Project Overview: Hotel Booking System

The Hotel Booking System is a web-based application designed to streamline the booking process for users looking to reserve rooms at hotels across various locations. This project provides a simple and user-friendly platform where users can search for available rooms, submit booking requests, and manage their reservations.

Key Features:

1. User Login System:

The project includes a fully functional login system that authenticates users and admins using a secure login mechanism. We have implemented OAuth integration, allowing users to securely log in with their credentials. The system ensures that only authenticated users can access booking-related features.

2. Hotel and Room Management:

The website allows admins to manage hotel and room information. Admins can view and approve or reject booking requests submitted by users. Hotel details such as name, location, descriptions, room types, availability, and pricing are stored in the system's database. Users can search for hotels based on city, location, and room availability.

3. Booking Request System:

Once users select a hotel and room, they can submit a booking request. The request includes the selected room, check-in and check-out dates, and the user's information. Admins can review and approve or reject these booking requests from an admin panel. The system also ensures that users are notified when their booking request is either approved or rejected.

4. Database Integration:

The system uses a relational database to manage hotel data, room availability, and user bookings. It also ensures data integrity by enforcing foreign key relationships between users, rooms, and booking records. PDO (PHP Data Objects) is used for database interactions to maintain a secure and efficient communication channel with the MySQL database.

5. **Booking Summary and Confirmation**:

After selecting a room and submitting a request, users are presented with a booking summary that includes details like room cost, taxes, and the total amount. This information helps users review their booking details before submitting the final request. Upon confirmation, the request is sent to the admin for approval.

Work Remaining:

Although the website is functional, several features are still under development, including:

- Integration of dynamic data fetching from third-party APIs to provide up-to-date hotel information.
- Implementation of additional user and admin features, such as booking history and real-time booking status updates.
- UI enhancements for better user experience and design consistency.

The system will continue to evolve, with future plans to implement payment integration, booking management features for users, and enhanced reporting for admins.