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.

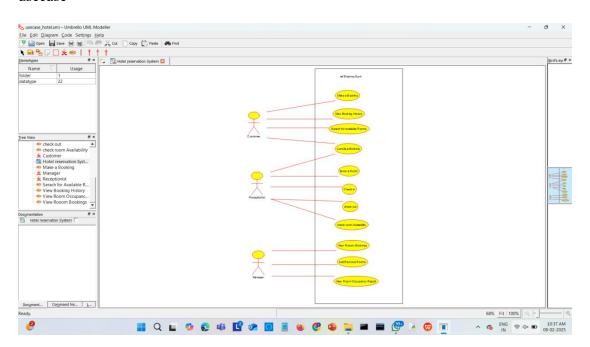
AIM:To design and develop a UML diagram for a hotel reservation system where customers can make online hotel bookings by specifying their accommodation requirements, verifying room availability, calculating charges, and confirming reservations.

Procedure:

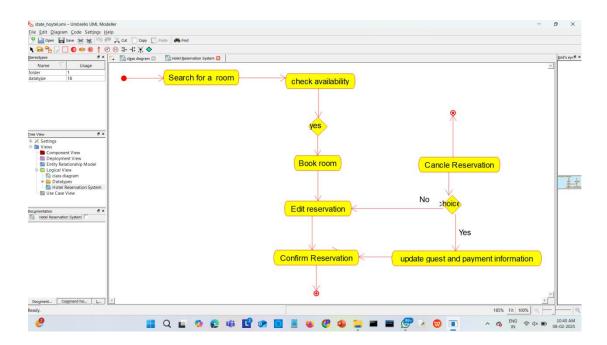
- 2) Identify key classes and actors involved in the hotel reservation process.
- 3) Define relationships between classes such as customer, hotel, room, and reservation system.
- 4) Create a use case diagram to visualize user interactions with the system.
- 5) Draw a class diagram showing attributes, operations, and associations between classes.
- 6) Design a sequence diagram to depict interactions during the booking process.
- 7) Develop an activity diagram to represent the step-by-step booking flow.
- 8) Validate and finalize all diagrams, ensuring clarity and adherence to UML standards.

UML Diagrams:

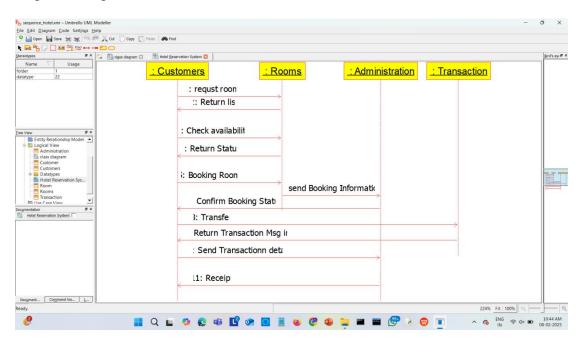
usecase



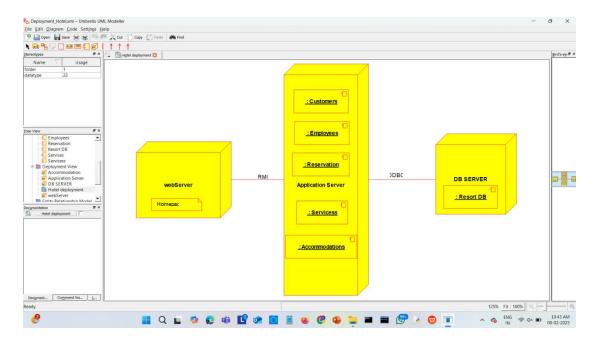
State diagram



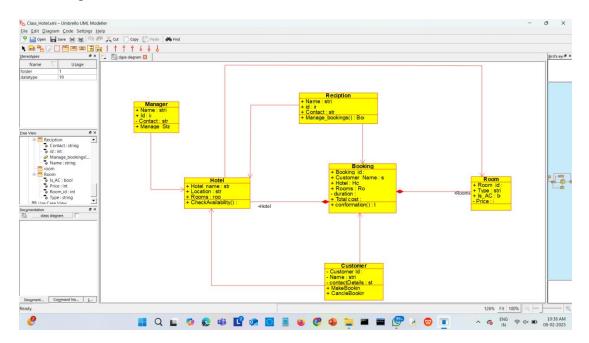
Sequence diagram



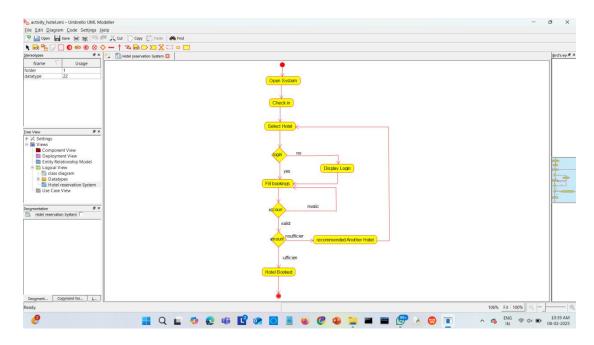
Deployement:



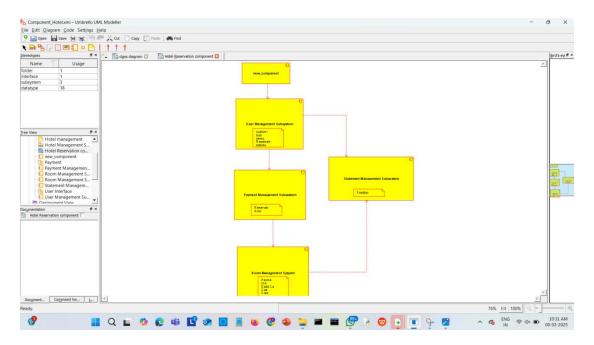
Class diagram



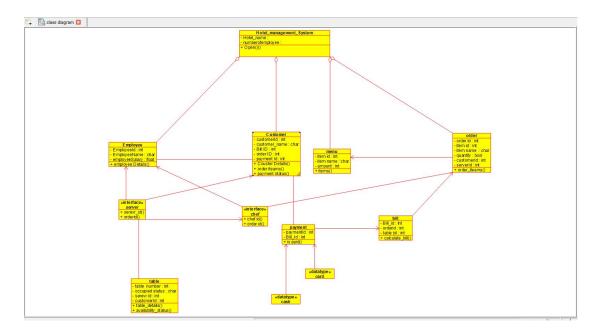
Activity diagram



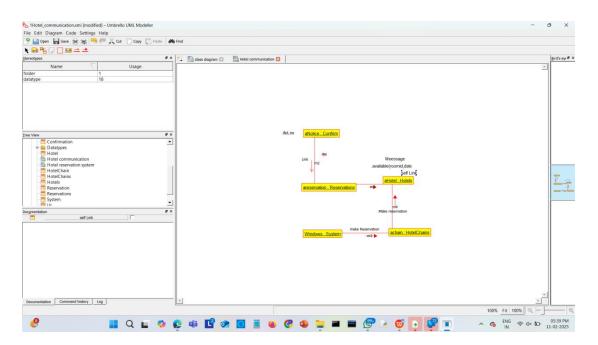
Component diagram



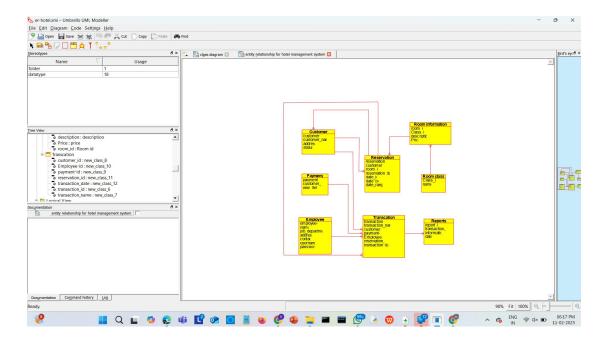
class



Comminication



ER Diagram



Result: The UML diagrams for the hotel reservation system were successfully designed, illustrating the system's structure and behavior, including user interactions and booking workflows.