

# SYSTEM ARCHITECTURE

- **Architecture Type:**

The system follows a three-tier architecture to ensure scalability, security, and easy maintenance.

1. **Presentation Layer**

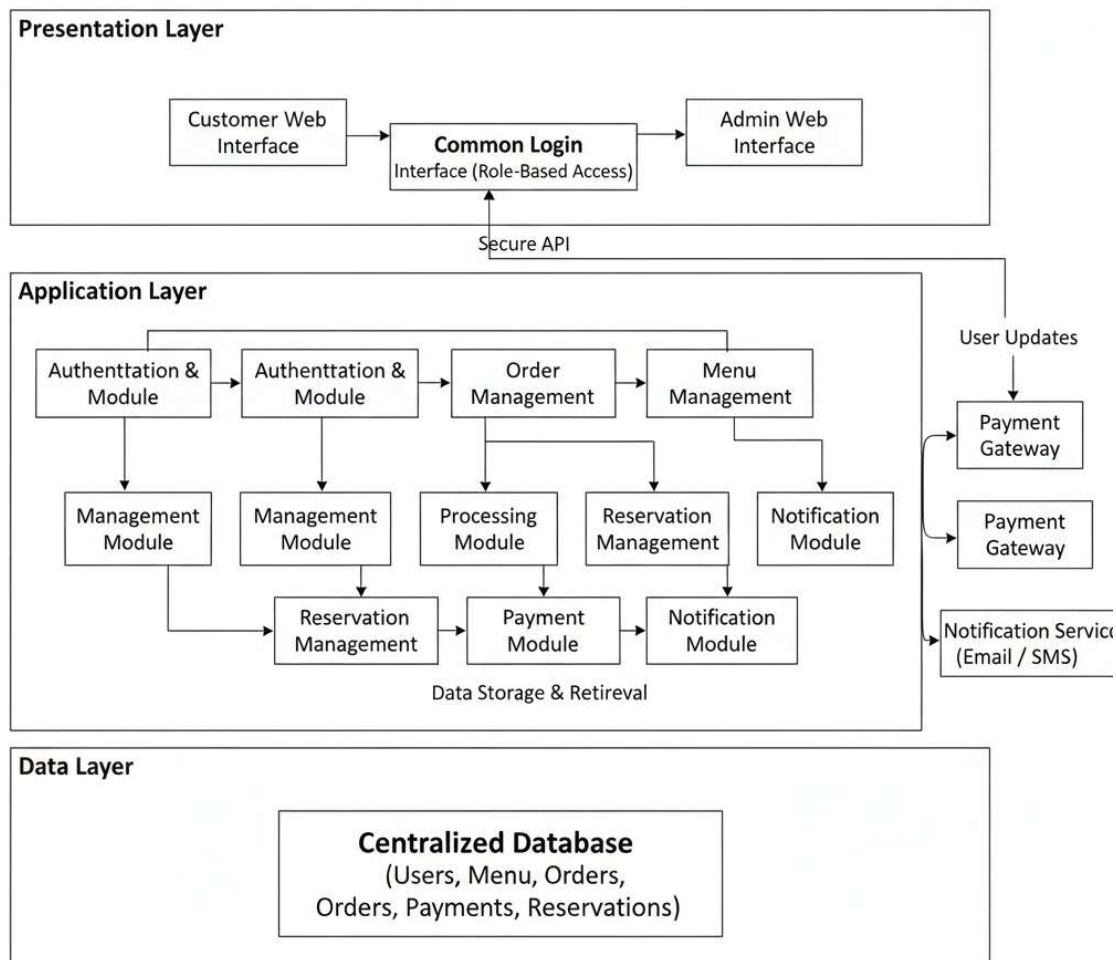
- Web interface for Customers and Admin
- Handles user interaction and data input

2. **Application Layer**

- Business logic and processing
- Handles orders, payments, reservations, and authentication

3. **Data Layer**

- Centralized database
- Stores user details, menu items, orders, payments, and reservations



## **MODULE DESCRIPTIONS**

### **1. Authentication Module**

- Common login system for all users
- Role-based access (Customer / Admin)
- Secure user authentication

### **2. Customer Module**

- Browse food menu
- Add items to cart
- Place food orders
- Make online payments
- Track order status
- Reserve tables

### **3. Admin Module**

- Manage menu items
- View customer orders
- Update order status
- Manage table reservations

### **4. Menu Management Module**

- Add, update, and delete menu items
- Manage item availability and pricing

### **5. Order Management Module**

- Process customer orders
- Maintain order lifecycle
- Update order status

### **6. Payment Processing Module**

- Integrates online payment gateway
- Handles payment confirmation and failure
- Ensures secure transactions

### **7. Reservation Management Module**

- Handles table booking requests
- Checks availability
- Confirms or rejects reservations

