MANAGEMENT INFORMATION SYSTEM

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1. Draw a UML diagram for hotel reservation system. In a hotel reservation system, a customer can make online booking for a hotel, by specifying the accommodation requirements such as type of room (AC/Non-AC, One bed/two bed), total no of rooms, duration of stay. The system selects a suitable hotel as per customer's requirements. If a hotel is found then the availability of rooms in that hotel is checked. The charges are calculated for the selected requirement and these are acknowledged to the customer. If the customer is satisfactory about the selection made by the system, then he confirms the reservation.

   AIM
   To design a UML model for a Hotel Reservation System that allows customers to book hotel rooms online based on their accommodation requirements. The system will check availability, calculate charges, and confirm reservations upon customer approval.
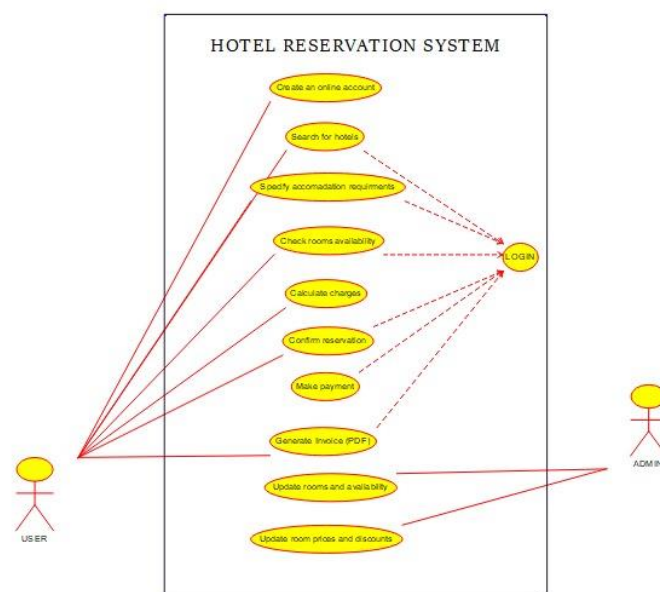
   PROCEDURE:
   - Identify system actors such as Customer, Hotel, Payment System, and Administrator.
   - Define use cases like Booking, Payment, Cancellation, and Confirmation.
   - Draw the Use Case Diagram to show system-user interactions.
   - Create an Activity Diagram to represent the booking process flow.
   - Design the Class Diagram to establish key classes and their relationships.
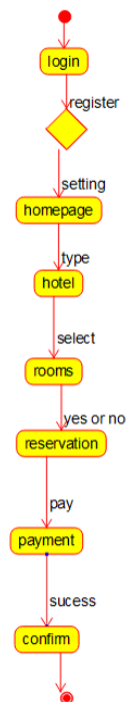
- Develop the State Diagram to illustrate different states of a booking.
- Create the Sequence Diagram to depict message exchanges between objects.
- Design the Communication Diagram for interactions between system components.
- Build Component and Deployment Diagrams to define system structure and implementation.
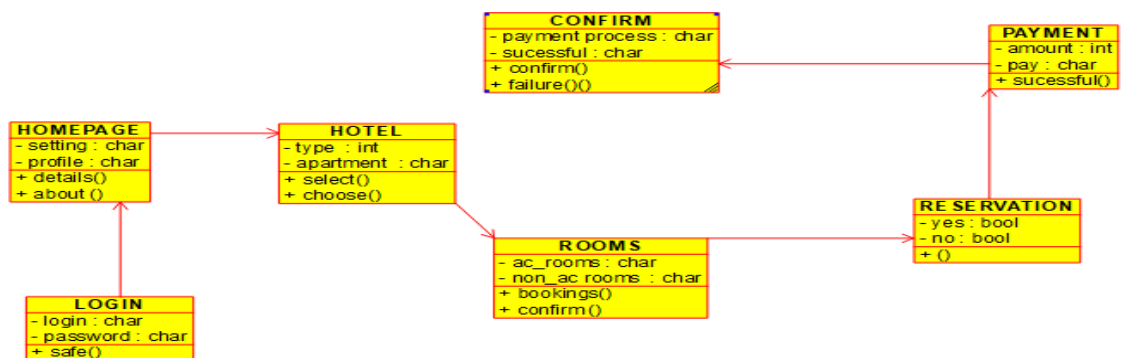- Create the ER Diagram to model the database structure and entity relationships.
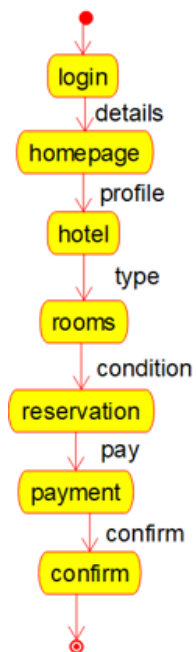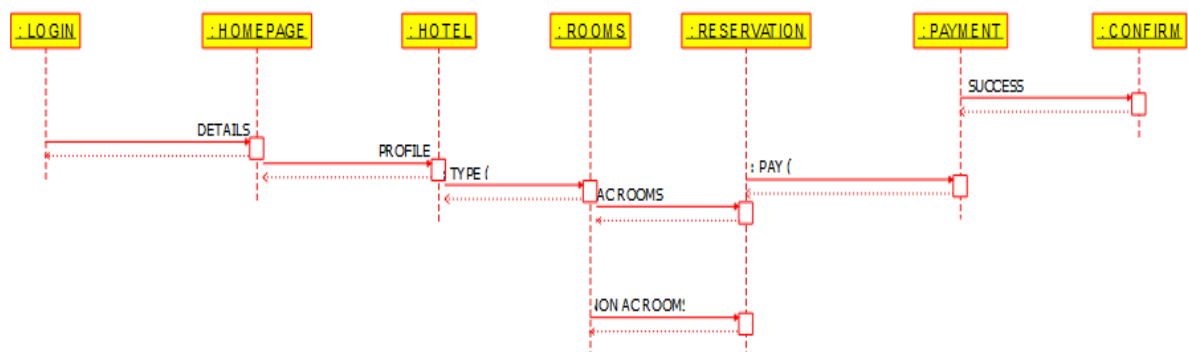
OUTPUT:

USE CASE DIAGRAM:

ACTIVITY DIAGRAM:

CLASS DIAGRAM:
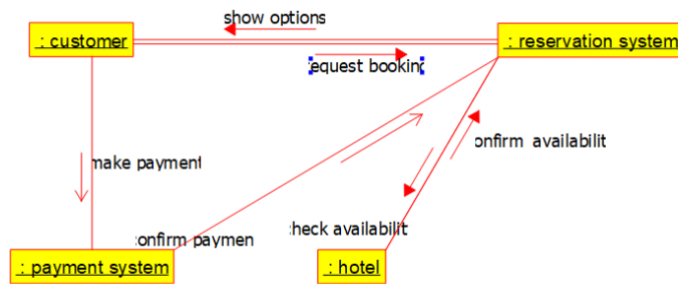
STATE DIAGRAM:

```
        ●
        │
     ┌─────┐
     │login│
     └─────┘
        │ details
   ┌─────────┐
   │homepage │
   └─────────┘
        │ profile
     ┌─────┐
     │hotel│
     └─────┘
        │ type
     ┌─────┐
     │rooms│
     └─────┘
        │ condition
 ┌───────────┐
 │reservation│
 └───────────┘
        │ pay
   ┌───────┐
   │payment│
   └───────┘
        │ confirm
   ┌───────┐
   │confirm│
   └───────┘
        │
        ◉
```

SEQUENCE DIAGRAM:

: LOGIN	: HOMEPAGE	: HOTEL	: ROOMS	: RESERVATION	: PAYMENT	: CONFIRM

SUCCESS

DETAILS

PROFILE

TYPE (

ACROOMS

: PAY (

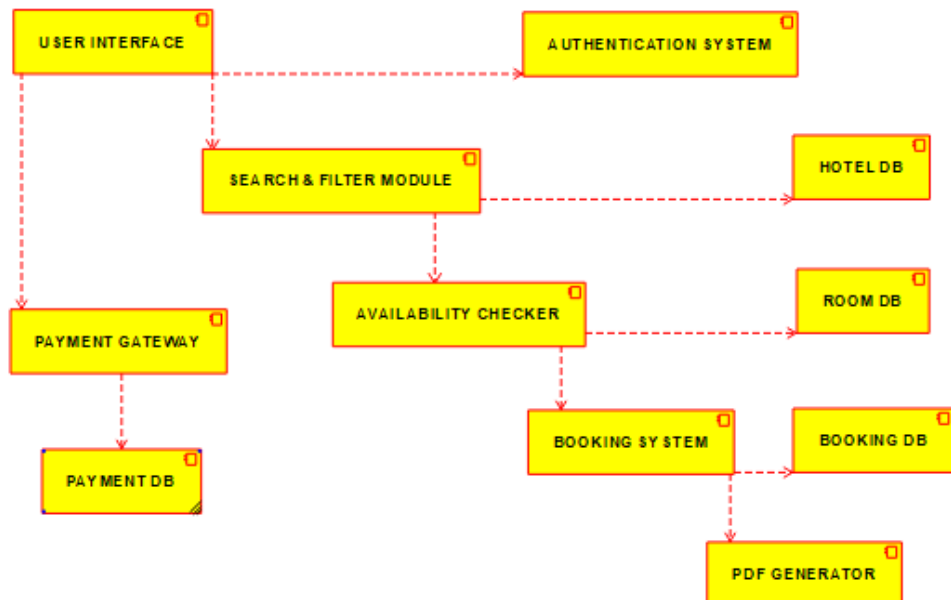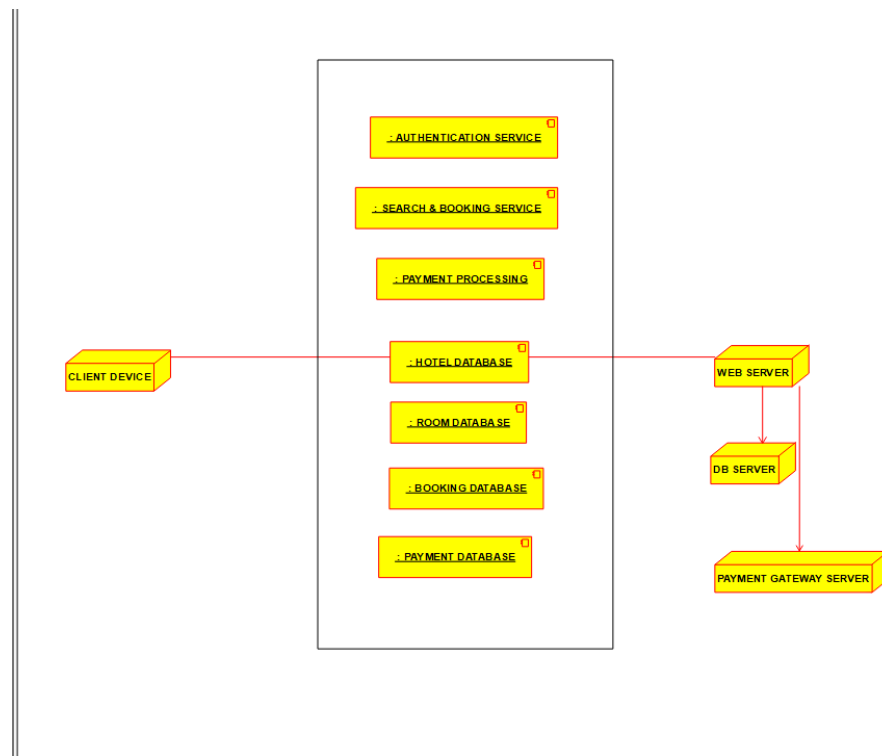ION ACROOM!

COMMUNICATION DIAGRAM:

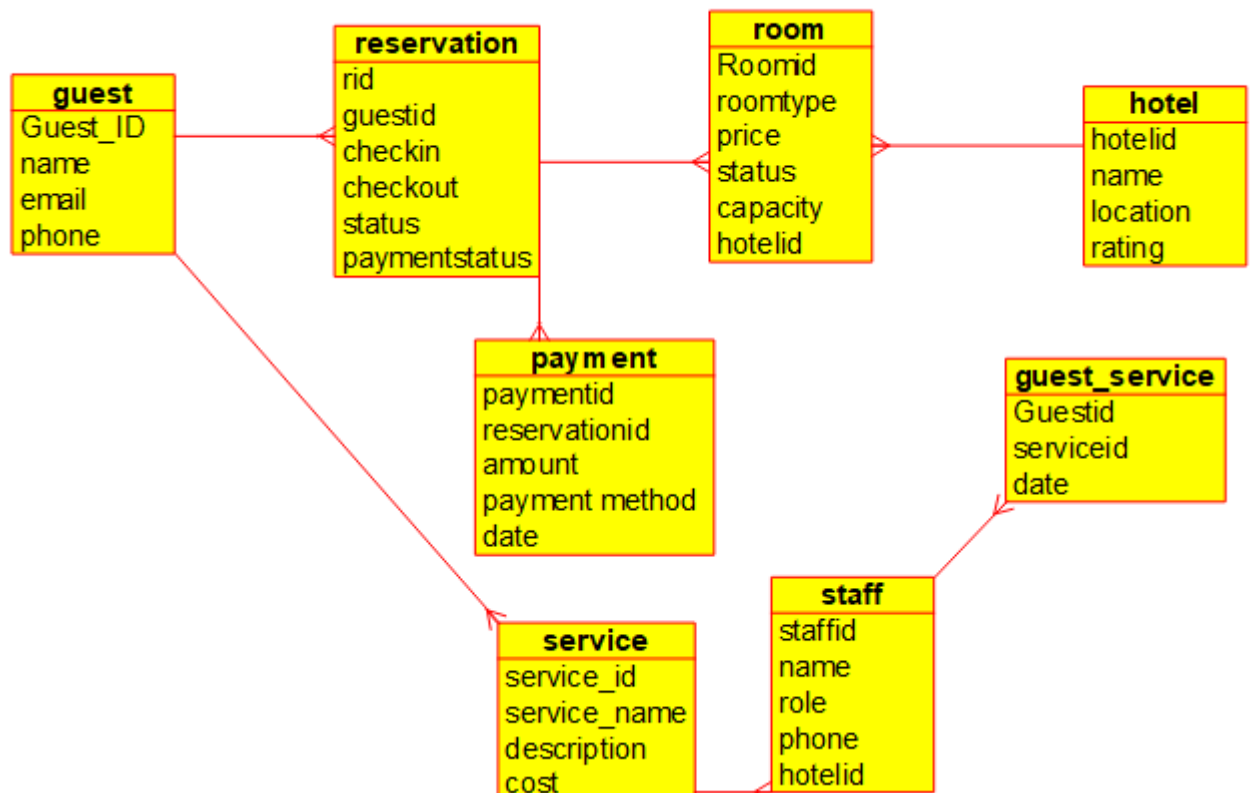
COMPONENT DIAGRAM:

DEPLOYMENT DIAGRAM:

ENTITY RELATIONSHIP DIAGRAM:

RESULT:

The Hotel Reservation System UML diagrams were successfully designed, covering all necessary interactions, workflows, and system components. This provides a structured representation of the system for implementation.