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2) 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

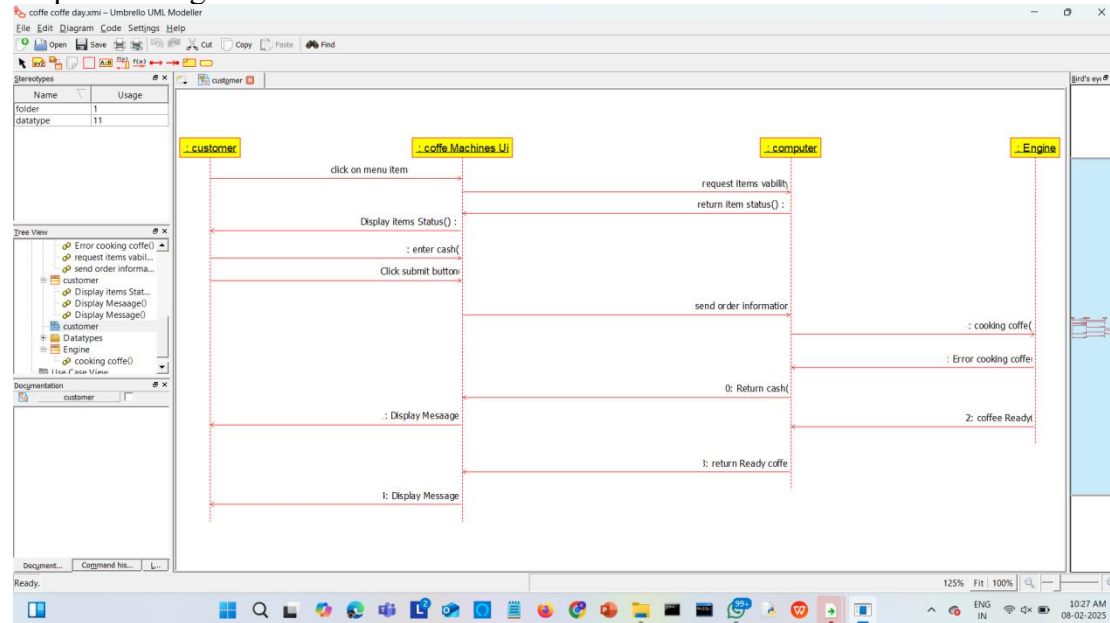
Aim : To design a use case diagram for a Coffee Day Ordering System, illustrating interactions between customers, service assistants, and the coffee vending machine.

Procedure :

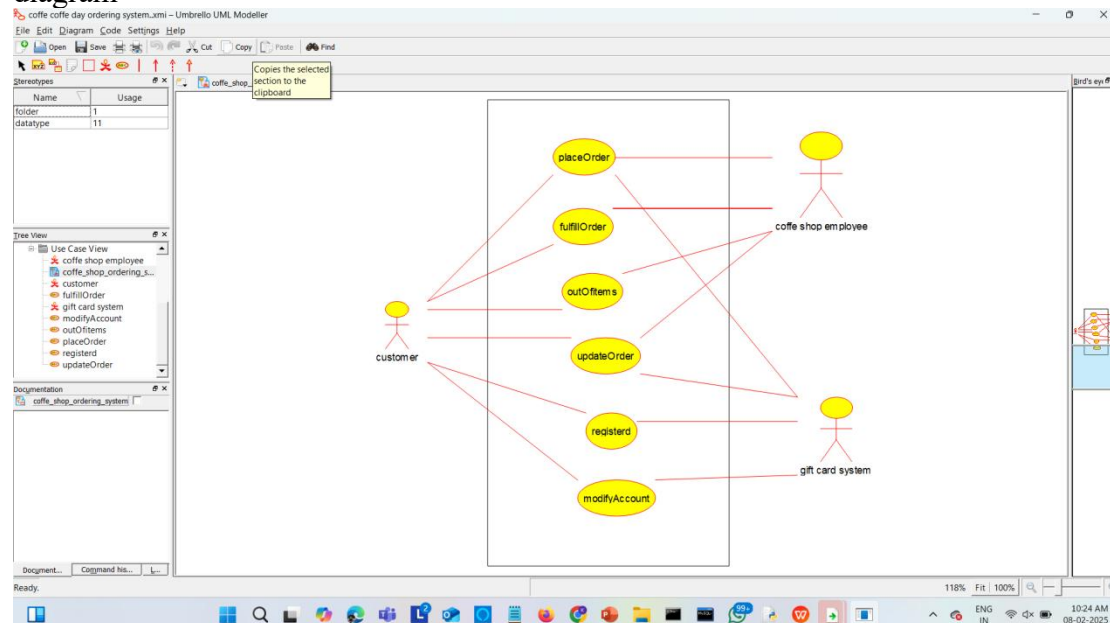
- 3) Identify key actors: Customer and Service Assistant.
- 4) Define use cases such as Select Recipe, Pay for Coffee, Dispense Coffee, and Return Change.
- 5) Establish service assistant functionalities, including Load Ingredients, Add Recipe, Edit Recipe, and Delete Recipe.
- 6) Draw actor-use case relationships to visualize system operations and interactions.
- 7) Connect the Customer actor to order-related functionalities.
- 8) Link the Service Assistant actor to recipe and ingredient management tasks.
- 9) Ensure the diagram follows UML conventions and clearly represents system requirements.

UML Diagrams:

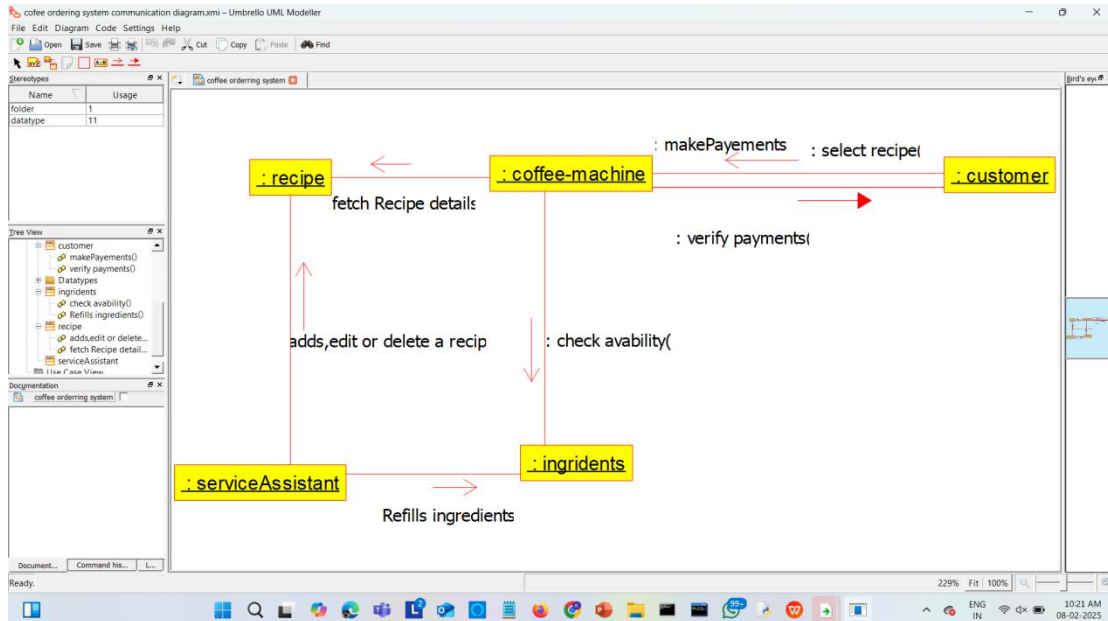
Sequence Diagram



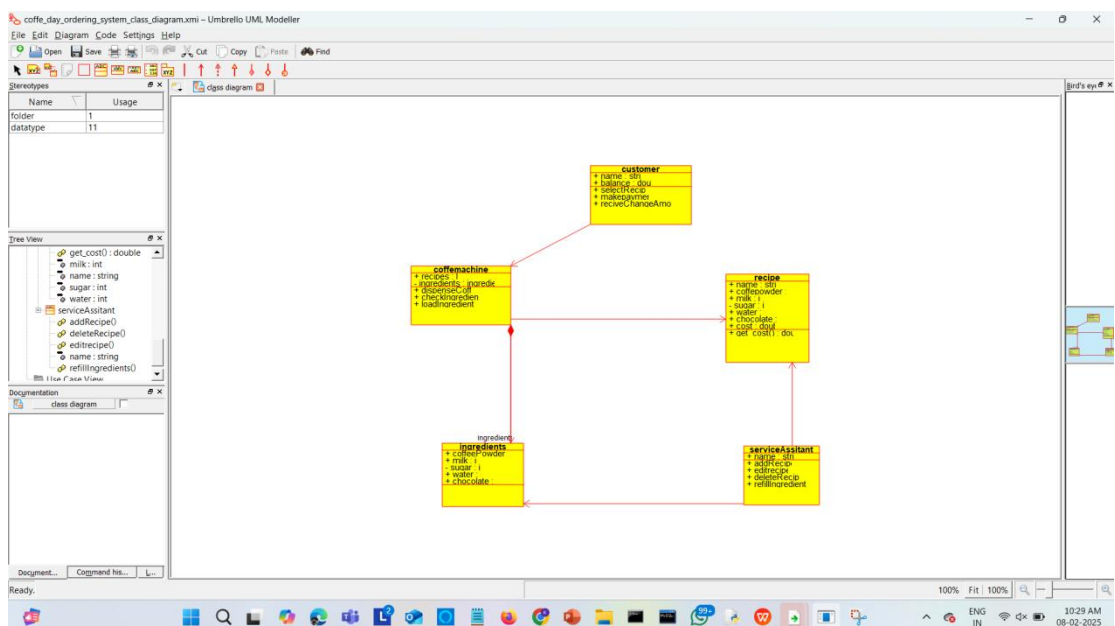
Use case diagram



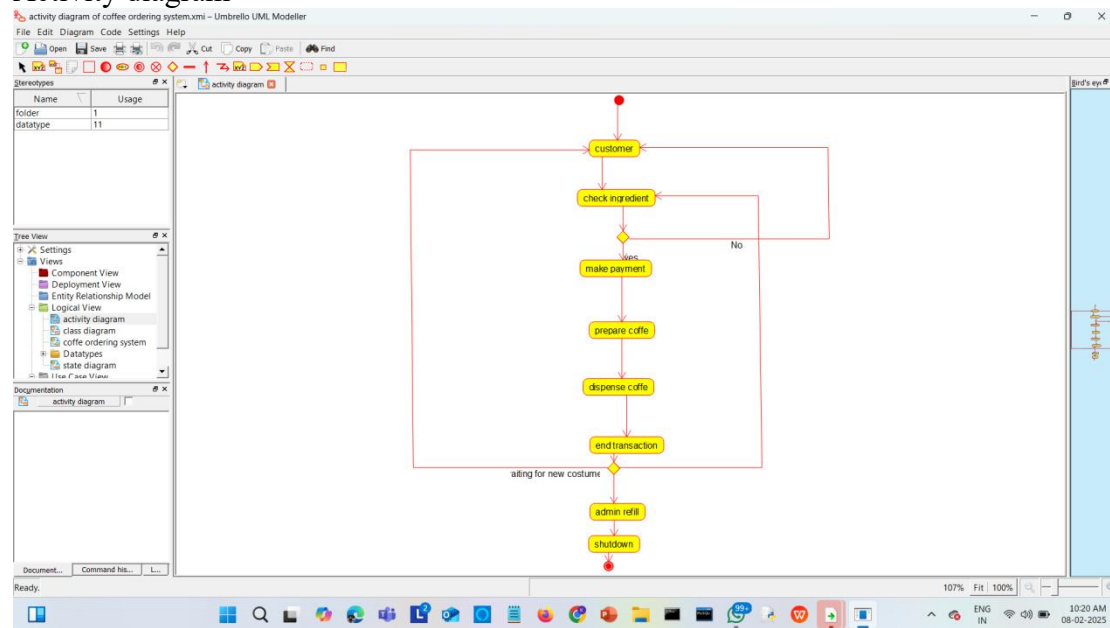
communication



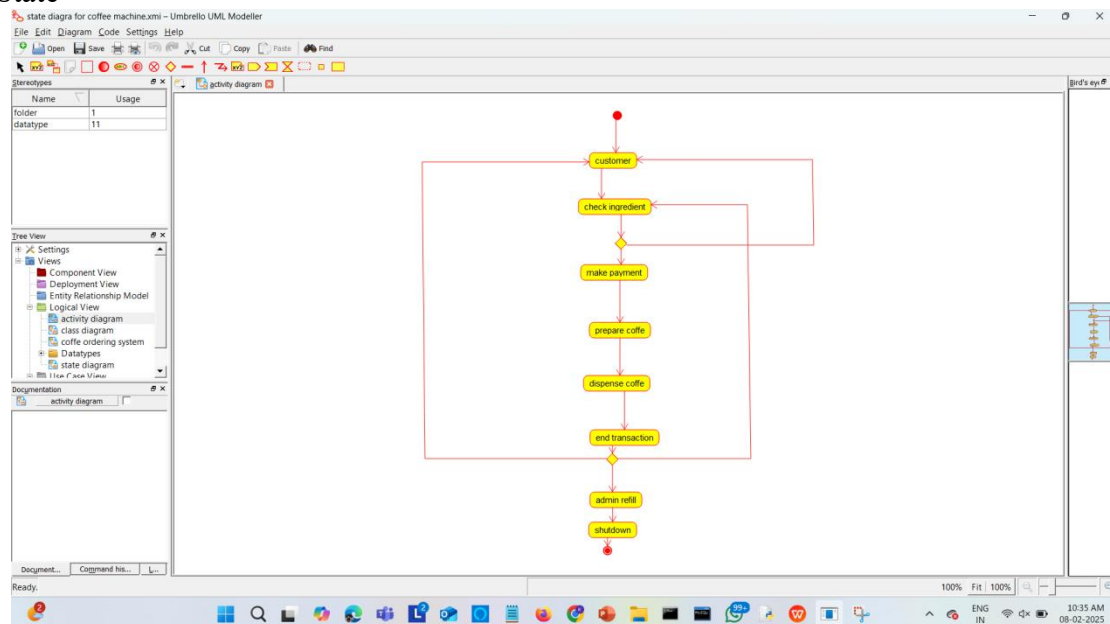
class



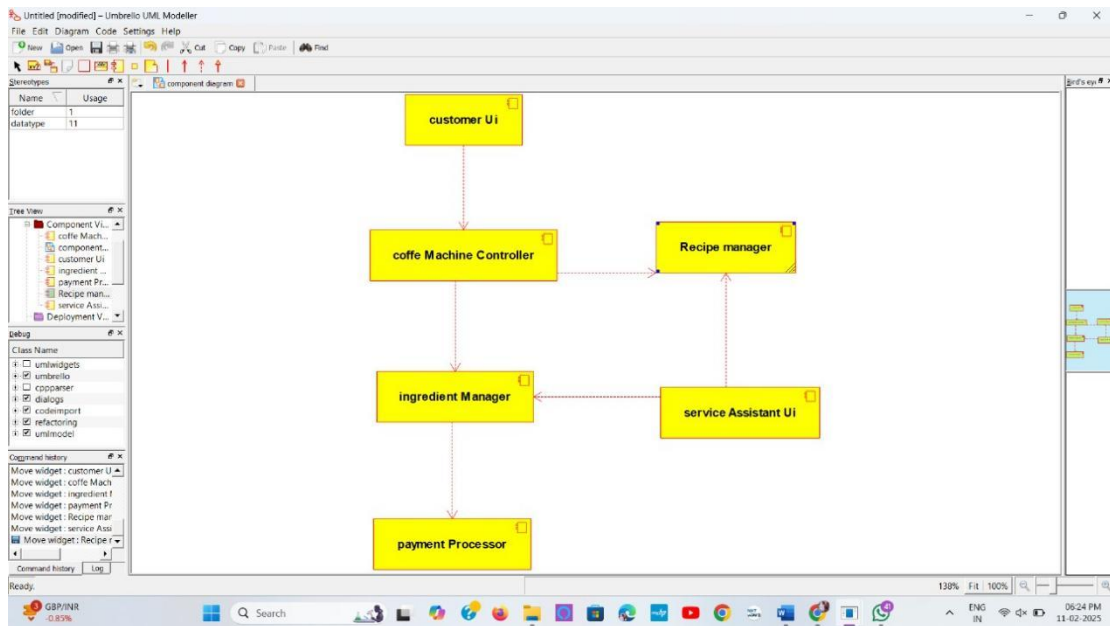
Activity diagram



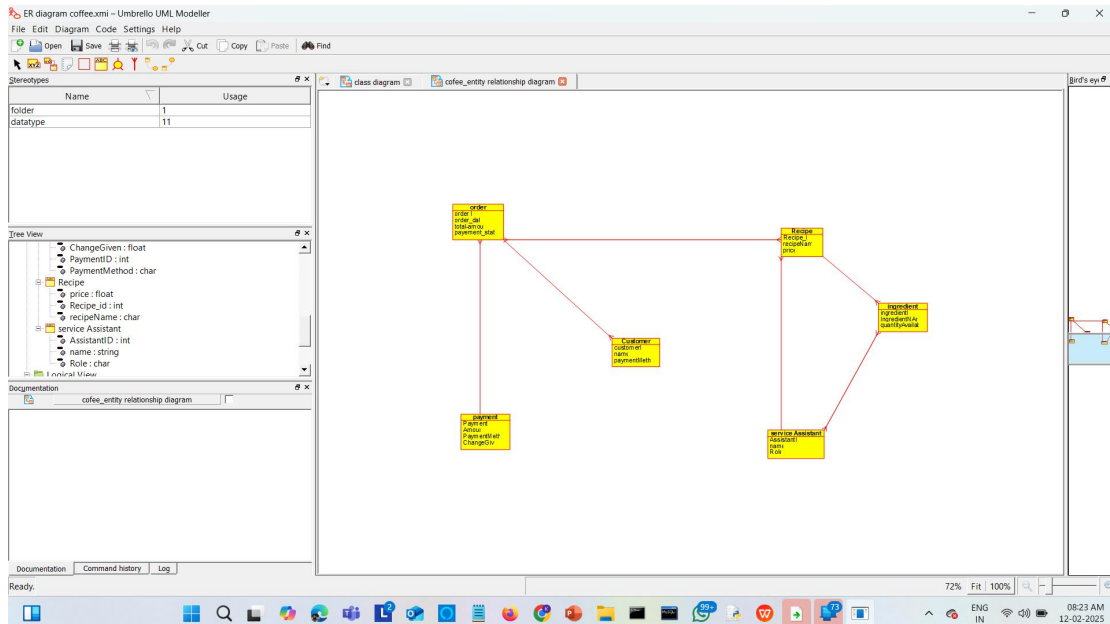
State



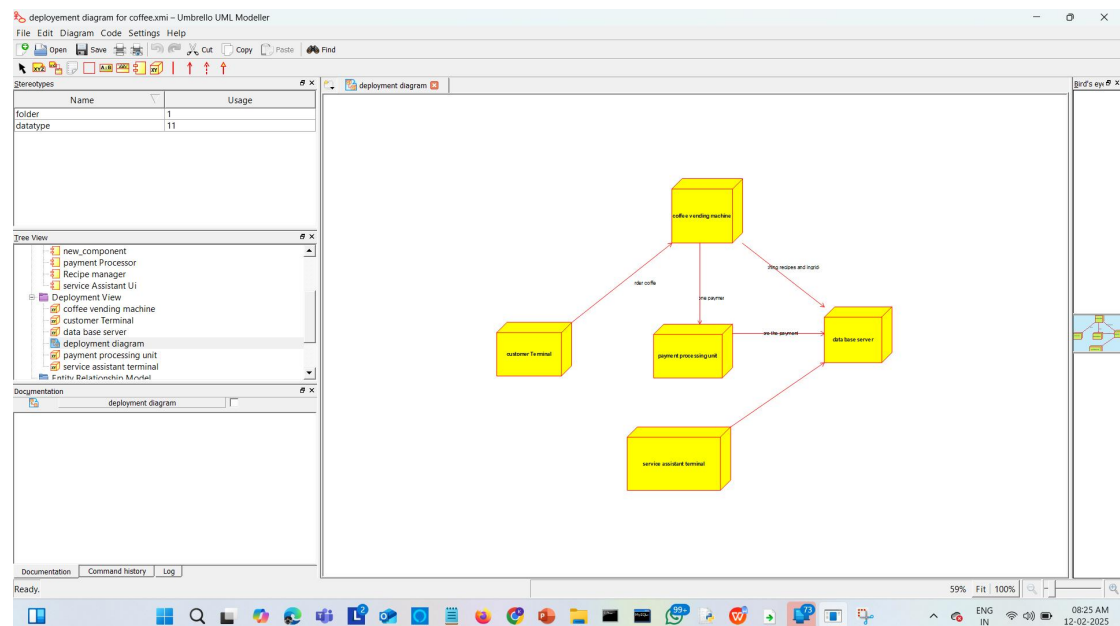
Compound



ER



Deployment



Result:

A comprehensive use case diagram was successfully created for the Coffee Day Ordering System, capturing user interactions, vending machine operations, and recipe management by the service assistant.