EXERCISE-2

Draw a coffee coffee day ordering system. A coffee 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.

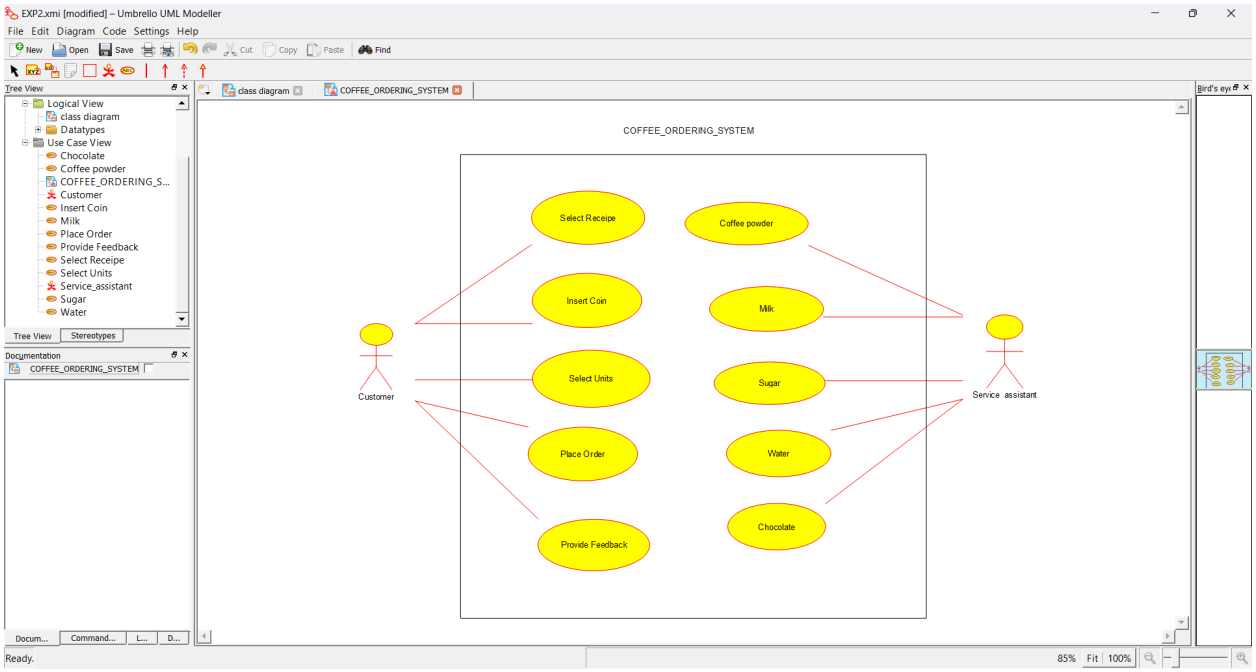
Aim:

To develop a **Use Case Diagram** for a **Coffee Coffee Day Ordering System**, depicting interactions between the customer, service assistant, and the coffee vending machine.

Procedure:

1. **Identify Actors** – Determine the users: Customer, Service Assistant, and Coffee Machine (system boundary).
2. **Define Customer Use Cases** – Identify actions like selecting a recipe, making payments, and receiving coffee & change.
3. **Define Service Assistant Use Cases** – Include loading ingredients, adding, editing, and deleting recipes.
4. **Establish System Boundaries** – Define the Coffee Machine as the system handling orders, payments, and dispensing.
5. **Draw Actors and Use Cases** – Use stick figures for actors and ellipses for use cases inside the system boundary.
6. **Connect Actors to Use Cases** – Draw lines from each actor to their respective use cases to show interactions.
7. **Use Relationships if Needed** – Apply "include" for shared actions and "extend" for optional interactions.
8. **Review and Validate** – Ensure clarity, completeness, and correctness of actor-use case relationships.

USE CASE DIAGRAM:



Result:

A **Use Case Diagram** was successfully developed for the Coffee Coffee Day Ordering System, representing the interactions of the customer and service assistant with the vending machine.