Experiment:1

Draw a UML diagram for the 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.

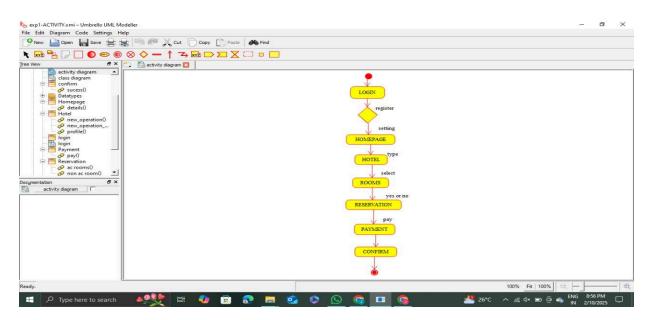
Aim:

To design a comprehensive UML Diagram for a Hotel Reservation System, capturing the interactions and flow of processes from customer booking to confirmation.

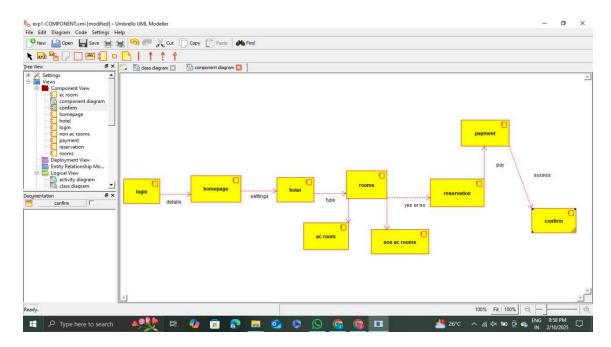
Procedures:

- 1. Identify the key actors: Customer and System.
- 2. Define the use cases: Make Booking, Check Availability, Calculate Charges, Confirm Reservation.
- 3. Establish relationships between actors and use cases using associations.
- 4. Model the sequence of events, including selecting room type, checking availability, and confirming reservation.
- 5. Draw UML Diagrams including Use Case, Class, Sequence, Activity, State, Component, and Deployment Diagrams to represent the full system process.

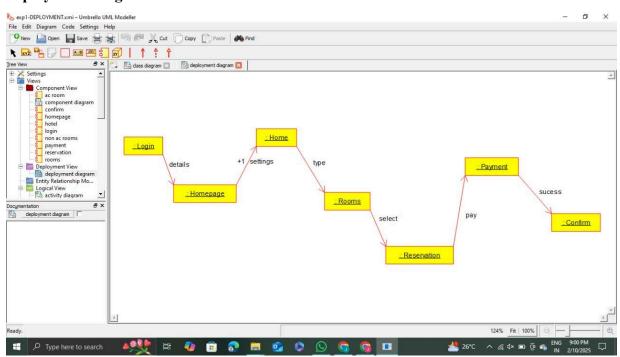
Activity Diagram:



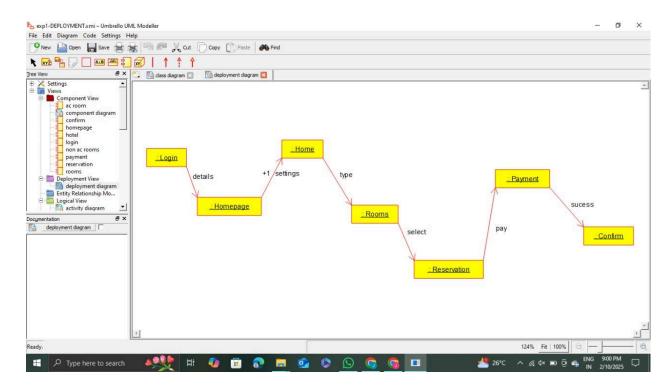
Component Diagram:



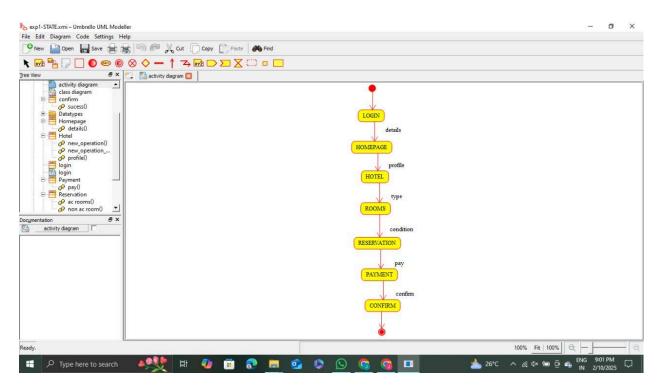
Deployment Diagram:



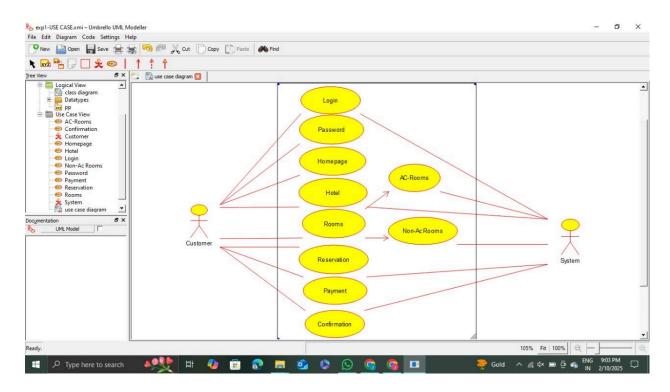
Sequence Diagram:



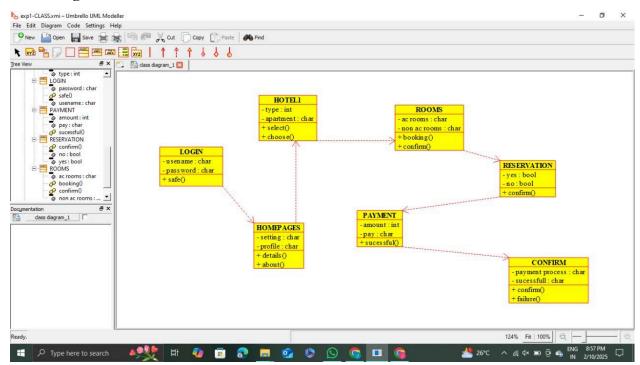
State Diagram:



Use Case Diagram:



Class Diagram:



Result:

The UML Diagrams for the Hotel Reservation System were successfully created, representing all processes and interactions for booking, availability check, and reservation confirmation.