

LAP EXPERIMENTS

CSA4001-MANAGEMENT INFORMATION SYSTEM

EXPERIMENT-01

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 diagram for a Hotel Reservation System that represents the interaction between the customer and the system for booking, confirming, and managing hotel reservations.

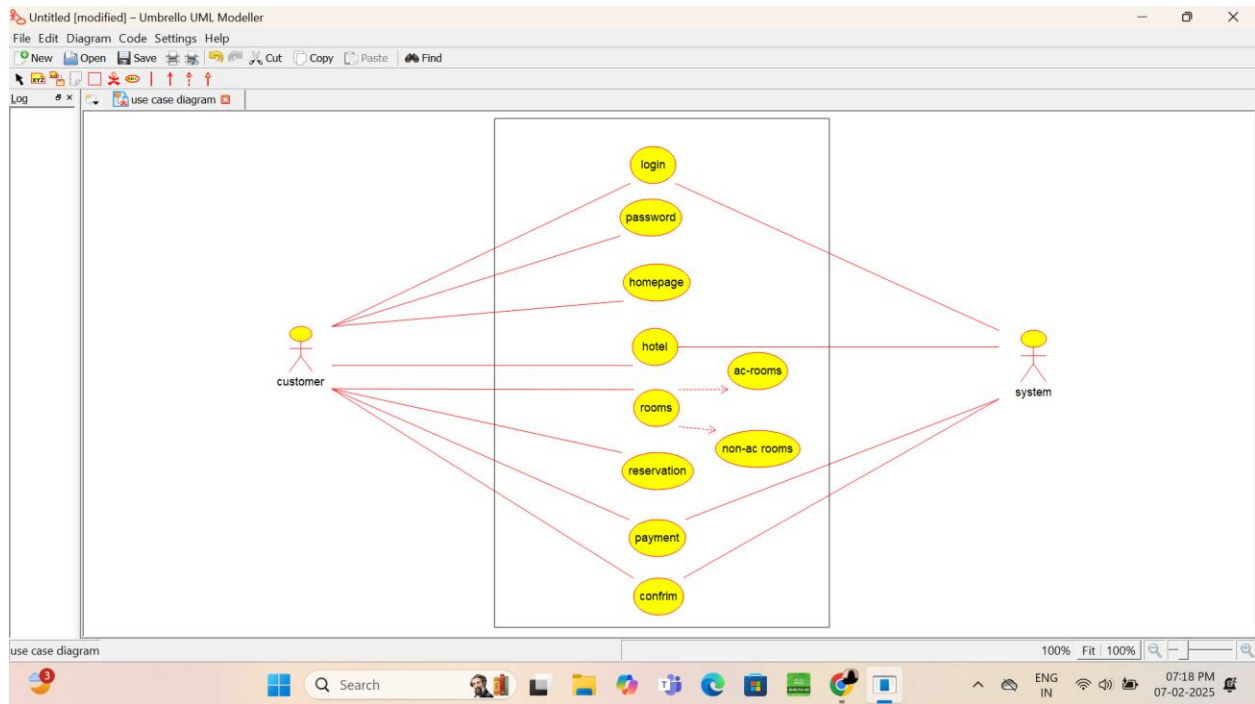
Procedure:

1. Identify the Main Entities
 - Determine the key actors and classes involved, such as Customer, Hotel, Room, Reservation, and Payment.
2. Define Attributes and Methods
 - Assign relevant attributes and operations to each class to represent real-world functionality.
3. Establish Relationships
 - Define associations, generalizations, and dependencies among the classes.
4. Draw the UML Class Diagram
 - Represent classes as rectangles containing attributes and methods.
 - Connect related classes using appropriate relationships:
 - Association (—)
 - Aggregation (◁ —)
 - Composition (◆ —)
 - Inheritance (▷ —)
5. Verify the Diagram

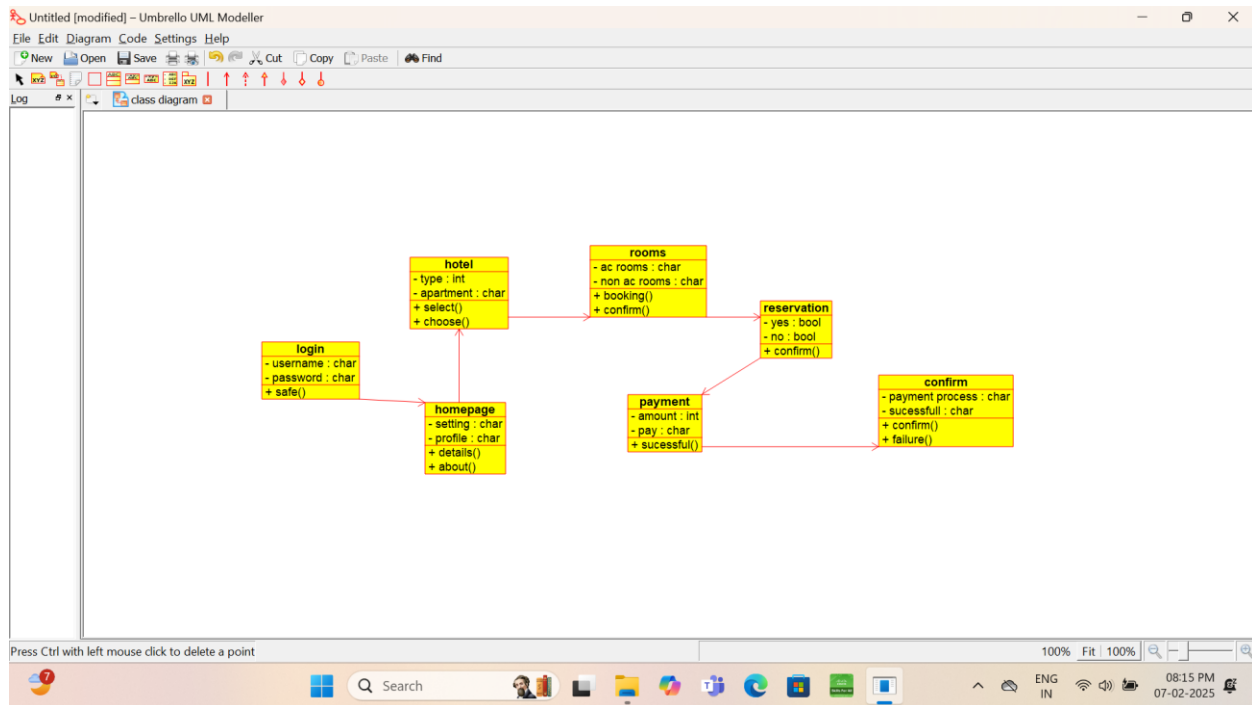
- Ensure correctness by checking if all key functionalities of the hotel reservation system are represented.

Diagram:

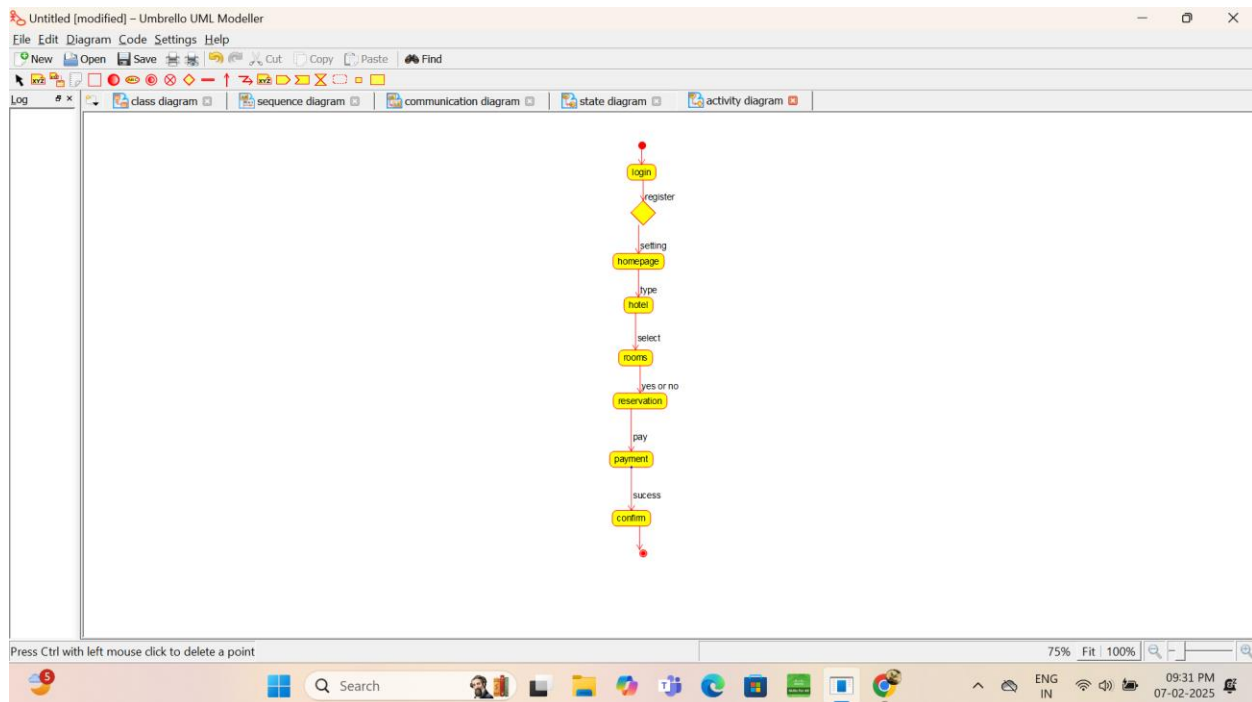
1.use case Diagram:



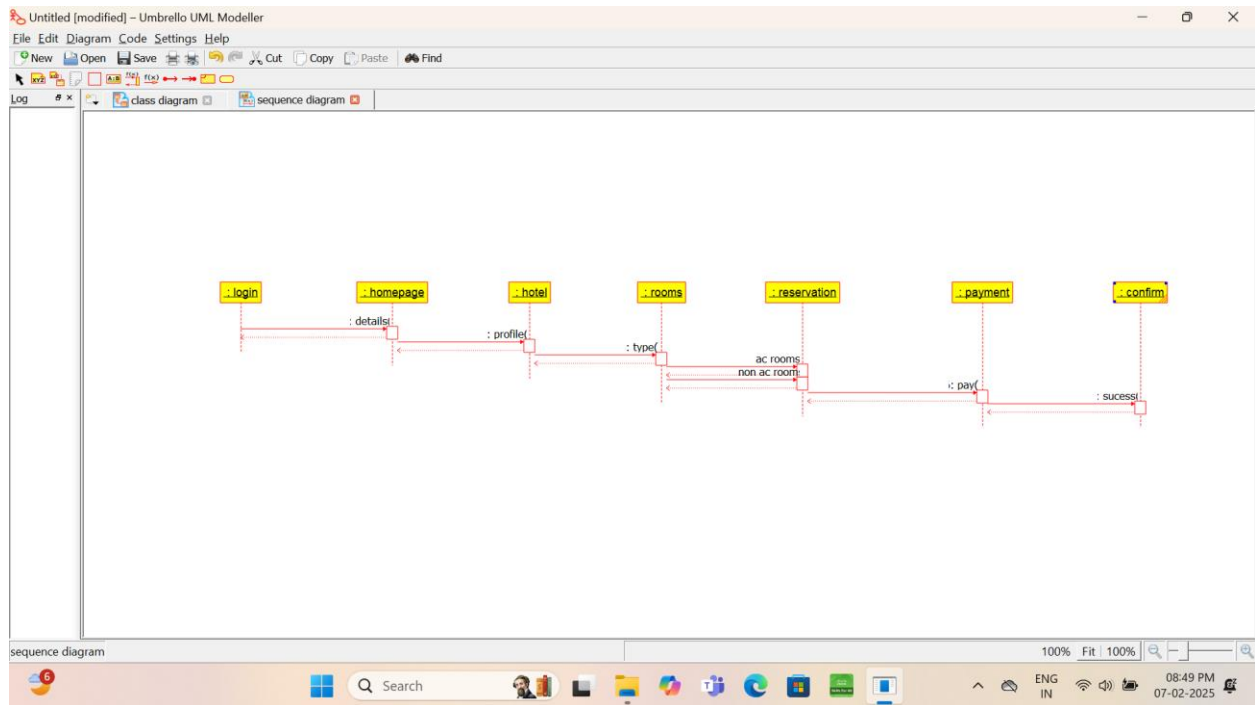
2.class diagram:



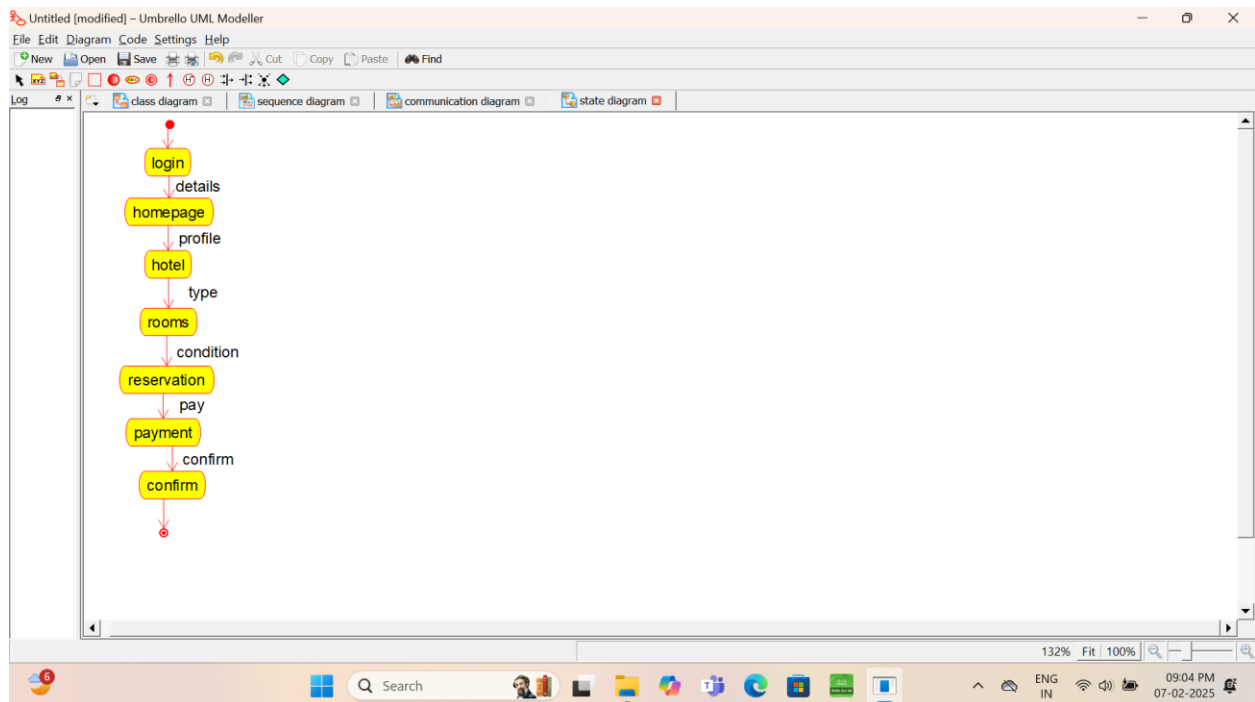
3.activity diagram:



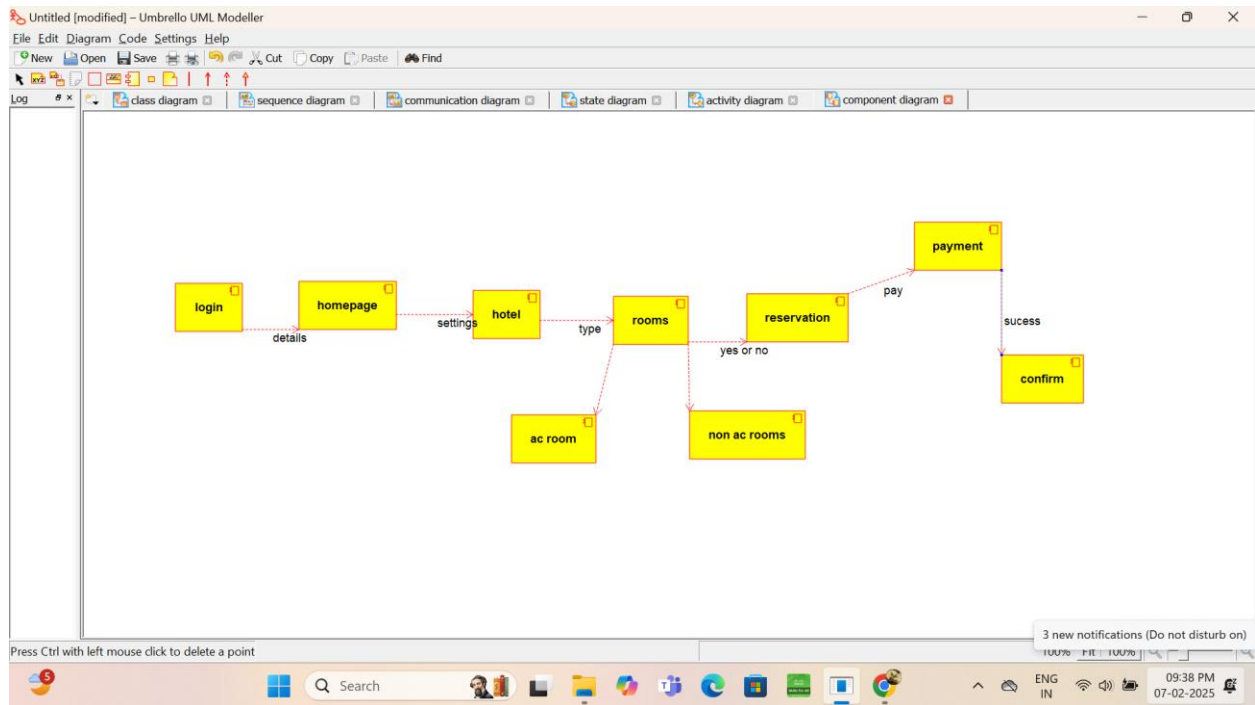
4.sequence diagram:



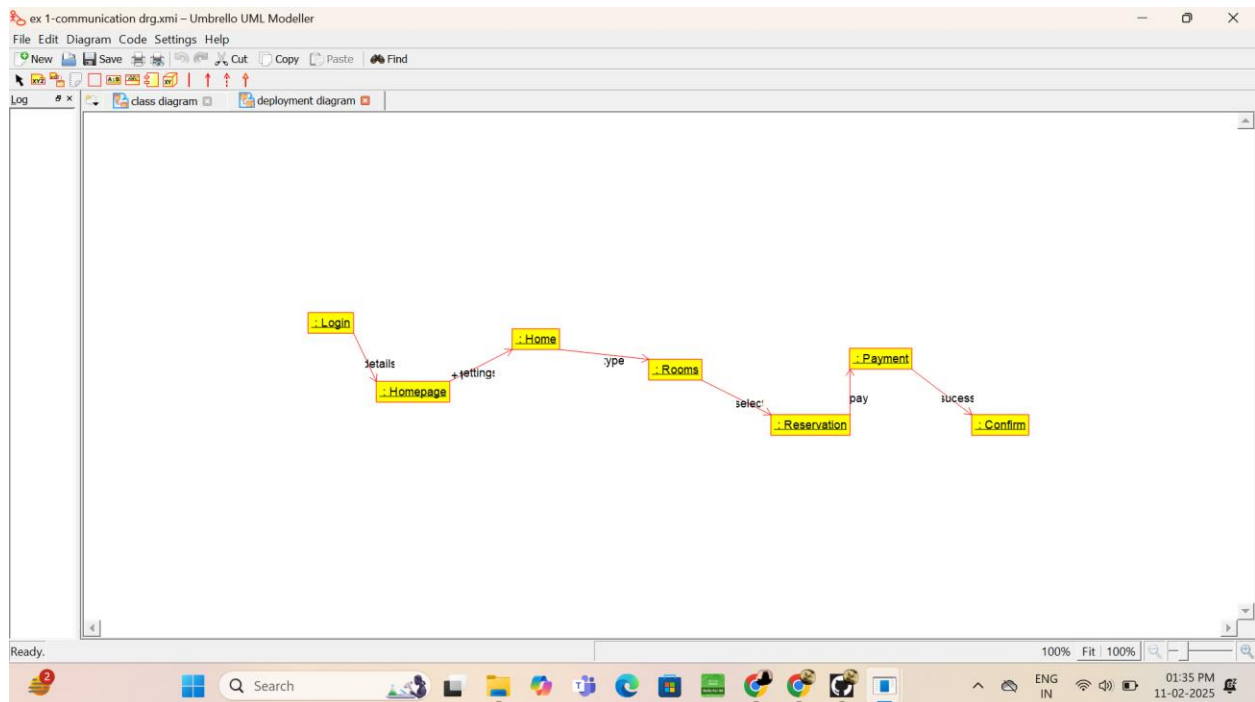
5.State Diagram:



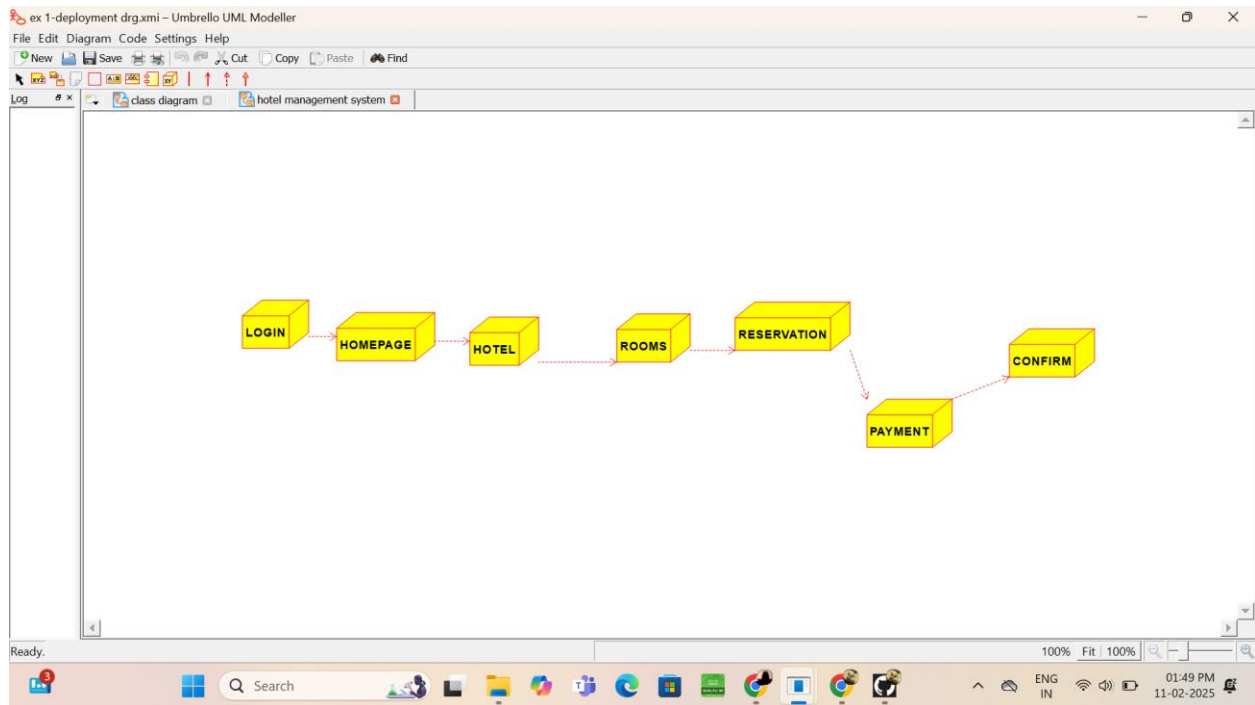
6.Component Diagram:



7.Communication Diagram:



8.Deployment Diagram:



Result:

A UML Class Diagram was successfully designed for the Hotel Reservation System, representing the relationships and interactions between different entities involved in the hotel booking process.