2) Draw a coffee day ordering system. A coffee day shop vending machine Draw a coffee day ordering system. A coffee day shop vending machine dispenses coffee to customers. Customers order coffee by selecting a recipe from a set of recipes. Customers pay for the coffee using coins. Change is given back, if any, to the customers. The 'service assistant' loads ingredients (coffee powder, milk, sugar, water, chocolate) into the coffee machine. The 'service assistant' adds recipe by indicating the name of the coffee, the units of coffee powder, milk, sugar, water, chocolate to be added as well as the cost of the coffee. The service assistant can also edit and delete a recipe. Develop the use case diagram for the specification above**.**

AIM:

To design a use case diagram for a Coffee Day Ordering System that shows the interactions between the customer, service assistant, and the coffee vending machine, covering tasks such as coffee ordering, payment, ingredient management, and recipe handling.

Procedure

Step 1: Identify the main actors

- **Customer**
- **Service Assistant**

Step 2: Identify the use cases

- Order Coffee
- Pay for Coffee
- Dispense Coffee
- Add Recipe
- Edit Recipe
- Delete Recipe
- Load Ingredients

Step 3: Define the relationships between actors and use cases

- **Customer** interacts with the system to:
    - Order Coffee
    - Pay for Coffee
    - Receive Change (if any)
- **Service Assistant** interacts with the system to:
    - Load Ingredients

    - Add Recipe
    - Edit Recipe
    - Delete Recipe

Step 4: Draw actors and use cases

- Use stick figures to represent actors (Customer and Service Assistant).
- Use ovals to represent use cases (e.g., Order Coffee, Add Recipe).

Step 5: Connect actors to their respective use cases

- Draw lines from **Customer** to: Order Coffee, Pay for Coffee, Dispense Coffee, Receive Change.
- Draw lines from **Service Assistant** to: Load Ingredients, Add Recipe, Edit Recipe, Delete Recipe.

Step 6: Label and structure the diagram clearly

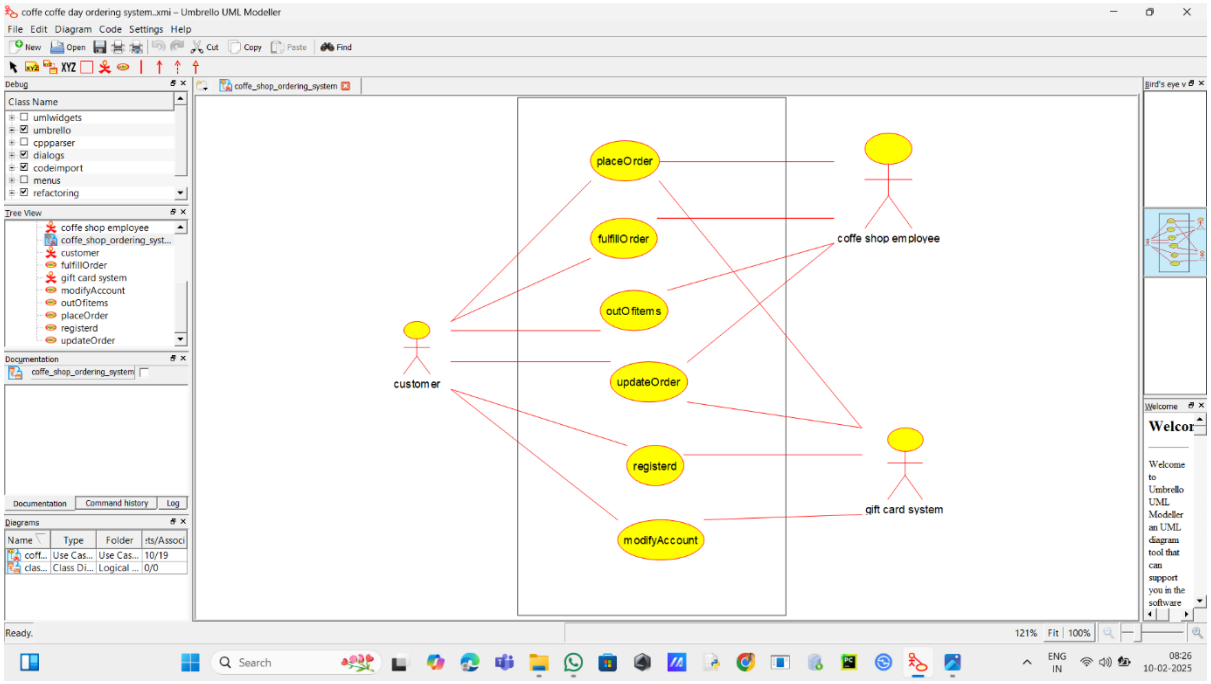
- Organize the diagram with the **Customer** on one side and the **Service Assistant** on the other for clarity.
- Place the use cases logically in the system boundary.

Step 7: Verify the diagram

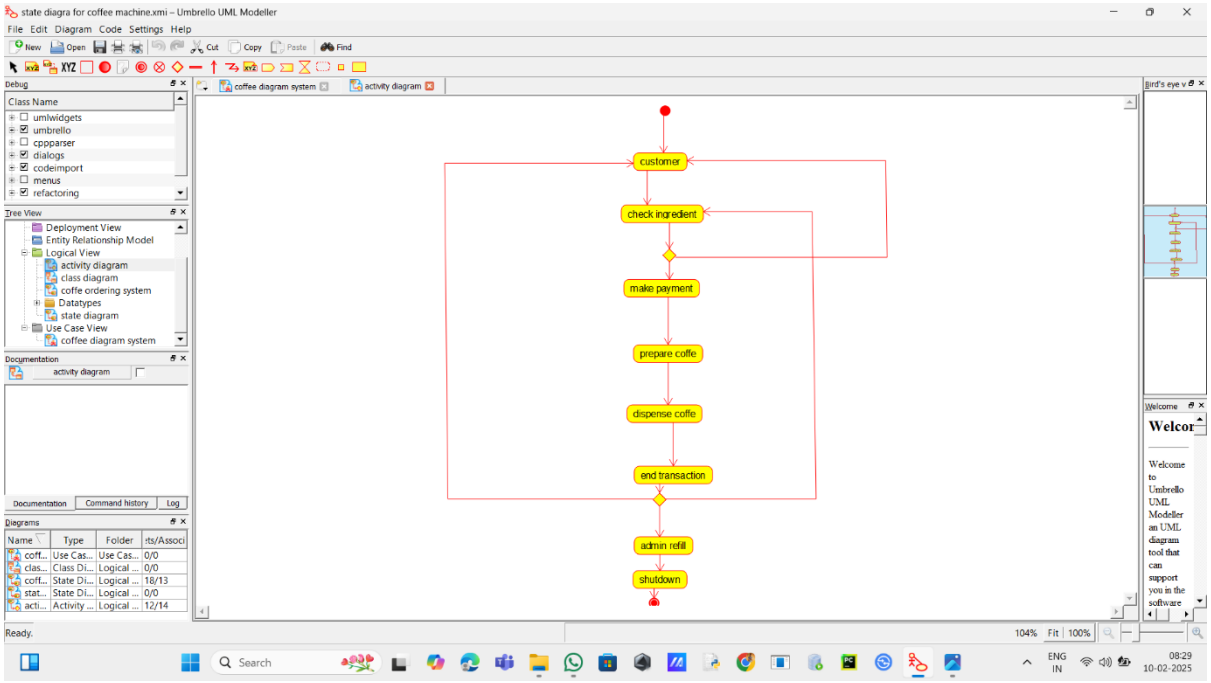
- Ensure all functional requirements are represented.
- Double-check relationships between actors and use cases for accuracy.

OBSERVATION:

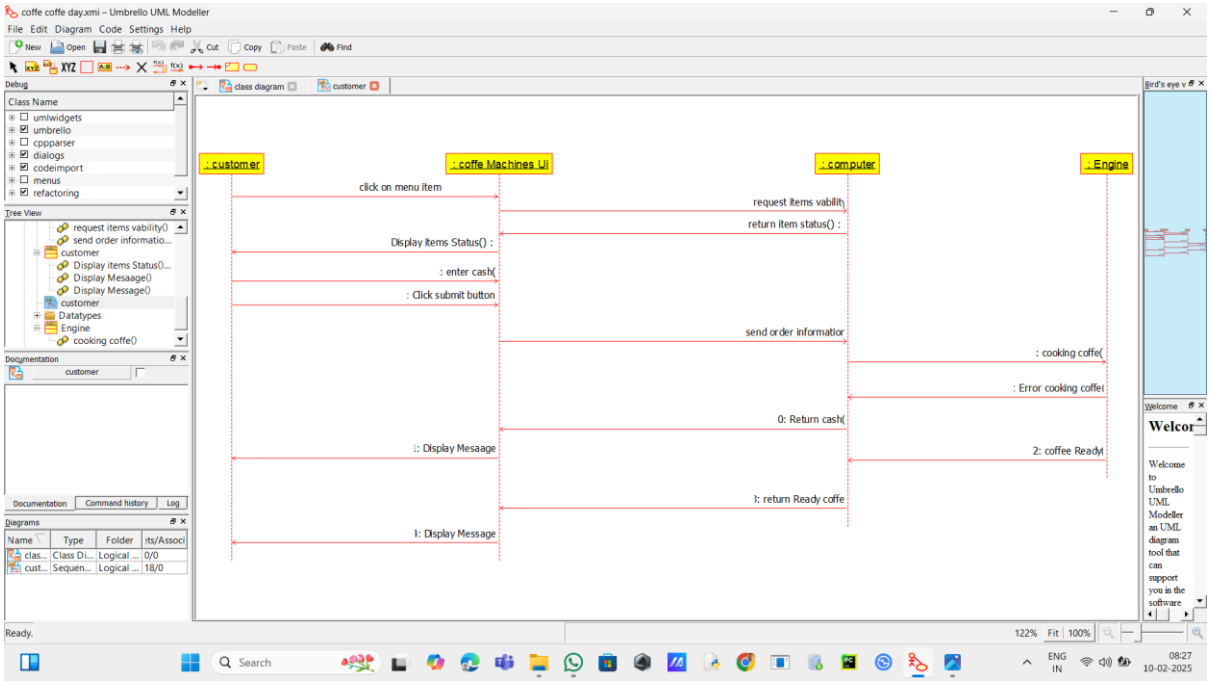
USE CASE DIAGRAM



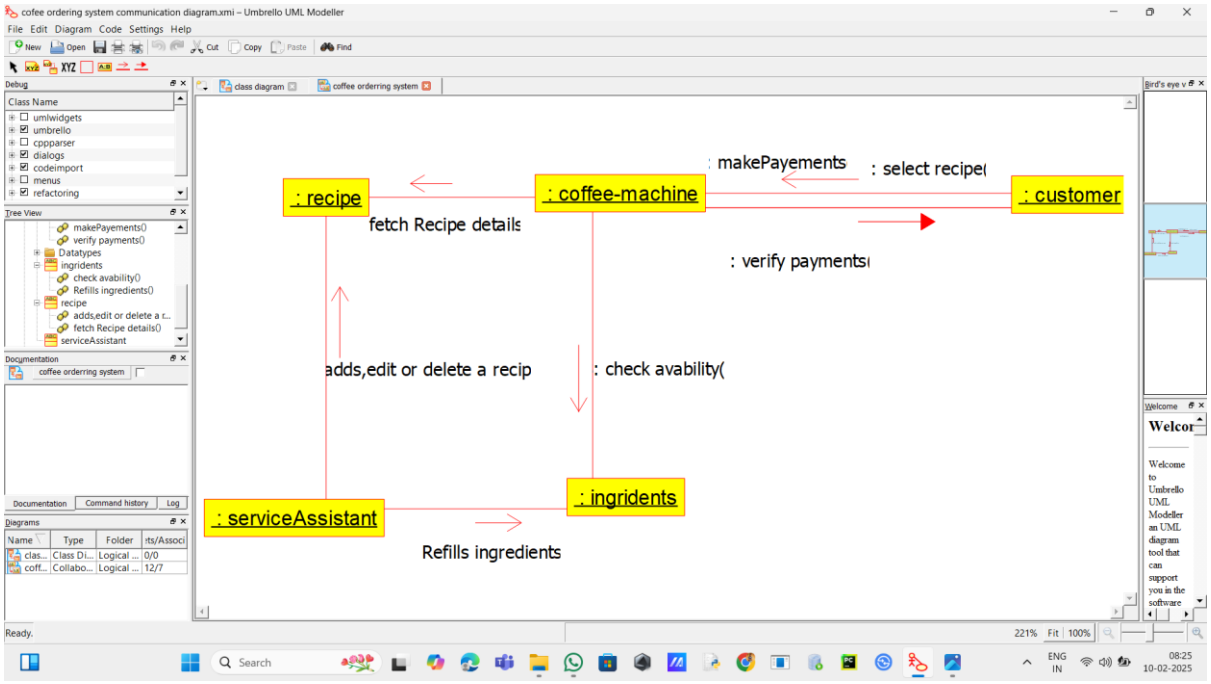
STATE DIAGRAM



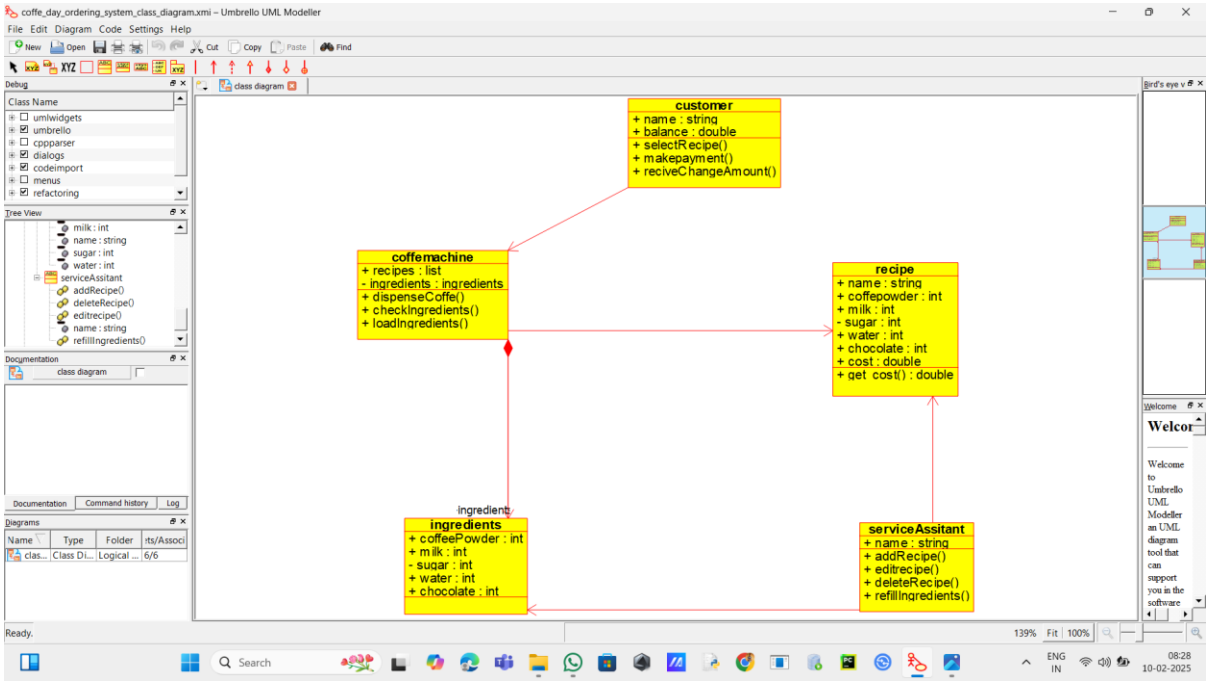
SEQUENCE DIAGRAM



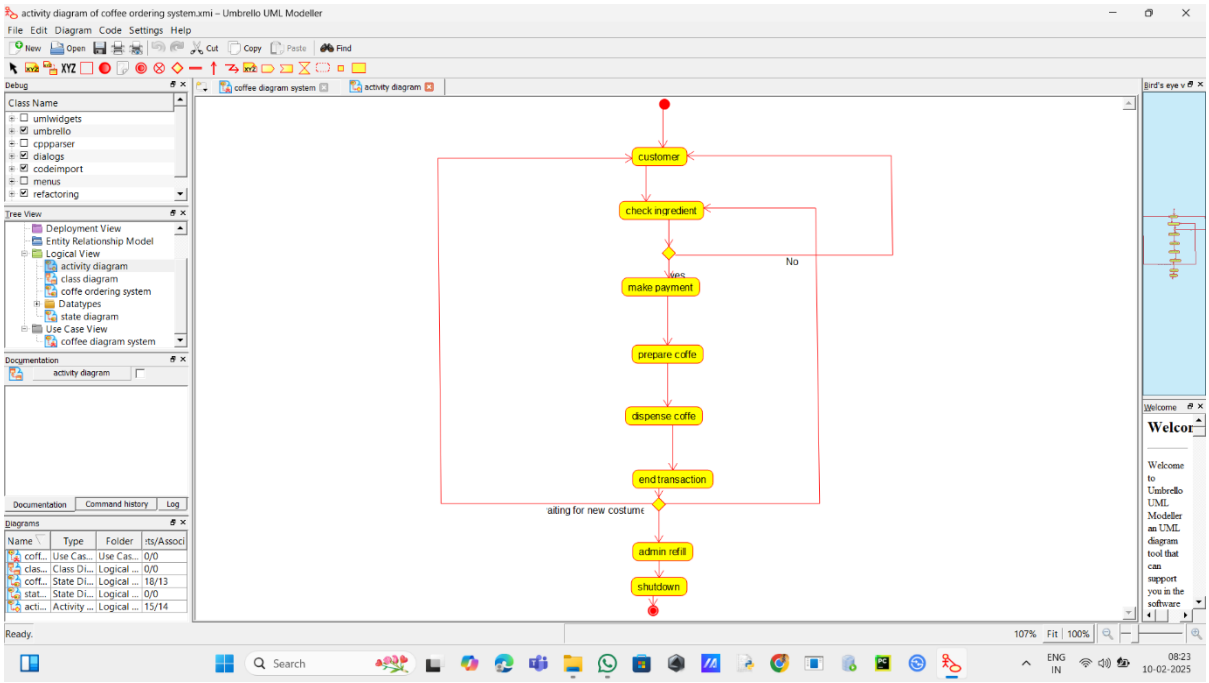
COMMUNICATION



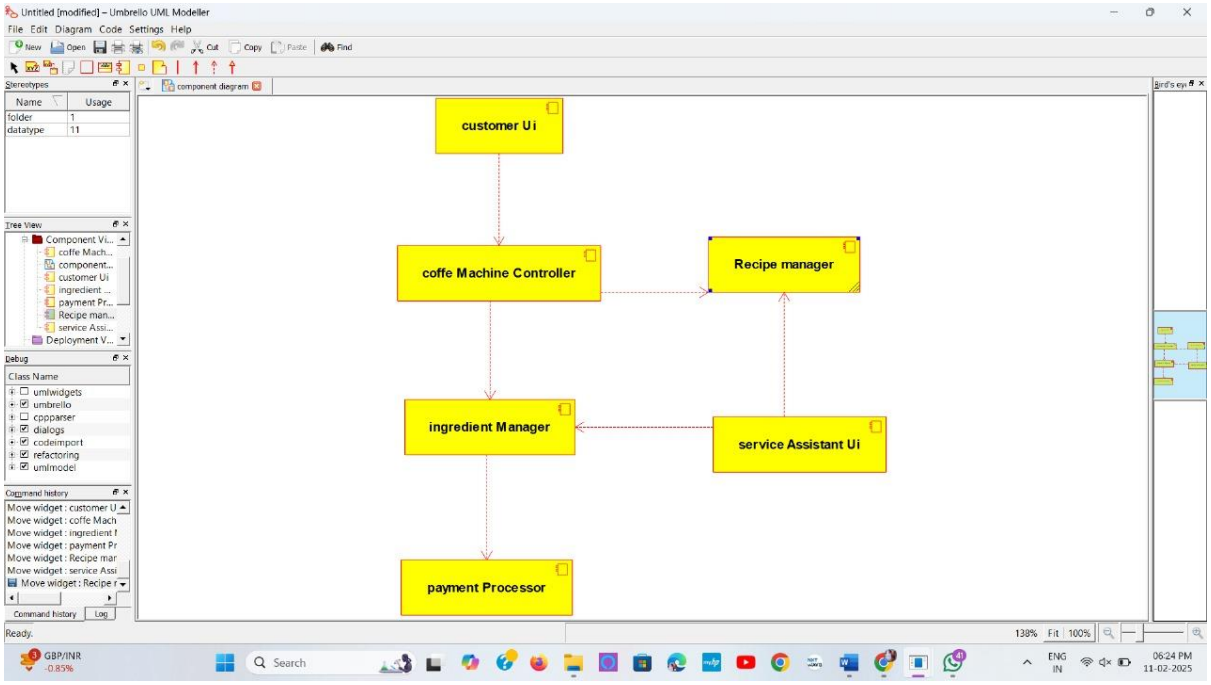
CLASS DIAGRAM



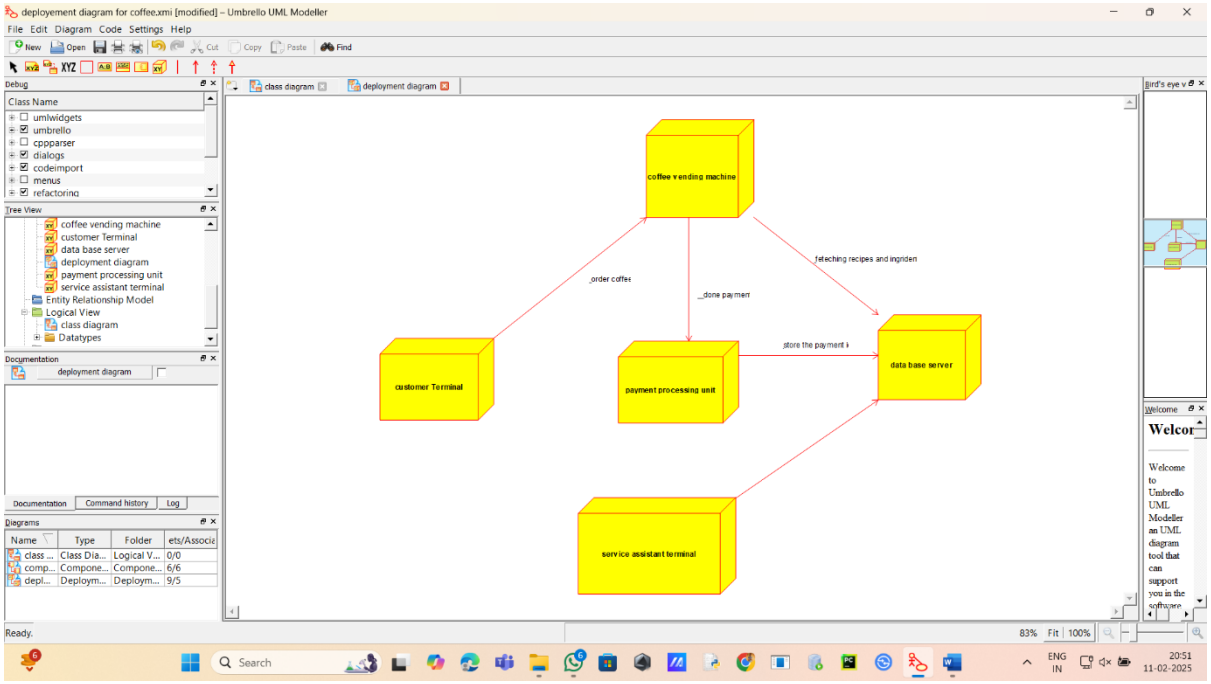
ACTIVITY DIAGRAM



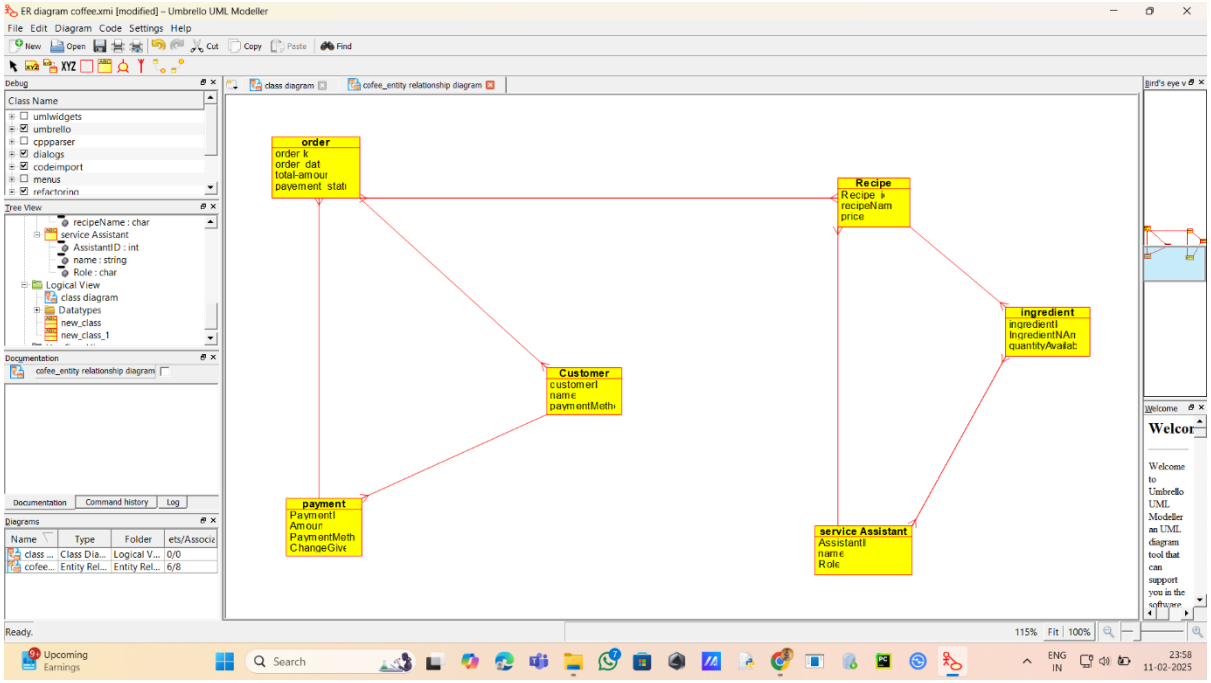
COMPONENT DIAGRAM



DEPLOYMENT DIAGRAM



ER DIAGRAM



Result

The use case diagram provides a clear and structured representation of the Coffee Day Ordering System, showing the interactions between the customer, service assistant, and the vending machine for coffee ordering, payment, and recipe management.