

## **EX 1:**

### **Aim:**

The aim of the **Hotel Reservation System** is to provide an efficient and automated platform for customers to book accommodations online. The system allows customers to specify their accommodation requirements (room type, number of rooms, duration of stay), select a suitable hotel, check room availability, calculate charges, and confirm reservations. This system ensures smooth handling of reservations, room availability updates, and accurate charge calculation, improving the overall booking process for both customers and hotel managers.

### **Procedure:**

#### **1. Customer Input:**

- Customer enters accommodation requirements (room type, number of rooms, and stay duration).

#### **2. Hotel Selection:**

- System finds suitable hotels based on customer input.

#### **3. Room Availability Check:**

- System checks room availability in selected hotel.

#### **4. Charges Calculation:**

- System calculates the total charges based on room type, number of rooms, and stay duration.

#### **5. Acknowledge Charges:**

- System displays the calculated charges to the customer for confirmation.

#### **6. Reservation Confirmation:**

- If satisfied, the customer confirms the reservation.

#### **7. Update Room Availability:**

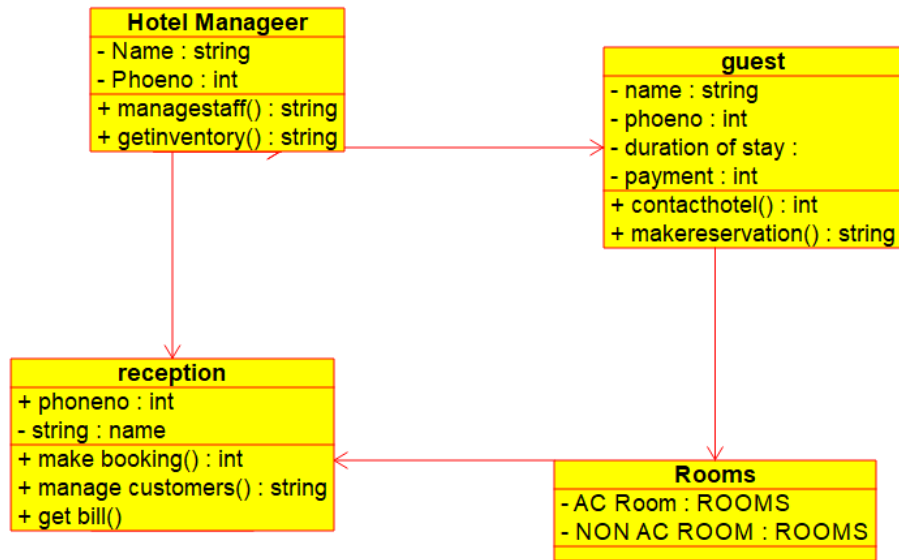
- System updates room availability after confirmation.

#### **8. Completion:**

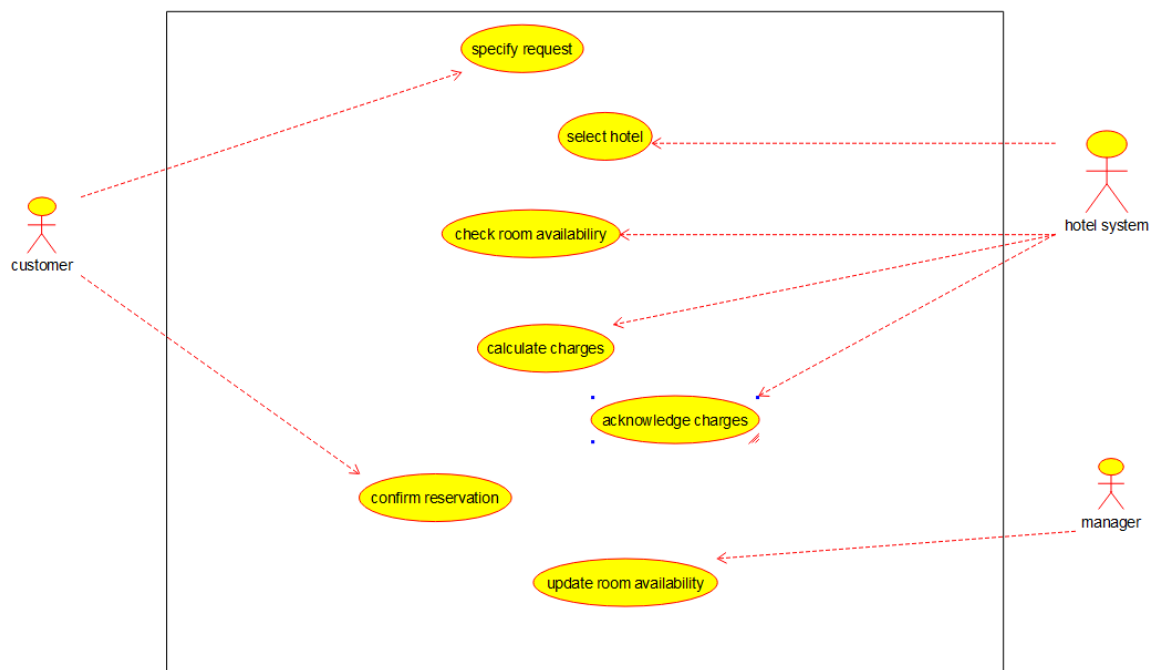
- Customer receives booking confirmation with details.

OUTPUT

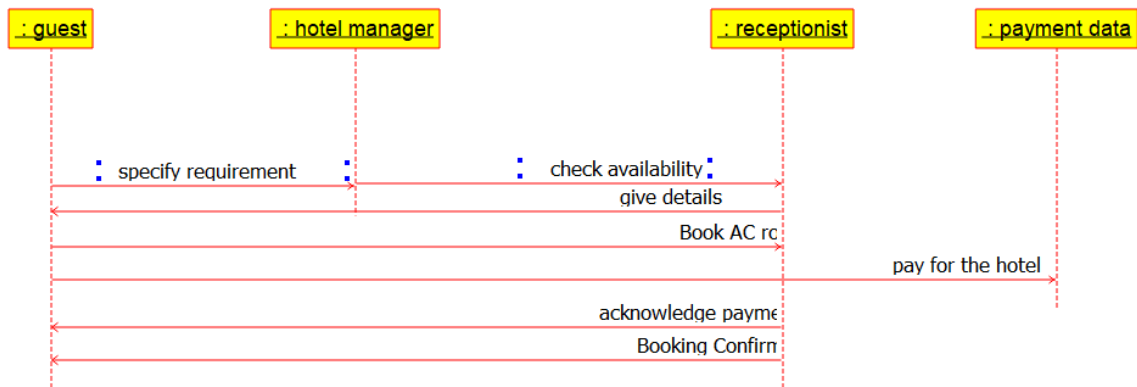
CLASS DIAGRAM:



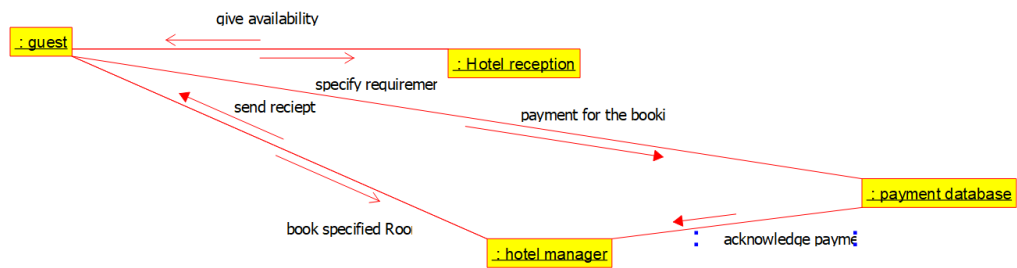
USE CASE DIAGRAM:



SEQUENCE DIAGRAM:



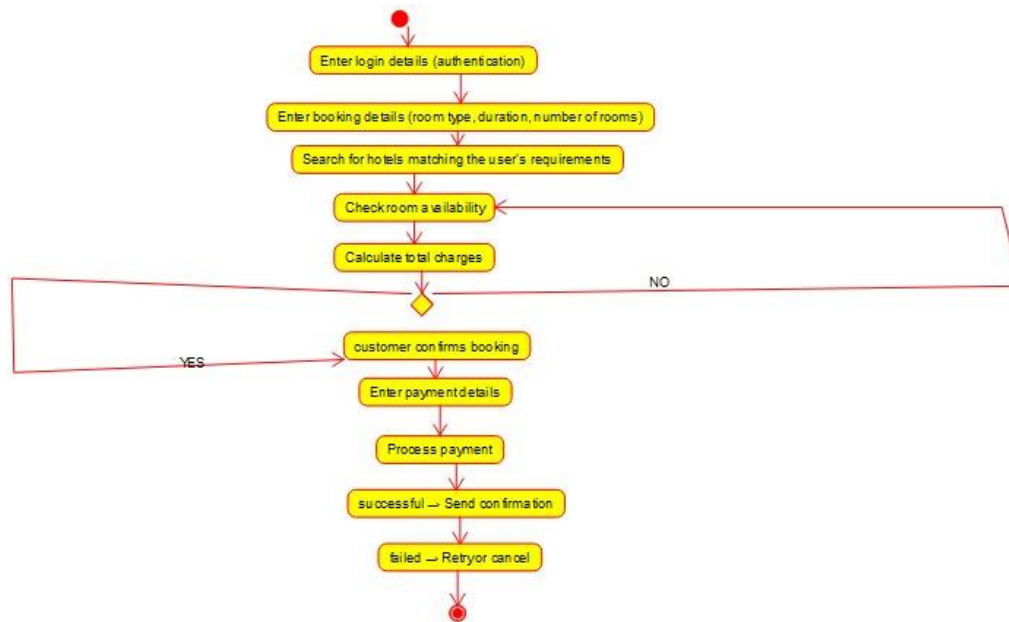
### COLLABORATION DIAGRAM:



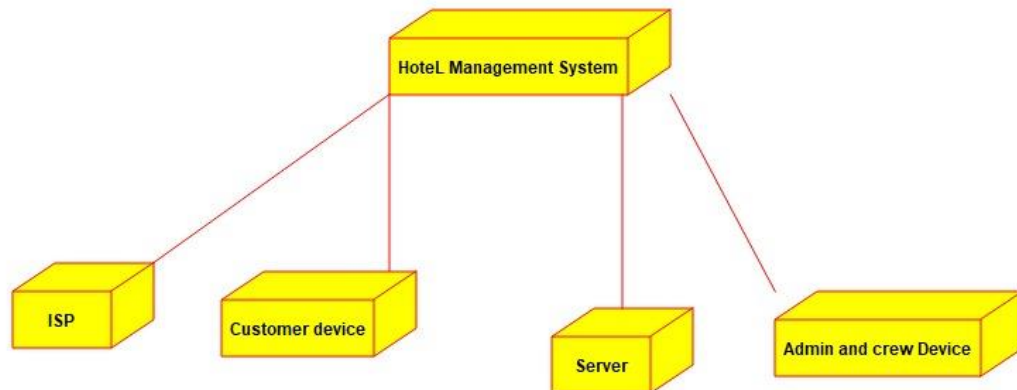
### STATE DIAGRAM:



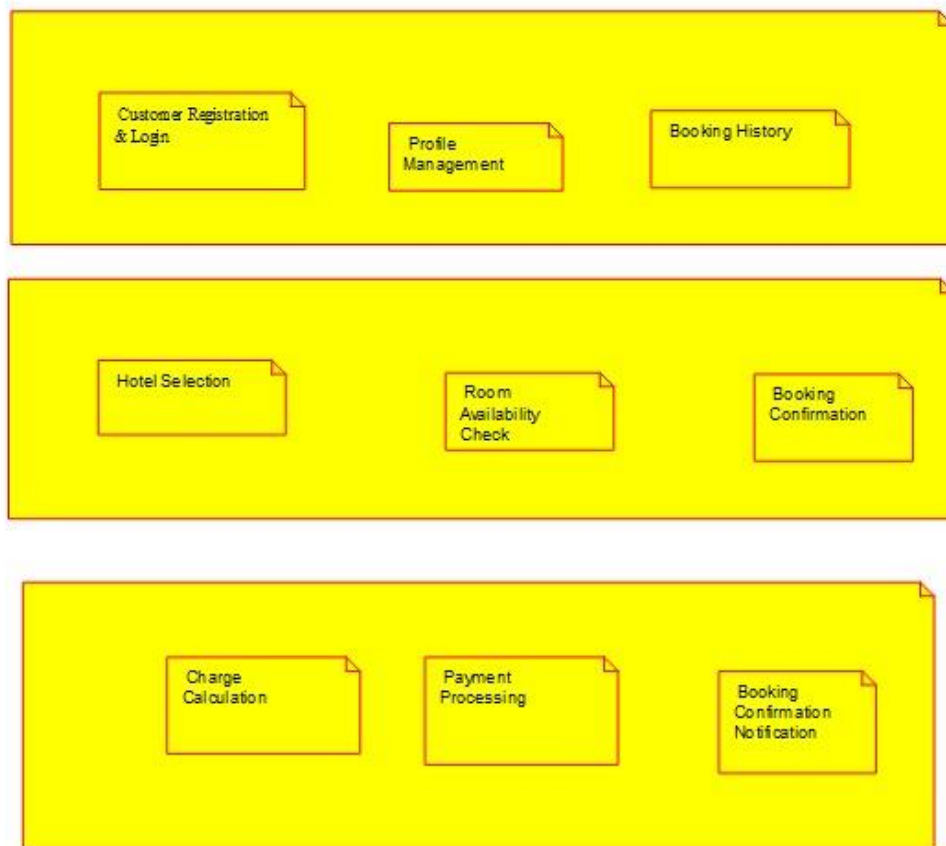
## ACTIVITY DIAGRAM:



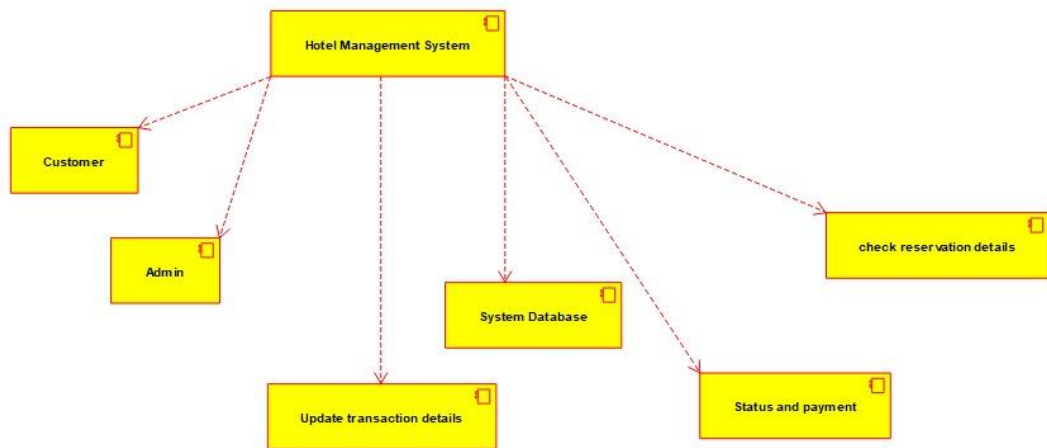
## DEPLOYMENT DIAGRAM:



## PACKAGE DIAGRAM:



COMPONENT DIAGRAM:



#### RESULT:

Hence, the customer inputs their requirements, and the system selects a suitable hotel, checks room availability, and calculates charges. Upon confirmation, the reservation is made, and room availability is updated. The customer receives a booking confirmation, ensuring efficient management of reservations for both the customer and hotel.