MET

Bhujbal Knowledge City

MET INSTITUTE OF COMPUTER SCIENCE

TUTORIAL SHEET

Date: 24 / 02 / 2025

MCA Semester ___II___

Subject ___UIL___

Academic Year 20___ - 20___

Roll No ___1554___

Signature of Faculty _____

Hotel Management system Analysis

primary Analysis of Any project consists of 3 Types:

1. Domain Analysis
2. User Analysis
3. Task Analysis

1. Domain Analysis:

Problem Domain:-

A Hotel management system connects customers, hotel staff, and administrators through an online platform. It facilitates room booking, payment processing and customer service while managing hotel operations efficiently.

①
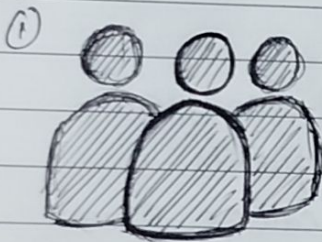
- Search for hotels and available rooms.
- Make online reservations.
- Manage bookings (cancel, modify, extend stay)
- make online payments.

Customer

②

- Check-in and check-out guests.
- maintain room availability.
- Manage customer queries and complaints
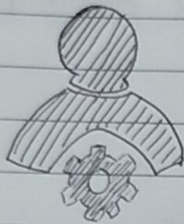- Housekeeping staff ensures room cleanliness.

Hotel staff

(3)

Administrator / Manager

- Manager hotel rooms and pricing.
- Handle customer and staff records
- Monitor revenue and performance
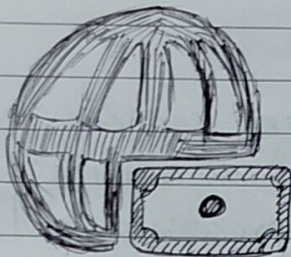- manage promotional offers and discounts.

(4)

Admin Panel

- Manage App. user account
- Resturant account
- Handle transactions commissions and disputes.
- Generate reports and insights.

(5)

Payment Gaautway.

- Ensure encryption and complaine with finaciaul clawys.
- Handle refunds and failed payments
- Support multiple payment methods.

(6)

Customer Support

- madiate disputes between users
- Handle complains / queries.
- Provide 24/7 chart, call or email support
- Improve Customer satisfaction.

Functional Requirements.
1) Booking & Reservation management

- Allows customers to Search available rooms, book, modify or cancel reservations.
- Generates confirmations emails and invoices
- Displays real-time availability of rooms.

2) Hotel Dashbord (Admin Panel)

- Consists of room and booking managements.
- Generates confirmation emails and invoices
- Displays real-time availability of rooms.
- ~~Con~~ Notifies admin of low inventory, maintenance needs, and customer ~~feed~~ feedback.
- Tracks sales, occupancy, and revenue.

3) Payment Gateway:

- Allows secure online transactions using NetBanking, Mobile Banking, UPI, etc.

4) Booking & Room Tracking:-

- Real-time tracking of room reservations and guest Checkiins / check-outs.

5) Hotel Staff & Room Service.-

- Routing guests to rooms and assigning housekeeping tasks.
- Communications between guests and hotel staff (e.g room services, requests, special arrangements).

6) User Feedback & Ratings.

- Guests can leave reviews and ratings on hotel services, room, and staff.

Non-Functional Requirements:-

1. Scalability- Handles high traffic during peak seasons.
2. Availability (24/7) - System is accessible anytime for bookings.
3. Reliablity (99%) - Ensures minimal downtime
4. User Experience:- Smooth interface for guests, admin, and staff.

Domain Constraints:

1. **Room Availability:** - Limited by the number of vacant rooms at a given time.

2. **Payment Restrictions:** - Certain regions may not support specific payment methods.

3. **Booking Cancellation** - Refund policies for canceled bookings.

4. **Customer Support:** - Guests may experience delays in response or resolution.

* Use Case Diagram for Hotel Management System:-

Hotel Management System.

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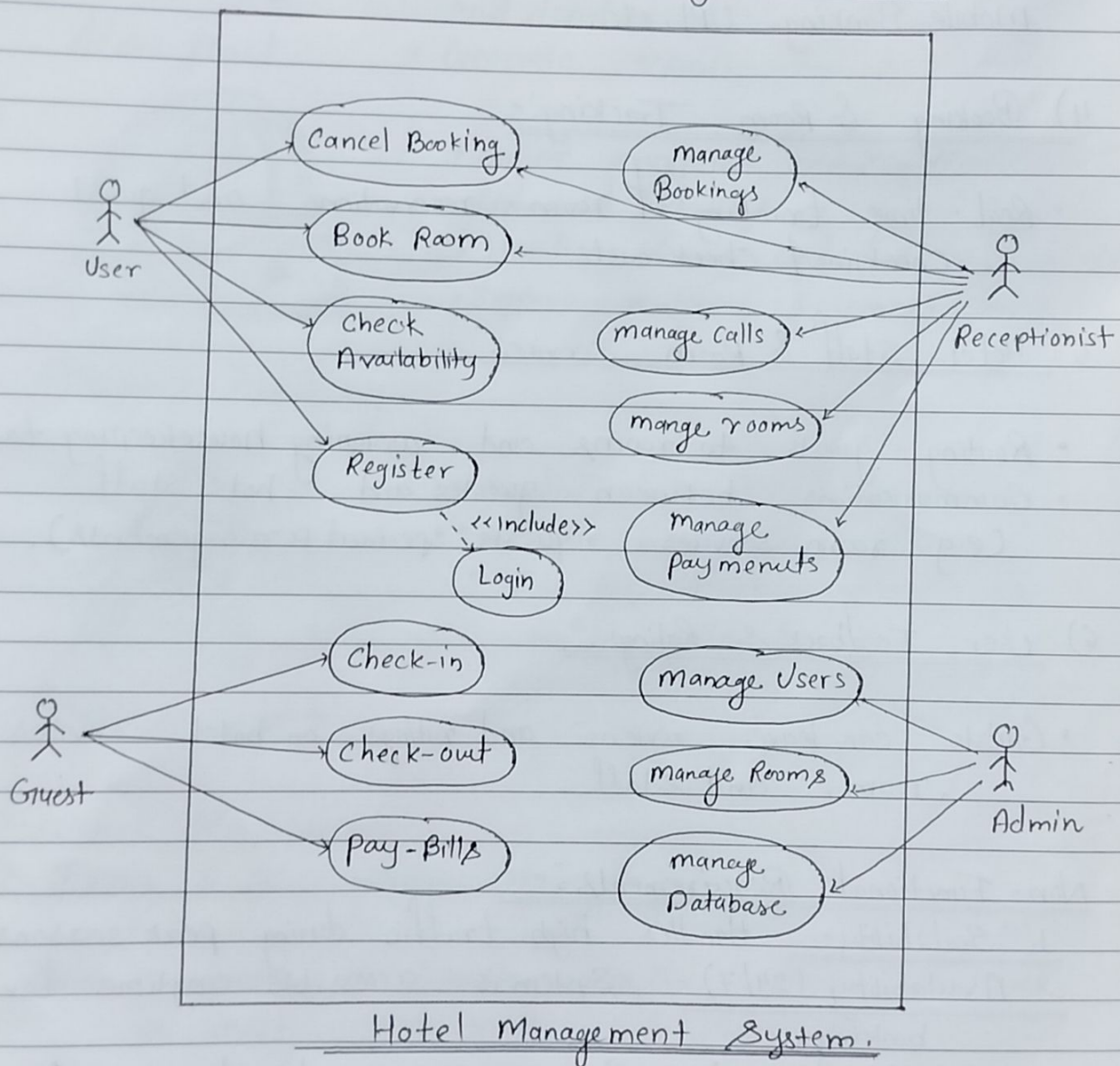
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Customer User Persona

who?

- Individuals booking a hotel room
- families looking for vacation stays
- Business travelers booking for work trips.

Pain points.

- Slow check-in/check-out process.
- Poor room service quality
- Refund policy issues
- Unresponsive customer support

key Requirements.

- User-frendly booking system.
- Real-time room availability tracking.
- Multiple payment options.
- Booking modification & cancellation support.
- 24/7 Customer assistance.

Hotel staff User Persona :-

who?

- Hotel managerers handling bookings.
- front desk staff managing check-ins & check-outs.
- Housekeeping staff ensuring room cleanliness.

Pain Points:

- High Commission fees on third-party bookings
- inconsistent gust requests.
- late or no-show reservations.

key Requirements.

- Eefficient room management system
- Automated guest chek-in & check-out
- Transparent revenue tracking.
- Seamless integration with existing systems.
- Timely payment settlements.

* Hotel Staff User persona

Who?

- Receptionists managing check-ins and Check-out.
- Housekeeping staff maintaining room Cleaniness
- Hotel managers overseeing operations and guest Satisfactions.
- Concierge staff assisting guests with special requests

Pain points:

- - Delayed payments from third-party booking platroms.
- Guest complaints about room Cleanliness or Service delays
- Difficulty in managing high-volume bookings during peak Seasons.
- Limited coordination between departments (reception, housekeeping , etc).

key Requirements:

- Real-time room availability tracking.
- Seamless communication between departments.
- Automated guest Check-in & chek-out system.
- Transparent commission and revenue tracking.
- Instant notification for guest requests and room Service.

Task Analysis:
Guest Experience

Goal- The hotel booking system should allow customers
to easily browse available rooms, make
reservations, and manage their stay.

Steps Involved:-
1. ~~optio~~ Open the Appl website & login -
Guests enter their credentiauls or book
as a guest
2. Browse Available Rooms- Filter rooms based on
Pricing, amentites and availability.

3. select Room & Add Services-
Choose a room, add meal Plans, special requsts,
or additional Services.
4. Confirm Booking & payment.
Secure booking with various Payment options.

5. Receive Confirmation & chek-in Details -
Get a digital receipt and stay details.

* Guest Experience:-
Goal- The hotel System should allow customers to book
rooms, manage their stay, and access Services.
Seamlessly.
• Steps Involved: -
1. login & Browse:- Guests Jog in and explore available
rooms and Services.
2. Select Room & Add Services:-
Choose a room, add Extra amenities like
breakfast, Spa, or room service.
3. Checkout & Payment - Enter guest details, confirm
booking, and make payment.

3. **Checkout & payment** - Enter guest details, confirm booking, and make payment.

4. **Receive Confirmation:-** Get booking details via email/SMS.

5. **Check-in & stay management-** Self-check-in or front desk Check-in request Services during the stay.

6. **Checkout & feedback** - Complete the stay, process payment if required and provide feedback.

* **Hotel staff (Receptionist, Housekeeping, manager)**
 - **Goal** - Manage bookings, assist gusts and ensure Smooth hotel opt operations.

Step Involved:-

1. **Receive Booking Notification:-** System alerts staff about new bookings.

2. **Prepare for Guest Arrival-** ~~Allocate~~ Allocate rooms, Shedule housekeeping.

3. **Check-in process-** Verify guest details, provide room keys.

4. **Manage Guest Requests:-** Handle room service, Complaints and special requests.

5. **Check out & Billing-** Process cheaout-out, finalize billing, and update room avialability.

6. **Collect Guest Feedback.-** Gather reviews for service improvements nts.

* **Housekeeping staff:-**

1. **Receive Cleaning Requests** - Notification ~~fror~~ for room cleaning.

2. **Prepare Room-** clean, restock amenitties and report any maintenance issues.

3. **Updade status-** mark rooms as Clean and ready for new guests.