5).Draw a UML diagram for a food ordering system Systems. The activities of the food ordering system are listed below. Receive the Customer food orders, Produce the customer ordered food, Serve the customer with their ordered food, collect payment from Customers, Store customer payment details, Order Raw Materials for food products, Pay for Raw Materials and Pay for Labour.

Aim

To design a UML use case diagram for a Food Ordering System that represents the activities such as receiving orders, preparing food, serving food, collecting payment, and managing raw materials and labor payment.

Procedure

Step 1: Identify the main actors

- **Customer**
- **Kitchen Staff**
- **Cashier**
- **Supplier**
- **Manager**

Step 2: Identify the use cases

- **For Customer:**
    - Place Food Order
    - Receive Ordered Food
    - Make Payment
- **For Kitchen Staff:**
    - Prepare Food
    - Serve Food
- **For Cashier:**
    - Collect Payment
    - Store Customer Payment Details
- **For Supplier:**
    - Supply Raw Materials
- **For Manager:**
    - Order Raw Materials

    - Pay for Raw Materials
    - Pay for Labour

Step 3: Establish relationships between actors and use cases

- **Customer** places food orders and makes payment.
- **Kitchen Staff** produces and serves food based on the orders received.
- **Cashier** handles payment collection and stores payment details.
- **Manager** is responsible for ordering raw materials and making payments to suppliers and labor.
- **Supplier** provides the required raw materials.

Step 4: Draw actors and use cases

- Use stick figures for actors and ovals for use cases.
- Place the actors outside the system boundary and the use cases inside the boundary.

Step 5: Connect actors to related use cases

- Draw lines between each actor and their respective use cases to show the interaction.

Step 6: Label all components and ensure logical organization

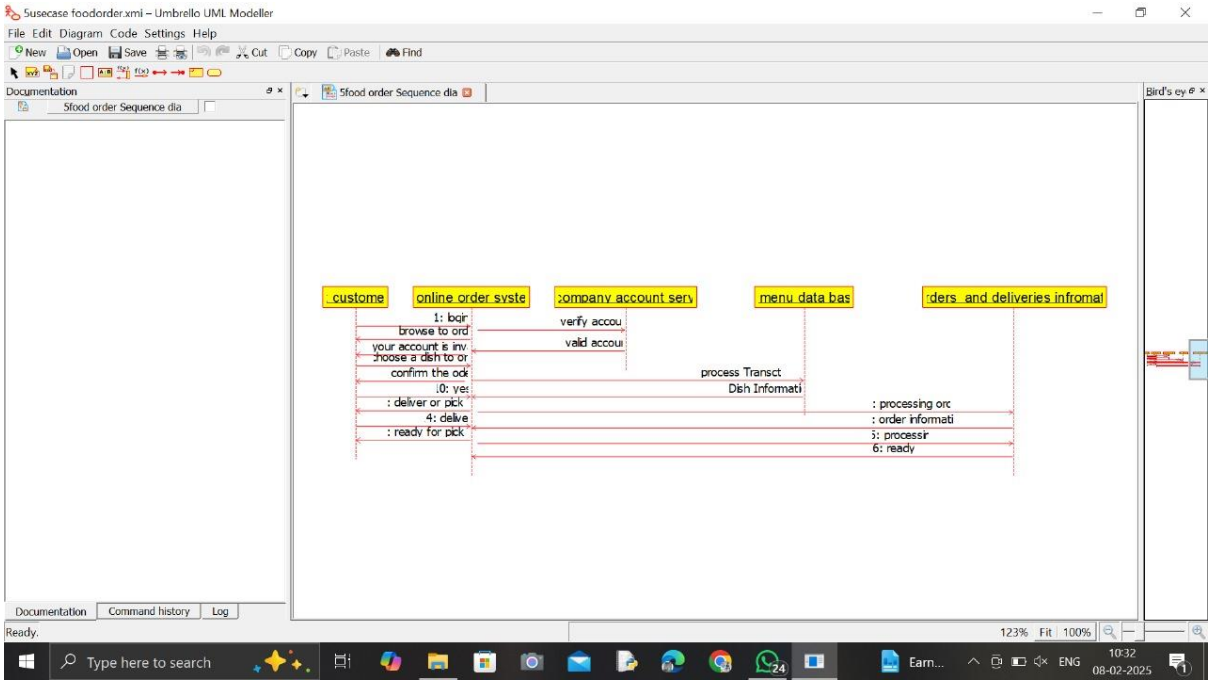
- Clearly label the system boundary, use cases, and actors. Ensure that the diagram is organized for easy understanding.

Step 7: Verify and review the diagram

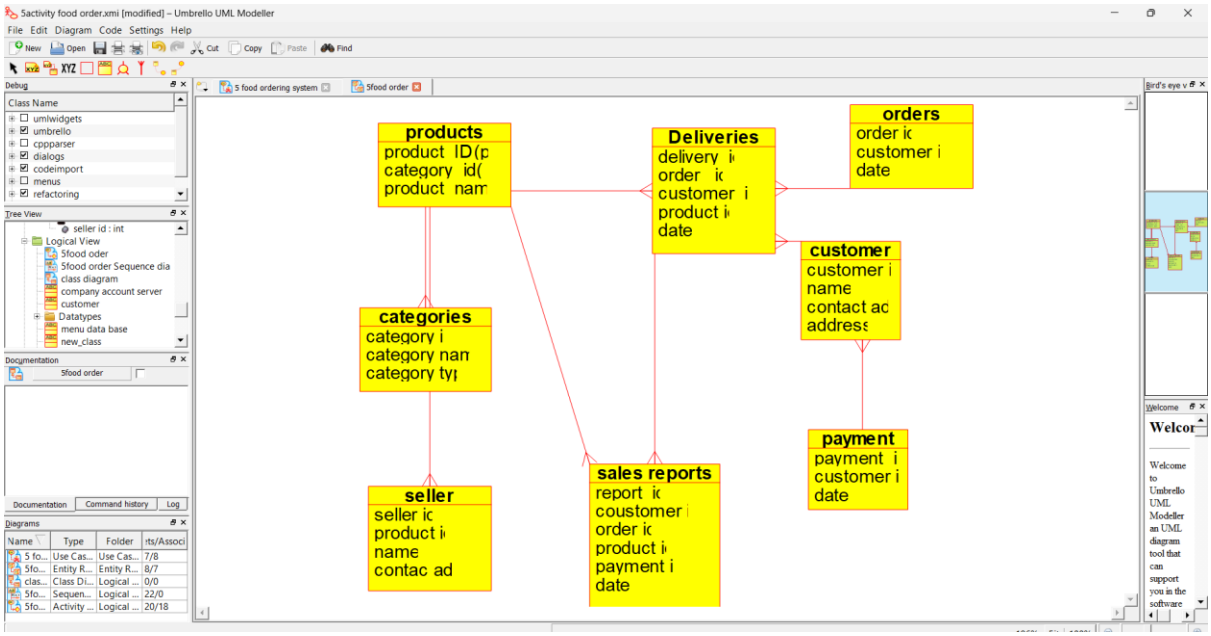
- Ensure the diagram represents all specified activities and relationships accurately.

OBSERVATION:

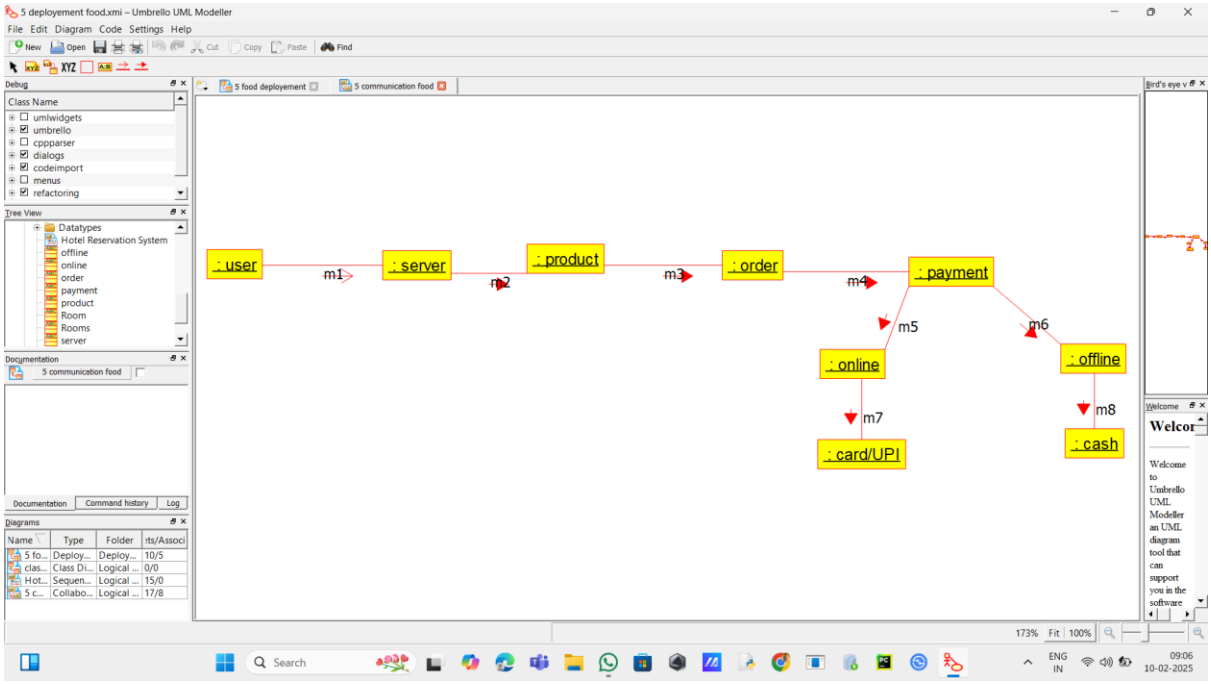
SEQUENCE DIAGRAM



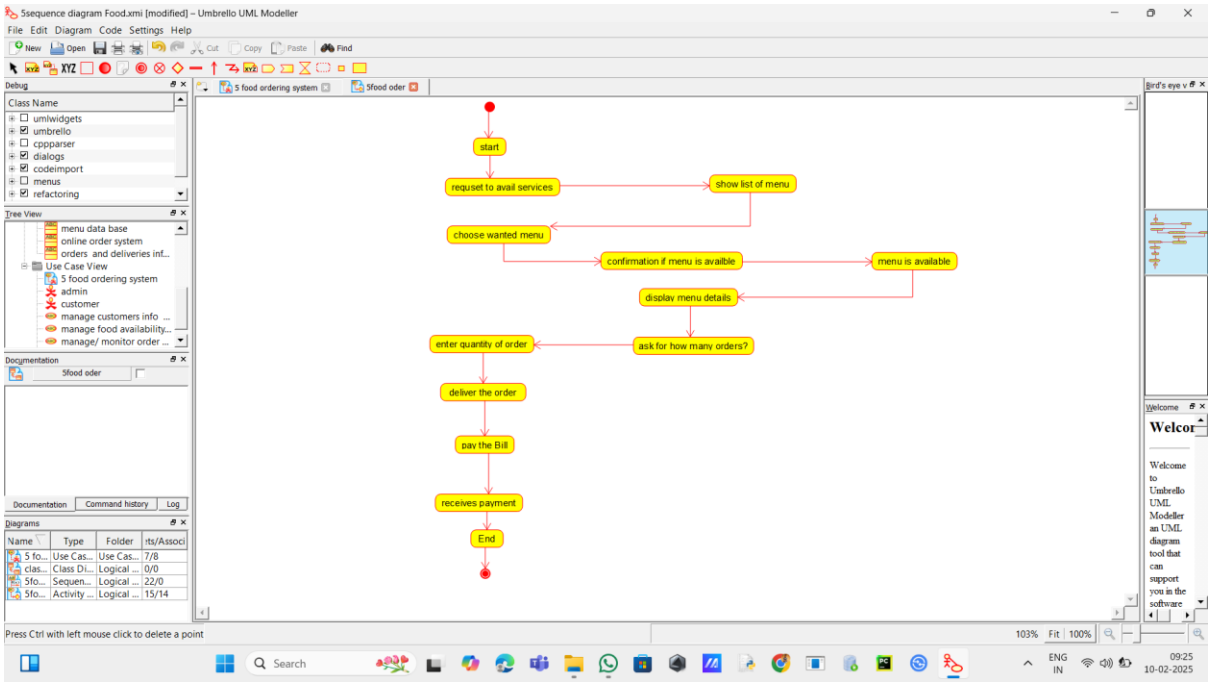
ER DIAGRAM



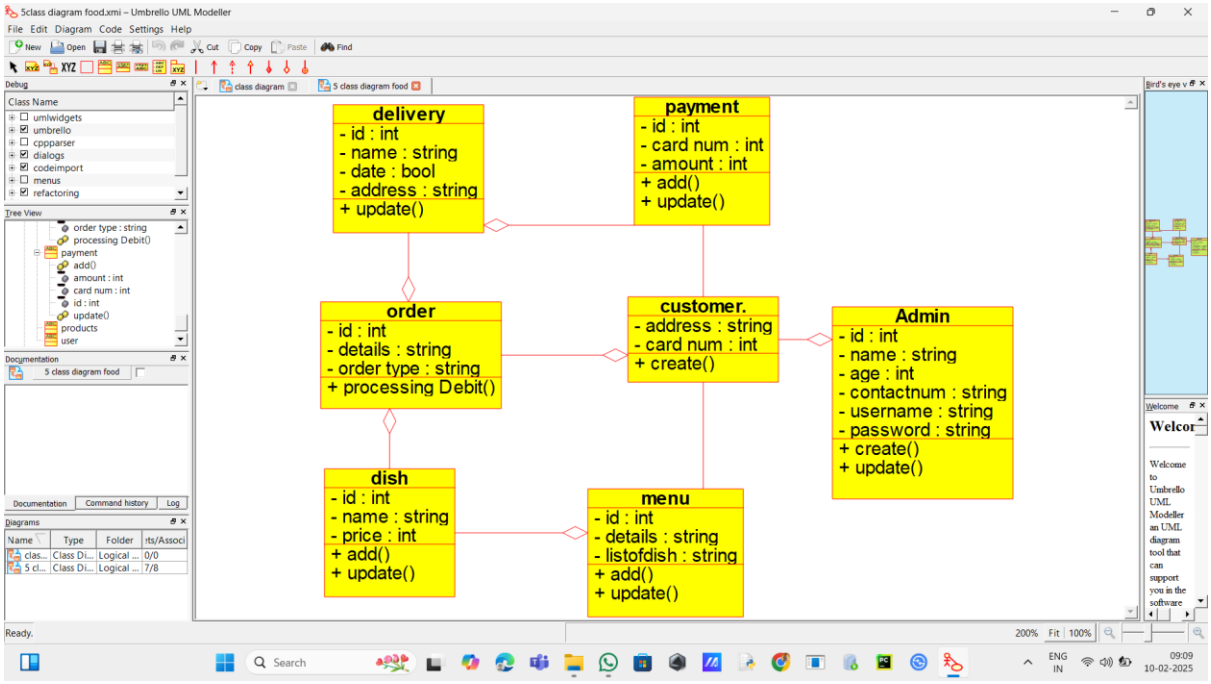
COMMUNICATION DIAGRAM



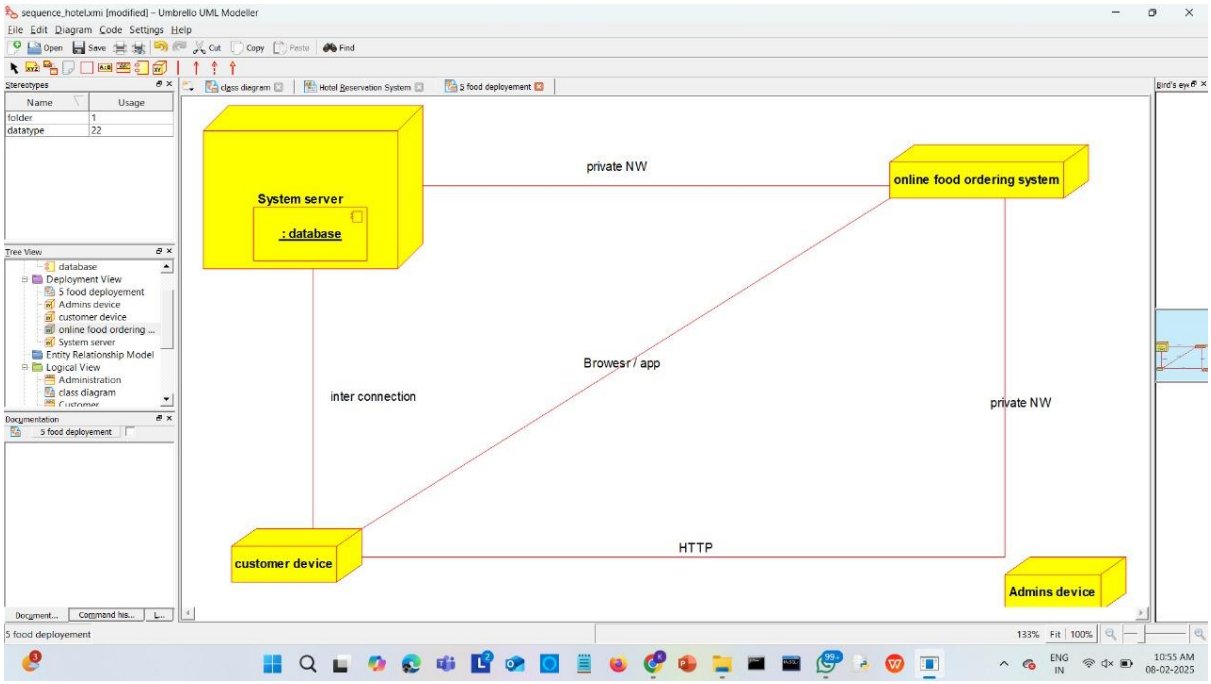
ACTIVITY DIAGRAM



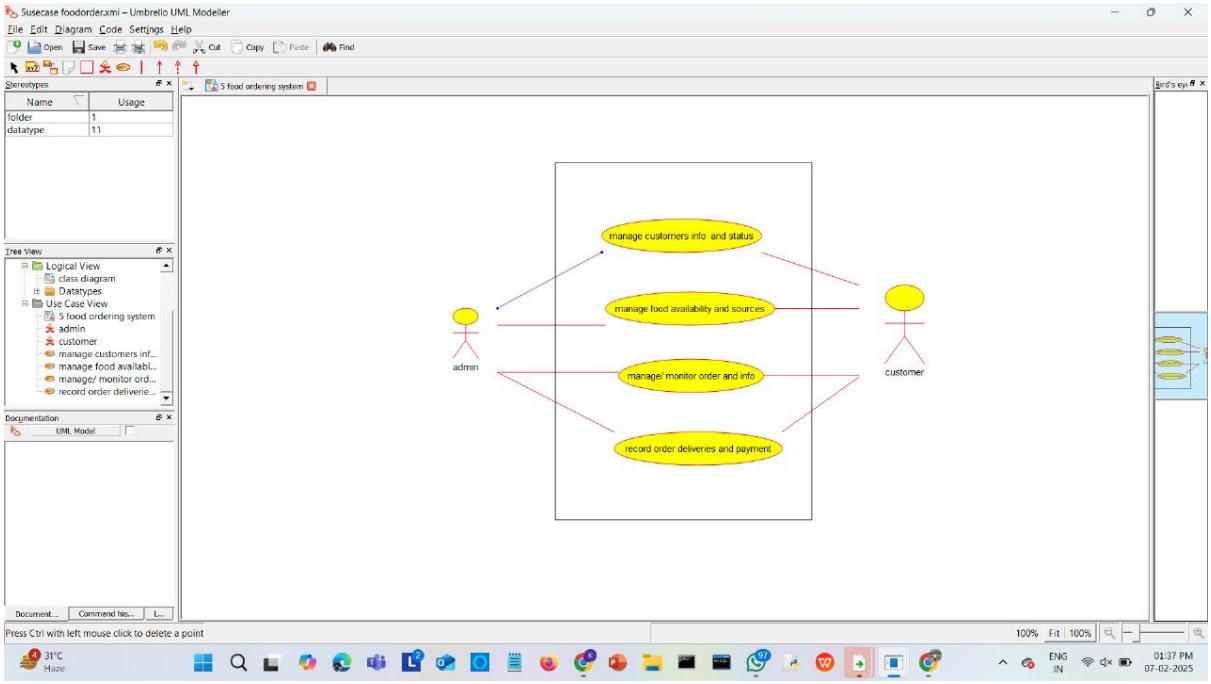
CLASS DIAGRAM



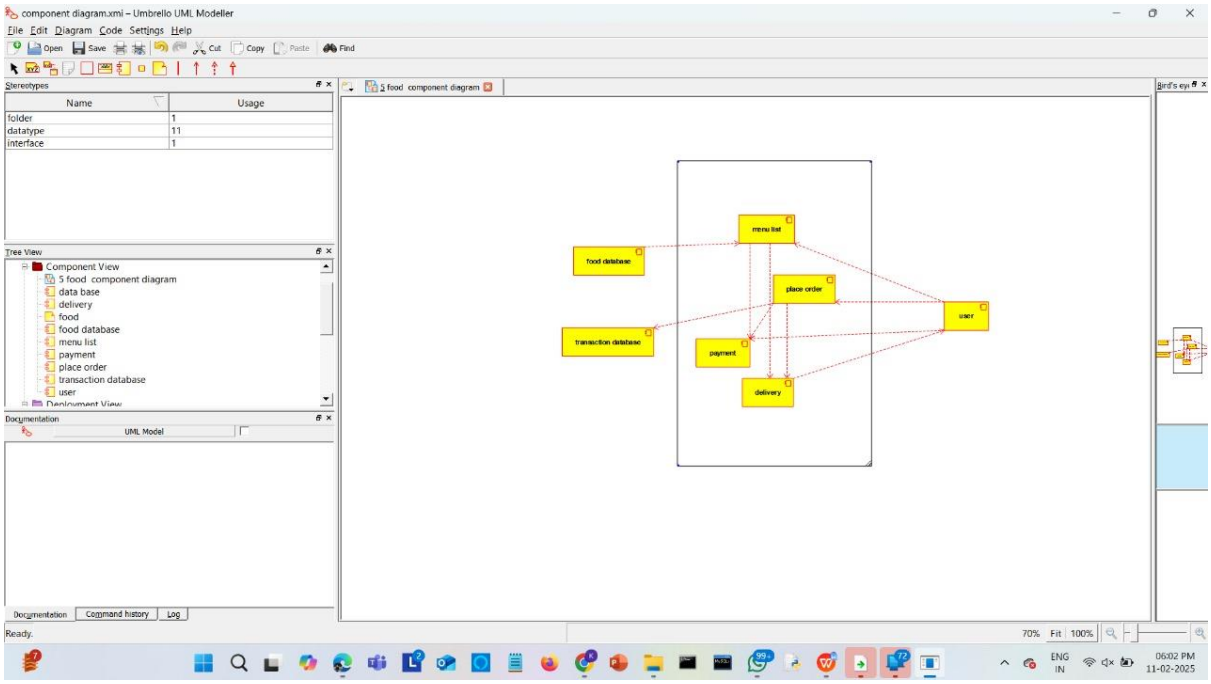
DEPLOYMENT DIAGRAM



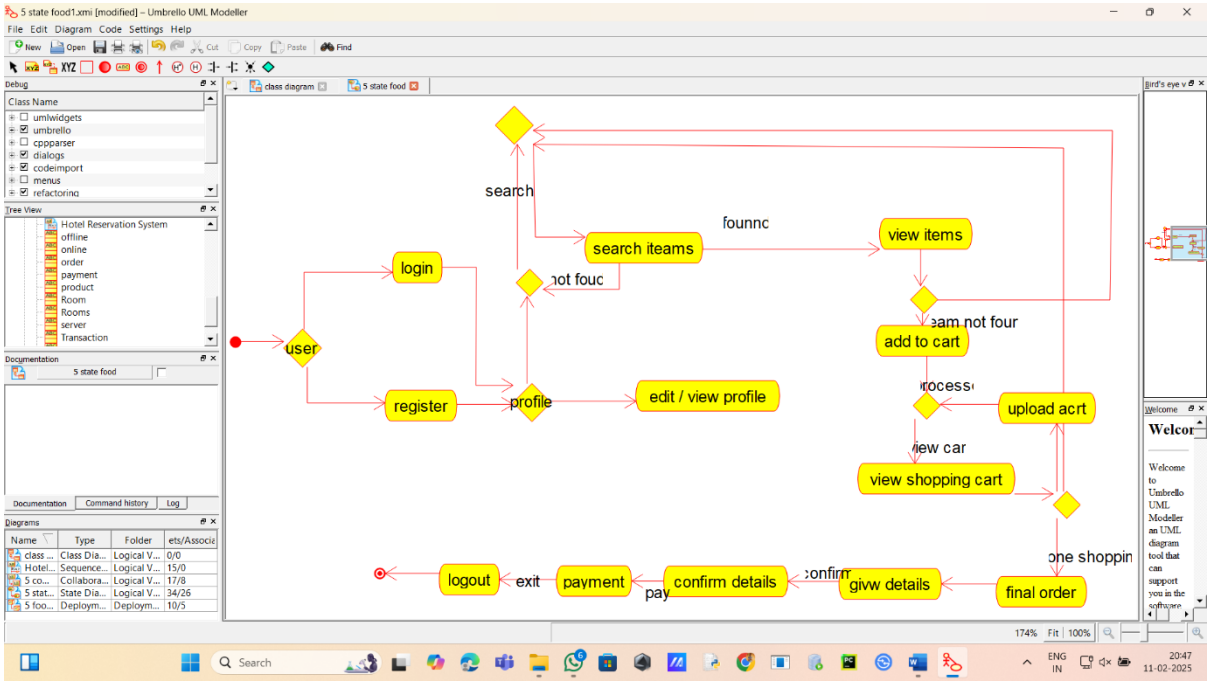
USE CASE DIAGRAM



COMPONENT DIAGRAM



STATE DIGARAM



Result

The UML use case diagram illustrates how the Food Ordering System functions, showing the roles of customers, staff, suppliers, and managers in receiving and processing orders, preparing food, managing payments, and handling raw material supplies.