HOTEL BOOKING SYSTEM

Project Overview

The Hotel Booking System is a web-based platform that allows customers to browse and book available hotel rooms. The system aims to provide a seamless and user-friendly experience for customers while allowing hotel administrators to manage room availability, bookings, and customer information efficiently.

The system will include the following functionalities:

Online room booking
User account management
Room availability tracking
Payment gateway integration
Admin dashboard for managing bookings

Stakeholders Of the Hotel (Who are using hotel and working hotel)

Role   **Description**

Customer Users who want to book rooms.

Admin   Manages the system, handles room availability, and customer issues.

System Features

Customer Perspective

1. **Registration & Login**

   o   Customers can sign up or log in using email and password.

   Room Search & Filter

   o   Search rooms by:

   ▪   Date range

   ▪   Room type (Single, Double, Suite)

   ▪   Price range

   ▪   Amenities (Wi-Fi, TV, AC, etc.)

2. **Room Booking**

   o   Select room and book it.

   o   Display room details and price breakdown.

3. **Payment Gateway**

   o   Secure payment processing using Stripe/PayPal.

o   Support for credit/debit cards, UPI, and net banking.

4. **Booking Confirmation & Notifications**

   o   Email/SMS notification for booking confirmation.

   o   Cancellation policy notification.

5. **Customer Profile Management**

   o   Update personal details (name, email, phone).

   o   View booking history and payment details.

Admin Perspective

1. **Admin Dashboard**

   o   Overview of current bookings and revenue.

   o   Monthly/yearly reports.

2. **Room Management**

   o   Add/edit/remove rooms.

   o   Manage room status (Available, Occupied, Under Maintenance).

3. **Booking Management**

   o   View, update, or cancel bookings.

   o   Assign or change room allocations.

4. **Customer Management**

   o   View customer profiles and booking history.

   o   Handle customer complaints and queries.

5. **Revenue Management**

   o   Generate financial reports.

   o   Track payments and pending dues.

User Stories

Customer Stories

- As a customer, I want to search for available rooms using filters so that I can quickly find a suitable room.

- As a customer, I want to securely pay for my booking using different payment methods.

- As a customer, I want to receive email and SMS confirmation after booking a room.

Admin Stories

- As an admin, I want to view booking statistics so that I can monitor business performance.

- As an admin, I want to manage room status and pricing to maximize revenue.

- As an admin, I want to update customer details and respond to complaints.

Functional Requirements

Customer-Side Requirements

- User registration and login

- Search and filter functionality

- Secure payment processing

- Booking confirmation and cancellation

Admin-Side Requirements

- Admin dashboard with analytics

- Booking and room status management

- Revenue tracking and reporting

- User access control

Use Case Diagrams

(i) Customer Use Case Diagram

- Register/Login

- Search Room

- Book Room

- Make Payment

- View Booking Status

- Cancel Booking

(ii) Admin Use Case Diagram

- Manage Rooms

- Manage Bookings

- View Reports

- Manage Customers