

A FIELD PROJECT REPORT ON

Restaurant Reservation System

Submitted

In partial fulfillment of the requirements for the award of the degree

BACHELOR OF TECHNOLOGY

In

COMPUTER SCIENCE AND ENGINEERING

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CERTIFICATE

This is to certify that the field project entitled "*Restaurant Reservation System*" is being submitted by **K .Vinod [231FA04E51], Y. Srinivas [231FA04E73], A. Manvitha [231FA04E79], and D. Rakesh [231FA04G46]** in partial fulfilment of the requirements for the degree of **Bachelor of Technology (B.Tech.) in Computer Science and Engineering** at Vignan's Foundation for Science, Technology and Research (Deemed to be University), Vadlamudi, Guntur District, Andhra Pradesh, India.

This is a bonafide work carried out by the aforementioned students under my guidance and supervision.

Guide

Project Review Committee

HOD, CSE



(Deemed to be University) - Estd. u/s 3 of UGC Act 1956

DECLARATION

Date:

We hereby declare that the work presented in the field project titled “Restaurant Reservation System” is the result of our own efforts and investigations.

This project is being submitted under the supervision of **Ch. Swarna Lalitha, Assistant Professor, CSE** in partial fulfillment of the requirements for the Bachelor of Technology (B.Tech.) degree in Computer Science and Engineering at Vignan's Foundation for Science, Technology and Research (Deemed to be University), Vadlamudi, Guntur, Andhra Pradesh, India.

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1. INTRODUCTION

A Restaurant Reservation System is a digital platform designed to enhance the dining experience for customers and streamline operations for restaurant owners and staff. As the demand for convenience and efficiency in hospitality continues to grow, online reservation systems have become essential tools in modern restaurant management. These systems allow customers to effortlessly book tables at their preferred restaurants, while enabling businesses to manage reservations, track availability, and reduce manual errors.

An effective restaurant reservation website aims to provide a smooth and intuitive interface for both users and administrators. It offers features such as restaurant listings, table availability checks, real-time booking options, confirmation notifications, and reservation history tracking. Restaurants benefit from this system by improving customer satisfaction, optimizing table occupancy, and minimizing no-shows through automated reminders and confirmations.

The core objective of a restaurant reservation system is to bridge the gap between diners and restaurant services by offering a seamless, time-saving, and user-friendly booking process. In addition to basic functionalities, the system can also include features like user profiles, special occasion reminders, loyalty points, review and rating systems, and even pre-ordering options.

The goal of the Restaurant Reservation System is to enhance both customer convenience and restaurant efficiency by providing an easy-to-use, mobile-responsive interface with automated confirmations and notifications. Built with technologies like HTML, CSS, JavaScript the system is designed to handle user requests smoothly and securely. Additional features such as booking history, customer reviews, and cancellation/modification options improve the overall user experience and business operations.

Developing such a system comes with challenges, such as handling high traffic during peak times, managing last-minute cancellations or modifications, and securing sensitive user information. These can be addressed by incorporating strong backend architecture, secure authentication (e.g., JWT), and real-time data handling.

1.1Problem Definiton

In today's fast-paced world, many people find it difficult and inconvenient to dine out without prior planning. Traditional methods of reserving tables—such as calling restaurants or walking in—can lead to long wait times, overcrowding, or even being turned away due to unavailability. This not only affects the customer experience but also hampers restaurant efficiency and revenue.

Customers also face challenges in discovering restaurants that suit their preferences for cuisine, ambiance, timing, and budget. At the same time, restaurants struggle to manage table bookings manually, especially during peak hours, leading to confusion, miscommunication, and poor customer service.

A Restaurant Reservation System addresses these issues by offering a streamlined, user-friendly platform where users can browse restaurants, check table availability in real-time, and make reservations instantly. For restaurant owners, it simplifies booking management, reduces no-shows, and improves table turnover.

By centralizing reservation tasks and enhancing accessibility, the system makes dining out a smoother, faster, and more enjoyable experience for both customers and restaurants.

1.2Existing System

Currently, several online platforms allow users to find and reserve tables at restaurants. Some of the most widely used systems include:

- Zomato, Swiggy Dineout – Offer table reservations, restaurant discovery, and reviews.
- OpenTable, Yelp Reservations – Provide online booking features for various restaurants, mainly in metropolitan cities.
- Google Maps – Allows limited restaurant reservations through third-party integrations.
- Restaurant Websites – Many restaurants have individual websites for reservations and menu viewing

Limitations of the Existing System

- Fragmented access – Users need to switch between multiple apps or websites to compare restaurants and availability.
- Limited features for smaller/local restaurants – Many platforms prioritise big chains, leaving local eateries underrepresented.
- Inconsistent user experience – Some platforms lack real-time availability, leading to booking errors.
- Dependency on third-party services – Restaurants often pay high commissions or fees for visibility and reservations.

1.3 Proposed System

The proposed Restaurant Reservation System offers a seamless and user-friendly platform that allows customers to:

- Unified Table Booking – Browse nearby restaurants, check real-time table availability, and make instant reservations.
- Restaurant Discovery – View detailed menus, photos, ratings, and cuisines to help users pick the best dining options.
- User Profiles & Reservation History – Track bookings, favorite restaurants, and dining preferences for a personalized experience.

Benefits:

Saves time by avoiding phone calls and walk-ins.

- Improves customer satisfaction with instant confirmations and reminders.
- Supports restaurants by managing reservations, peak times, and no-shows efficiently.
- Enhances visibility for local restaurants by connecting them to a larger audience.

1.4 Literature Review

The hospitality industry has seen rapid digital transformation with the increasing demand for seamless dining experiences. Restaurant reservation systems have become essential tools for both customers and restaurant owners, offering convenience, efficiency, and better service management. However, existing systems present several limitations:

- Scattered Information – Users often need to switch between multiple platforms or apps to view restaurant details, make bookings, and read reviews.
- Lack of Personalization – Many platforms do not suggest restaurants based on user preferences such as cuisine type, budget, or previous choices.
- No Real-Time Updates – Some systems fail to provide live updates on table availability, special offers, or operating hours.

2. SYSTEM REQUIREMENTS

2.1 HARDWARE AND SOFTWARE REQUIREMENTS:

Software Requirements :

- Operating System: Windows 10, macOS, or Linux
- Database: MySQL or PostgreSQL (to store user and travel data)
- Backend: Java, Python (to manage website functions)
- Frontend: HTML, CSS, JavaScript (for website design and interaction)
- Browser: Google Chrome, Firefox, or Safari (latest versions)

Hardware Requirements :

Minimum Requirements:

- Processor : Intel Core i3
- RAM: 4GB
- Storage: 20GB free space
- Internet: Required for online access

Recommended Requirements:

- Processor: Intel Core i5/i7
- RAM: 8GB+
- Storage: 50GB+
- Internet: High-speed connection for smooth browsing and bookings

2.2 Software Requirements Specification (SRS)

2.2.1. Functional Requirements

- User Registration & Login –
Secure sign-up and login functionality for customers and restaurant owners.
- Search & Table Booking –
Users can search restaurants based on location, cuisine, availability, and make reservations.

- **Restaurant Profile Management –**

Restaurant owners can add, update, and manage details like menu, timings, and table availability.

- **Booking History & Notifications –**

Users can view their previous bookings and get confirmation/reminder alerts.

- **Reviews & Ratings –**

Customers can rate restaurants and share dining experiences.

- **Payment Integration –**

Secure online payments for booking deposits or prepaid meals.

2.2.2. Non-Functional Requirements

1. **Performance –**

The system should respond to user actions within 2 seconds and handle multiple requests simultaneously.

2. **Security –**

All sensitive data (like passwords and payments) should be encrypted and securely stored.

3. **Scalability –**

The system should be able to support an increasing number of users and restaurants as the platform grows.

4. **Compatibility –**

The application should function smoothly across various devices (mobile, tablet, desktop) and browsers.

5. **Availability –**

The system should ensure at least 99.5% uptime to maintain constant availability.

3.SYSTEM DESIGN

3.1 Modules of Systems:

3.1.1. User Interaction –

Customers browse restaurants, view menus, read descriptions, and explore with engaging UI and images.

3.1.2. Search & Filters –

Find restaurants based on location, cuisine, price range, ratings, and availability.

3.1.3. Reservation & Payment –

Allows users to reserve tables in real-time and make secure payments via UPI, PayPal, Razorpay, etc.

3.1.4. Content Display –

Restaurant details, menus, and images are showcased using HTML, CSS, and JavaScript.

3.1.5. Personalized Suggestions –

AI recommends restaurants based on user preferences, past bookings, and trending spots.

3.1.6. User Reviews & Feedback –

Diners can rate restaurants, write reviews, and share their experiences.

3.1.7. Admin Panel –

Admins and restaurant owners manage bookings, view analytics, update menus, and handle customer queries.

3.1.8. Reservation Alerts & Reminders –

Users receive real-time booking confirmations, reminders, and updates via email/SMS.

3.1.9. Social Media Integration –

Users can share reservations and dining experiences on platforms like Instagram and Facebook.

3.1.10. Offline Booking Access –

Users can view saved reservations, favorite restaurants, and offline menus without internet access

3.2 UML Diagrams

3.2.1. Use Case Diagram :- A Use Case Diagram is a behavioral UML diagram that visually represents the interactions between users (actors) and the Restaurant Reservation System. It defines the functional requirements of the system and shows what actions users can perform. This diagram helps in identifying the scope of the project, the primary features, and the relationships between different users and functionalities.

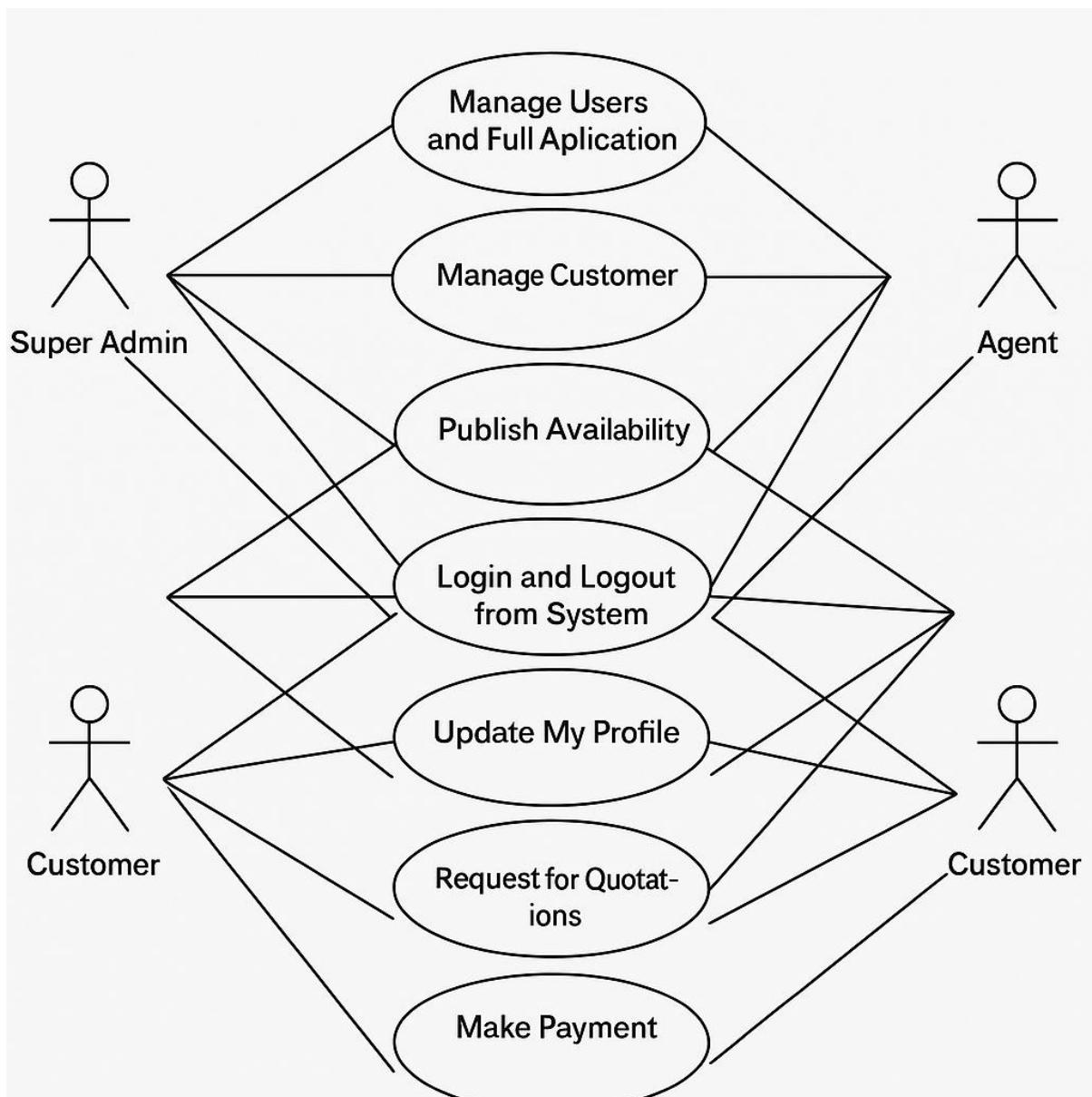


FIG 3.2.1(use case diagram)

3.2.2.Activity Diagram:- An Activity Diagram is a behavioral UML diagram that represents the workflow of the Restaurant Reservation System. It visualizes the dynamic aspects of the system by illustrating the sequence of activities and actions performed by users and the system itself.

This diagram shows how a user interacts with the platform—from browsing available restaurants, making a reservation, to receiving confirmation. It includes decision points like login verification, table availability checks, and payment completion.

By highlighting the system's activity flow, the diagram ensures that both developers and stakeholders clearly understand how the reservation process functions step-by-step, helping streamline operations and enhance user experience.

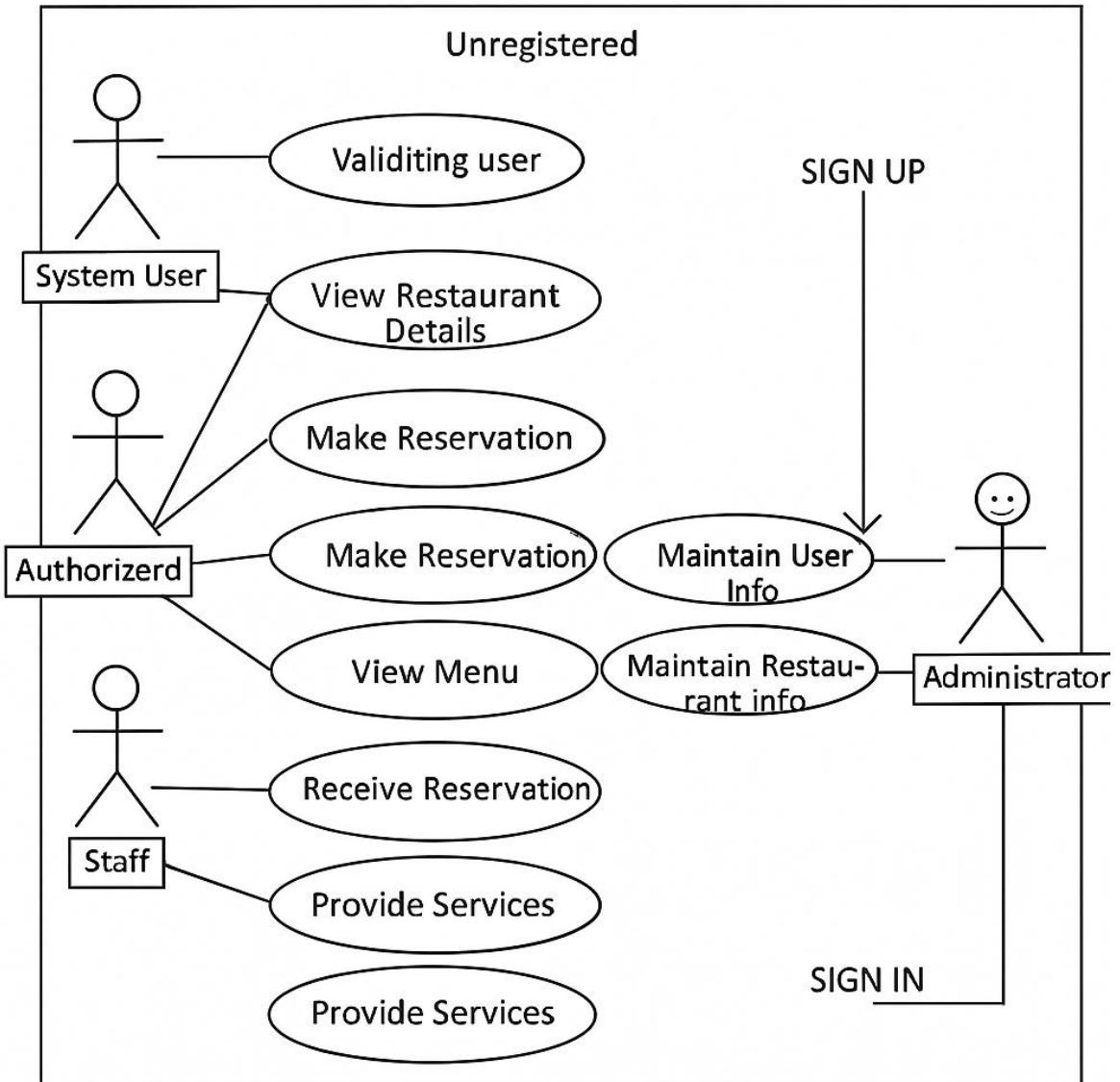


FIG 3.2.2(Activity diagram)

3.2.3. Class Diagram :-

A Class Diagram is a structural UML diagram that represents the static structure of a system by showing its classes, attributes, methods, and relationships among objects. It is widely used in object-oriented design to define the blueprint of a system.

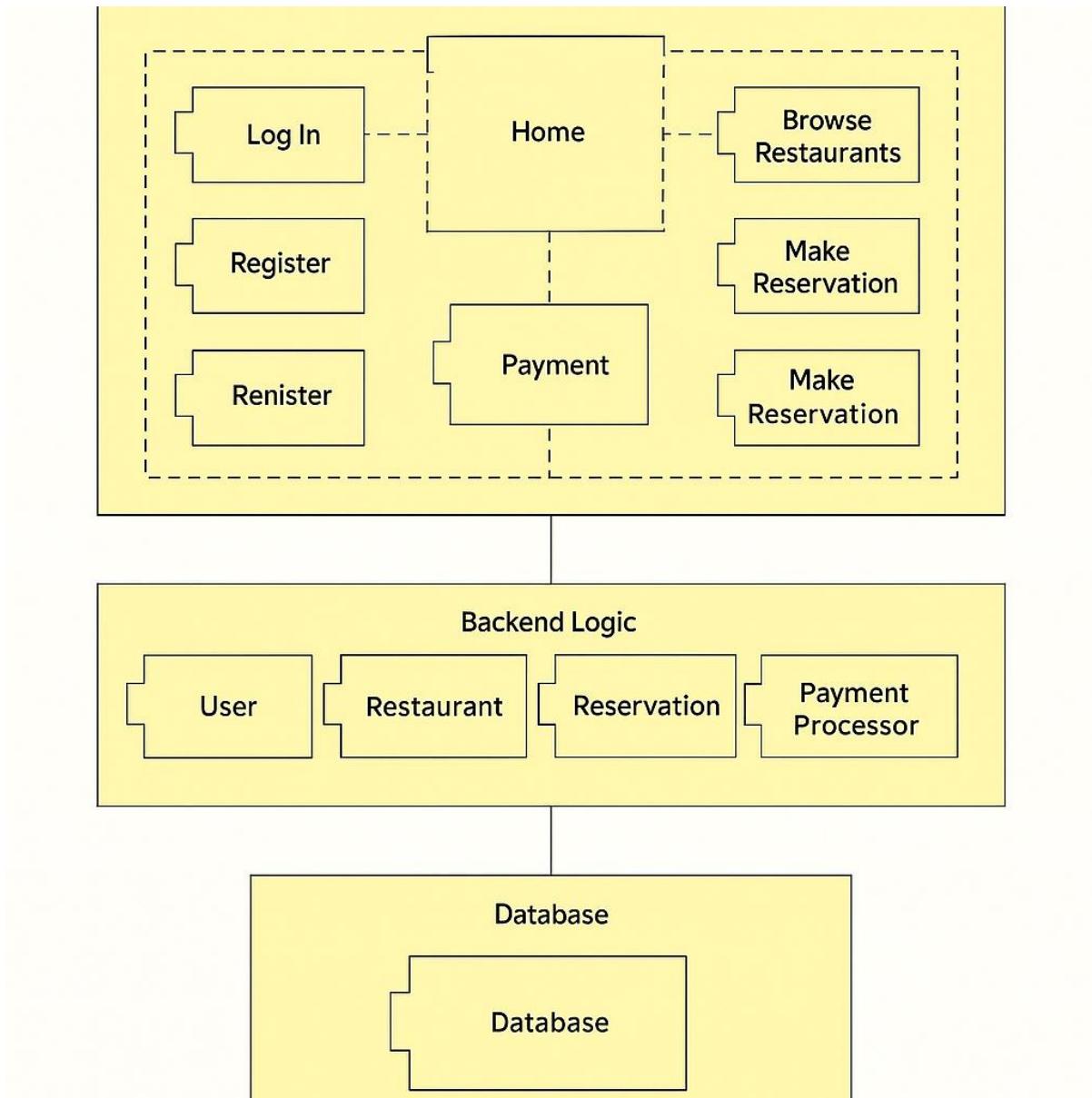


FIG 3.2.3(class diagram)

4. IMPLEMENTATION

4.1 Sample Codes

4.1.1. Login code

```
<!DOCTYPE html>

<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Login Page</title>
<link rel="stylesheet" type="text/css" href="lstyles.css">

</head>
<body>
<div class="login-container">
<h1 style="background-color:brown;color:white;border-radius:5px;">Activate
Tables</h1>
<h1 style="background-color:brown;color:white;border-radius:5px;">Login</h1>
<form action="up2.html">
<input type="text" name="username" placeholder="Username" required>
<input type="password" name="password" placeholder="Password" required>

<button type="submit">next</button>
</form>
</div>
</body>
</html>
```

4.1.2.Login page styles:

```
body {  
    font-family: lucida;  
    background-image: url("https://img.freepik.com/premium-vector/mobile-booking-  
    reservation-table-restaurant-woman-chooses-cafe-online-waiter-sets-table-huge-smartphone-  
    tiny-people-online-menu-food-application-vector-concept_176411-5518.jpg?w=1060");  
    background-repeat: no-repeat;  
    background-size: cover;  
    background-attachment: fixed;  
    background-size: 100% 100%;  
    backdrop-filter: blur(4px);  
    backdrop-filter: brightness(85%);  
    display: flex;  
    justify-content: center;  
    align-items: center;  
    height: 100vh;  
    margin: 0;  
}  
.login-container {  
    background: transparent;  
    padding: 50px;  
    border-radius: 10px;  
    border: double black;  
    text-align: center;  
}  
.login-container h2 {  
    margin-bottom: 20px;  
}  
.login-container input {  
    width: 100%;  
    padding: 10px;  
    margin: 10px;  
    border: 1px solid #ccc;  
    border-radius: 5px;  
}  
.login-container button {  
    width: 100%;  
    padding: 10px;  
    background-color: brown;  
    color: white;  
    border: none;  
    border-radius: 5px;  
    cursor: pointer;  
}  
.login-container button:hover {  
    background-color: blue;  
}  
body {  
    font-family: lucida;
```

```
background-image: url("https://img.freepik.com/premium-vector/mobile-booking-reservation-table-restaurant-woman-chooses-cafe-online-waiter-sets-table-huge-smartphone-tiny-people-online-menu-food-application-vector-concept_176411-5518.jpg?w=1060");
background-repeat: no-repeat;
background-size: cover;
background-attachment: fixed;
background-size: 100% 100%;
backdrop-filter: blur(4px);
backdrop-filter: brightness(85%);
display: flex;
justify-content: center;
align-items: center;
height: 100vh;
margin: 0;
}
.login-container {
background: transparent;
padding: 50px;
border-radius: 10px;
border: double black;
text-align: center;
}
.login-container h2 {
margin-bottom: 20px;
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.login-container input {
width: 100%;
padding: 10px;
margin: 10px;
border: 1px solid #ccc;
border-radius: 5px;
}
.login-container button {
width: 100%;
padding: 10px;
background-color: brown;
color: white;
border: none;
border-radius: 5px;
cursor: pointer;
}
.login-container button:hover {
background-color: blue;
}
```

4.1.3.Main

```
<html>

<head>

    <title>Restaurant Reservation System</title>
    <link rel="stylesheet" type="text/css" href="mstyles.css">

</head>

<body>
    <nav class="navbar">
        <div class="logo">  Activate Tables</div>
        <ul class="nav-links" id="nav-links">
            <li><a href="up2.html">Home</a></li>
            <li><a href="aboutus.html">About Us</a></li>
            <li><a href="contact.html">Contact</a></li>
        </ul>
    </nav>

    <!-- Reservation Section -->
    <div id="reservation-section" class="input">
        <h1 style="color:rgb(151, 18, 18);text-align: center; font-size:42px;">Activate
        Tables</h1>
        <h2>Table Reservation</h2>
        <form id="reservation-form">
            <label for="name">Name:</label>
            <input type="text" id="name" required placeholder="Enter your name"><br><br>

            <label for="phone">Phone Number:</label>
            <input type="tel" id="phone" required placeholder="Enter your mobile
            number"><br><br>

            <label for="table-preference">Table Preference:</label>
            <select id="table-preference">
                <option value="Indoor">Indoor</option>
                <option value="Outdoor">Outdoor</option>
                <option value="Window">Window</option>
            </select><br><br>

            <label for="members">Number of Members:</label>
            <input type="number" id="members" required placeholder="Number of
            people"><br><br>

            <label for="email">Email:</label>
            <input type="email" id="email" required placeholder="Enter your
            email"><br><br>

            <label for="date">Date:</label>
            <input type="date" id="date" required><br><br>
        </form>
    </div>
</body>
```

```

<label for="time">Time:</label>
<input type="time" id="time" required><br><br>

<button type="submit">Reserve Table</button>
</form>
</div>

<!-- Restaurant Selection (Initially Hidden) -->
<div id="restaurant-selection" class="input hidden">
  <h2 style="color:rgb(154, 12, 12);">Select a Restaurant</h2>
  <select id="restaurant-list">
    <option value="">-- Select a Restaurant --</option>
    <option value="Krigo">Krigo</option>
    <option value="The Vintage">The Vintage</option>
    <option value="Spice Paradise">Spice Paradise</option>
    <option value="Eat Green">Eat Green</option>
    <option value="Cinnamon">Cinnamon</option>
    <option value="Sangrilla">Sangrilla</option>
    <option value="The Art Kitchen">The Art Kitchen</option>
  </select>
  <button id="select-restaurant">Select</button>
</div>

<!-- Menu Section -->
<div id="menu-section" class="input hidden">
  <h2 style="color:rgb(154, 12, 12);">Menu</h2>
  <p><strong>Selected Restaurant:</strong> <span id="selected-restaurant"></span></p>
  <form id="menu-form">
    <div id="menu-items"></div>
    <button type="submit">Order Food</button>
  </form>
</div>

<!-- Summary Section -->
<div id="summary-section" class="input hidden">
  <h2 style="color:rgb(154, 12, 12);">Your Reservation and Order Summary</h2>
  <p><strong>Restaurant:</strong> <span id="summary-restaurant"></span></p>
  <p><strong>Name:</strong> <span id="summary-name"></span></p>
  <p><strong>Phone Number:</strong> <span id="summary-phone"></span></p>
  <p><strong>Table Preference:</strong> <span id="summary-table-preference"></span></p>
  <p><strong>Members:</strong> <span id="summary-members"></span></p>
  <p><strong>Email:</strong> <span id="summary-email"></span></p>
  <p><strong>Date:</strong> <span id="summary-date"></span></p>
  <p><strong>Time:</strong> <span id="summary-time"></span></p>
  <p><strong>Ordered Items:</strong> <span id="summary-items"></span></p>
  <p><strong>Total Price:</strong> <span id="summary-price"></span></p>
</div>

```

```

<footer class="footer">
  <p>© 2025 Restaurant. All Rights Reserved.</p>
</footer>

<script src="script.js" defer></script>

</body>
</html>

```

4.1.4. Main style:

```

body {
  font-family: lucida;
  background-image: url("https://img.freepik.com/premium-vector/mobile-booking-reservation-table-restaurant-woman-chooses-cafe-online-waiter-sets-table-huge-smartphone-tiny-people-online-menu-food-application-vector-concept_176411-5518.jpg?w=1060");
  background-repeat: no-repeat;
  background-size: cover;
  background-attachment: fixed;
  background-size: 100% 100%;
  color: black;
  backdrop-filter: blur(4px);
  backdrop-filter: brightness(85%);
}

.hidden {
  display: none;
}

.menu-item {
  margin-bottom: 10px;
}

.input {
  background-color: rgba(255, 255, 255, 0.5); /* Pink with 50% transparency */
  width: 600px;
  margin: 80px auto;
  padding: 30px;
  border: 4px double #0c0606dd;

  font-size: 20px;
  font-weight: bold;
}

button {
  margin-top: 10px;
}

```

```
        padding: 10px;
    }

#summary-section {
    border-top: 2px solid #ccc;
    margin-top: 20px;
    padding-top: 10px;
}

.navbar {
    background-color: black;
    padding: 15px 20px;
    display: flex;
    justify-content: space-between;
    align-items: center;
    color: white;
}

.navbar .logo {
    font-size: 24px;
    font-weight: bold;
}

.nav-links {
    display: flex;
    list-style: none;
    padding: 0;
    margin: 0;
}

.nav-links li {
    margin: 0 15px;
}

.nav-links a {
    color: white;
    text-decoration: none;
    font-size: 18px;
    transition: 0.3s;
}

.nav-links a:hover {
    text-decoration: underline;
}

.footer {
    background-color: black;
    color: white;
    text-align: center;
    position: relative;
    bottom: 0;
```

```

width: 100%;
font-size: 13px;
}

input[type="number"] {
width: 60px;
margin-left: 10px;
}

```

4.1.5.Main script:

```

const reservationForm = document.getElementById("reservation-form");
const restaurantSelection = document.getElementById("restaurant-selection");
const selectRestaurantButton = document.getElementById("select-restaurant");
const menuSection = document.getElementById("menu-section");
const menuForm = document.getElementById("menu-form");
const summarySection = document.getElementById("summary-section");

let reservationData = { };

// Handle reservation submission
reservationForm.addEventListener("submit", function (event) {
    event.preventDefault();

    reservationData.name = document.getElementById("name").value;
    reservationData.phone = document.getElementById("phone").value;
    reservationData.tablePreference = document.getElementById("table-
preference").value;
    reservationData.members = document.getElementById("members").value;
    reservationData.email = document.getElementById("email").value;
    reservationData.date = document.getElementById("date").value;
    reservationData.time = document.getElementById("time").value;

    alert(`Table reserved successfully for ${reservationData.name}!`);

    // Hide reservation and show restaurant selection
    document.getElementById("reservation-section").classList.add("hidden");
    restaurantSelection.classList.remove("hidden");
});

// Handle restaurant selection
selectRestaurantButton.addEventListener("click", function () {
    const selectedRestaurant = document.getElementById("restaurant-list").value;
    if (selectedRestaurant) {
        reservationData.restaurant = selectedRestaurant;
        document.getElementById("selected-restaurant").textContent =
selectedRestaurant;
        loadMenu(selectedRestaurant);
        restaurantSelection.classList.add("hidden");
        menuSection.classList.remove("hidden");
    } else {
        alert("Please select a restaurant.");
    }
});

```

```

    }
});

// Load menu items with quantity
function loadMenu(restaurant) {
    const menuItemsContainer = document.getElementById("menu-items");
    menuItemsContainer.innerHTML = "";

    const menuData = {
        "Krido": [
            { name: "Pizza", price: 199 },
            { name: "Pasta", price: 130 },
            { name: "Lasagna", price: 299 },
            { name: "Burger", price: 299 },
            { name: "Steak", price: 150 },
            { name: "Fries", price: 99 },
            { name: "Salad", price: 79 },
            { name: "Smoothie", price: 170 },
            { name: "Vegan Wrap", price: 130 }
        ],
        "The Vintage": [
            { name: "Dum Biryani", price: 150 },
            { name: "Fry Biryani", price: 200 },
            { name: "Lollipop Biryani (3 pc)", price: 250 },
            { name: "Wings Biryani (3 pc)", price: 250 },
            { name: "Joint Biryani (3 pc)", price: 250 },
            { name: "Boneless Biryani (3 pc)", price: 280 },
            { name: "Tandoori Chicken Biryani ", price: 350 },
            { name: "Tandoori Tikka Biryani", price: 300 },
            { name: "Prawns Fry Biryani", price: 280 },
            { name: "Prawns curry Biryani", price: 280 },
            { name: "Mutton curry Biryani", price: 380 },
            { name: "Prawns fry Biryani", price: 380 },
            { name: "Egg Biryani", price: 280 },
            { name: "Kaju Biryani", price: 200 },
            { name: "Paneer Biryani", price: 200 },
            { name: "Veg mixed Biryani", price: 180 }
        ],
        "Spice Paradise": [
            { name: "Chilli Paneer", price: 220 },
            { name: "Paneer 65", price: 200 },
            { name: "Paneer 555", price: 200 },
            { name: "Mushroom 65", price: 200 },
            { name: "Chilli Mushroom", price: 220 },
            { name: "Chicken 65", price: 220 },
            { name: "Chicken 555", price: 220 },
            { name: "Lemon Chicken", price: 200 },
            { name: "Dragon Chicken", price: 280 },
            { name: "Pepper Chicken", price: 220 },
        ]
    }
}

```

```

    { name: "Garlic Chicken", price: 200 },
    { name: "Chicken Majestic", price: 250 },
    { name: "Chicken Wings", price: 290 },
    { name: "Chilly prawn", price: 250 },
    { name: "Prawn 65", price: 250 },
    { name: "Pepper prawn", price: 260 },
    { name: "Prawn Manchuria", price: 250 }

],
"Eat Green": [
    { name: "chicken tikka kabab", price: 243 },
    { name: "tandoori chicken(half)", price: 243 },
    { name: "tandoori chicken(full)", price: 379 },
    { name: "chicken reshmi kebab", price: 243 },
    { name: "chicken garlic kabab", price: 243 },
    { name: "butter chicken boneless", price: 246 },
    { name: "nizami handi", price: 171 },
    { name: "tandoori roti", price: 40 },
    { name: "rumali roti", price: 40 }

],
"Cinnamon": [
    { name: "chicken biryani", price: 210 },
    { name: "mutton biryani", price: 253 },
    { name: "mutton family pack", price: 576 },
    { name: "chicken family pack", price: 552 },
    { name: "special chicken biryani", price: 337 },
    { name: "special mutton biryani", price: 351 },
    { name: "supreme chicken biryani", price: 784 },
    { name: "supreme mutton biryani", price: 819 },
    { name: "egg biryani", price: 154 },
    { name: "veg. biryani", price: 154 },
    { name: "veg. family pack", price: 383 },
    { name: "veg. suprema pack", price: 574 }

],
"Sangrilla": [
    { name: "cheeseburger", price: 100 },
    { name: "veg burger", price: 100 },
    { name: "chowmein", price: 120 },
    { name: "chowmein plan", price: 12 },
    { name: "paneer rice", price: 120 },
    { name: "veg spring roll", price: 90 },
    { name: "momos", price: 100 },
    { name: "fried rice", price: 120 },
    { name: "chilli potato", price: 100 },
    { name: "chicken momos", price: 150 },
    { name: "chicken rice", price: 150 },
    { name: "manchuria", price: 120 }

],
"The Art Kitchen": [
    { name: "black decker(chocolate)", price: 110 },

```

```

        { name: "blue dot(black current)", price: 110 },
        { name: "butterscotch(milk shake)", price: 110 },
        { name: "figaro(angir badam)", price: 110 },
        { name: "dry fruit twist(dry fruit)", price: 110 },
        { name: "lichee shake(lichee)", price: 110 },
        { name: "beilgium milk shake(BOC)", price: 120 },
        { name: "custom(your choice)", price: 120 }
    ]
};

menuData[restaurant].forEach(item => {
    const div = document.createElement("div");
    div.classList.add("menu-item");
    div.innerHTML = `
        <input type="checkbox" value="${item.name}" data-price="${item.price}">
        <label>${item.name} (${item.price})</label>
        <input type="number" value="1" min="1" class="quantity" data-
item="${item.name}">
    `;
    menuItemsContainer.appendChild(div);
});
}

// Handle menu submission
menuForm.addEventListener("submit", function (event) {
    event.preventDefault();

    const selectedItems = Array.from(document.querySelectorAll("#menu-form
input:checked"));
    if (selectedItems.length > 0) {
        reservationData.items = [];
        reservationData.totalPrice = 0;

        selectedItems.forEach(item => {
            const quantityInput = document.querySelector(`.quantity[data-
item="${item.value}"]`);
            const quantity = parseInt(quantityInput.value);
            const price = parseFloat(item.dataset.price);
            reservationData.items.push(`${item.value} x ${quantity}`);
            reservationData.totalPrice += price * quantity;
        });

        showSummary();
    } else {
        alert("Please select at least one item.");
    }
});

// Display summary
function showSummary() {

```

```

        document.getElementById("summary-restaurant").textContent =
reservationData.restaurant;
        document.getElementById("summary-name").textContent =
reservationData.name;
        document.getElementById("summary-phone").textContent =
reservationData.phone;
        document.getElementById("summary-table-preference").textContent =
reservationData.tablePreference;
        document.getElementById("summary-members").textContent =
reservationData.members;
        document.getElementById("summary-email").textContent =
reservationData.email;
        document.getElementById("summary-date").textContent = reservationData.date;
        document.getElementById("summary-time").textContent = reservationData.time;
        document.getElementById("summary-items").textContent =
reservationData.items.join(", ");
        document.getElementById("summary-price").textContent =
reservationData.totalPrice.toFixed(2);

        menuSection.classList.add("hidden");
        summarySection.classList.remove("hidden");
    }
}

```

4.1.6. About us:

```

<html>
<head>

<title>About Us - Activate Tables</title>
<link rel="stylesheet" type="text/css" href="abstyles.css">

</head>
<body>

<!-- Navigation Bar -->
<nav class="navbar">
    <div class="logo">Activate Tables</div>
    <ul class="nav-links">
        <li><a href="up2.html">Home</a></li>
        <li><a href="aboutus.html">About Us</a></li>

        <li><a href="contact.html">Contact</a></li>
    </ul>
</nav>

<!-- About Us Content -->
<div class="container">
    <h1>Welcome to <span class="highlight">Activate Tables</span></h1>
    <p>At <span class="highlight">Activate Tables</span>, we bring the joy of dining
    to your fingertips by offering a seamless and efficient <strong>table reservation

```

system for various top-rated restaurants. Our mission is to provide a hassle-free dining experience by allowing users to reserve tables, explore menus, and place orders all in one platform.</p>

<h2>Why Choose Us?</h2>

<p>We understand how valuable your time is. That's why we've built a user-friendly and intuitive reservation platform where you can:</p>

█ Book a table instantly at your preferred restaurant.

█ Browse the best restaurant menus with a variety of dishes.

█ Get real-time order updates and reservation confirmations.

█ Enjoy a smooth and secure payment process.

<h2>Our Vision</h2>

<p>Our goal is to create a memorable dining experience by leveraging technology that simplifies the booking and dining process. We strive to connect food lovers with their favorite restaurants effortlessly while maintaining high service standards.</p>

<h2>Meet Our Team</h2>

<div class="team-section">

<div class="team-member">

<p>Arjun Sharma
Founder & CEO</p>

</div>

<div class="team-member">

<p>Neha Gupta
Chief Operating Officer</p>

</div>

<div class="team-member">

<p>Rohan Verma
Chief Technology Officer</p>

</div>

</div>

</div>

<!-- Footer -->

<footer class="footer">

<p>© 2025 Activate Tables. All Rights Reserved.</p>

</footer>

</body>

</html>

4.1.7. About styles:

```
body {  
    font-family: lucida;  
  
    background-image: url("https://img.freepik.com/premium-vector/mobile-booking-  
reservation-table-restaurant-woman-chooses-cafe-online-waiter-sets-table-huge-smartphone-  
tiny-people-online-menu-food-application-vector-concept_176411-5518.jpg?w=1060");  
    background-repeat: no-repeat;  
    background-size: cover;  
    background-attachment: fixed;  
    background-size: 100% 100%;  
    color: black;  
    backdrop-filter: blur(4px);  
    backdrop-filter: brightness(85%);  
  
}  
.container {  
    max-width: 900px;  
    margin: 50px auto;  
    padding: 40px;  
    background-color: transparent;  
    border-radius: 10px;  
    border: 4px double #0c0606dd;  
}  
h1, h2, h3 {  
    text-align: center;  
    color: black;  
}  
p {  
    line-height: 1.6;  
    font-size: 18px;  
    color: black;  
}  
.highlight {  
    color: #c0392b;  
    font-weight: bold;  
}  
.team-section {  
    text-align: center;  
    margin-top: 40px;  
}  
.team-member {  
    display: inline-block;  
    margin: 20px;  
    width: 200px;  
}  
.team-member img {  
    width: 100%;  
    border-radius: 10px;  
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.2);  
}
```

```

}
.team-member p {
  margin-top: 10px;
  font-weight: bold;
  color: #333;
}
.navbar {
  background-color: black;
  padding: 15px 20px;
  display: flex;
  justify-content: space-between;
  align-items: center;
  color: white;
}
.navbar .logo {
  font-size: 24px;
  font-weight: bold;
}
.nav-links {
  display: flex;
  list-style: none;
  padding: 0;
  margin: 0;
}
.nav-links li {
  margin: 0 15px;
}
.nav-links a {
  color: white;
  text-decoration: none;
  font-size: 18px;
  transition: 0.3s;
}
.nav-links a:hover {
  text-decoration: underline;
}
.footer {
  background-color:white;
  color: white;
  text-align: center;
  position: relative;
  bottom: 0;
  width: 100%;

  font-size: 14px;
}

```

4.1.8. Contact us:

```

<!DOCTYPE html>
<html lang="en">

```

```

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Contact Us - Activate Tables</title>
  <link rel="stylesheet" type="text/css" href="cstyles.css">

</head>
<body>

  <!-- Navigation Bar -->
  <nav class="navbar">
    <div class="logo">Activate Tables</div>
    <ul class="nav-links">
      <li><a href="up2.html">Home</a></li>
      <li><a href="aboutus.html">About Us</a></li>
      <li><a href="contact.html">Contact</a></li>
    </ul>
  </nav>

  <!-- Contact Us Section -->
  <div class="container">
    <h1>Contact <span style="color: #c0392b;">Activate Tables</span></h1>
    <p>Have questions or need assistance? We're here to help! Feel free to get in touch with us using the contact form below or reach out through our provided contact details.</p>

    <h2>Get In Touch</h2>
    <form id="contact-form">
      <label for="name">Name:</label>
      <input type="text" id="name" name="name" required placeholder="Enter your name">

      <label for="email">Email:</label>
      <input type="email" id="email" name="email" required placeholder="Enter your email">

      <label for="phone">Phone Number:</label>
      <input type="tel" id="phone" name="phone" required placeholder="Enter your phone number">

      <label for="message">Message:</label>
      <textarea id="message" name="message" rows="6" required placeholder="Write your message..."></textarea>

      <button type="submit">Send Message</button>
    </form>
  </div>

  <!-- Contact Details Section -->
  <div class="container">
    <h2>Our Contact Details</h2>
    <p><strong>✉ Email:</strong> support@activatetables.com</p>

```

```

<p><strong>📞 Phone:</strong> +91 98765 43210</p>
<p><strong>📍 Address:</strong> 123, Food Street, MG Road, Hyderabad, India</p>
<h3>Operating Hours</h3>
<p><strong>Monday - Friday:</strong> 10:00 AM - 10:00 PM</p>
<p><strong>Saturday - Sunday:</strong> 11:00 AM - 11:00 PM</p>
</div>

<!-- Footer -->
<footer class="footer">
  <p>© 2025 Activate Tables. All Rights Reserved.</p>
</footer>

<script src="cscript.js" defer></script>

</body>
</html>

```

4.1.9. Contact us styles:

```

body {
  font-family: lucida;

  background-image: url("https://img.freepik.com/premium-vector/mobile-booking-
reservation-table-restaurant-woman-chooses-cafe-online-waiter-sets-table-huge-smartphone-
tiny-people-online-menu-food-application-vector-concept_176411-5518.jpg?w=1060");
  background-repeat: no-repeat;
  background-size: cover;
  background-attachment: fixed;
  background-size: 100% 100%;
  color: black;
  backdrop-filter: blur(4px);
  backdrop-filter: brightness(85%);
}

.container {
  max-width: 800px;
  margin: 50px auto;
  padding: 40px;
  background-color: transparent;
  border-radius: 10px;
  color: black
}

h1, h2, h3 {
  text-align: center;
  color: black;
}

p {
  line-height: 1.6;
  font-size: 18px;
  color: black;
}

```

```
form {
  margin-top: 20px;
}
label {
  font-weight: bold;
}
input, textarea {
  width: 100%;
  padding: 12px;
  margin-top: 8px;
  margin-bottom: 20px;
  border: 1px solid;
  color: black;
  border-color: transparent;
  border-radius: 5px;
}
button {
  background-color: #c0392b;
  color: white;
  padding: 12px 20px;
  border: none;
  border-radius: 5px;
  cursor: pointer;
  font-size: 18px;
}
button:hover {
  background-color: #e74c3c;
}
.navbar {
  background-color: black;
  padding: 15px 20px;
  display: flex;
  justify-content: space-between;
  align-items: center;
  color: white;
}
.navbar .logo {
  font-size: 24px;
  font-weight: bold;
}
.nav-links {
  display: flex;
  list-style: none;
  padding: 0;
  margin: 0;
}
.nav-links li {
  margin: 0 15px;
}
.nav-links a {
  color: white;
```

```

text-decoration: none;
font-size: 18px;
transition: 0.3s;
}
.nav-links a:hover {
  text-decoration: underline;
}
.footer {
  background-color: whitesmoke;
  color: white;
  text-align: center;
  position: relative;
  bottom: 0;
  width: 100%;

  font-size: 14px;
}

```

4.1.10. Contact script:

```

document.getElementById("contact-form").addEventListener("submit", function(event) {
  event.preventDefault();

  const name = document.getElementById("name").value;
  const email = document.getElementById("email").value;
  const phone = document.getElementById("phone").value;
  const message = document.getElementById("message").value;

  if (name && email && phone && message) {
    alert(`Thank you, ${name}! Your message has been received. We'll get back to you
soon.`);
    document.getElementById("contact-form").reset();
  } else {
    alert("Please fill out all fields before submitting.");
  }
});

```

4.2 Test Cases



5.RESULTS

5.1 Output Screens

5.1.1 Login Page :-



DIAGRAM 5.1.1(Login page)

5.1.2 Table Reservation page:



DIAGRAM 5.1.2(Table Reservation page)

5.1.3 Restaurant selection page:

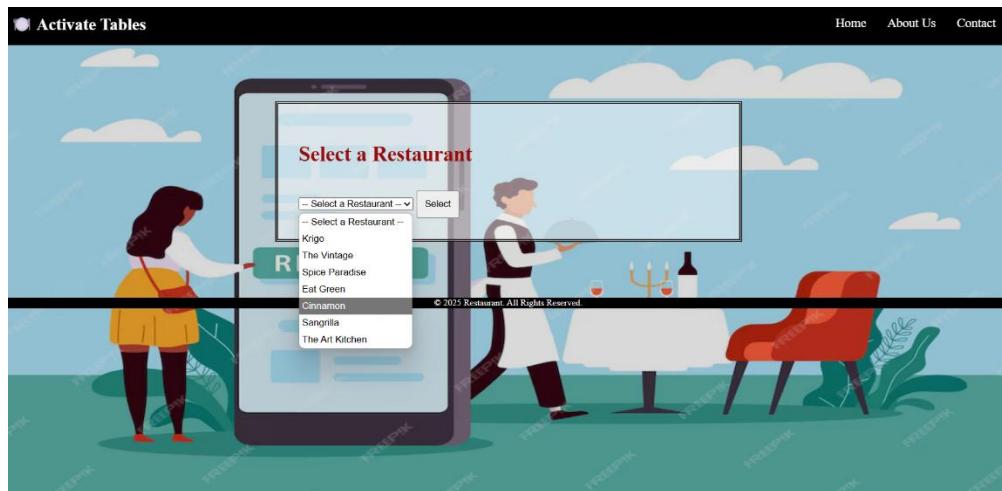


DIAGRAM 5.1.3(Restaurant selection page)

5.1.4 Menu

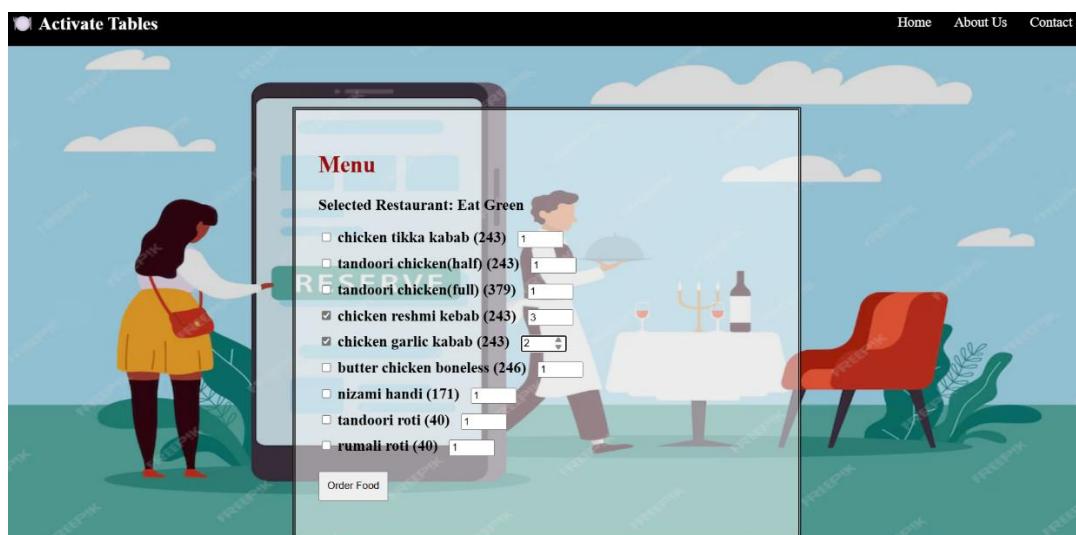


DIAGRAM 5.1.4 (Menu)

5.1.5 About us



DIAGRAM 5.1.5 (about us)

5.1.6 Vision:

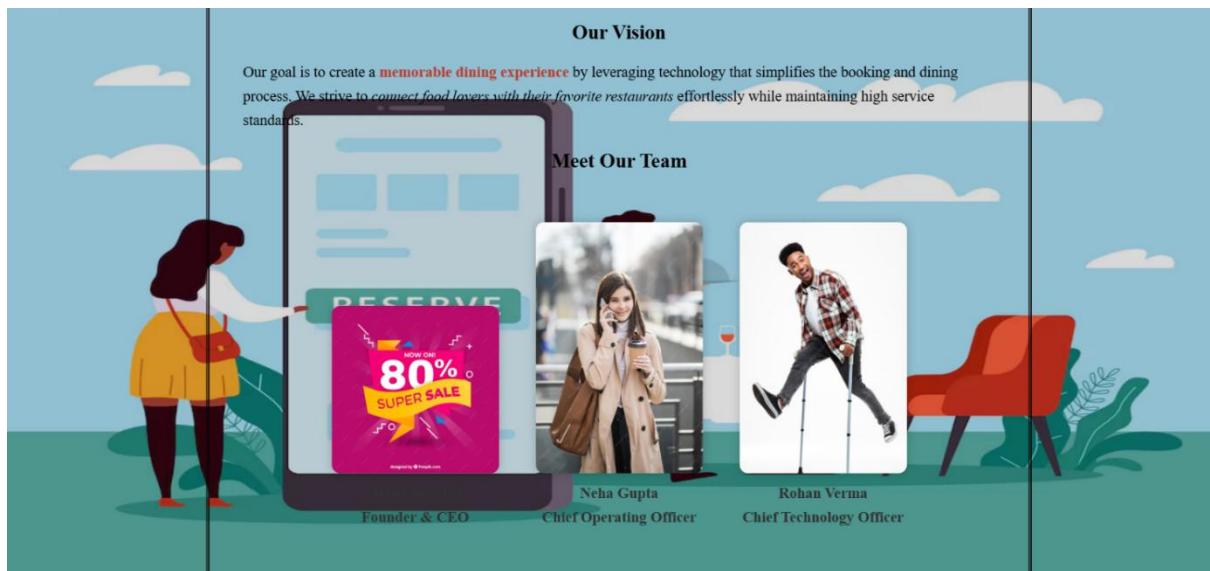


DIAGRAM 5.1.6 (vision)

5.1.7 Contact:

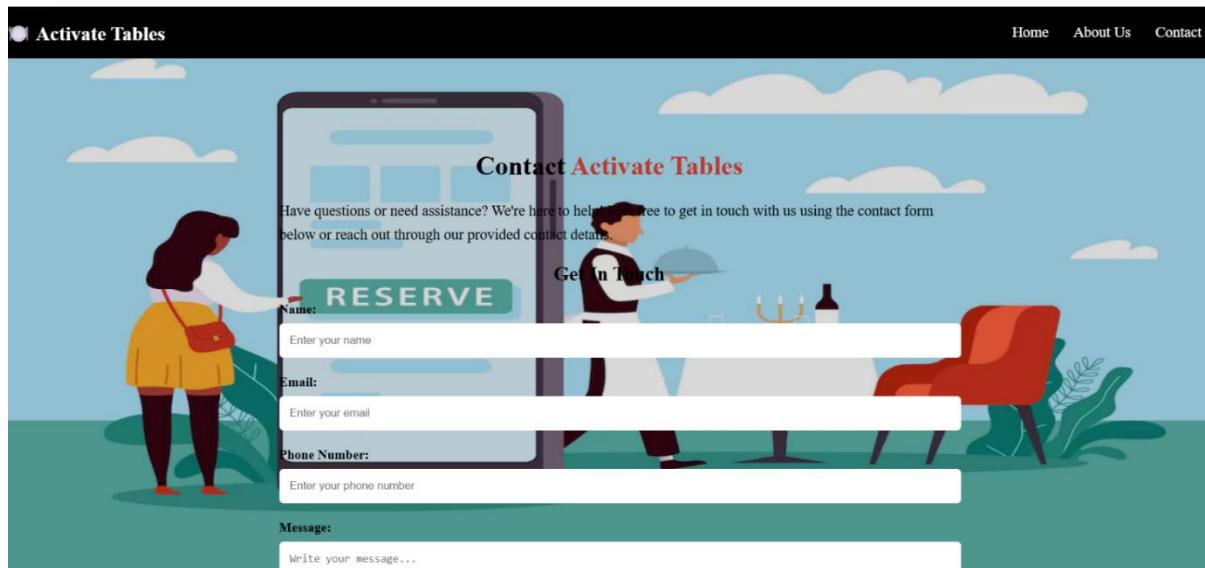


DIAGRAM 5.1.7 (contact)

5.1.8 Contact information:



DIAGRAM 5.1.8 (contact information)

5.1.9 Information pop up:

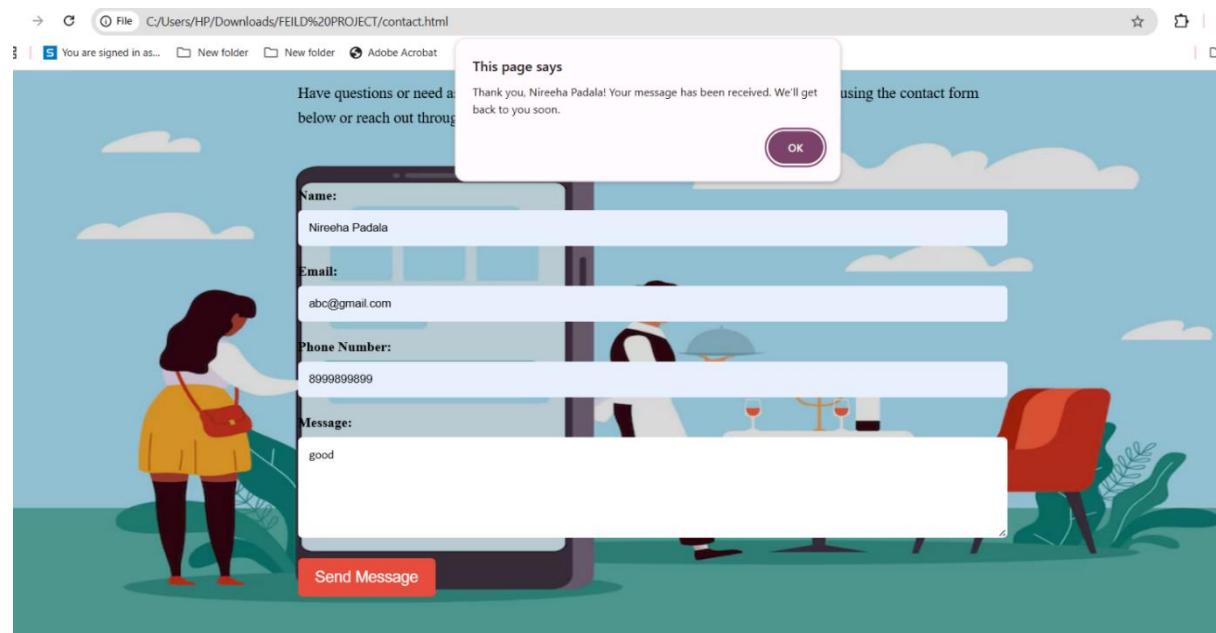


DIAGRAM 5.1.9 (information pop up)

6.1.CONCLUSION

The Restaurant Reservation System streamlines the process of booking tables, managing reservations, and improving overall dining experiences for both customers and restaurant staff. By allowing users to view available slots, make reservations online, and receive instant confirmations, the system saves time and eliminates the hassle of traditional booking methods. Restaurant administrators can efficiently manage bookings, update availability in real-time, and reduce overbooking or scheduling conflicts. With features like customer profiles, feedback collection, and email/SMS notifications, the system enhances user satisfaction and helps build lasting customer relationships. Overall, the system provides a modern, convenient, and reliable solution for restaurant management and customer engagement.

6.2. References

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 - Mozilla Developer Network (MDN) - <https://developer.mozilla.org>
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3. GeeksforGeeks. (n.d.). *Restaurant Management System – Project Ideas*. Retrieved from: <https://www.geeksforgeeks.org>
4. Sommerville, I. (2011). *Software Engineering* (9th ed.). Pearson Education.
5. Pressman, R. S. (2014). *Software Engineering: A Practitioner's Approach* (8th ed.). McGraw-Hill Education.
6. Booch, G., Rumbaugh, J., & Jacobson, I. (2005). *The Unified Modeling Language User Guide* (2nd ed.). Addison-Wesley.

Github Link: <https://github.com/drakesh09/restaurantreservationsystem>