Exercise 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.

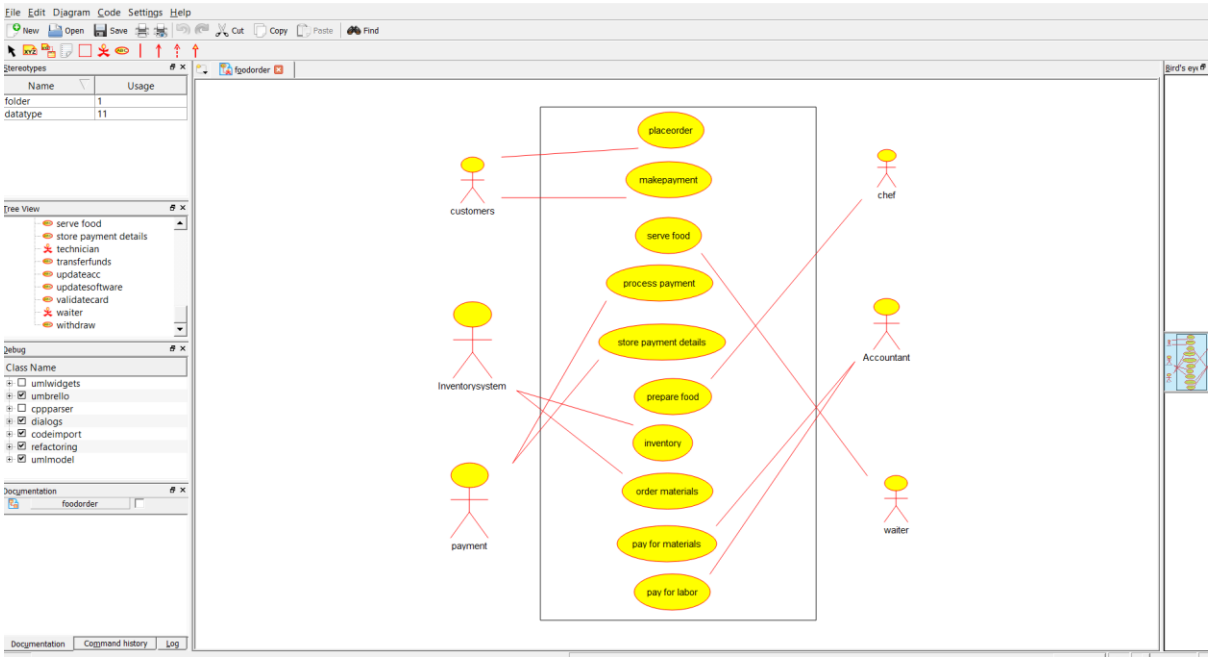
Aim:

To design a UML Diagram for a Food Ordering System that illustrates the interactions between customers, the restaurant system, and suppliers.

Procedure:

1. Identify Key Entities – Define main components like Customer, Order, Food Item, Restaurant, Payment, Supplier, and Staff.
2. Define Attributes & Methods – Assign attributes (e.g., orderID, foodName, price, paymentStatus) and methods (e.g., placeOrder(), prepareFood(), makePayment()).
3. Establish Relationships – Define associations (e.g., a Customer places an Order, Restaurant prepares food, Supplier provides raw materials, Staff processes orders).
4. Draw the Class Diagram – Represent classes, attributes, methods, and relationships (e.g., one-to-many between Order and Food Item, one-to-one between Customer and Payment).
5. Include Functional Classes – Add Order Management, Payment Processing, Inventory Management, and Kitchen Operations to represent system functionalities.
6. Create Use Case Diagram – Identify actors (Customer, Chef, Cashier, Supplier) and use cases (Place Order, Prepare Food, Make Payment, Order Raw Materials).
7. Validate and Optimize – Ensure correctness, refine class relationships, and optimize for a clear, structured UML diagram.

Output



Result

Thus the UML diagram for the Food Ordering has been implemented successfully.