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 create a comprehensive set of UML diagrams for a Food Ordering System, covering Use Case, Activity, Sequence, and Class Diagrams to represent the system's structure and behavior in a clear, standardized manner.

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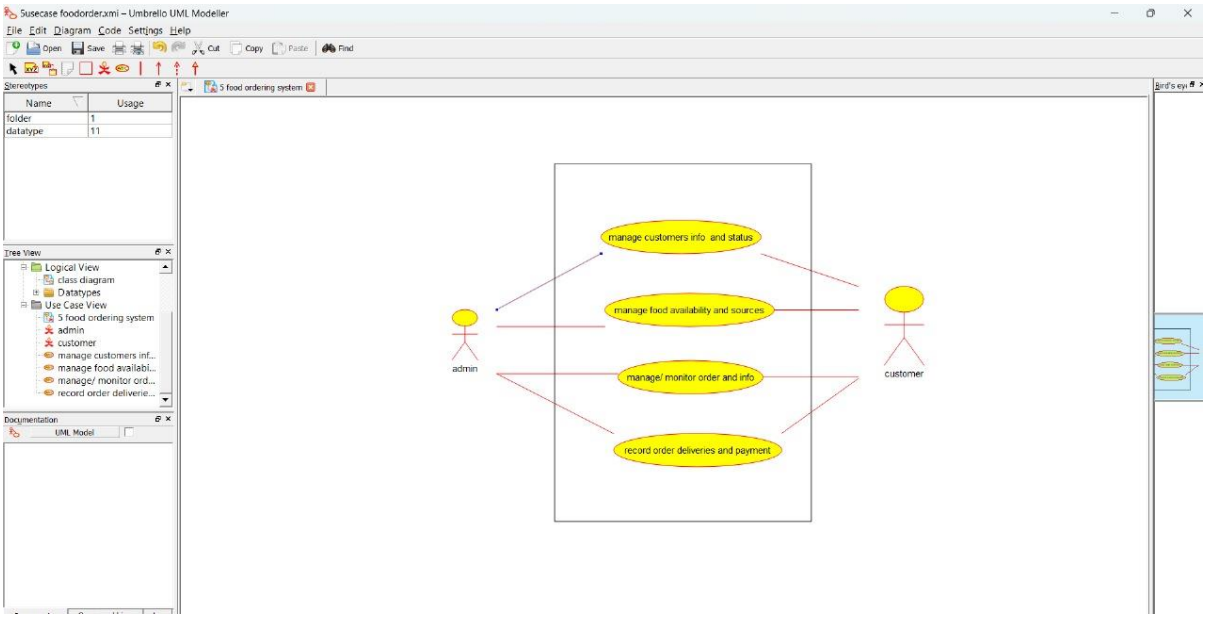
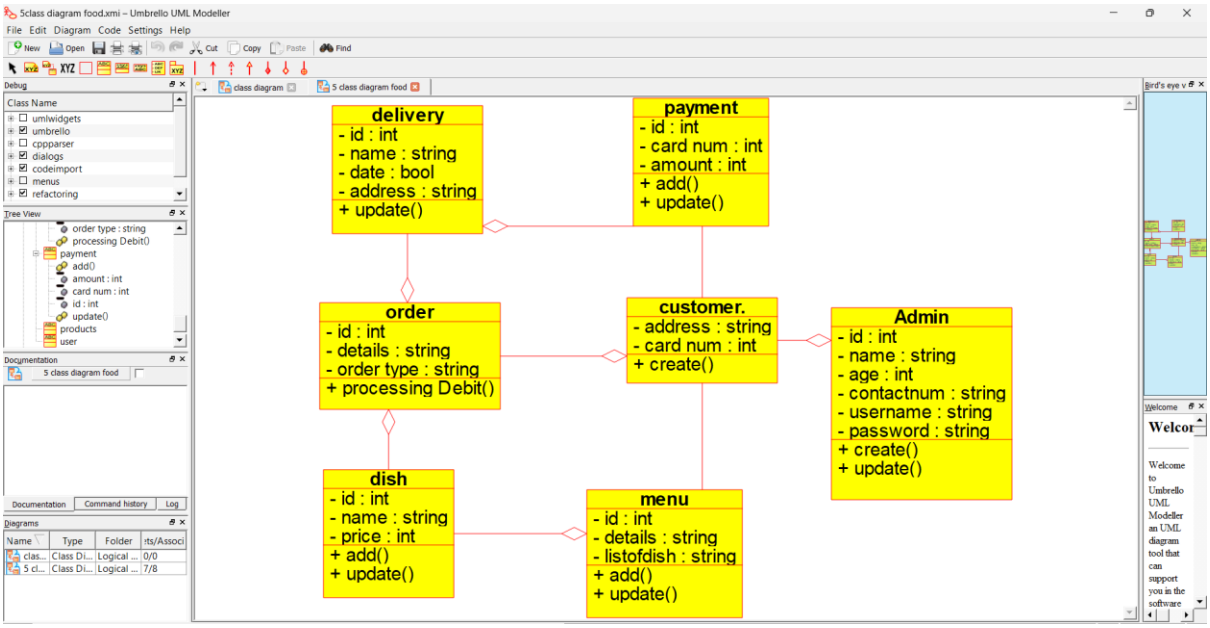
Procedure:

1. Define System Requirements:
    - Identify the key activities in the food ordering system (e.g., receiving orders, preparing food, serving food, collecting payment).
2. Identify Actors:
    - Recognize the roles interacting with the system, such as Customer, Kitchen Staff, Waitstaff, Accountant, Supplier, and System.
3. Create Use Case Diagram:
    - Show interactions between actors and system functions (e.g., "Place Order," "Prepare Food," "Collect Payment").
4. Design Activity Diagram:
    - Represent the flow of activities from receiving orders to paying for raw materials and labor.
5. Create Sequence Diagram:
    - Illustrate the sequence of interactions between objects over time, e.g., customer placing an order, payment processing.
6. Develop Class Diagram:
    - Model the system structure with classes such as Customer, Order, Payment, Kitchen Staff, Raw Material, etc.
7. Review and Refine:
    - Ensure that all diagrams are accurate and reflect the full system functionality.

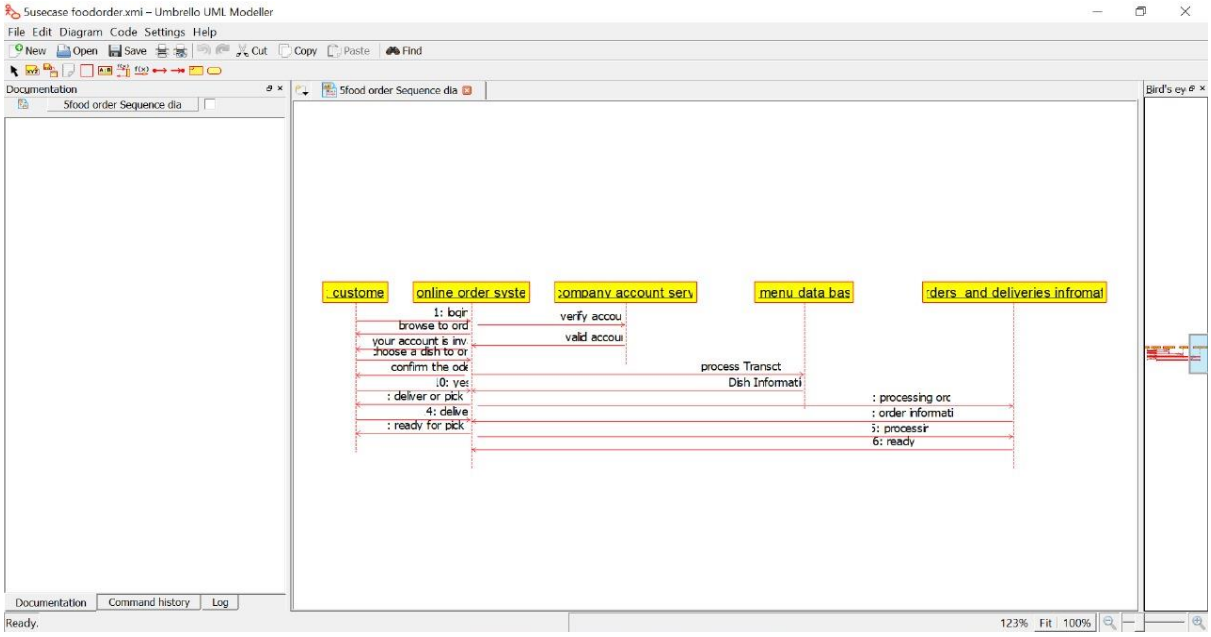
USE CASE DIAGRAM



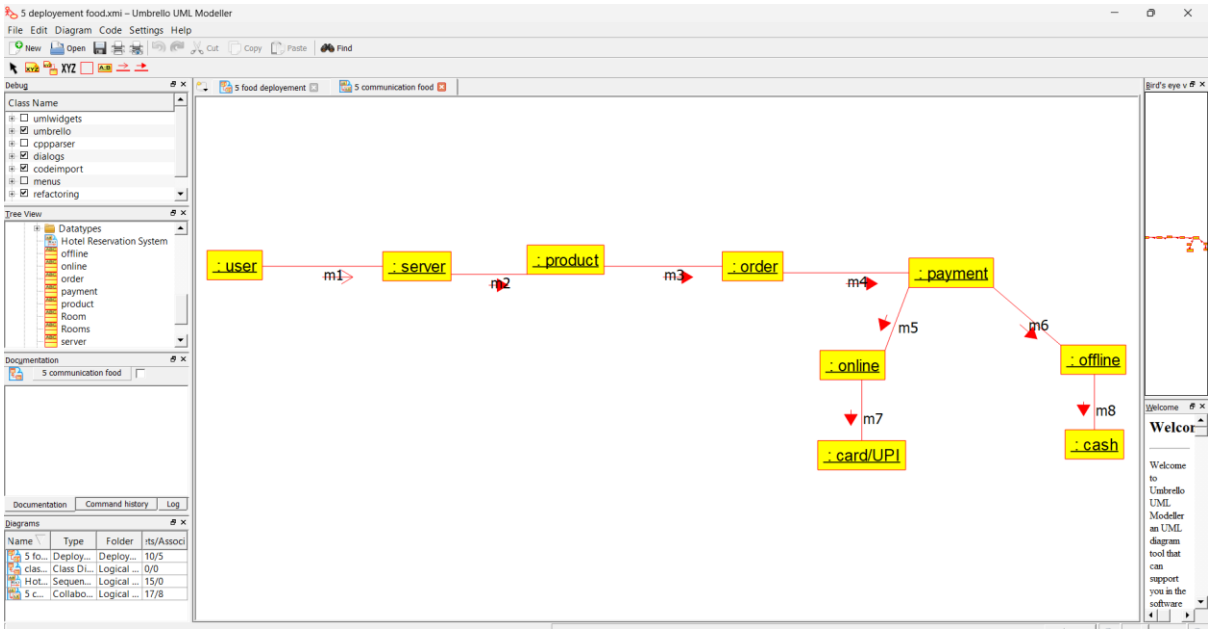
CLASS DIAGRAM



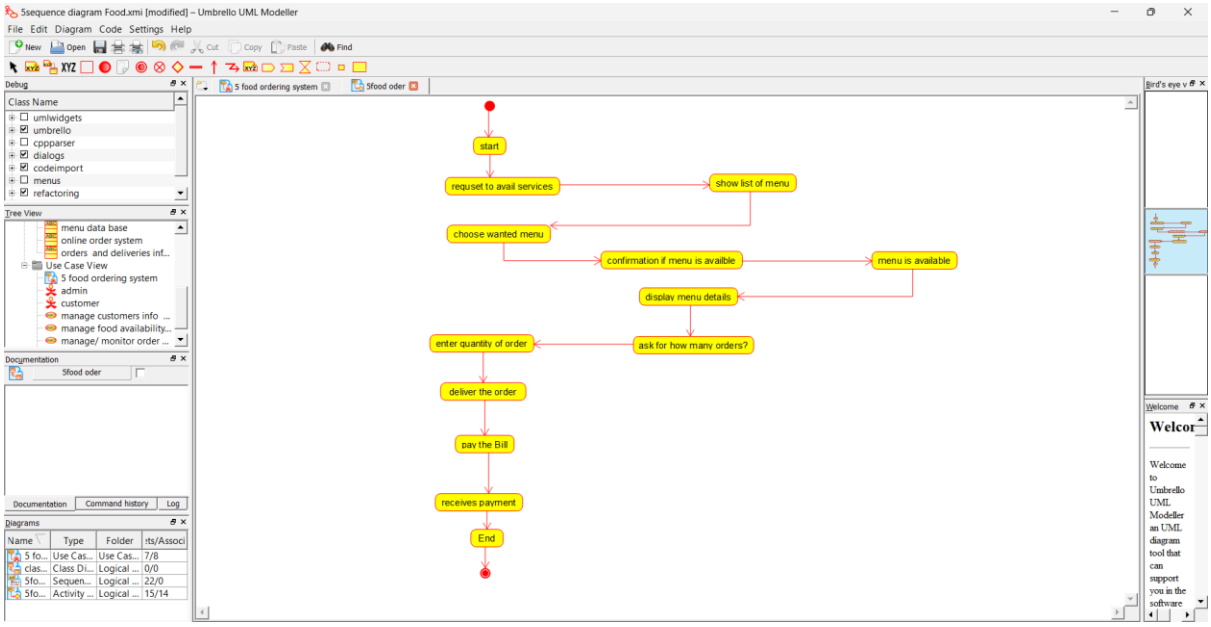
SEQUENCE DIAGRAM



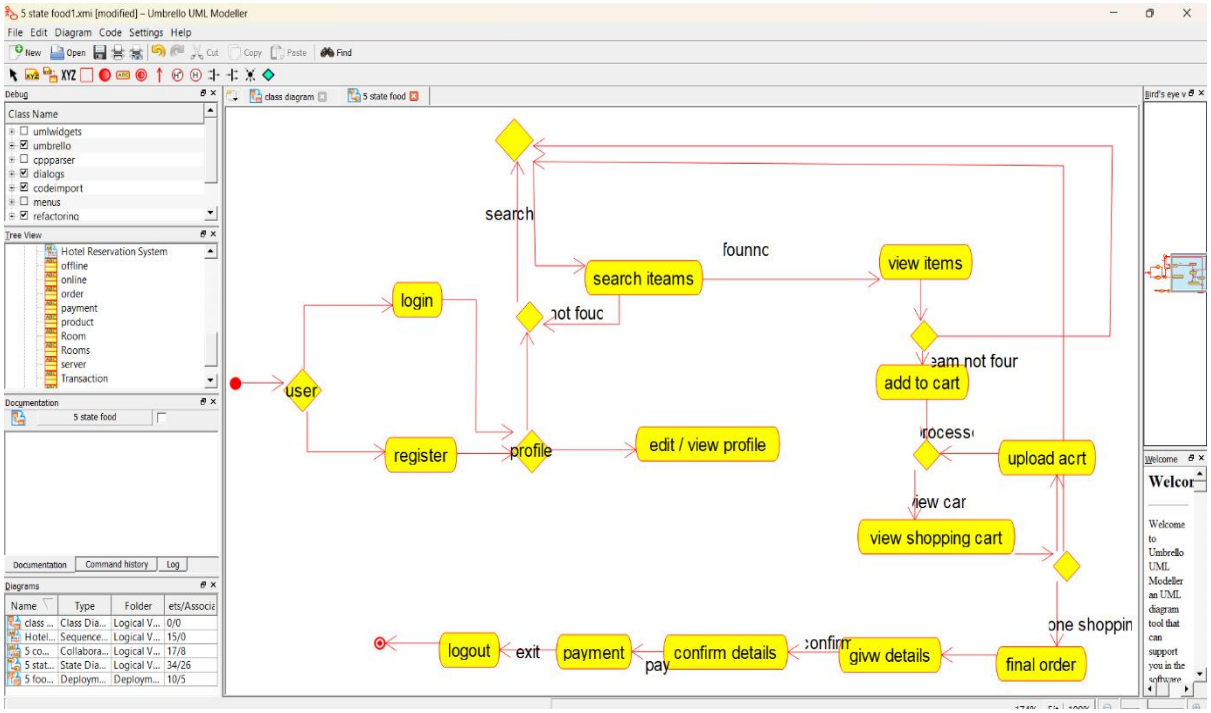
COMMUNICATION DIAGRAM



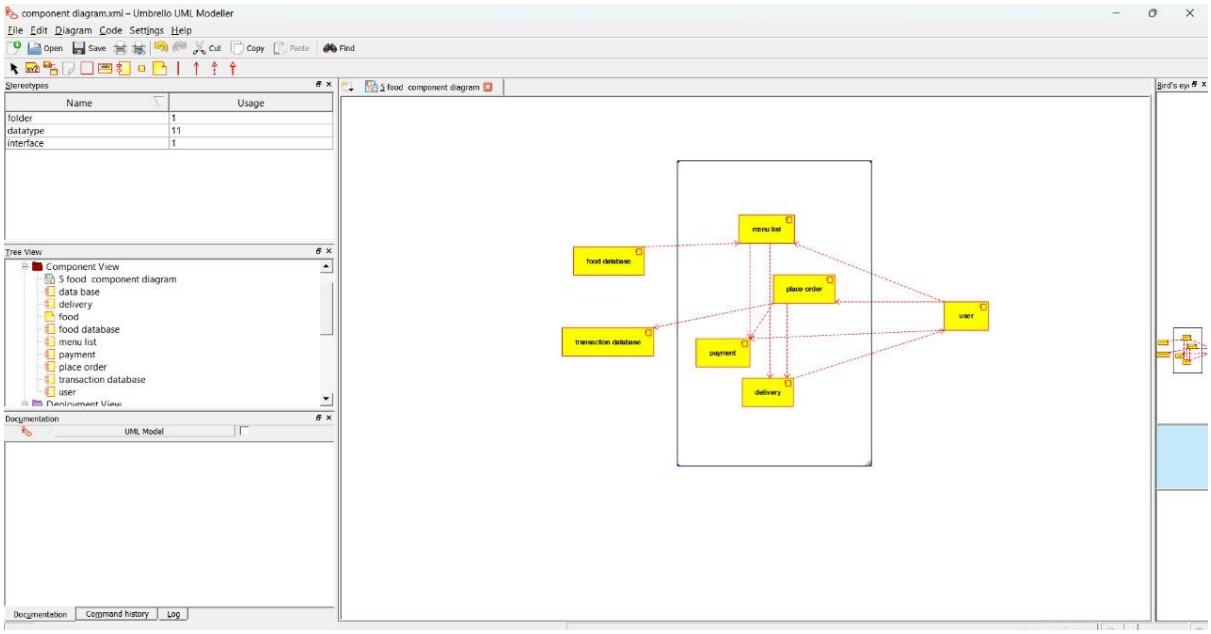
ACTIVITY DIAGRAM



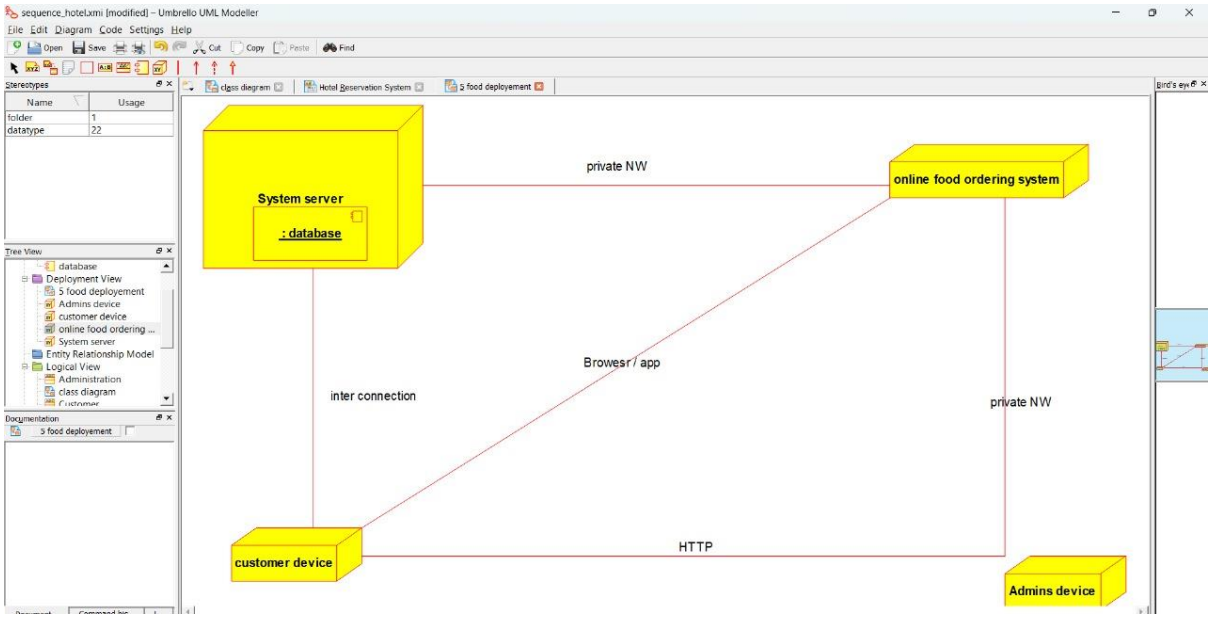
STATE DIGARAM :



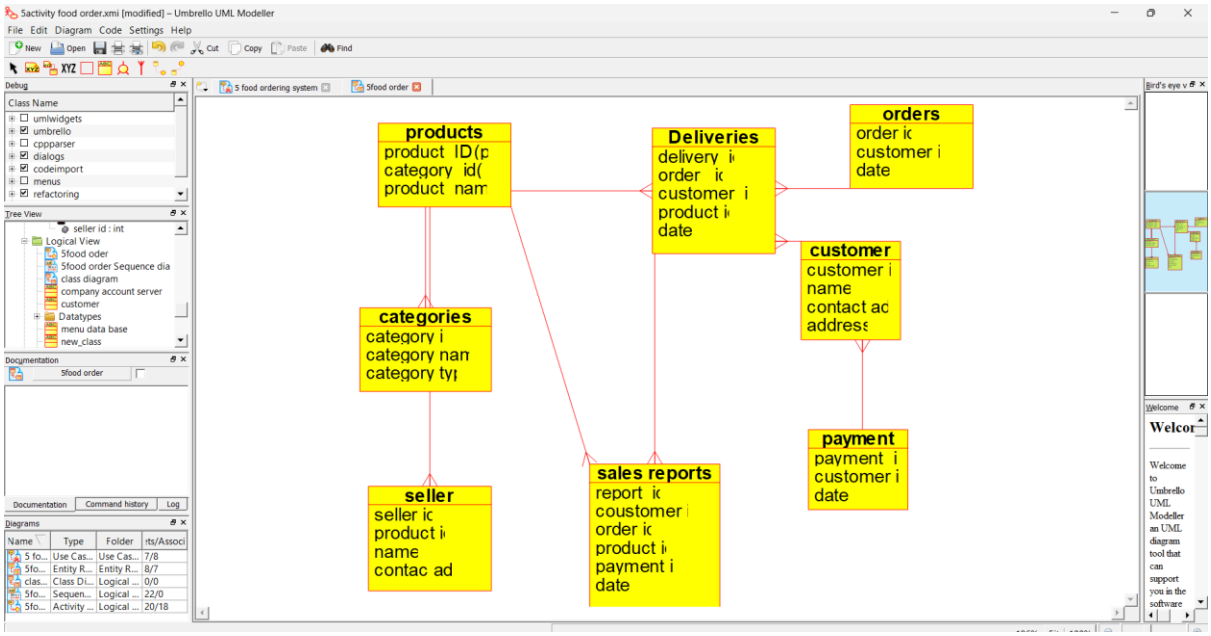
COMPONENT DIAGRAM



DEPLOYMENT DIAGRAM



ER DIAGRAM:



Result

The result is a set of UML diagrams (Use Case, Activity, Sequence, and Class Diagrams) that clearly represent the functionality, interactions, and structure of the Food Ordering System.