guide for her valuable guidance and encouragement which enabled me to successful completion of project in time.

I express my sincere thanks to all other faculty members of CSE Department for extending their helping hands and valuable suggestion when in need.

Finally, my heartfelt thanks to my parents for giving me all I ever needed to be a successful student and individual. Because of their hard work and dedication, I have had opportunities beyond my wildest dreams.

WITH SINCERE REGARDS,

M. Divyaswarupa – R190529,

DECLARATION

Hereby declare that this project work entitled **"*Online Bus Ticket Booking System*"** submitted to **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING** is a genuine work carried out by me, for the fulfillment of Bachelor of Technology in the Department of Computer Science & Engineering during the academic year 2023-2024 under the supervision of my project guide **Mrs. CH.RATNA KUMARI,** Department of **Computer Science & Engineering** in **RAJIV GANDHI UNIVERSITY OF KNOWLEDGE TECHNOLOGIES(AP-IIIT), R.K.Valley** and that it has not formed the basis for the award of any degree/diploma or other similar title to any candidate of the university.

WITH SINCERE REGARDS,

M. Divyaswarupa – R190529,

ABSTRACT

The Online Bus Ticket Booking System is a web-based application. This system deals with maintenance of records of details of each passenger. It also includes maintenance of information like schedule and details of each bus. This application allows users to book bus tickets from anywhere and anytime. The user can easily book their tickets and cancel tickets. The user can view all the details of the website, bus, and driver. In Existing Booking System, I found 1 major issue that users are currently facing. Unable to book additional tickets beside an already booked ticket if the gender is different. In this project I am proposing solution for this major issue along with some performance improvements. For this problem, I am planning to use user profile based mechanism to allow booking of additional ticket beside already booked ticket irrespective of gender.

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CHAPTER - 1

INTRODUCTION

1.1 INTRODUCTION

An online bus ticket booking system is a digital platform that allows users to conveniently and efficiently book bus tickets through the internet. This system has revolutionized the way people plan and organize their travel by providing a seamless and user-friendly experience. With just a few clicks, travelers can search for available bus routes, check schedules, compare prices, choose preferred seats, and make secure payments for their choosen journey.

Key Features of an Online Bus Ticket Booking System:

Search and Selection: Users can search for bus routes, departure and arrival points, travel dates, and times. The system presents various options based on the search criteria, enabling users to choose the most suitable option for their travel needs.

Real-Time Availability: The system provides real-time information about available seats, bus types, and ticket prices. This helps users make informed decisions and secure their preferred seats.

Seat Selection: Passengers can view the layout of the bus and select their desired seats, whether they prefer window seats, aisle seats, or specific rows.

Ticket Customization: Users can customize their travel preferences, such as choosing between different classes of buses (e.g., luxury, semi-sleeper, sleeper), selecting additional amenities (e.g., Wi-Fi, charging ports), and adding special requests.

Secure Payments: The system offers secure online payment options, allowing users to pay for their tickets using various methods such as credit/debit cards, digital wallets, and online banking.

Booking Confirmation: After successful payment, users receive an instant booking confirmation along with an e-ticket that can be printed or saved digitally on their smartphones.

Cancellations and Refunds: The system provides a clear policy for ticket cancellations and refunds, helping users understand the terms and conditions associated with modifying or cancelling their bookings.

User Accounts: Users can create accounts to manage their booking history, personal details, and preferences. This streamlines the booking process for future trips.

Customer Support: An online bus ticket booking system often includes a customer support feature that allows users to get assistance with their bookings, address concerns, and seek help in case of issues.

CHAPTER - 2

LITERATURE SURVEY

2.1 LITERATURE SURVEY

A literature survey for an online bus ticket booking system would involve reviewing existing research, studies, and articles related to various aspects of online ticket booking systems, especially within the transportation industry. Here's a general outline of what such a literature survey might include:

Introduction to Online Ticket Booking Systems:

- Overview of the importance and evolution of online ticket booking systems.
- Explanation of their significance in the transportation sector, including buses, trains, airlines, etc.

Technology and Platforms:

- Review of the different technological platforms used for online ticket booking (e.g., websites, mobile apps).
- Comparison of various booking systems and their features (e.g., user interface, payment options, ticket customization).

Security and Payment Systems:

- Examination of security measures implemented in online booking systems to protect user data and transactions.
- Overview of different payment gateways and their integration into ticket booking platforms.

Challenges and Future Directions:

- Identification of challenges faced by online ticket booking systems (e.g., competition, technological advancements, regulatory issues).
- Discussion of potential future directions for research and development in this area.

User Experience and Interface Design:

- Analysis of user experience design principles in online booking systems.
- Evaluation of interface designs aimed at enhancing usability and user satisfaction.

Market Trends and Business Models:

- Exploration of current market trends in online ticket booking systems.
- Overview of different business models adopted by online ticketing platforms (e.g., commission-based, subscription-based).

Conclusion:

- Summary of key findings from the literature survey.
- Suggestions for further research and practical implications for the development and improvement of online bus ticket booking systems.

CHAPTER - 3

PURPOSE AND FEATURES

3.1 PURPOSE

The purpose of an online bus booking system is to provide a convenient and efficient platform for travellers to plan, search for, and book bus tickets over the internet. This digital system serves several important purposes, benefiting both travellers and bus operators:

Convenience: Online bus booking systems offer unparalleled convenience to travellers. They can easily browse through various bus options, check schedules, compare prices, and make bookings from the comfort of their homes or while on the go. This eliminates the need to physically visit bus stations or booking counters, saving time and effort.

Time-Saving: By allowing users to quickly search for available routes, select seats, and make payments online, these systems significantly reduce the time required for ticket booking compared to traditional methods.

Access to Information: Travelers have access to real-time information about bus routes, departure and arrival times, seat availability, and ticket prices. This empowers them to make informed decisions based on their preferences and requirements.

Seat Selection and Customization: Online booking systems enable travellers to choose their preferred seats on the bus and customize their travel experience by selecting amenities and services that suit their needs.

Secure Payments: These systems provide a secure platform for users to make payments using various methods, ensuring the safety of their financial transactions.

Efficient Management: For bus operators, an online booking system streamlines the ticketing process and allows for efficient management of seat inventory, schedules, and passenger information.

3.2 ADVANTAGES

Convenience: Travelers can easily search for bus routes, schedules, and seat availability from the comfort of their homes or while on the go, eliminating the need to visit physical booking counters.

Time-Saving: The online system allows users to quickly compare different bus options, select seats, and complete bookings in a matter of minutes, saving valuable time compared to traditional methods.

Real-Time Information: Users have access to up-to-date information about bus schedules, seat availability, and ticket prices, enabling them to make informed decisions based on their preferences and travel plans.

Seat Selection: Travelers can view the layout of the bus and choose their preferred seats, enhancing their overall travel experience.

Secure Payments: Online payment options offer a secure and convenient way to make transactions, with various payment methods available, including PhonePay, GooglePay, Paytm or through UPI.

Booking Confirmation and Notifications: Instant booking confirmations and notifications keep travellers informed about their reservations and any changes in schedules.

Flexibility: Users can easily modify their bookings, subject to the system's terms and conditions, providing them with flexibility in their travel plans.

Access Anytime, Anywhere: The system is accessible 24/7, allowing users to book tickets and plan their trips at their convenience, even during non-operational hours.

3.3 DISADVANTAGES

Technical Issues: Online systems can experience technical glitches, downtime, or errors, leading to frustration for both travellers and operators. Technical problems may prevent users from booking tickets or accessing important information.

Connectivity Concerns: Access to the online system depends on internet connectivity. Travelers in areas with poor or no internet connectivity may face difficulties in using the system.

User Inexperience: Some users, particularly elderly individuals or those less familiar with technology, may find it challenging to navigate the online booking process.

Cancellation and Refund Policies: Some online booking systems have strict cancellation and refund policies, which may lead to dissatisfaction among travellers who need to change their plans.

Accessibility Issues: Individuals with disabilities or those who require special assistance may face difficulties using online booking systems that are not designed with accessibility in mind.

Reliability and Trust: Trust issues could arise if users perceive the online system as less reliable than traditional methods or if they have had negative experiences with similar platforms.

CHAPTER - 4

REQUIREMENT SPECIFICATIONS

Software Requirements:

Front end	HTML, CSS, Bootstrap, JavaScript, JQuery, Ajax
Server side Language	PHP
Database Server	MYSQL
Web Browser	MicroSoft Edge or any compatible browser
Operating System	Windows or any equivalent OS
Software	Windows or any equivalent Software

Functional Requirements:

Registration: If new customer wants to book some seats, then he/she must be registered.

Login: Customer logins to the system by entering registered username and password for the seats to be booked.

Search: Users should be able to search for Buses based on different criteria. (e.g., Bus route or destination, departure date & time, bus type).

Select: Users should be able to select the desired bus and view the available

seats.

Payment: Payment is done through PhonePay or GooglePay or through UPI. The seats will be booked and blocked only after a successful payment.

Ticket Generation: A ticket is produced with Username, name ,age, Mobile number, trip_no, gender, selected_seat, Journey_date ,etc..

Email Confirmation: Send an email confirmation to the user with the details of the booked seats.

CHAPTER - 5

Analysis and Design

As Technology is growing rapidly we are also moving to a technical world where everything we want to be online. So with the help of this project we are bringing the use of technology in the field online bus booking system is to provide a convenient and efficient platform for travelers to plan, search for, and book bus tickets over the internet. This digital system serves several important purposes, benefiting both travellers and bus operators registration of the users easily.

Disadvantage of present system:

- ✓ I found 2 major issues that users are currently facing.
- ➢ Unable to book additional tickets beside an already booked ticket if the gender is different.
- ➢ Once a user selects a seat for booking and initiated payment, for some reason if user is not able to finish the payment, then that seat is locked for all users making it unavailable.

5.1 Design Introduction

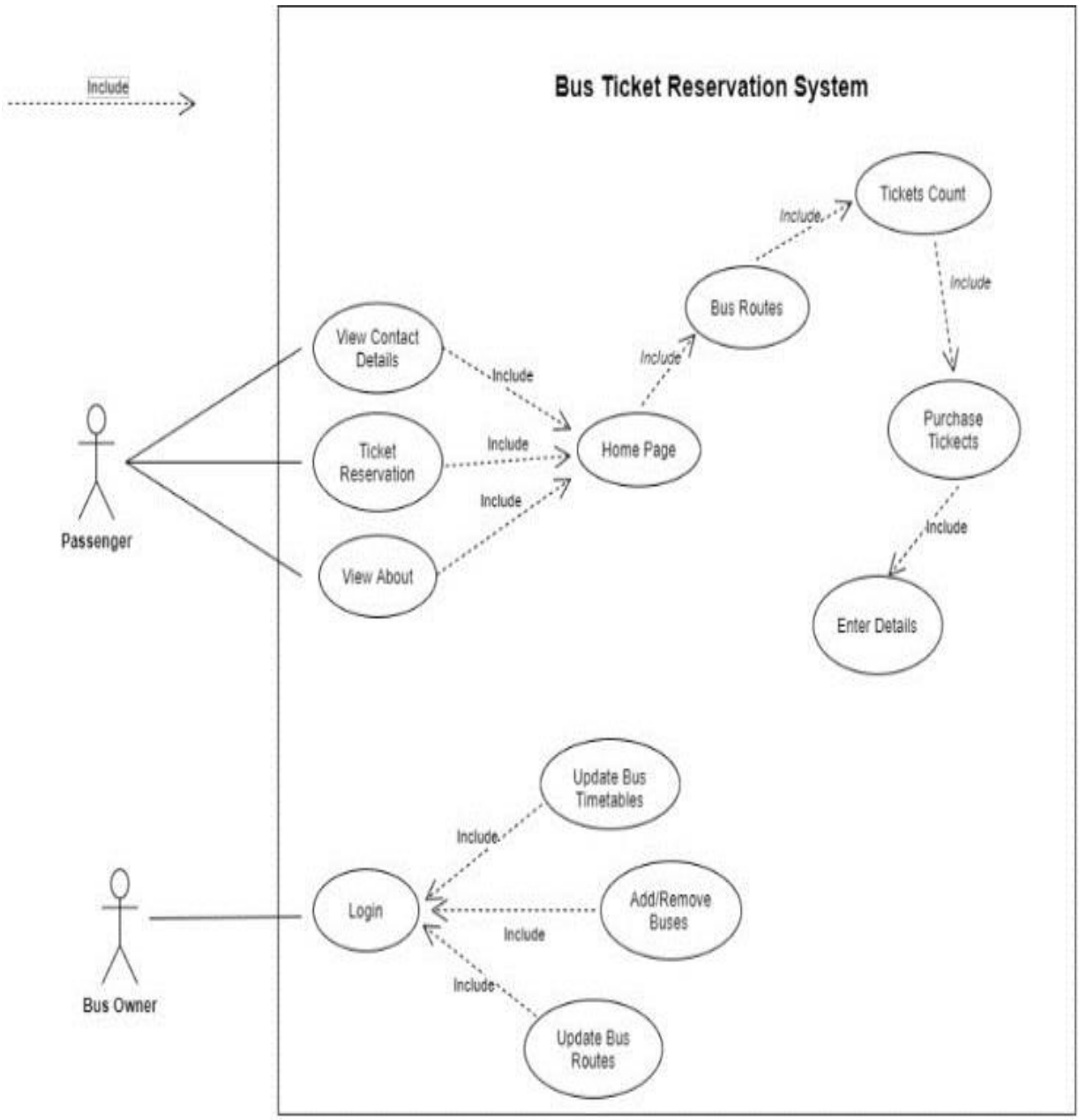
Design is the first step in the development phase for any techniques and principles or the purpose of defining a device, a process or system in sufficient detail permit Its physical realization. Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are

required to build and verify the software.The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system. Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data.

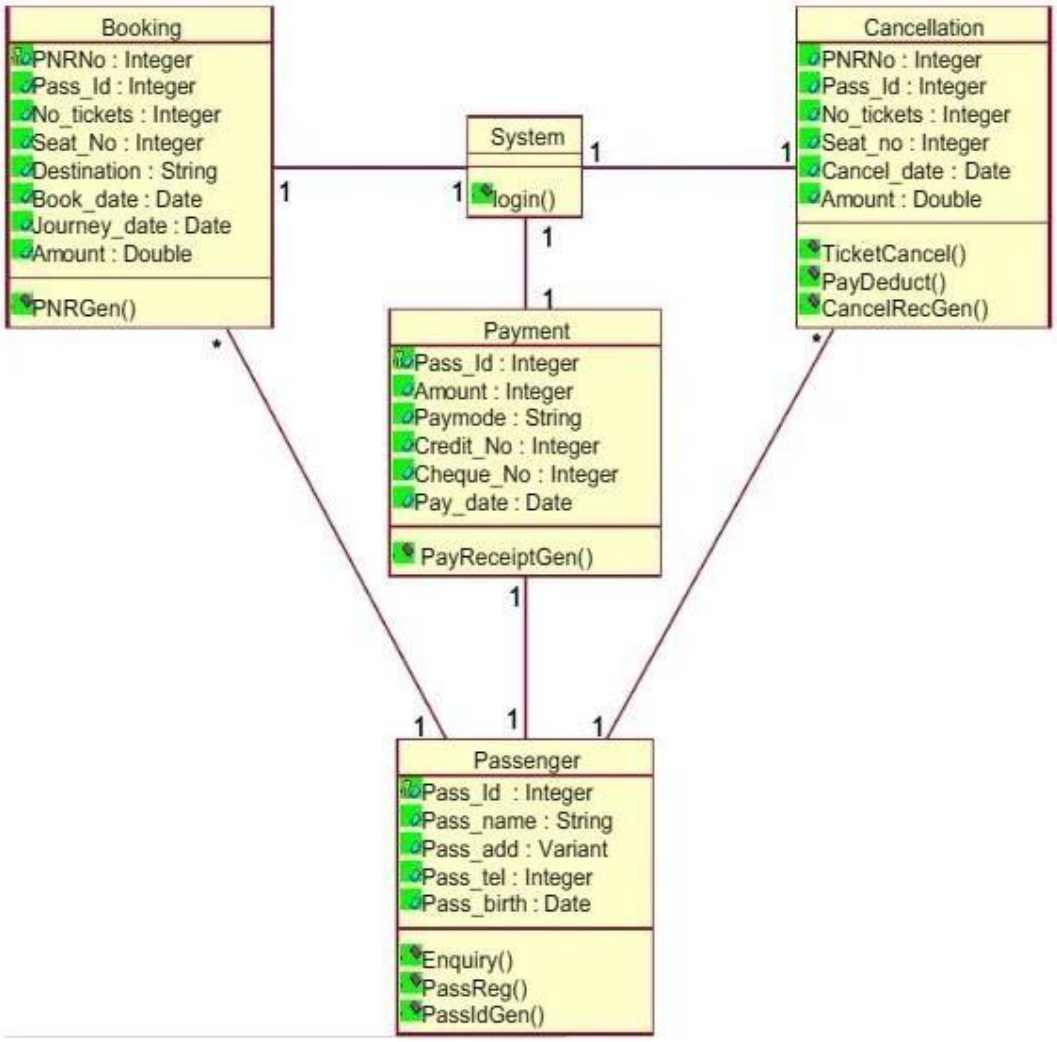
5.2 UML Diagrams:

- **Class diagram**
- **Object diagram**
- **Use case diagram**
- **Sequence diagram**
- **Activity diagram**

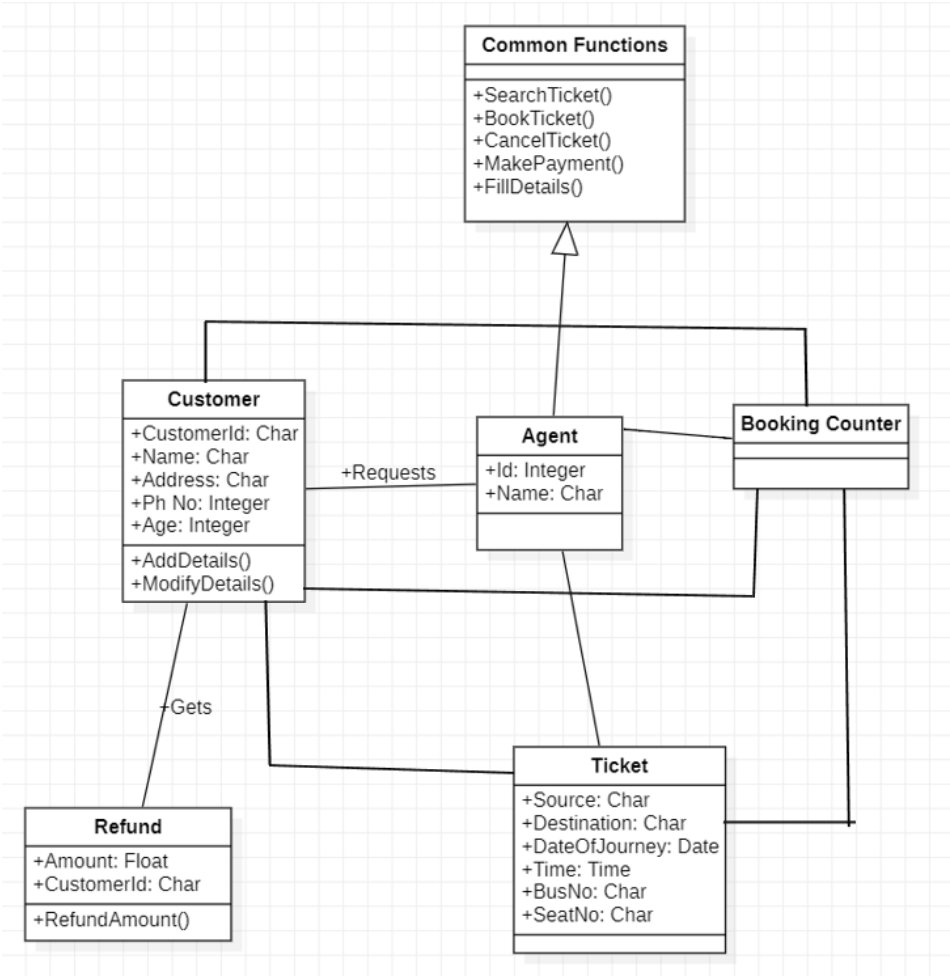
USECASE DIAGRAM:



CLASS DIAGRAM:



OBJECT DIAGRAM:



SEQUENCE DIAGRAM:

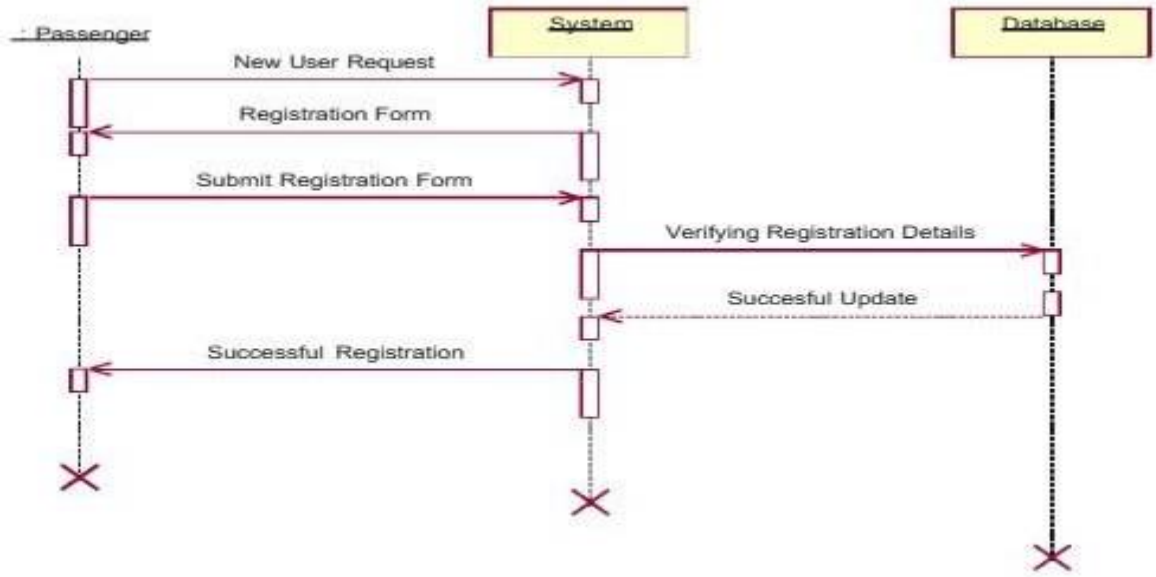


Figure 1. Sequence Diagram for Passenger Registration

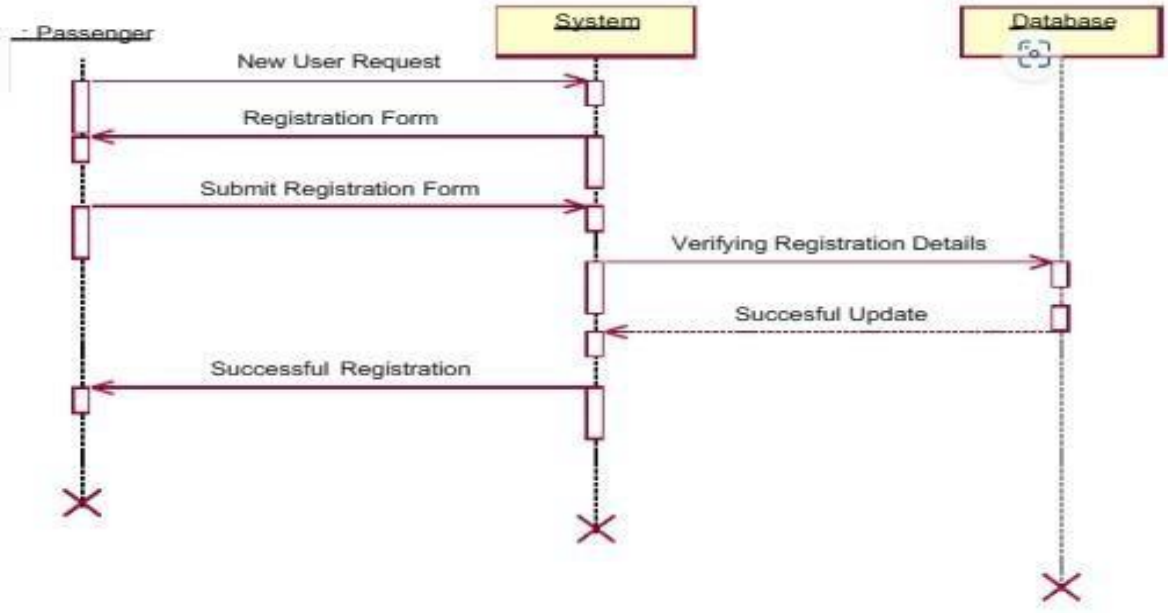
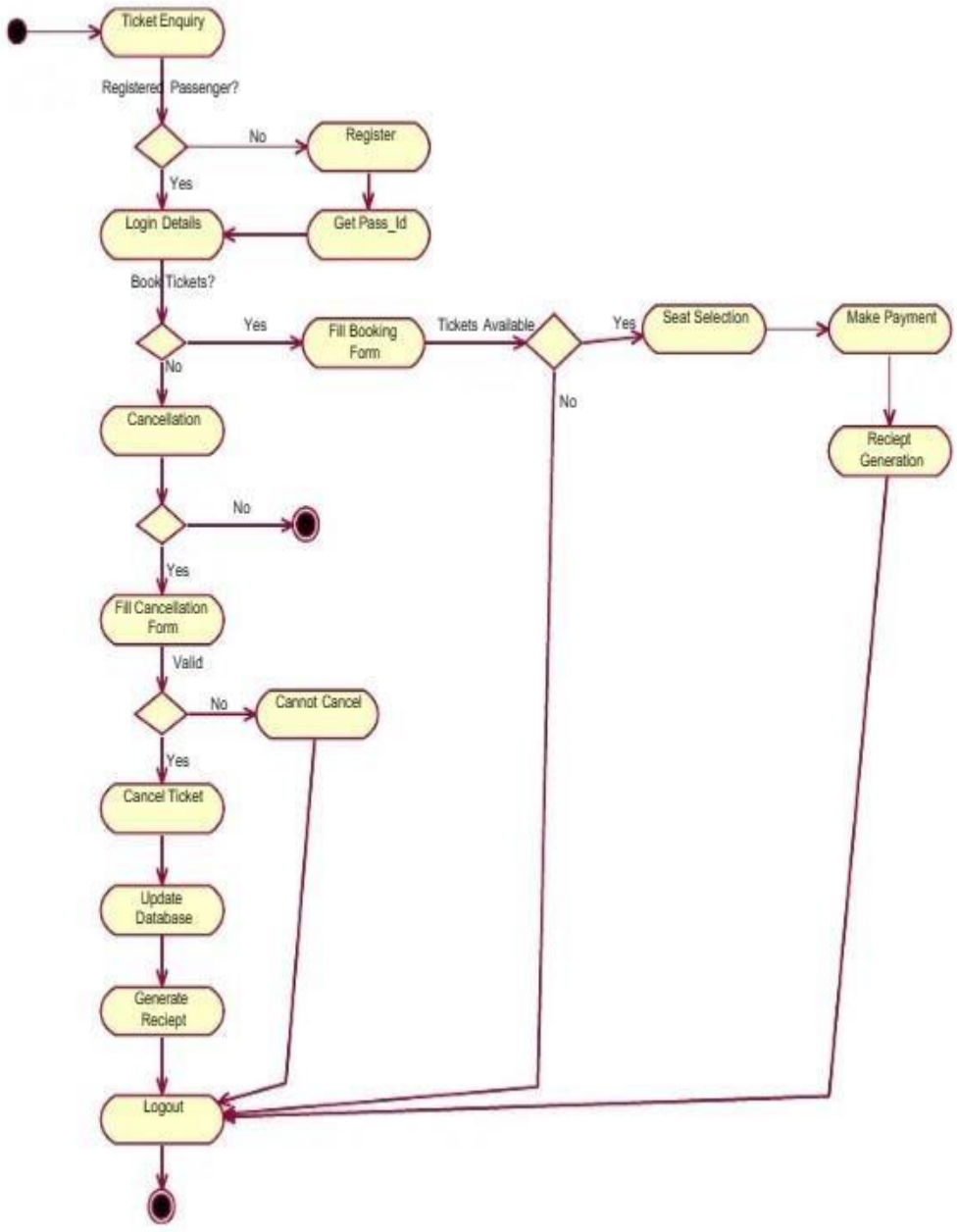


Figure 2. Sequence Diagram for Reservation

ACTIVITY DIAGRAM:



ER Diagram:

The Entity-Relationship (ER) model was originally proposed by Peter in 1976 [Chen76] as a way to unify the network and relational database views. Simply stated the ER model is a conceptual data model that views the real world as entities and relationships. A basic component of the model is the Entity-Relationship diagram which is used to visually represent data objects. Since Chen wrote his paper the model has been extended and today it is commonly used for database design for the database designer, the utility of the ER model is: It maps well to the relational model. The constructs used in the ER model can easily be transformed into relational tables. It is simple and easy to understand with a minimum of training. Therefore, the model can be used by the database designer to communicate the design to the end user.

ER Notation:

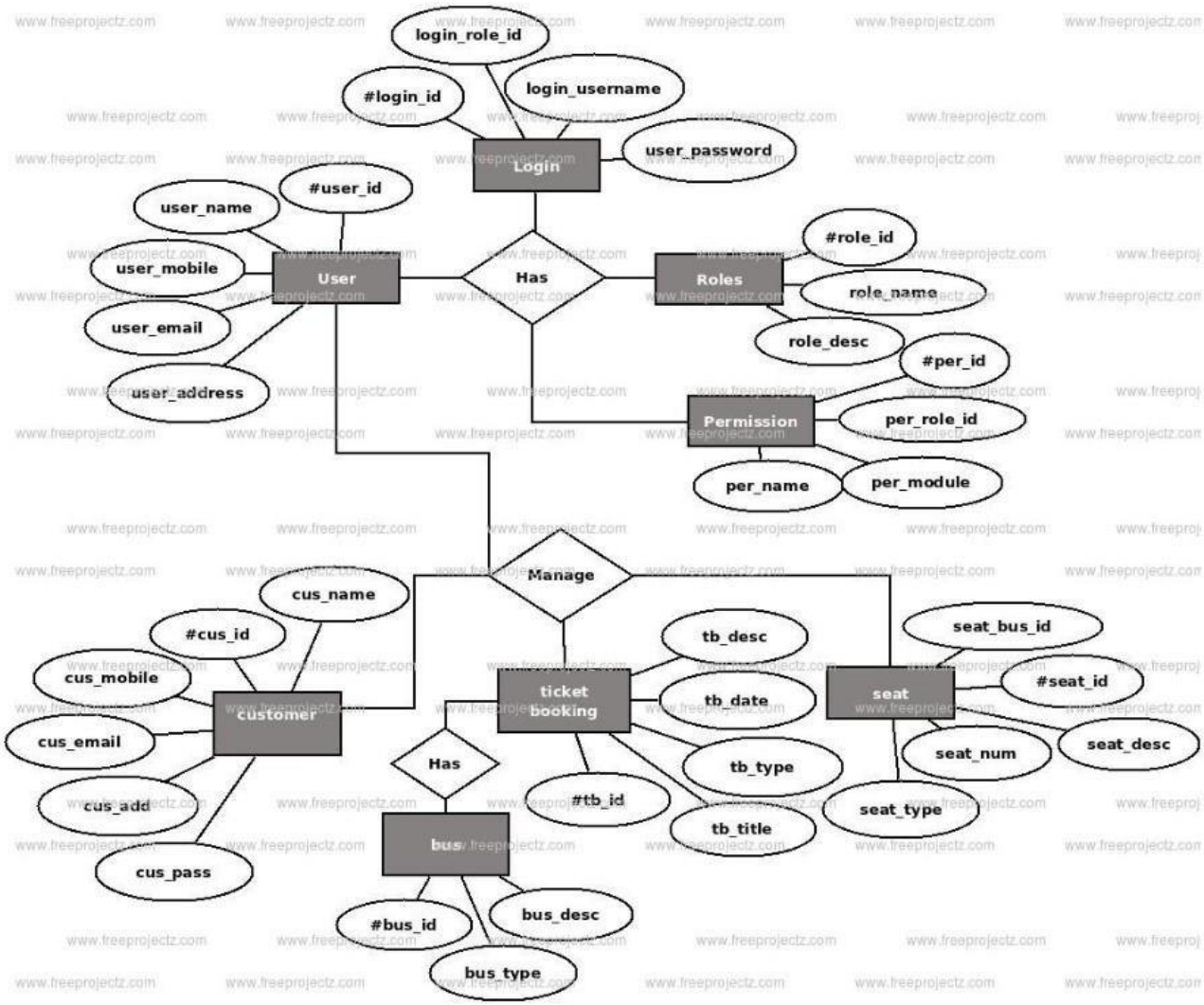
There is no standard for representing data objects in ER diagrams. Each modeling methodology uses its own notation. The original notation used by Chen is widely used in academics texts and journals but rarely seen in either CASE tools or publications by non academics. All notational styles represent entities as rectangular boxes and relationships as lines connection boxes. Each style uses a special set of symbols to represent the cardinality of a connection. The notation used in this document is from Martin. The symbols used for the basic ER constructs are:

Entities are represented by labeled rectangles. The label is the name of the entity. Entity names should be singular nouns. Relationships are represented by a solid line connecting two entities. The name of the relationship is written above the line. Relationship names should be verbs, Attributes, when included,

are listed inside the entity rectangle. Attributes which are identifiers are underlined. Attribute names should be singular nouns.

Cardinality of many is represented by a line ending in a crow's foot. If the crow's foot is omitted, the cardinality is one.

ER DIAGRAM:



ER Diagram For Bus Ticket Booking System

CHAPTER – 6

IMPLEMENTATION AND OUTPUT

6.1.1 Frontend Modules:

HTML :

HTML, or Hyper Text Markup Language, is the standard markup language used to create web pages. It defines the structure and layout of a web document by using a variety of tags and attributes to describe the content. HTML documents are composed of elements, which are enclosed by tags and typically consist of a start tag, content, and an end tag.

JavaScript :

JavaScript is a high-level, interpreted programming language primarily used for client-side web development. It allows developers to add interactivity and dynamic behavior to web pages. This enables developers to create dynamic and interactive web pages that respond to user actions in real-time without needing to communicate with the server for every interaction.

PHP :

PHP, which stands for Hypertext Preprocessor, is a server-side scripting language primarily used for web development. Unlike client-side languages like JavaScript, PHP is executed on the server before the resulting HTML is sent to the client's web browser. This allows PHP to interact with databases, manage sessions, generate dynamic content, and perform other server-side tasks.

MySql :

MySQL is an open-source relational database management system (RDBMS) that is widely used for storing and managing structured data. MySQL uses SQL as its query language for interacting with the database. SQL allows users to perform a wide range of operations, including creating and modifying

database schemas, inserting, updating, and deleting data, querying data to retrieve specific information, and managing user permissions.

6.1.2 SOURCE CODE

Seat Selection :

```
<div class="container">
  <?php
    session_start();
    $seat_values=$_POST["update_results"];
    $id=$_POST["update_results_id"];
    $unique_seats = $_POST["update_results_unique"];
    $username = $_SESSION['username'];
    $connect=mysqli_connect("localhost","root","","bus_service");
     $sql = "UPDATE bus_lists SET booked_seat = ".$seat_values." WHERE trip_no = ".$id."";
    if ($connect->query($sql) === TRUE) {
      //echo "Record updated successfully";
    }
    else {
      //echo "Error updating record: " . $connect->error;
    }
    $_SESSION['seat_value'] = $seat_values;
    $_SESSION['id'] = $id;
    $_SESSION['unique_seats'] = $unique_seats;
    $gender = "SELECT * FROM passengers WHERE trip_no = $id";
    $resultGender = mysqli_query($connect, $gender);
    $passengersData = array();
```

```
        while($row = mysqli_fetch_array($resultGender)) {
            $passenger = array(
                'Gender' => $row['Gender'],
                'Selected_Seats' => $row['Selected_Seats'],
                'Name' => $row['Name'],
                'User' => $row['User']
            );
            array_push($passengersData, $passenger);
        }
        $passengers_data = json_encode($passengersData);
        //echo ".$passengers_data.";
        $login_details = "SELECT * FROM user_registration";
        $login_result = mysqli_query($connect,$login_details);
        $login_data = array();
        while($row = mysqli_fetch_array($login_result)){
            $details = array(
            'Name' => $row['User_Name'],
            'Password' => $row['Password']
            );
            array_push($login_data,$details);
        }
        $login_details_data = json_encode($login_data);
    ?>
    </div>
  </div>
</div>
<script>
```

```
var booked_seats = "<?php echo $unique_seats; ?>";
 //alert(booked_seats);
 var split_seats = booked_seats.split(",");
 //alert(split_seats);
 var len=split_seats.length;
 //alert(len);
 generateFormFields();
 function generateFormFields() {

  //alert("Number of Seats Selected:");
  //alert(len);
 Var repetitions = parseInt(document.getElementById("repetitions").value);
  var container = document.getElementById("container");
  container.innerHTML = "";
  for (var i = 0; i < len; i++) {
  var fieldset = document.createElement("fieldset");

    // Create the seat number input box
    var seatInput = document.createElement("input");
    seatInput.type = "text";
    seatInput.name = "selectedseat[]";
    seatInput.value= split_seats[i];
    seatInput.style.width = "50px";
    seatInput.style.color= "#10d743";
    seatInput.style.backgroundColor="#dede4a";
    fieldset.appendChild(seatInput);
```

```
// Create the name input box
var nameInput = document.createElement("input");
nameInput.type = "text";
nameInput.name = "name[]";
nameInput.placeholder = "Name";
fieldset.appendChild(nameInput);

// Create the age input box
var ageInput = document.createElement("input");
ageInput.type = "number";
ageInput.name = "age[]";
ageInput.placeholder = "Age";
fieldset.appendChild(ageInput);

// Create the mobile number input box
var mobileInput = document.createElement("input");
mobileInput.type = "tel";
mobileInput.name = "mobile[]";
mobileInput.placeholder = "Mobile Number";
fieldset.appendChild(mobileInput);

// Create the gender input box
var genderInput = document.createElement("select");
genderInput.name = "gender[]";
var optionsel = document.createElement("option");
optionsel.value = "Gender";
optionsel.text = "Gender";
```

```
        var optionMale = document.createElement("option");
        optionMale.value = "male";
        optionMale.text = "Male";
        var optionFemale = document.createElement("option");
        optionFemale.value = "female";
        optionFemale.text = "Female";
        genderInput.add(optionsel);
        genderInput.add(optionMale);
        genderInput.add(optionFemale);
        fieldset.appendChild(genderInput);
        container.appendChild(fieldset);
      }

      for (var i = 0; i < len; i++) {

currentGenderInput=container.querySelectorAll("select[name='gender[]']")[i
];
 currentGenderInput.addEventListener("change", handleGenderChange);
      }
function handleGenderChange() {
selectedSeat=this.parentElement.querySelector("input[name='selectedseat[]
']").value;
 var adjacentSeat = getAdjacentSeat(selectedSeat);
 var selectedGender = this.value;
  var adjacentGender = getPassengerGender(adjacentSeat);
  var adjacentUser = getPassengerUser(adjacentSeat);
   var username = "<?php echo $username; ?>";
```

```
if (adjacentUser !== username) {
    if (adjacentGender === "female" && selectedGender === "male") {
      alert("Adjacent seat already booked by a female passenger.");
      this.selectedIndex = 2; // Reset selection to default
    }
  }
}

function getAdjacentSeat(seatNumber) {
  var row = seatNumber.charAt(0);
  var seatNum = parseInt(seatNumber.substring(1));
  var isEvenSeat = seatNum % 2 === 0;
  var adjacentSeatNum = isEvenSeat ? seatNum - 1 : seatNum + 1;
  var adjacentSeat = row + adjacentSeatNum;
  return adjacentSeat;
}

function getPassengerGender(seatNumber) {
  var passengers_data = <?php echo $passengers_data; ?>;
  for (var i = 0; i < passengers_data.length; i++) {
    if (passengers_data[i].Selected_Seats === seatNumber) {
      return passengers_data[i].Gender;
    }
  }
}
function getPassengerUser(seatNumber) {
  var user_data = <?php echo $passengers_data; ?>;
```

```
    for (var i = 0; i < user_data.length; i++) {
      if (user_data[i].Selected_Seats === seatNumber) {
        return user_data[i].User;
      }
    }
  }
```

Passenger Details :

```
<?php
   session_start();
   $seat_values = $_SESSION['seat_value'];
   $id = $_SESSION['id'];
   $unique_seats = $_SESSION['unique_seats'];
   // Check if the 'username' session key is set
   if (isset($_SESSION['username'])) {
      $username = $_SESSION['username'];
   } else {
      //
   }
   echo "<h1>Passenger Details</h1>";
   //echo "<b>Seat Values:</b> " . $seat_values . "<br>";
   echo "<b>Trip ID:</b> " . $id . "<br><br>";
   echo "<b>Selected Seats:</b> " . $unique_seats . "<br>";
   //echo "<b>Username:</b>" .$username. "<br>";
   echo "<br><br><br>";

   // Calculate the count of unique seats
```

```
$seats_array = explode(",", $unique_seats);
$unique_seat_count = count(array_unique($seats_array));
// Assign the unique seat count to the $len variable
$len = $unique_seat_count;
if ($_SERVER["REQUEST_METHOD"] === "POST") {
   $connect = mysqli_connect("localhost", "root", "", "bus_service");
   if (!$connect) {
      die("Connection failed: " . mysqli_connect_error());
   }
   echo "<table>";
   echo "<tr>";
   echo "<th>User_Name</th>";
   echo "<th>Name</th>";
   echo "<th>Age</th>";
   echo "<th>Mobile</th>";
   echo "<th>Gender</th>";
   echo "<th>Selected Seat</th>";
   echo "<th>Trip_No</th>";
   echo "<th>Date</th>";
   echo "</tr>";

   for ($i = 0; $i < $len; $i++) {
      $name = $_POST["name"][$i]; // Retrieve the value as an array
      $age = $_POST["age"][$i];
      $mobile = $_POST["mobile"][$i];
      $gender = $_POST["gender"][$i];
      $selectedSeats = $seats_array[$i];
```

```
        $Tripno = $id;
        $userData= $username;
        $date = date("Y-m-d");

        // Insert data into the table
            $sql = "INSERT INTO passengers (Name, Age, Mobile, Gender, Selected_Seats, Trip_no, User,Date_of_booking)
                                VALUES ('$name', $age, '$mobile', '$gender', '$selectedSeats','$Tripno','$userData','$date')";

        if (mysqli_query($connect, $sql)) {
            echo "<tr>";
            echo "<td>$userData</td>";
            echo "<td>$name</td>";
            echo "<td>$age</td>";
            echo "<td>$mobile</td>";
            echo "<td>$gender</td>";
            echo "<td>$selectedSeats</td>";
            echo "<td>$Tripno</td>";
            echo "<td>$date</td>";
            echo "</tr>";
        } else {
            echo "Error inserting data: " . mysqli_error($connect);
        }
    }
    echo "</table>";
```

```
// Fetching fare from bus_lists based on trip_no
   $fare_query = "SELECT fare FROM bus_lists WHERE trip_no = $id";
   $fare_result = mysqli_query($connect, $fare_query);

   if ($fare_result) {
      // Fetch the fare row only if the query is successful
      $fare_row = mysqli_fetch_assoc($fare_result);
      $fare = $fare_row['fare'];
   } else {
      // Handle the error if the query fails
      $fare = 0; // Set a default fare value or handle as needed
   }

   // Display the fare information
   echo "<div style='margin-top: 20px;'></div>";
   echo "<div style='margin-top: 20px;'></div>";
   echo "<div style='margin-top: 20px;'></div>";
   echo "<b>Trip Fare:</b> $" . $fare . "<br><br>";

   // Calculate total cost based on the number of passengers
   $total_cost = $len * $fare;
   echo "<b>Total Cost for $len passengers:</b>
$".$total_cost."<br><br>";
   // Close the mysqli connection after using it
         mysqli_close($connect);
```

```
            }
        ?>
        <div style="text-align: center; margin-top: 20px;">
      <img
src="https://th.bing.com/th/id/OIP.eZ151UnGU4fH0ghhIbykVAHaDq?rs=1&pid
=ImgDetMain" alt="Image 1" style="width: 300px; height: auto; margin-right:
20px;">
  <img src="https://acart.com/wp-content/uploads/2013/03/ht_sleep_ad.jpg"
alt="Image 2" style="width: 300px; height: auto; margin-right: 20px;">
    <!-- Add more images or content as needed -->
  </div>

  <form action="payment.php" method="post">
    <!-- Mobile Number -->
    <label for="mobile"><b>Mobile Number: </b>
      <input type="text" id="mobile" name="mobile" required>
    </label>

    <!-- Email Address -->
    <label for="email"><b>Email Address: </b>
      <input type="email" id="email" name="email" required>
    </label><br><br>

    <!-- Checkbox for Terms and Conditions -->
    <label>
      <input type="checkbox" required> I accept the terms and conditions
     </label><br><br>
```

```
        <!-- Make a Payment button -->
        <input type="submit" value="Make a Payment">
    </form>
```

Sending Email :

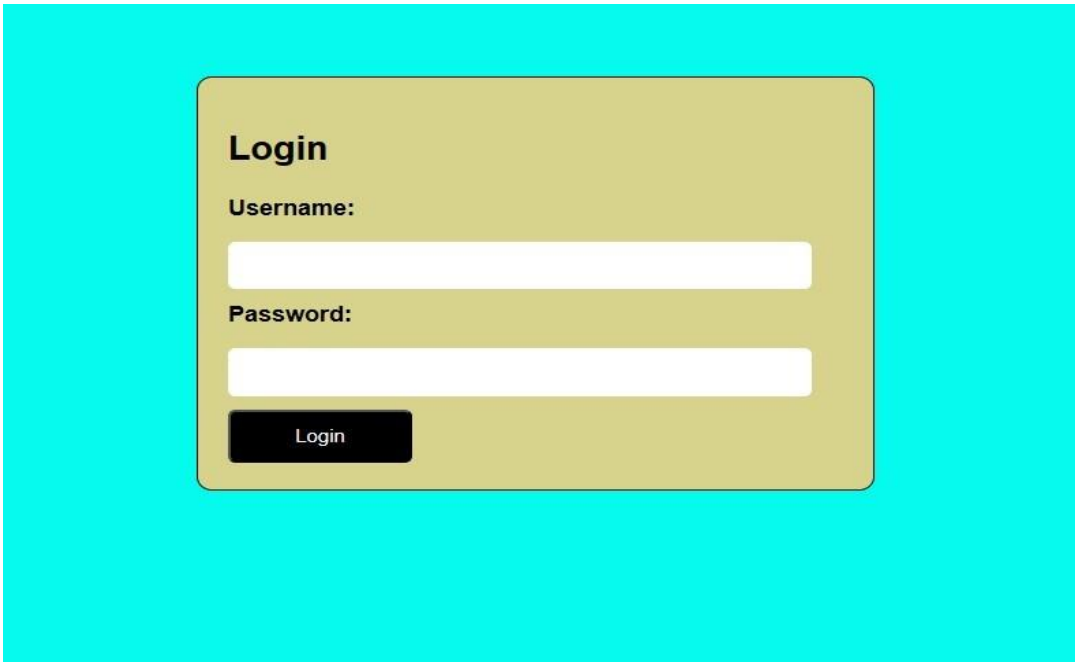
```
<?php

    use PHPMailer\PHPMailer\PHPMailer;
    use PHPMailer\PHPMailer\Exception
    require 'vendor/autoload.php';
    if ($_SERVER["REQUEST_METHOD"] === "POST") {
        $passenger_mobile = $_POST['mobile'];
        $passenger_email = $_POST['email'];
        if (isset($_POST['Proceed'])) {

            $to_id = $passenger_email;
            $subject = 'Your Ticket Booking Confirmed';
            $message = 'Dear passenger, your ticket booking is confirmed. Thank you
for choosing our service.';
            $mail = new PHPMailer(true);
            $mail->isSMTP();
            $mail->Host = 'smtp.gmail.com';



            $mail->SMTPAuth = true;
            $mail->Username = 'r190529@rguktrkv.ac.in';
```

```
        $mail->Password = bqmy bpbc lzxh utrl;
        $mail->SMTPSecure = 'tls';
        $mail->Port = 587;
        $mail->setFrom('r190529@rguktrkv.ac.in', 'Divya');
        $mail->addAddress($to_id);
        $mail->Subject = $subject;
        $mail->Body = $message;
        if (!$mail->send()) {
        $error  = "Mailer Error: " . $mail->ErrorInfo;
           echo "Error: " . $error;
        } else {
           echo "<b>Your Ticket Booking Confirmed.   </b>";
           echo "<b>Check your email for confirmation... </b>";
        }
      } else {
        echo "Please enter valid details...";
      }
   }
?>
```

OUTPUT :

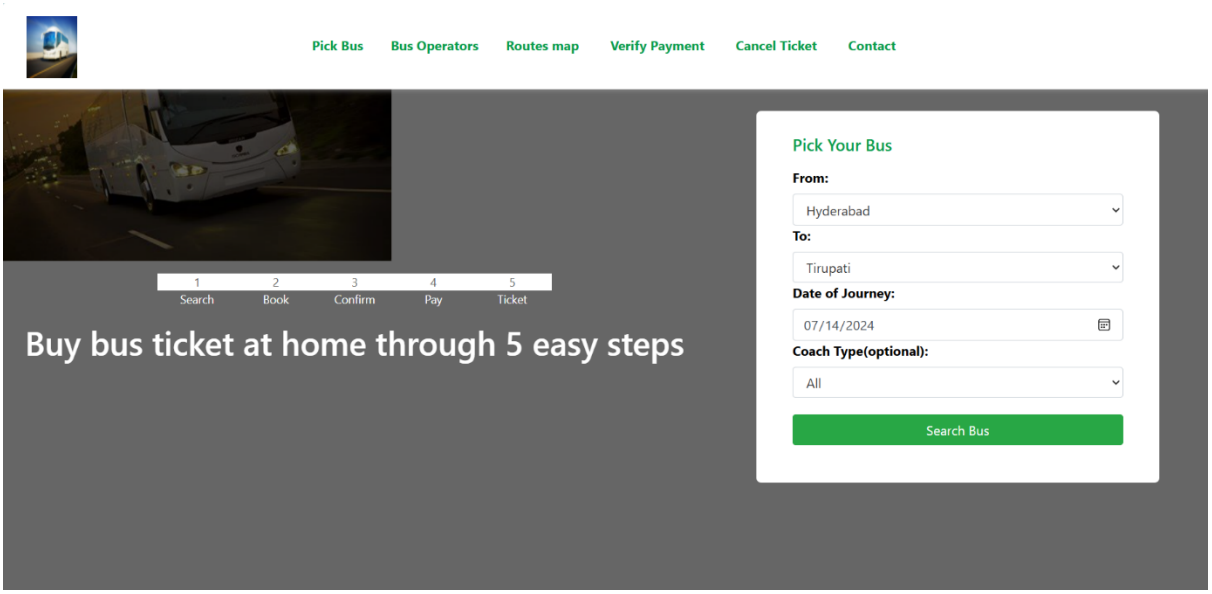
1.Home Page:

2. Login Page:

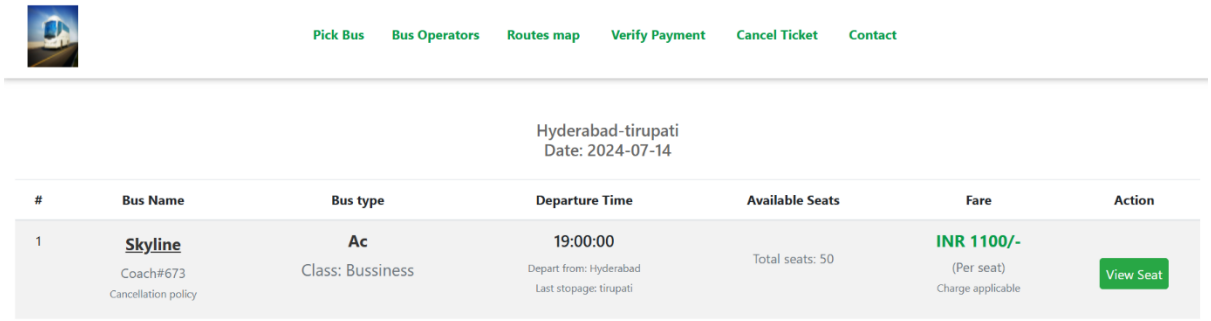


3. Register Page:

4. Booking Page:

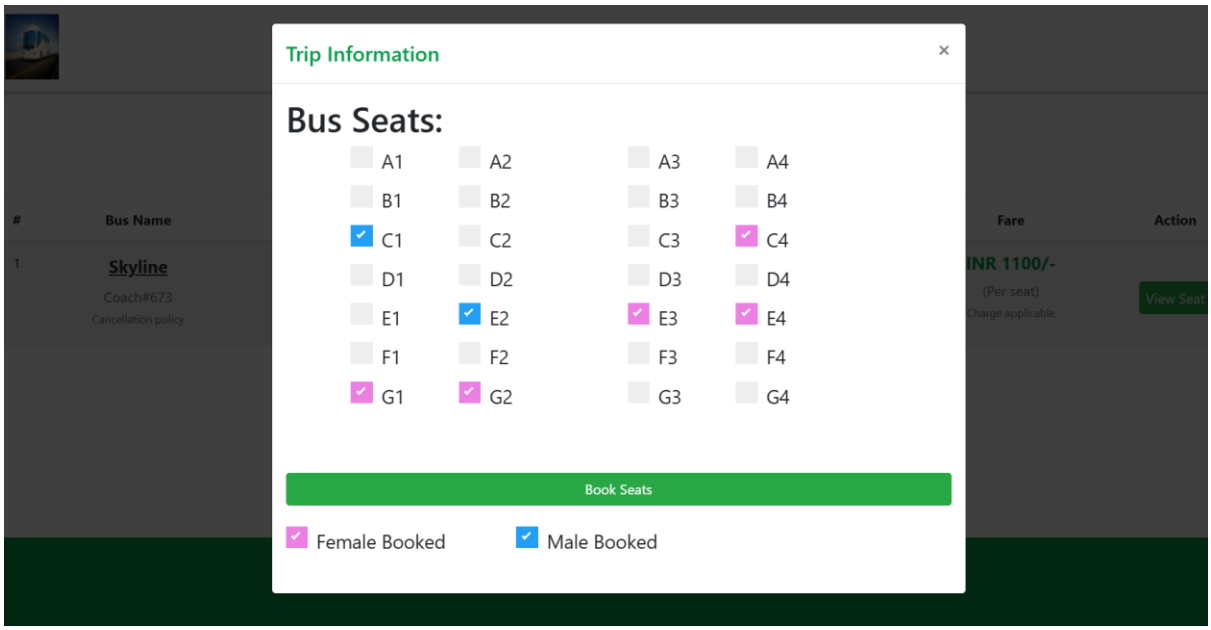


5. Available Buses:



6. Bus Info:

7. Seat Info:

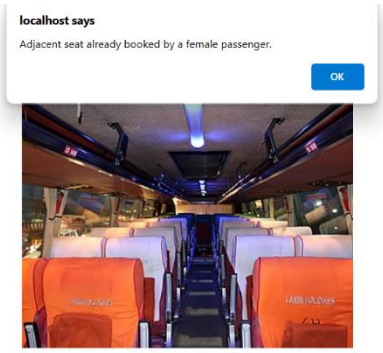


8. If (Selected_seat.Username !== Adjacent_seat.Username){

If (Adjacent_seat.Gender=”Female” && Selected_seat.Gender == “Male”){

alert(“then it shows the alert and bydefualt Gender Female option is Fixed”)

}}



9. **If (Selected_seat.Username === Adjacent_seat.Username){**

If (Adjacent_seat.Gender == ”Female” && Selected_seat.Gender == “Male”){

then both the username are same so both Gender options are enabled

}}

Traveller Details:

G1	Divi	20	6300453240	Female
E2	Yash	23	6300453240	Male

Submit

10. Passenger Details:

Passenger Details

Trip ID: 4

Selected Seats: G1,E2

User_Name	Name	Age	Mobile	Gender	Selected Seat	Trip_No	Date
divi	Divi	20	6300453240	female	G1	4	2024-07-14
divi	Yash	23	6300453240	male	E2	4	2024-07-14

Trip Fare: $1100

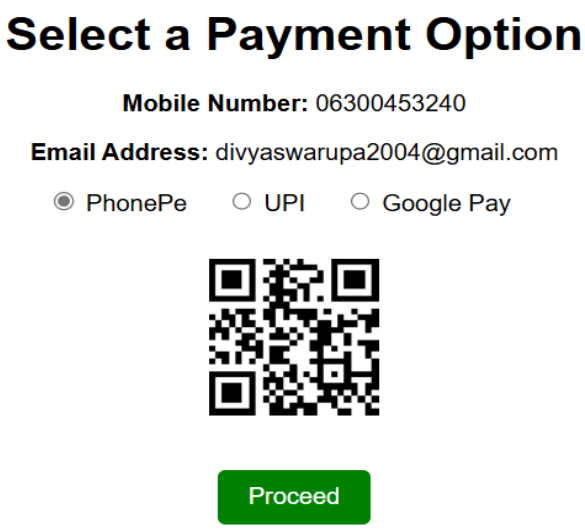
Total Cost for 2 passengers: $2200

Mobile Number: **Email Address:**

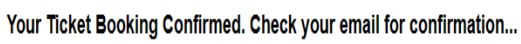
I accept the terms and conditions

Make a Payment

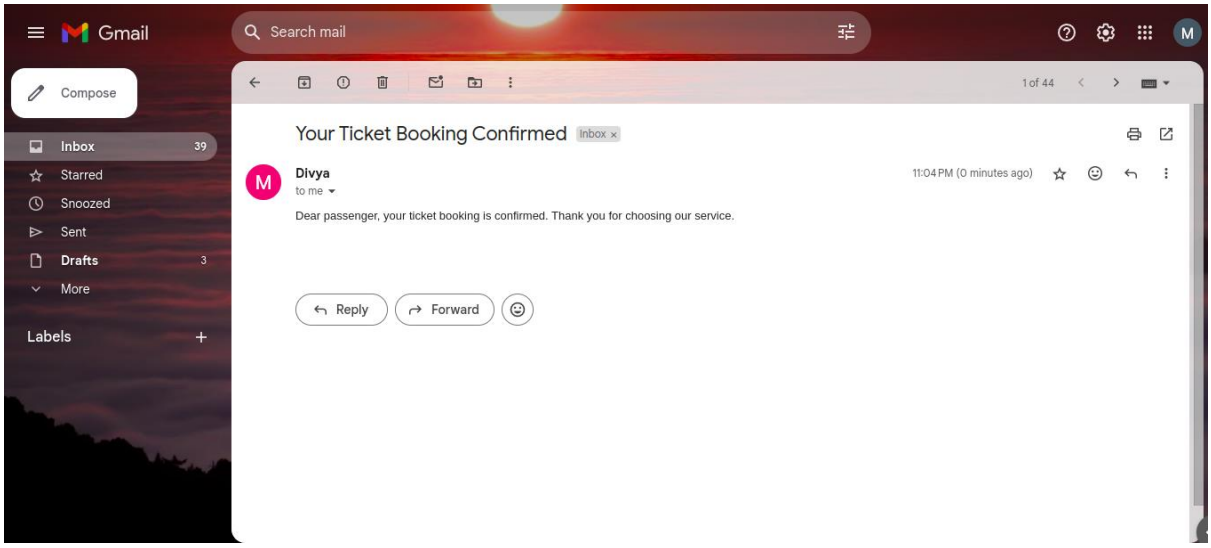
11. Payment Page:



12. Confirmation Page:



13. Confirmation Mail:



FUTURE SCOPE

The Future Scope of the Project, Bus-Booking-System can involve various enhancements and expansions to further improve user experience, increase functionality, and adapt to emerging trends in the digital Landscape. Here are some potential avenues for future development.

Multi-platform Accessibility:

Mobile Applications: Develop mobile applications for iOS and Android to reach a broader audience and provide a seamless mobile experience.

Payment Integration: Integrate various payment gateways to provide users with multiple options for making payments, such as credit/debit cards, digital wallets, and net banking.

Real-Time Tracking: Implement real-time bus tracking so that users can track the current location and estimated arrival time of the bus.

CONCLUSION

The Advent of the online bus ticket booking system has ushered in a new era of convenience, efficiency, and accessibility for travelers and bus operators alike. This transformative technology has revolutionized the way people plan and embark on bus journeys, offering a seamless platform that empowers users to search for routes, compare options, secure seats, and complete transactions at their fingertips. The system's real-time information, secure payment gateways, and instant booking confirmations have significantly streamlined the booking process, saving valuable time and effort. The online bus ticket booking system has also improved. By offering tools for seat management, route optimization, and data-driven insights, the system empowers operators to meet demand more effectively and enhance customer satisfaction.

In this project I proposed solution for one of the major issue along with some performance improvements and planning to use user profile based mechanism to allow booking of additional ticket beside already booked ticket irrespective of gender.

REFERENCES

For JavaScript:

- https://www.w3schools.com/js/

For MySQL:

- https://www.w3schools.com/MySQL/default.asp

For PHP:

- https://www.w3schools.com/php/