### Exercise 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.

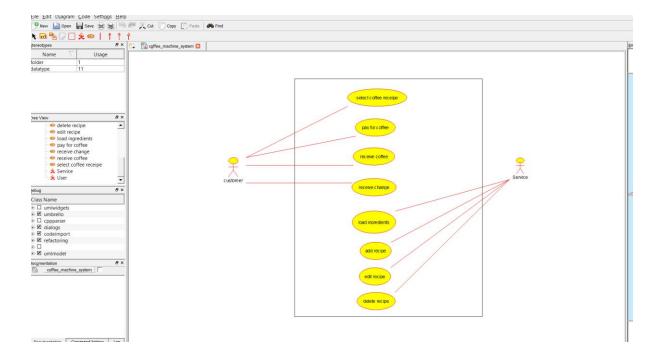
### Aim:

To develop a use case diagram for the Coffee Vending Machine system that allows customers to order coffee, pay, and receive change while providing the service assistant functionality to manage recipes and ingredients.

# **Procedure:**

- 1. Identify Actors: Determine the actors involved (Customer, Service Assistant).
- 2. Define Customer Use Cases: List the actions a customer can perform, such as selecting a recipe and making payments.
- 3. Define Service Assistant Use Cases: List the actions a service assistant can perform, such as adding, editing, or deleting recipes.
- 4. Establish Relationships: Connect the actors with the corresponding use cases based on their interactions.
- 5. Draw System Boundaries: Define the system scope, marking where the vending machine functionality begins and ends.
- 6. Create Use Case Diagram: Draw actors, use cases, and relationships on a diagram, following UML standards.
- 7. Review and Refine: Check for completeness and ensure all system functionalities are represented.

# Output



# Result

Thus the UML diagram for the Coffee Day Ordering System has been implemented successfully