#### HOTEL BOOKING SYSTEM

The Hotel Booking System is designed for a single hotel to manage its room bookings, payments, check-ins, housekeeping, and customer reviews. The system enables the admin, and users (customers) to interact efficiently with the hotel's daily operations and services.

### **PROBLEM STATEMENT:**

The problem the system aims to solve is to provide a centralized management platform for a single hotel. This includes handling:

- Room bookings, ensuring customers can book rooms with accurate availability.
- Managing payments, ensuring secure transactions and tracking of booking payments.
- Customer reviews and feedback, giving users the ability to rate and review rooms.

### **USER'S OF THE SYSTEM:**

### 1. User (Customer)

- A guest or customer who wants to book a room in the hotel.
- Can make bookings, pay for reservations, and leave reviews.

### 2. Admin

- A hotel administrator responsible for managing the hotel's operations.
- Can add and remove users, manage rooms, bookings, payments, and generate reports.

#### MODULE IDENTIFIED:

### 1. User Management Module

- **Function**: Allows customers to register, login, view available rooms, make bookings, make payments, and leave reviews.
- User Role: User (Customer), Admin
- Key Features:
  - 1. Register and login
  - 2. Browse rooms
  - 3. Make bookings
  - 4. Make payments
  - 5. Provide feedback and reviews

### 2. Room Management Module

- **Function**: Allows admins to add/remove room details (type, price, availability), view and modify room status.
- User Role: Admin
- Key Features:

- 1. Add/edit room details (number, price, type)
- 2. Manage room availability (booked, available, under maintenance)

## 3. Booking Management Module

- **Function**: Manages booking details (customer, room, date range), updates booking status, and allows for room reservations.
- User Role: User (Customer), Admin
- Key Features:
  - 1. Book rooms based on availability
  - 2. View current bookings
  - 3. Manage booking status (confirmed, cancelled)

## 4. Payment Management Module

- Function: Manages payments associated with bookings (payment methods, payment status).
- User Role: User (Customer), Admin
- Key Features:
  - 1. Process payments via multiple methods
  - 2. Track payment status (pending, completed)
  - 3. Refund transactions if required

# 5. Check-In/Check-Out Management Module

- Function: Manages the process of user check-ins and check-outs, updating room status.
- User Role: Admin
- Key Features:
  - 1. Check-in users when they arrive
  - 2. Check-out users when they depart
  - 3. Update room status after check-out (available/cleaning required)

### 6. Review & Feedback Module

- Function: Allows users to rate and review rooms they have stayed in.
- User Role: User (Customer), Admin
- Key Features:
  - 1. Leave ratings (stars) and feedback for rooms
  - 2. View reviews of rooms before booking

### **ROLE OF USERS ON MODULE:**

## **User (Customer)**

- Access: Booking, Payment, Feedback
- Responsibilities:
  - 1. Register/login to the system
  - 2. View available rooms
  - 3. Book rooms based on availability
  - 4. Make payments for booked rooms
  - 5. Leave feedback and rate rooms

#### Admin

- Access: All modules (Room Management, Booking Management, Payment Management, Reports)
- Responsibilities:
  - 1. Manage users (add, remove, update)
  - 2. Manage rooms (add, edit, delete rooms)
  - 3. Monitor bookings and payments
  - 4. Generate and view system reports

### **Conclusion:**

The implementation of our hotel booking system represents a significant advancement in operational capabilities, automating reservation processes, streamlining guest management, and providing real-time inventory control to deliver substantial benefits to both staff and customers. By eliminating double bookings, reducing manual data entry errors, and providing comprehensive analytics, the system enhances decision-making through its user-friendly interface while minimizing training requirements. As the hospitality industry evolves, this flexible system positions our organization to adapt to changing customer expectations, optimize operational efficiency, and maximize revenue generation while laying groundwork for future enhancements including third-party service integration, expanded mobile functionality, and sophisticated personalization features.