**A PROJECT REPORT**

**on**

**FoodMandu – Restaurant Management System**

**Submitted to**

**KIIT Deemed to be University**

**In Partial Fulfilment of the Requirement for the Award of**

**BACHELOR’S DEGREE IN**

**Computer Science And Engineering**

**BY**

**Kunal Kewat**

**Nawsad Ansari**

**Rohit Gupta**

**Sandip Kumar Sah**

**Anmol Mishra**

**22054050**

**22054059**

**22054078**

**22054083**

**22054427**

**UNDER THE GUIDANCE OF**

**Dr. Nayan Kumar Subhashis Behera**



**SCHOOL OF COMPUTER ENGINEERING**

**KALINGA INSTITUTE OF INDUSTRIAL TECHNOLOGY**

**BHUBANESWAR, ODISHA - 751024**

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CERTIFICATE

This is certify that the project entitled

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**Nawsad Ansari**

**Rohit Gupta**

**Sandip Kumar Sah**

**Anmol Mishra**

**22054050**

**22054059**

**22054078**

**22054483**

**22054427**

is a record of bonafide work carried out by them, in the partial fulfilment of the requirement for the award of Degree of Bachelor of Engineering (Computer Science & Engineering) at KIIT Deemed to be university, Bhubaneswar. This work is done during the year 2024-2025, under our guidance.

Date: 10/04/2025

**Dr. Nayan Kumar Subhashis Behera**

Project Guide

**Acknowledgements**

We are profoundly grateful to **Dr. Nayan Kumar Subhashis Behera** of **KIIT University** for his expert guidance and continuous encouragement throughout to see that this project meets its target since its commencement to its completion.

**Kunal Kewat**

**Nawsad Ansari**

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**ABSTRACT**

With the rapid development of web technologies, service-oriented industries especially restaurants have undergone transformational changes. Modern customers expect faster, more reliable, and user-friendly services, driving the demand for digital systems that can efficiently manage daily operations. Traditional manual methods often lead to issues such as human error, slow service, and poor data management, all of which reduce staff efficiency and lower customer satisfaction. To address these problems, this project introduces **FoodMandu**, a web-based restaurant management solution aimed at automating core functions such as staff coordination, reservation cancellations, table bookings, and user account management. Developed using HTML, CSS, PHP, and MySQL, this platform acts as a robust bridge between business operations and customer service, ensuring smoother workflows and an improved user experience.

The system has two accesses to customers and staff. Customers can register their accounts without personal interaction and see the table that can be used. On the other hand, employees can safely enter and manage the data for reservations, cancel trend monitoring and update operating notes safely into systems to update their operating notes. Foodmandu focuses on simplicity, speed and efficiency, unlike one user type or an overly complex conventional system. This platform is designed to be easy and easy to respond to, so we try to digitize the service by distributing small and medium -sized scale to the restaurant. This report presents a detailed overview of architecture, system development and implementation processes, the effects of restaurants and customer participation.

**Keywords:** Restaurant Management, Online Reservation System, Web-Based Application, PHP and MySQL Integration, Automated Booking System

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Chapter 1

Introduction

In the current digital age, restaurants need an effective system for reservation, customer data and employee activities. The manual process is often slow and error occurs, but many existing digital solutions are too complicated or have no main functions.

Foodmandu Restaurant Management System is designed to overcome this gap and offers to employees simple web platforms and effective operation management that can register, reserve or cancel reservations.

Created using HTML, CSS, PHP and MySQL, this system is light and comfortable for users. This report presents the motivation of the project, emphasizes the limitations of the current system, and describes the design, implementation and function of the proposed solution.

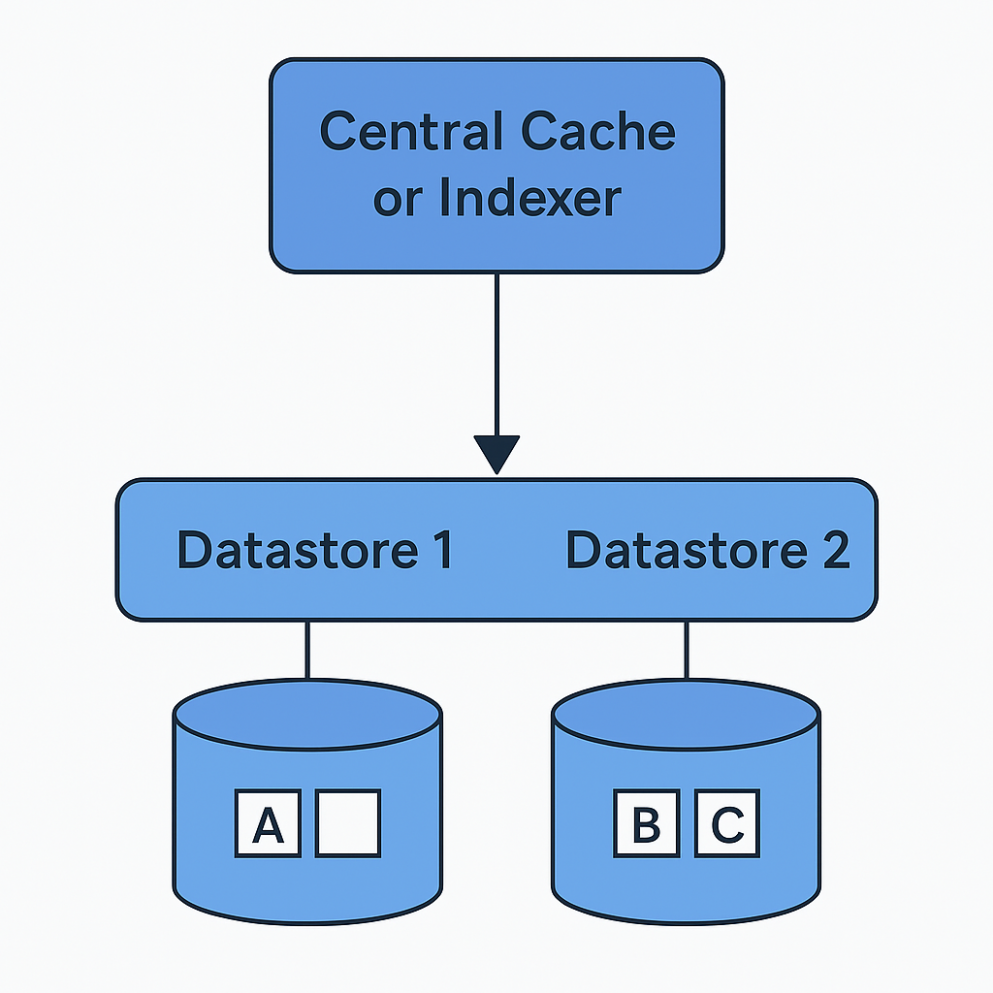


Figure 1.1: Data Consolidation from Distributed Datastores into a Central Repository

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Chapter 2

Basic Concepts/ Literature Review

This section describes the main technologies and tools used to develop the Foodmandu Restaurant Management system. This basic concept helps to understand how the system works in the foreground and background.

### 2.1 HTML (HyperText Markup Language)

HTML is used to create the structure of a web page. Determines the layout of the form, button, table and content areas that make up the user interface.

### 2.2 CSS (Cascading Style Sheets)

CSS improves the shape of the application. It is used to use styles such as colors, fonts, distances and responses to HTML content.

### 2.3 PHP (Hypertext Preprocessor)

PHP is the main language of scenarios used to connect the front part with a database. He handles operations such as system input, registration, reservation and cancellation.

### 2.4 MySQL

MySQL is a database system used to store user information, reservation items and other related data. It supports effective data search and updates.

### 2.5 XAMPP

XAMPP is an environment of local servers used for application development and testing. This includes Apache, PHP and MySQL, allowing the project to work local.

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Chapter 3

**Problem Statement / Requirement Specifications**

3.1 Project Planning

The goal of this project is to create a web-based restaurant management system that will make food service operations more efficient. Several interrelated modules were carefully analyzed, designed, implemented, and tested as part of the development process, which was conducted using an organized project planning methodology.

**1. Project Objective:-**

The project's main objective is to provide an interactive, user-friendly platform that enables patrons and staff to oversee different restaurant services like meal orders, table reservations, and feedback. Administrative features like employee authentication and order cancellation are also supported by the system.

#### 2. System Analysis

* The necessary features were listed prior to development and included:
* Login and customer registration
* Viewing and ordering from the menu
* Table reservation system
* Feedback submission
* Employee login to manage reservations and view feedback

#### 3. Design and Structure

* The project was divided into the following modules:
* Front-End: The user interface was created using HTML, CSS, and JavaScript files. For instance, important elements of the customer-facing side are menu.html, reservation.html, and login.html.
* Back-end: PHP files such as order.php, reserve.php, and login.php manage form processing, server-side logic, and database interaction.

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* Database: Files like db.php show that a relational database is being used to hold user, order, and reservation data, even though the SQL file is not specifically mentioned here.

#### 4. Implementation Steps

1. The following steps comprised the project development:
2. Identifying user roles (e.g., employee, customer) and their functionalities is known as requirement gathering.
3. Designing the HTML/CSS layouts for various user views is known as interface design.
4. Writing PHP scripts to process form inputs and interact with the database is known as server-side scripting.
5. Validation & Feedback: Ensuring appropriate confirmation messages, feedback systems, and input validation.

#### 5. Testing and Debugging

Functional testing was performed on each feature to ensure that input validation, appropriate navigation, and anticipated results were met. To make sure database actions were carried out appropriately, backend scripts were debugged using test data.

#### 

#### 6. Future Enhancements

* Although the present version provides a solid basis, it can be improved further by: Including an admin dashboard to facilitate easier administration
* Including online payment methods
* Making the website responsive to mobile devices
* Putting user session handling into practice to improve security

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3.2 **Project Analysis (SRS)**:-

#### 

#### 1. Introduction

**Project Title:** Restaurant Management System

The goal of this project is to streamline restaurant operations by implementing a web-based system that allows patrons to browse the menu, book tables, place orders, and provide comments, while staff members handle bookings and keep an eye on patron interactions.

The system's scope includes backend functions for staff administration as well as customer-facing services including registration, login, reservations, orders, and feedback.With automation, it reduces human labor and improves user experience.

#### 2. Overall Description

**2.1 Product Perspective**

The system is an independent web application that can be deployed for any small to medium-sized restaurant. It integrates frontend design with backend scripting to support dynamic content and real-time interactions.

**2.2 Product Features**

* **Customer Panel:**
  + Sign up/log in and view menus
  + Reserve or book tables
* **Employee Panel:**
  + View and manage reservations by logging in.
  + View client testimonials
* **Admin Backend (basic):**
  + Keep an eye on system operations
  + Manage user and reservation information
  + FoodMandu: Restaurant Management System, KIIT, BBSR School of Computer Engineering

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**2.3 Types of Users and Their Features**

* + Client: Able to peruse the website, sign up, and use the ordering and reservation tools.
  + Employee: Has the ability to oversee and control restaurant operations, including feedback and orders.

**2.4 Operating Environment**

* Platform: web browser (Firefox, Edge, Chrome)
* Languages: PHP (backend), HTML, CSS, and JavaScript (frontend)
* MySQL database (via db.php)
* Web server or localhost for hosting

#### 3. Functional Requirements

**Customer Registration/Login:**

* + The database contains user input.
  + Passwords, emails, and other information are validated.

**Menu Browsing and Ordering:**

* + Customers can browse different culinary categories and place orders.
  + Order.php processes the forms used to submit orders.

**Table Reservation:**

* + Clients can use reserve.php to input information and reserve a table.

**Submission of Feedback:**

Reviews and comments can be sent by users using forms that are handled by cus\_feed.php

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4. Non-Functional Requirements

* Performance: It should take less than two seconds for the system to react to user input.
* Security: Basic input sanitation and login validation are in place.
* Usability: Structured navigation and a clean user interface with CSS enhance the user experience.
* Maintainability: Future modifications are made simpler with a modular file structure.

5. Constraints

* Advanced user authentication is absent from the existing system (no email or OTP verification)
* restricted role-based access—administrator functionality is still in its infancy.
* Some pages have restricted responsiveness on mobile devices.

#### 6. Future Enhancements

* Dashboards depending on roles (Admin, Employee, and Customer)
* Integration of online payments
* mechanism for tracking orders
* Version of the mobile app
* Improved session handling and data security

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**3.3 System Design:-**

System design describes the application's components and architecture, including how various modules work together to satisfy user needs. This covers both Low-Level Design (LLD) for component details and High-Level Design (HLD) for system organization.

#### 1. High-Level Design (HLD)

* + Three primary modules make up the restaurant management system at a high level:

**1.1 Frontend Presentation Layer**

* + constructed with HTML, CSS, and rudimentary JavaScript
  + regulates all user communications, including reservations, login, registration, and feedback.
  + Pages consist of:
  + menu.html, about.html, reservation.html, login.html, and so forth.

**1.2 Application Layer (Backend Logic)**

* PHP was used in its development to process form inputs and control data flow between the database and frontend.
* Important scripts:
* order.php, cancel\_reservation.php

##### 1.3 Data Layer (Database Interaction)

* Connectivity to a MySQL database using db.php
* keeps information about users, orders, bookings, and feedback.
* SQL queries are used by each PHP program to communicate with tables (but a SQL dump is not given).

#### 2. Low-Level Design (LLD)

##### 2.1 User Registration/Login Flow

* Form PHP (login.php or auth.php) is used by the user to submit credentials, and the database is checked.
* The user is taken to the appropriate dashboard or menu page if it is genuine.

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##### 2.2 Menu and Ordering System

* Menu displayed via static HTML pages (menu.html)
* Items selected and passed via form to order.php
* Order details saved to the database

##### 2.3 Reservation Handling

* The user chooses a time and date, then uses reservation.html to submit the form.
* The reserve.php PHP script verifies and adds the reservation to the database.
* Employees can access reservation data through emp\_res.php.

##### 

##### 2.4 Feedback Module

* Customers provide feedback through a form (cus\_feed.php)
* Consumers use a form (cus\_feed.php) to submit feedback.
* Employees can use emp\_review.php to view and examine this

##### 2.5 Cancellation Module

* Customers can use cancel.php or cancel\_reservation.php to cancel orders or reservations.
* handled by updating the database and confirming the reservation or order ID.

##### 2.6 Employee Panel

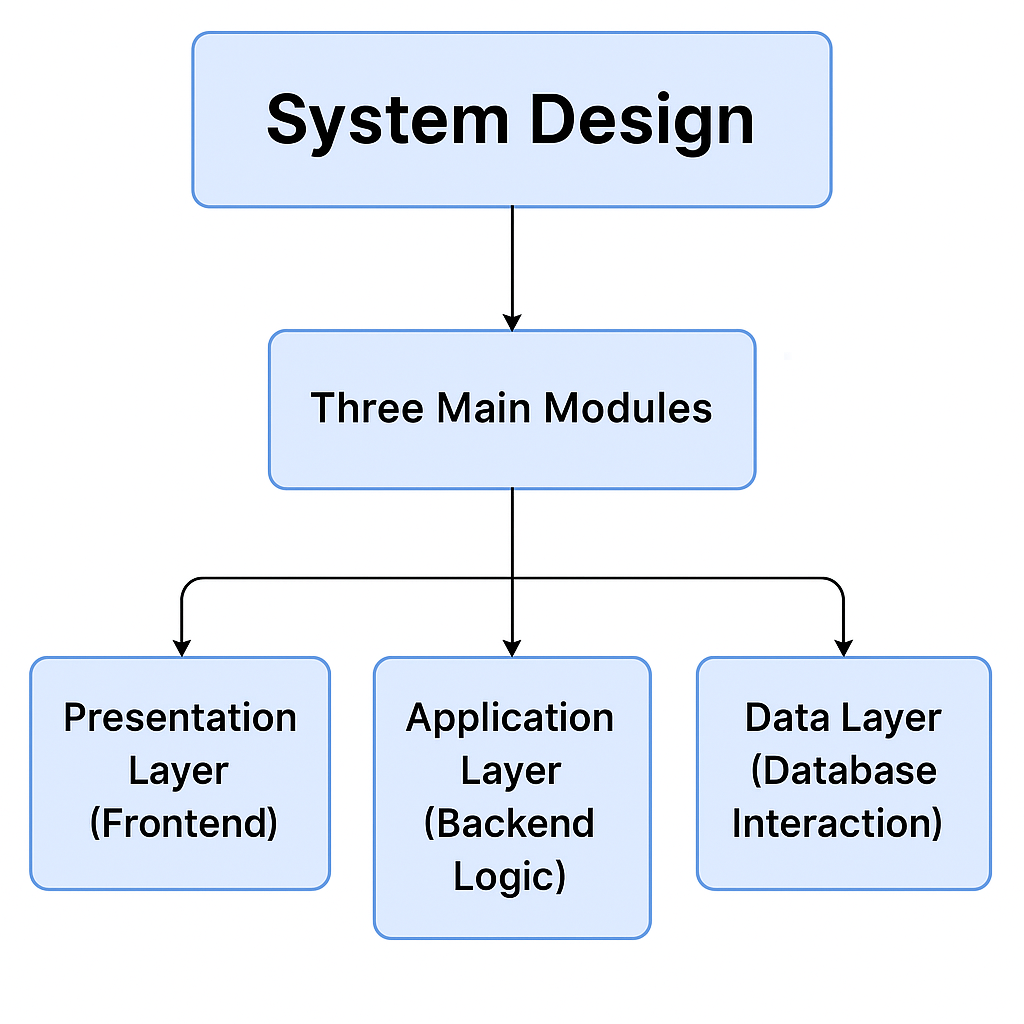
* Employees log in via emp\_login.php After login, they can: View/manage reservations: emp\_res.php Review feedback: emp\_review.php Cancel orders: emp\_canords.php

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**3.3.1 Design Constraints**

Limitations or limits that impact the system's development and implementation are known as design constraints. These limitations may be operational, environmental, or technical in character. The following limitations were noted for this restaurant management system:



#### 

#### 

#### 

#### 

#### 

Figure : 3.3.1 Layers of Design Constraints

#### 1. Platform Dependency

* It is designed to operate in a web server environment, such as WAMP or XAMPP.
* Because it relies on PHP and MySQL, only systems that support these technologies can be used for hosting.

#### 2. No Advanced Authentication

* User authentication is basic (username/password only).

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* No multi-factor authentication (MFA), CAPTCHA, or email verification is implemented, which affects security.

#### 3. Static Design for Menu and Pages

* The majority of HTML content and menu elements are hard-coded.
* A CMS integration or modifications to the backend code would be necessary to add or update menu items dynamically.

#### 4. Limited Role-Based Access Control

* Customer and Employee are the only user roles that are supported.
* Control over users and material is limited because the admin dashboard is not completely functional.

#### 5. Lack of Responsive Design

* The system is optimized primarily for desktop browsers.
* Limited or nonexistent support for mobile responsiveness affects the user experience on phones and tablets.

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**3.3.2 System Architecture (UML) / Block Diagram:-**

### 1. Use Case Diagram:-

Shows how different users (Customer, Employee) interact with the system.

#### Example Use Cases:

* Customer logs in / registers
* Customer places order
* Customer books table
* Customer sends feedback
* Employee logs in
* Employee views feedback
* Employee manages reservations

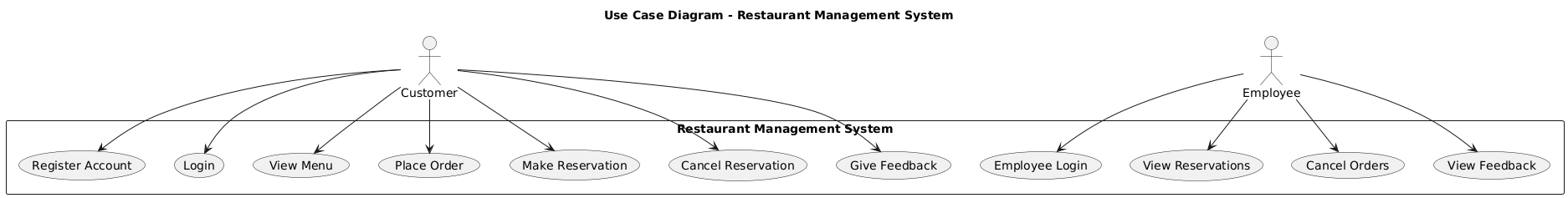


Figure :3.3.2 Use Case Diagrams

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**2. Component Diagram:-**

Shows the architectural structure: Frontend pages, Backend PHP scripts, Database.

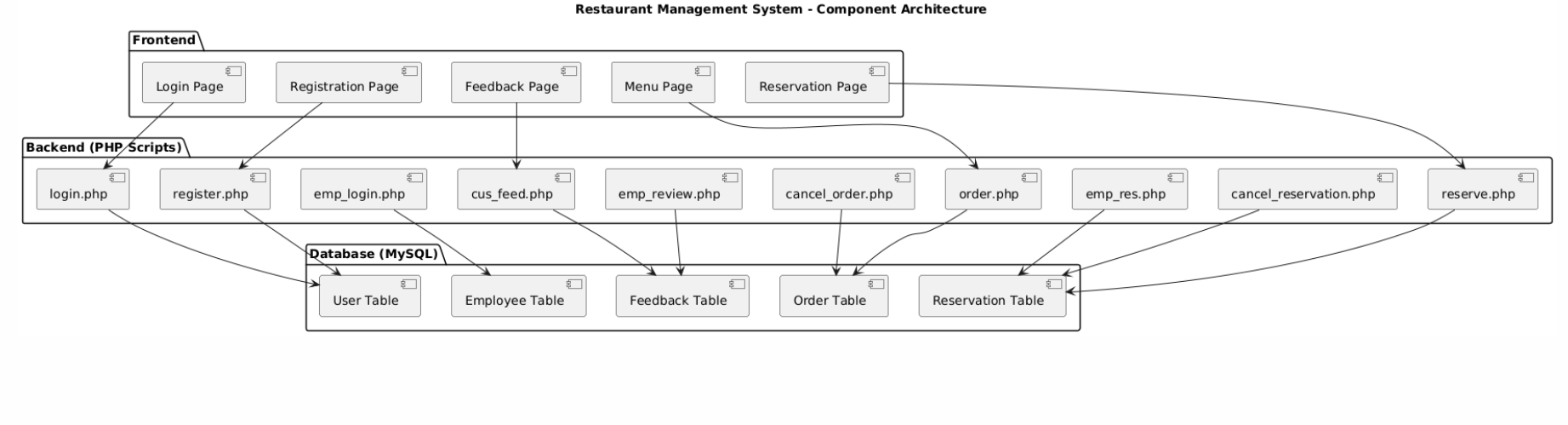


Figure : 3.3.3 Component Diagram

**3. Class Diagram:-**

Represents data models in your system (structure of tables or objects).

Example Classes:

* **User** (username, password, email)
* **Reservation** (res\_id, date, time, table\_no)
* **Order** (order\_id, items, status)
* **Feedback** (feedback\_id, comment, rating)
* **Employee** (emp\_id, name, role)

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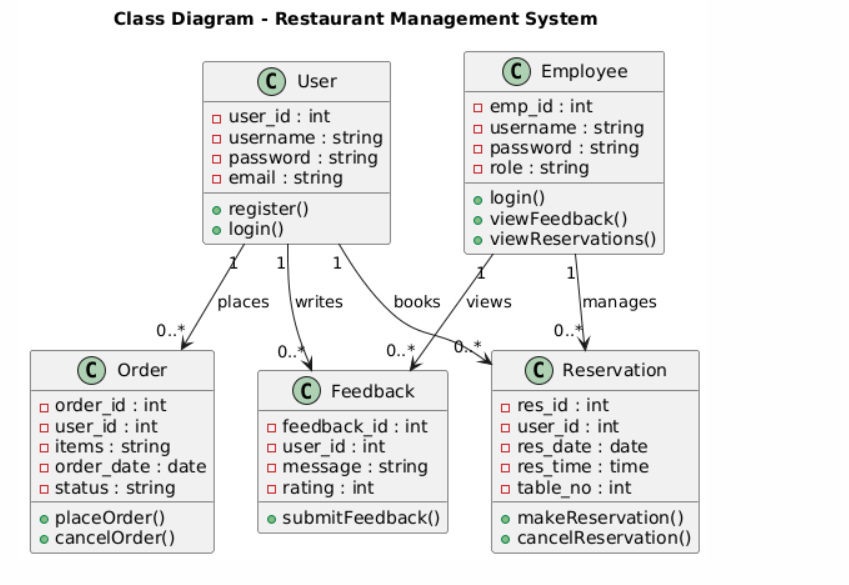


Figure : 3.3.4Class Diagram

**4. Sequence Diagram:-**

Represents the workflow of a specific process (e.g., Reservation Flow or Order Flow).

#### Example: Reservation Workflow

Start →Login →Fill Reservation Form → Submit → Store in DB → Confirmation → End

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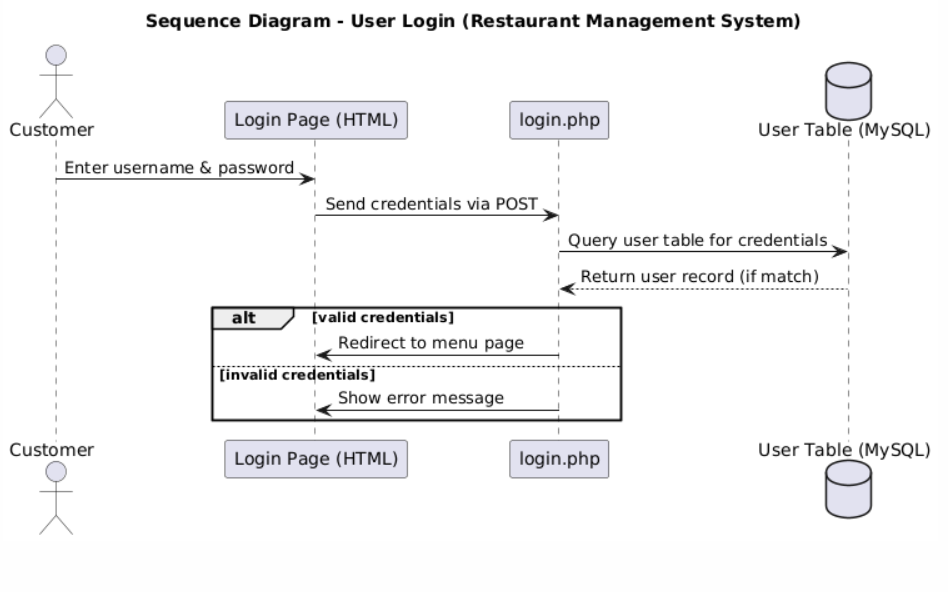


Figure : 3.3.5Sequence Diagram

**5. Activity Diagram:-**

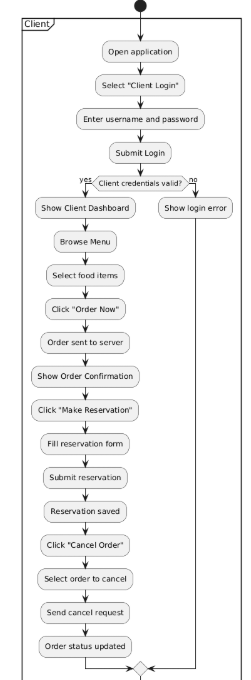
Represents the workflow of a specific process (e.g., Reservation Flow or Order Flow).

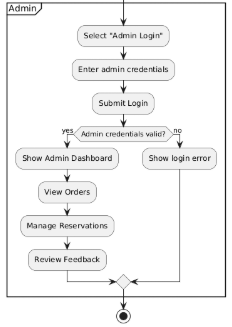
#### Example: Reservation Workflow

Start → Login → Fill Reservation Form → Submit → Store in DB → Confirmation → End

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Chapter 4

Implementation

4.1 Methodology OR Proposal

The **FoodMandu** restaurant management system was developed using the following methodology:

* **Requirement Gathering**: Identified features like table reservation, order processing, billing, and inventory control.
* **System Design**: Features including order processing, inventory control, billing, and reservation of tables were identified.
* **Technology Stack**:  
  + Frontend: HTML, CSS, JavaScript
  + Backend: PHP
  + Database: MySQL
* **Module Development**:  
  + **Menu Management**: The admin can add, modify, and remove menu items.
  + **Table Booking**: Through an interface, patrons may reserve tables.
  + **Order Management** : Customers or servers put orders.
  + **Billing**: Invoices that are automatically created with discounts and taxes.
  + **Inventory**: Admin oversees stock updates and raw material management.
* **Integration & Deployment**: The modules were hosted either locally or on a cloud server and were integrated.

**4.2 Testing OR Verification Plan**

Each module was tested using functional test cases to ensure correctness and stability.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Test | Test Case Title | Test Condition | System Behavior | Expected Result |
| ID |  |  |  |  |
|  |  |  |  |  |
| T01 | Add Menu Item | Admin adds a new food item | Menu item is stored in the database | Menu appears in the user menu list |
|  |  |  |  |  |
| T02 | Table Booking | User selects date and time slot | System checks for availability | Booking confirmation message shown |
|  |  |  |  |  |
| T03 | Generate Bill | User Completes order | Total amount is calculated with tax | Printable bill is generated |
|  |  |  |  |  |

4.3 Result Analysis OR Screenshots

* **Home Page**: Displays featured dishes and navigation.

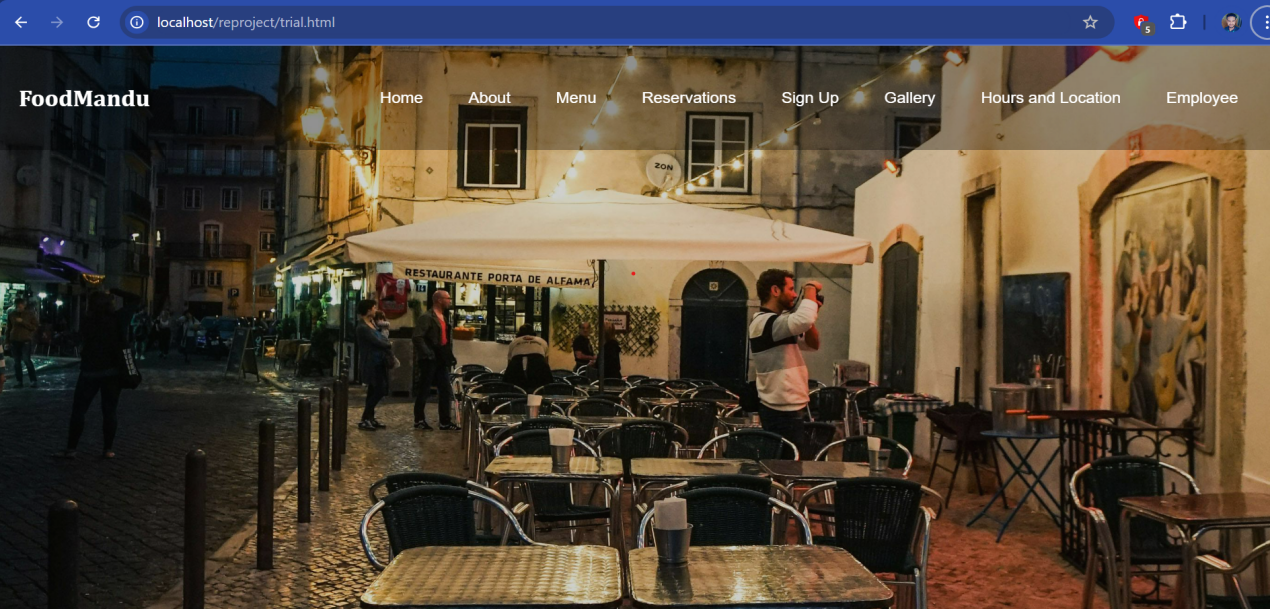


Figure : 4.3.1 Home Page

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* **Admin Dashboard**: Menu, inventory, and booking management tools.



Fig : 4.3.2 Admin Dashboard

* **Booking Page**: Date and time picker with availability status.

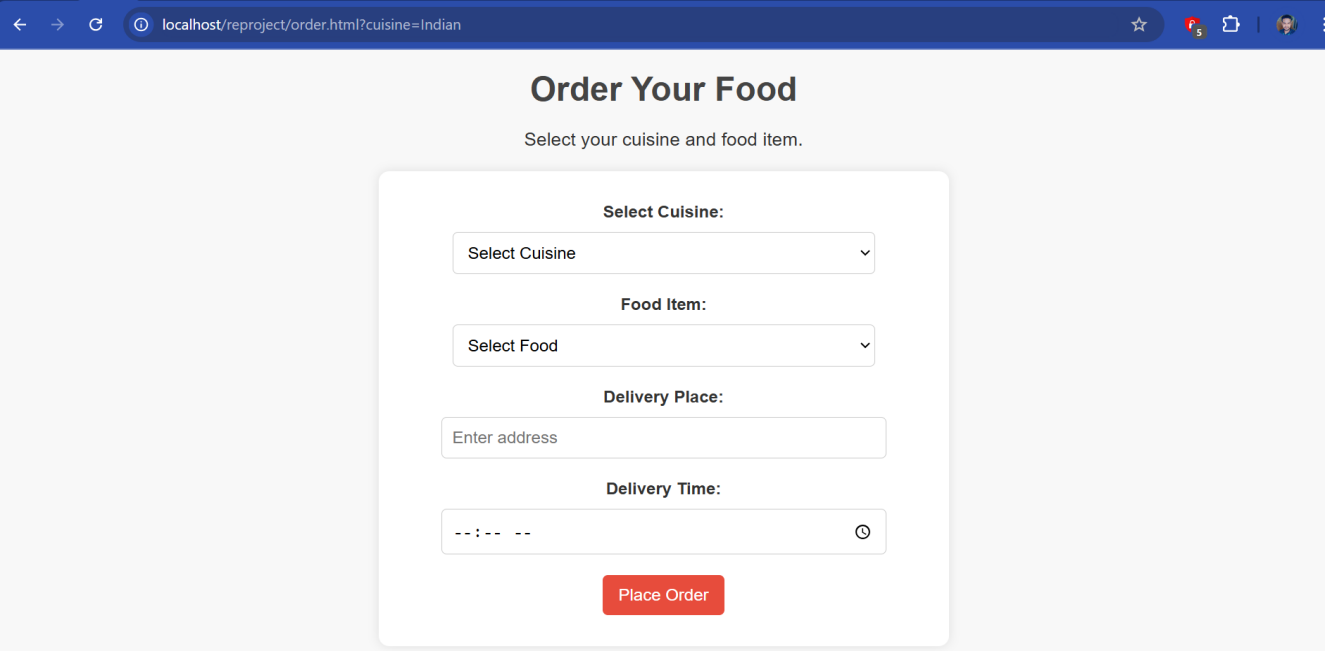


Fig : 4.3.3 Booking page

4.4 Quality Assurance

The project followed general software development practices:

* Code reviewed for clarity and modularity
* Testing conducted using manual test cases
* Guidelines from academic/project supervisor were followed

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Chapter 5

Standards Adopted

**5.1 Design Standards**

In the development of the *FoodMandu – Restaurant Management System*, standardized practices were followed to ensure consistency, maintainability, and scalability of the design. The following design standards were considered:

* **UML(Unified Modeling Language):** UML diagrams were utilized for visual representation of system architecture, including Use Case Diagrams, Class Diagrams, and Data Flow Diagrams (DFDs). These diagrams help in structuring system functionality and understanding component interactions.
* **Database Normalization (up to 3NF):** The MySQL database design follows standard normalization rules to eliminate redundancy and ensure data integrity.
* **Responsive Web Design Principles:** The UI was built using HTML5 and CSS3 with responsiveness in mind, aligning with **W3C standards**. Layouts were designed to adapt across devices including desktops, tablets, and smartphones.
* **Modular File Structure:** The project structure follows a modular approach separating frontend (.html, .css), backend (.php), and database (.sql) components for ease of maintenance.

**5.2 Coding Standards**

The development followed clean coding standards for PHP, HTML, CSS, and SQL to ensure readability and maintainability:

#### PHP Coding Practices

The PHP code complies with widely accepted standards, incorporating structured logic, clean formatting, and secure database interaction.

* PSR-1 and PSR-12 Standards: Code formatting reflects these guidelines with clear structure and readability.
* Proper Indentation and In-Line Comments: Comments help explain logic and important steps throughout the script. // Start session and redirect unauthorized users session\_start();

if (!isset($\_SESSION['email'])) {

header("Location: bon\_login.html");

exit(); }

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$userEmail = $\_POST['email'];

$reservationStatus = "Pending";

function checkReservationStatus($email) {

// Function logic

* Avoidance of Deep Nesting:

if (isset($\_POST['submit'])) {

$email = trim($\_POST['email']);

$password = trim($\_POST['password']);

if (!empty($email) && !empty($password)) {

// Database logic here

}

}

* Use of Prepared Statements for Database Security:

$stmt = $conn->prepare("INSERT INTO users (email, password) VALUES (?, ?)");

$stmt->bind\_param("ss", $email, $password);

$stmt->execute();

* Session Handling and Redirects:

session\_start();

$\_SESSION['email'] = $email;

header("Location: dashboard.php");

* Form Handling and Input Sanitization:

$email = htmlspecialchars(trim($\_POST['email']));

$password = htmlspecialchars(trim($\_POST['password']));

### HTML & CSS Practices

The front-end code adheres to clean, modular, and semantic HTML and CSS standards.

* Use of Semantic HTML5 Tags :

<header>

<h1>FoodMandu – Reserve Your Table</h1>

</header>

<section class="form-section">

<form action="bon\_signup.php" method="post">

<input type="text" name="name" required>

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</section>

* CSS Class Naming with Kebab-Case:

.form-section {

padding: 30px;

background-color: #f4f4f4;

}

.submit-button {

background-color: #e67e22;

border: none;

color: white;

}

* Modular and Maintainable Code

HTML files such as bon\_signup.html are styled using external CSS files like bon\_signup.css, separating structure and presentation.

* Responsive and Centered Layouts:

.container {

display: flex;

flex-direction: column;

align-items: center;

justify-content: center;

}

### SQL Coding Standards

SQL logic in the project is written clearly, using uppercase for commands and lowercase for variables, and prioritizes secure database access.

* Consistent SQL Formatting:

SELECT \* FROM reservations WHERE email = ? AND date = ?;

* Prepared Statements in PHP Scripts:

$stmt = $conn->prepare("SELECT \* FROM reservations WHERE email = ?");

$stmt->bind\_param("s", $email);

$stmt->execute();

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* DELETE Operations with Conditions:

$stmt = $conn->prepare("DELETE FROM orders WHERE order\_id = ?");

$stmt->bind\_param("i", $orderId);

$stmt->execute();

* Proper Handling of Query Results:

$result = $stmt->get\_result();

while ($row = $result->fetch\_assoc()) {

echo $row['reservation\_date'];

}

5.3 Testing Standards

The testing of the *FoodMandu* system adhered to standard practices to ensure a reliable and error-free experience:

* **Functional Testing:** Each module (e.g., User Login, Menu Management, Order Placement) was tested for expected inputs and outputs.
* **Validation and Verification:**
  + Input fields were tested for both valid and invalid inputs.
  + Backend logic was validated through manual testing.
* **Cross-Browser Testing:** The application was tested on Chrome, Firefox, and Edge to ensure consistent performance.
* **Responsiveness Testing:** Interfaces were tested using device emulation to check performance on mobile, tablet, and desktop.
* **Standards Followed:**
  + **ISO/IEC/IEEE 29119** for software testing processes.
  + **IEEE 829** test documentation format (Test Plans, Test Cases, and Test Reports were documented)

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Chapter 6

Conclusion and Future Scope

**6.1.0 Conclusion**

The web restaurant project was developed to ensure a perfect digital experience for both customers and restaurants. Here are the details of the success and complete defeat of this project.

### 1. User-Friendly Interface

This project uses HTML, CSS and JavaScript to create an intuitive user interface. Client is easy: Move to another page (menu, reservation, order) Look at the details and proposals of the restaurant Use the form to order the table or order food. The lightness of this level increases customer satisfaction and encourages use again.

### 2. Efficient Back-End Operations

You can use PHP to sponsor scripts. Form treatment (e.g. ordering and reservation) Interaction with the database (when implemented) Effective and dynamically processes user data This helps to reduce human mistakes, accelerate the service and maintain the best record.

### 3. Improves Restaurant Management

The restaurant workflow is further configured by introducing various functions such as menu displays, reservations and ordering as one platform. Employees can use this system to track cooperation with customers, manage reservations, and provide more seamless kitchen operation.

### 4. Practical Real-Life Application

This project is likely to be deployed in the real world. Whether it's a small cafe or a large restaurant network, such a system can especially improve your work and improve customer participation in the modern technology world.

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**6.2.0 Future Scope**

This project is a strong foundation but has a wide range of improvement. Let's take a closer look at each future with the relevance of the real world.

### 1. Secure Online Payments

why? Currently, most users expect digital payments. Additional payment: Razorpay, Stripe or Paypal Support for UPI or credit/debit cards reduces the problem of cash transactions and checks the payment immediately.

### 2. User Authentication and Role-Based Access

Added input function to system/registration guarantee: Customers can manage their profile and order history. Administrators or restaurant staff may have a separate monitoring panel for booking and menu items. This adds data security, personalization and professional structure to the system.

### 3. Mobile App Support

Since mobile use dominates Internet access, the selected version of Android/iOS application is as follows. Increase accessibility Push notifications are allowed. Make the order faster It can be used to develop tools such as React Native or Flutter.

### 4. Live Order Tracking

It is helpful to add this feature inspired by applications such as Zomato or Swiggy. Build transparency Reduce customer concern about delaying order. Increase confidence in the platform You can indicate a state similar to the preparation of delivery.

**5. Feedback & Rating System**

Clients can be evaluated. Cooking (based on taste, quantity, etc.) Delivery and service experience This controls the understanding of the community's trust and understanding of what to improve.

### 6. Multilingual Interface

Not all customers use the same language. Add multilingual support: Increased coverage (especially for tourist destinations) Improving comprehensive tools such as Google Translate API or localized content files can help you implement it.

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**INDIVIDUAL CONTRIBUTION REPORT : HOMEPAGE**

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**ROHIT GUPTA**

**22054078**

**Abstract:** Customers and staff alike can easily navigate the Restaurant Management System's homepage. Clients can log in, browse menus, place orders, and book reservations, and staff members can access administrative functions. Its HTML and PHP development guarantees safe login and seamless navigation. My contributions included designing the homepage layout, incorporating login features, and tying the interface to the database and backend PHP scripts. Making sure the design was responsive and the user experience was smooth was the main goal of my work.

**Individual contribution and findings:** By creating the homepage, integrating order and reservation capabilities using HTML and PHP, and putting user and admin login functionalities into place, I actively participated in the creation of the restaurant management system. In order to ensure efficient data processing and validation, I additionally managed backend connectivity with the MySQL database.

Results: This project enhanced my knowledge of database integration, gave me hands-on experience with full-stack web development, and taught me the value of secure authentication and user-friendly design in practical applications..

**Individual contribution to project report preparation:** By documenting important elements including the system overview, project planning, system design, UML diagrams, and ER diagram, I made a substantial contribution to the project report's creation.. Additionally, I made sure the information was free of plagiarism, kept a clear, structured manner, and assisted in creating visual diagrams using PlantUML. My work made sure that the report professionally and accurately represented the technical and functional components of the project.

**Individual contribution for project presentation and demonstration:** created report, described system characteristics, and gave examples of key functions of homepage.. In order to ensure a confident and clear project demonstration, I also responded to technical inquiries.

Full Signature of Supervisor: Full signature of the student:

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**INDIVIDUAL CONTRIBUTION REPORT : LOGIN**

**FoodMandu – Restaurant Management System**

**NAWSAD ANSARI**

**22054059**

**Abstract:**The entry page of this project is a safe entry point that users can access the reservation system. Designed using HTML, CSS, and JavaScript, the company has a pure and reactive interface for inputting accounting data. The system checks the input field to ensure the correct data input and provides a real -time error for the wrong input. Through successful authentication, the user redirects the preliminary panel. This component enhances user's confidentiality, prevents unauthorized access, and promotes the overall security of the application.

**Individual contribution and findings:** I was responsible for the development and implementation of the Foodmandu system of entry module. This includes creating safe user authentication mechanisms for both managers and customers who use encrypted accounting data. In order to ensure that the user's untrained tasks have been integrated, we have integrated forms, session control and error processing. Thanks to the test, I found that the implementation of the hash password greatly increased the security of the system.

**Individual contribution to project report preparation:** I prepared the sections related to the Login module in the project report. This included writing the design, implementation details, and security aspects such as password encryption and validation. I also created flowcharts and contributed to the testing documentation to ensure clarity and completeness in the report.

**Individual contribution for project presentation and demonstration :** During the project demonstration, I was responsible for presenting the input module for the system. We described the user authentication flow and showed the assigned keys, such as the work interface to the system, and the input verification and access. He also answered questions related to safety implementation and supported the team during the live demonstration.

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**INDIVIDUAL CONTRIBUTION REPORT : DASHBOARD**

**FoodMandu – Restaurant Management System**

**SANDIP KUMAR SAH**

**22054083**

**Abstract:** The homepage provides a simple and interactive interface for users to access key features like table booking, menu viewing, user login, and registration. Designed using HTML, CSS, and PHP, it ensures easy navigation, fast performance, and a user-friendly experience, acting as the central point of the restaurant management system.

**Individual contribution and findings:** I was responsible for developing the backend of the project using PHP and MySQL. My main tasks included implementing user login, registration, and table booking functionalities. I created and managed the database structure and wrote queries for data handling. I collaborated with the frontend team to connect forms with server-side scripts. This project improved my skills in backend development, database design, and teamwork. I also learned how to troubleshoot integration issues and ensure data security in a web application.

**Individual contribution to project report preparation:** I contributed to the project report by drafting the sections related to system design, backend implementation, and database structure. I also helped in proofreading the final report for clarity and accuracy. Additionally, I compiled screenshots of the working system and assisted in formatting the document as per the required guidelines. My role ensured that the technical aspects of the project were clearly documented and well-presented.

**Individual contribution for project presentation and demonstration:** I was responsible for presenting the backend functionalities of the project during the demonstration. I explained how the database, user login, and table booking system work. I also showcased real-time interactions between the frontend and backend. Additionally, I helped prepare the slides and assisted the team in answering technical questions during the Q&A session.

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**INDIVIDUAL CONTRIBUTION REPORT : RESERVATION**

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**ANMOL MISHRA**

**22054427**

**Abstract:** This project provides an interactive restaurant reservation system developed using HTML, CSS and JavaScript. This allows the user to see the available table and select the preferred time intervals and use a simple and convenient interface to confirm the reservation. The system checks the entrance, provides real -time feedback and visually updates the availability. Projects designed for efficiency and convenience.

**Individual contribution and findings :** They contributed to the system test of the development of the user interface, the implementation and error of the reservation function of major support. He participated in the report preparation for projects and presentations. Major conclusions include improving understanding of frontal development, input verification, real -time updates of user interfaces, technical technologies in project development, and joint experience.

**Individual contribution to project report preparation:** Contributed by drafting the system architecture, describing the reservation workflow, and detailing the technologies used. Assisted in organizing the content structure, proofreading for clarity and accuracy, and ensuring proper formatting. Also helped compile test results and screenshots to enhance the overall quality and presentation of the project report.

**Individual contribution for project presentation and demonstration:** Attractive slides prepared to emphasize the system function and work process. He described the reservation process, user interface and technology implementation during the demonstration. He actively participates in living demonstrations and answers questions effectively to ensure a clear understanding of the audience project.

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**INDIVIDUAL CONTRIBUTION REPORT : ABOUT**

**FoodMandu – Restaurant Management System**

**KUNAL KEWAT**

**22054050**

**Abstract:** The restaurant reservation system is a web application designed to simplify the table reservation process. Created using HTML, CSS, and JavaScript, this product provides an intuitive interface for viewing the available table, selects the preferred time slot, and checks the reservation confirmation. This system provides updates for real -time, input verification and adaptive design for smooth user experience on other devices. It aims to improve customer convenience by using the restaurant's reservation management optimization, manual error, and using a fast, interactive and stable digital platform.

**Individual contribution and findings :** Contributed to front-end development using HTML, CSS, and JavaScript, focusing on layout design and reservation functionality. Participated in testing and debugging for smooth user interaction. Key findings include improved skills in responsive web design, form validation, and real-time data handling, enhancing understanding of dynamic web application development.

**Individual contribution to project report preparation :** It is included in the spells of the section design, the technology and the implementation details. He helped to configure the structure of the report, add appropriate diagrams and screenshots, and ensure the correct format. He looks at the contents for accuracy and clarity, and the final report is comprehensive and well -organized and is the goal and results of the project.

**Individual contribution for project presentation and demonstration :** The prepared presentation of the slide that distinguishes the function of the system and the workflow. He explained the main modules during the demonstration, showed functions in the air, and responded to the request to ensure clear communication with the project's goals and implementation.

Full Signature of Supervisor: Full signature of the student:

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TURNITIN PLAGIARISM REPORT

**(This report is mandatory for all the projects and plagiarism**

**must be below 25%)**

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