Hotel Booking and Management Platform – Project Overview

Project Overview

Purpose: To provide users with a convenient, fast, and secure way to search, book, and manage hotel reservations online.

System Type: Web-based booking platform (currently prototyped in Figma, future backend in Django)

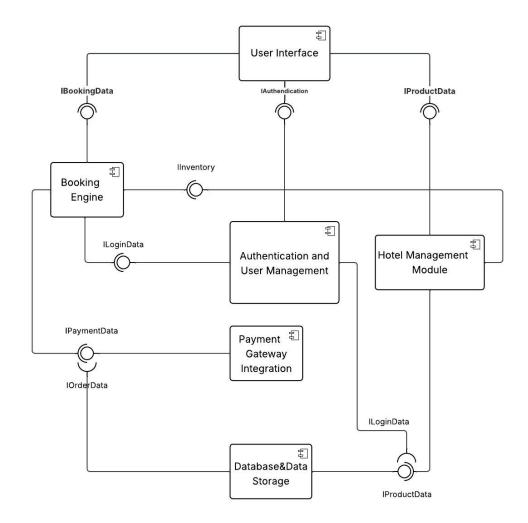
Stakeholders:

- End Users (customers)
- System Admin
- Hotel Staff

Problem It Solves: Eliminates manual booking and phone reservations by offering a digital alternative. Improves customer experience with quick room search, secure payment, and booking history access.

Core Functional Requirements:

- FR-1: The system shall provide a secure login for all users.
- FR-2: The system shall allow users to search for available hotels based on location and dates.
- FR-3: The system shall allow users to book rooms by entering guest and payment information.
- FR-4: The system shall display booking confirmation after successful payment.
- FR-5: The system shall allow users to cancel existing bookings.
- FR-6: The system shall validate user input forms before submission.



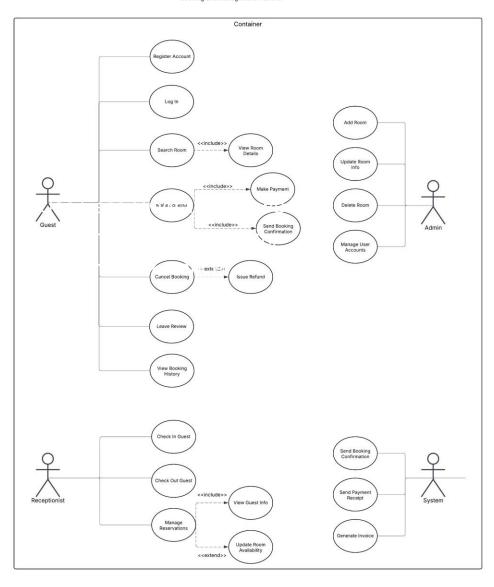
Final Content

Title: System Architecture

Component Diagram for Hotel Booking System

- User Interface: Entry point for users to interact with the system
- Booking Engine: Core logic for room search, booking, and updates
- Authentication Module: Manages login, registration, and access control
- Hotel Management Module: Let's staff update availability and room info
- Payment Gateway: Simulates payment processing
- Database: Stores user data, booking records, and room inventory

Use Case Diagram for Hotel Booking and Management Platform



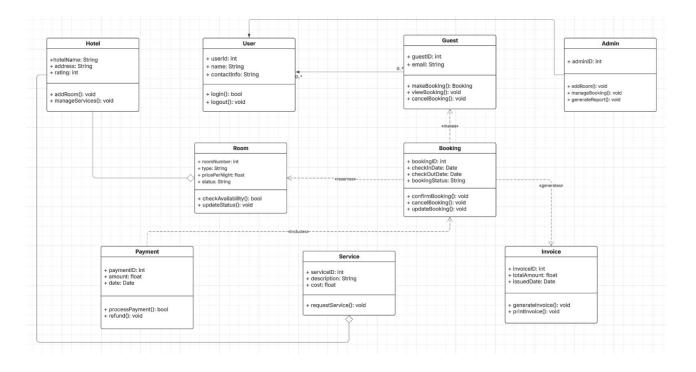
Title: UML Diagrams

Use Case Diagram

Use Case Diagram: Shows key user interactions — login, search, book, cancel

Class Diagram

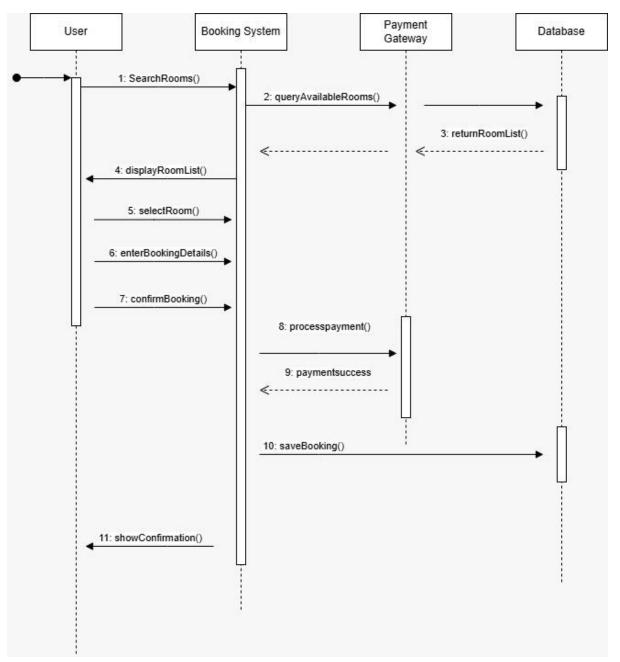
Class Diagram: Models key entities and their relationships (User, Booking, Room, Payment)



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Sequence Diagram For Make Booking

Sequence Diagram: Displays the booking flow — from user input to Database storage



Test Plan Summary

Test Scenario: Successful User Login

Requirement Tested: FR: The system shall provide a secure login

for all users

Precondition:

- A valid user account exists in the system
- The user is using a supported browser (e.g., Chrome)
- The system is online and operational

Steps:

- 1. Open the login page
- 2. Enter a valid email and password
- 3. Click the "Login" button

Expected Outcome:

- The user is authenticated within 2 seconds
- The user is redirected to their dashboard
- A welcome message and upcoming bookings are displayed
- Session is securely initialized

Priority: High

User Guide Summary

Feature Tutorial

A simple, written walkthrough of booking a hotel — from login \rightarrow search \rightarrow select room \rightarrow payment \rightarrow confirmation.

- FAQ Section
- o What happens if I forget my password?
- o How can I cancel a booking?
- o Is my booking saved automatically?
- o Can I use this on my phone?
- Troubleshooting
- o Login fails? → Use password reset
- o Booking not saved? → Recheck form inputs
- o Page not loading? → Check internet or try again

Traceability & Consistency

Requirement	Where It Appears	Verified In
FR-1: User Login Login	Login Screen (Prototype)	Test Case 1, User Guide
FR-2: Hotel Search	Search Screen (Prototype)	Use Case Diagram, Test Plan
FR-3: Book Room	Booking + Payment Screens	Test Case 2, Sequence Diagram
FR-4: View Booking	Dashboard / My Bookings	Functional Requirements, Guide

Value to Stakeholders

- 1. For Users (Customers):
- Fast and easy hotel booking from anywhere
- Can view, manage, and cancel bookings Fewer manual errors, more online
- Secure login and payment options improve trust

- 2. For Admins / Hotel Staff:
- Centralized system to manage room availability
- *automation*
- Reduces booking conflicts and customer service overhead

- 3. Based on Requirements + Use Cases
- Features delivered (search, book, confirm, cancel) all align with actual stakeholder needs defined in SRS
- System designed for usability and quick task completion

Prototyping



Prototype created in Figma, fully clickable.

Covers main user flows: Login/Register, Hotel Search, Booking Process, Booking Management.

Aligned with Requirements, Use Case Diagram, and Sequence Diagram.

UX: Intuitive navigation and consistent design.

Figma Link

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Conclusion

1. What has been delivered:

- Functional Requirements document
- UML and Architecture Diagrams
- Figma prototype with 8 interactive screens
- Test Plan and individual test cases
- User Guide covering booking flow

2. Current State:

- Prototype matches system design and use cases
- All documentation aligns with core functionality
- Stakeholder needs covered through core features (login, search, book, cancel)

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