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.

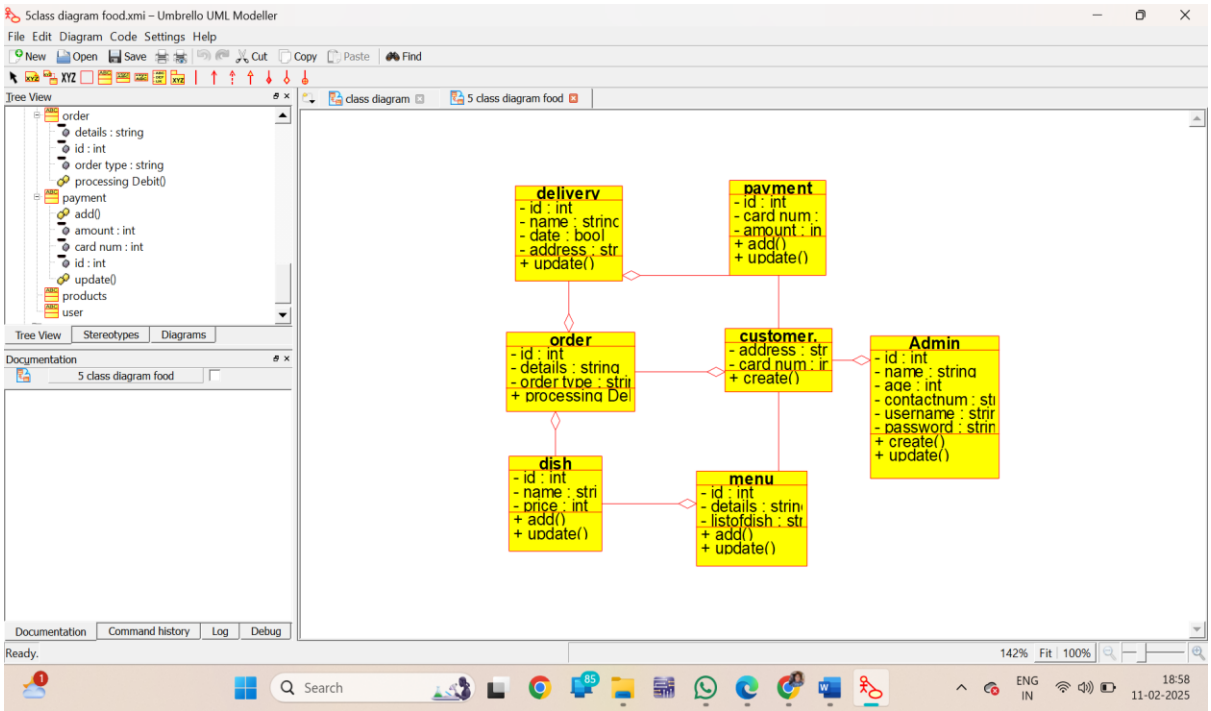
Aim:

To design a UML diagram for a Food Ordering System that represents its activities, including order management, food production, payment processing, and inventory management.

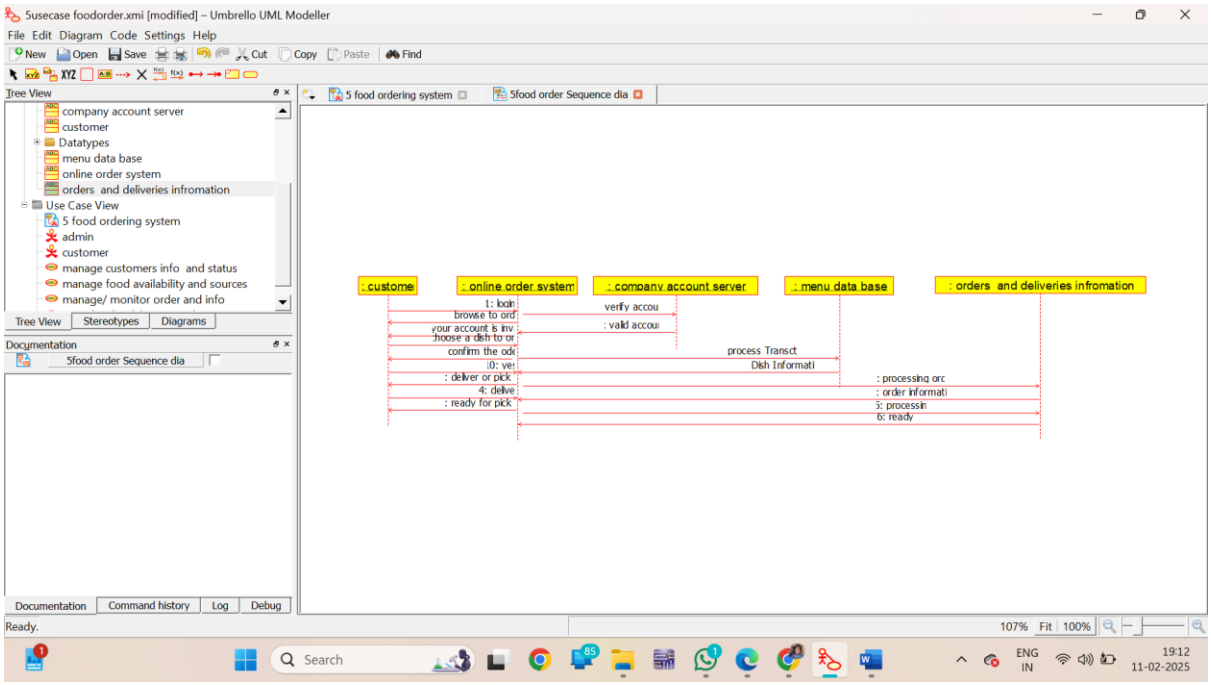
Procedure:

1. Identify Actors – Determine the external entities interacting with the system (e.g., Customers, Chef, Cashier, Supplier).
2. List Use Cases – Define the main functionalities like ordering food, preparing food, payment processing, and inventory management.
3. Draw Use Case Diagram – Represent actors and use cases with associations.
4. Design Class Diagram – Identify system classes (e.g., Order, Customer, Payment, Inventory) and their relationships.
5. Create Sequence Diagram – Show interactions between objects for key processes like food ordering and payment.
6. Develop Activity Diagram – Represent the workflow from order placement to food serving and payment collection.
7. Validate & Refine – Ensure completeness and consistency in diagrams.

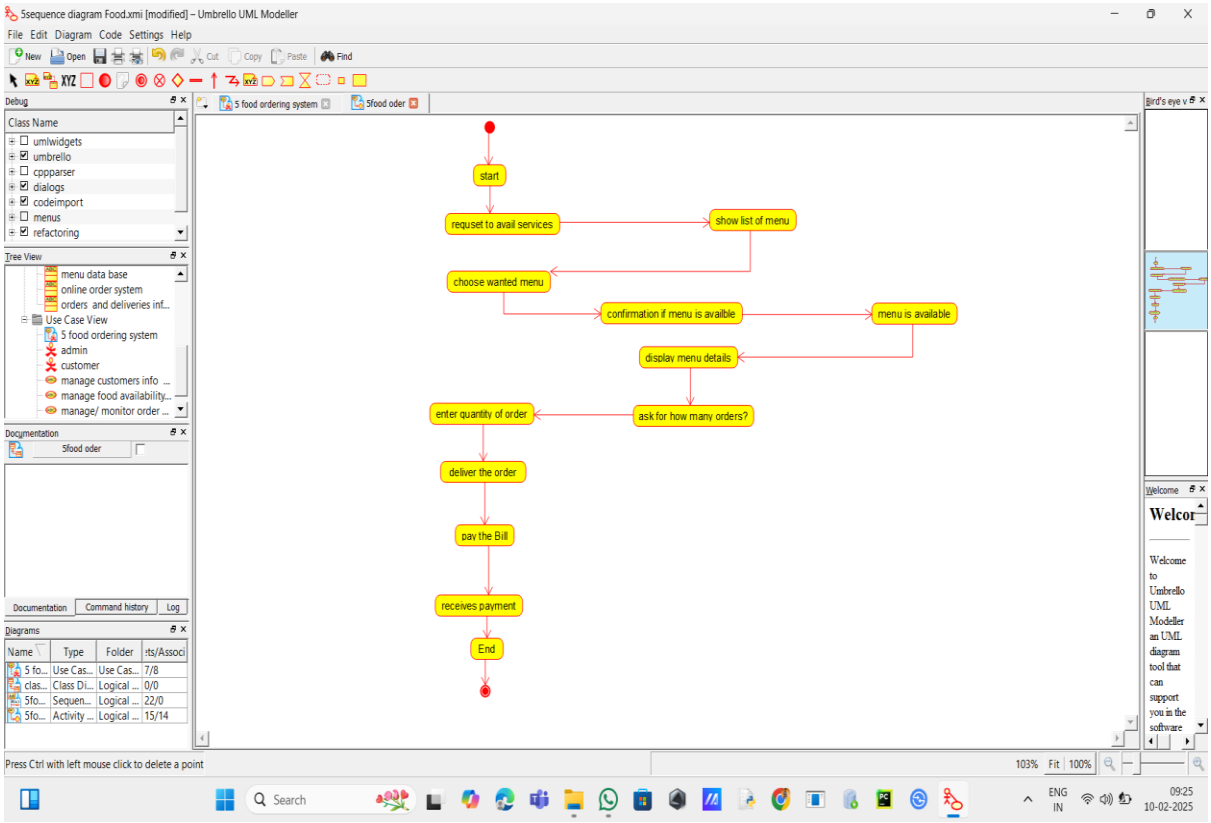
Class Diagram:



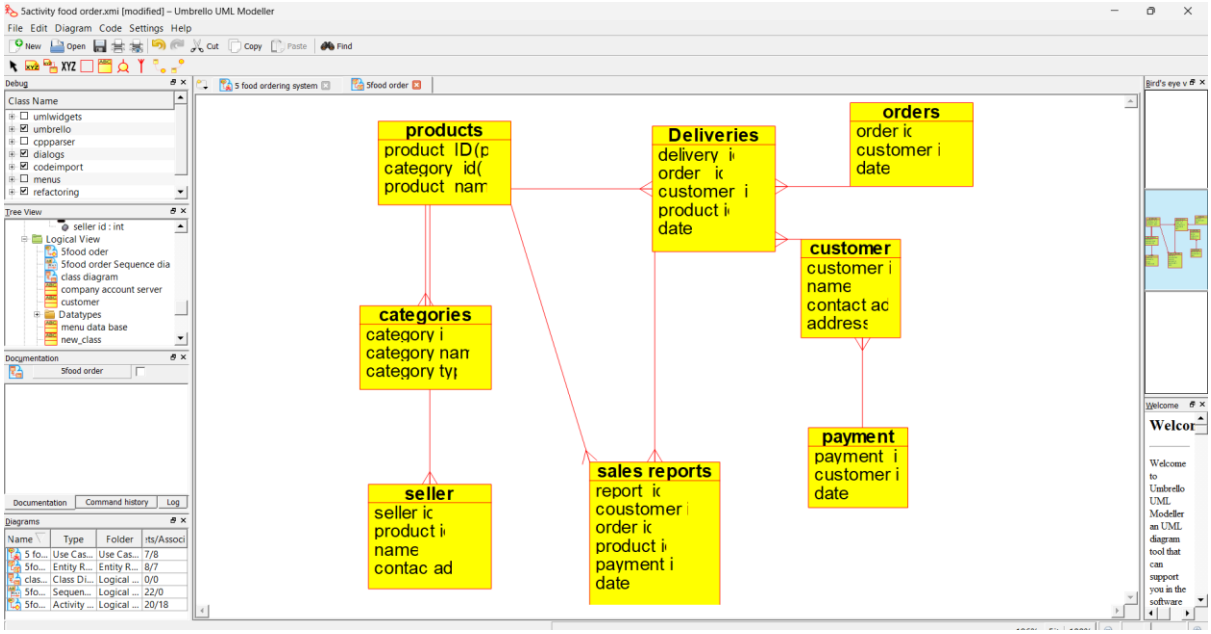
Sequence Diagram:



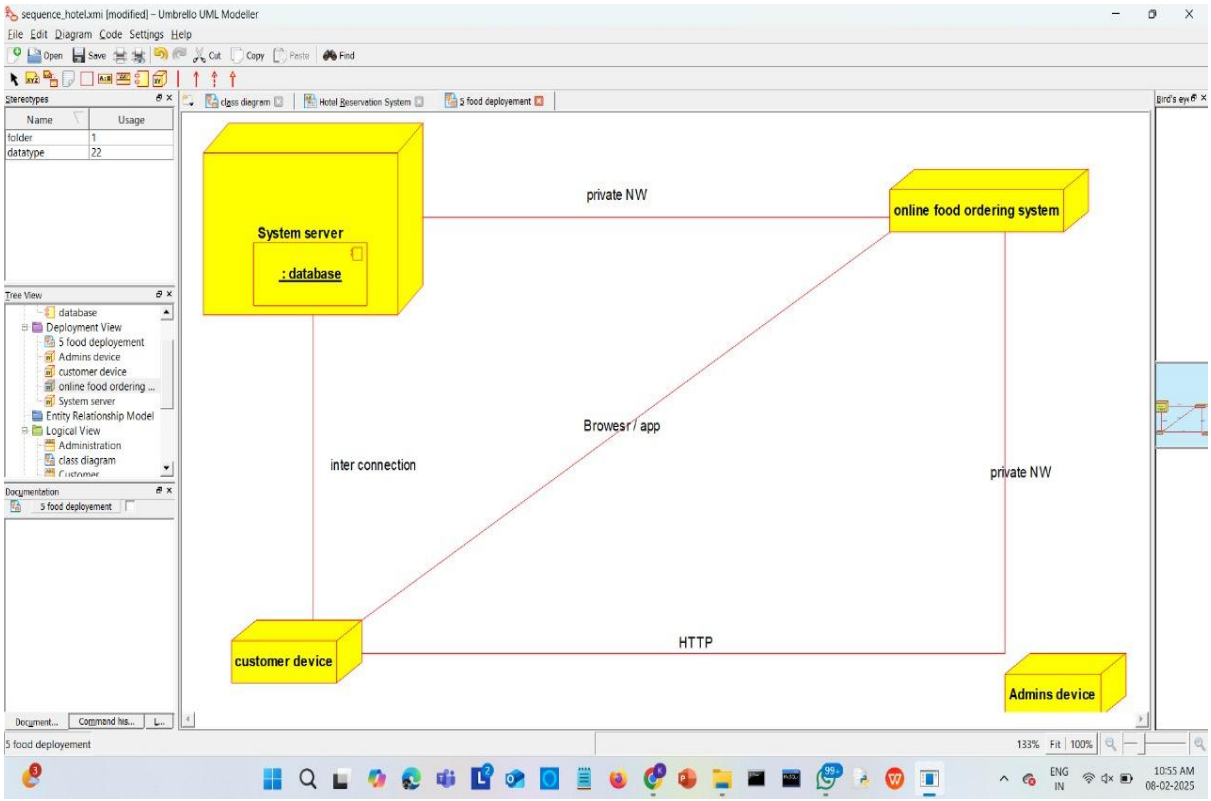
Activity Diagram:



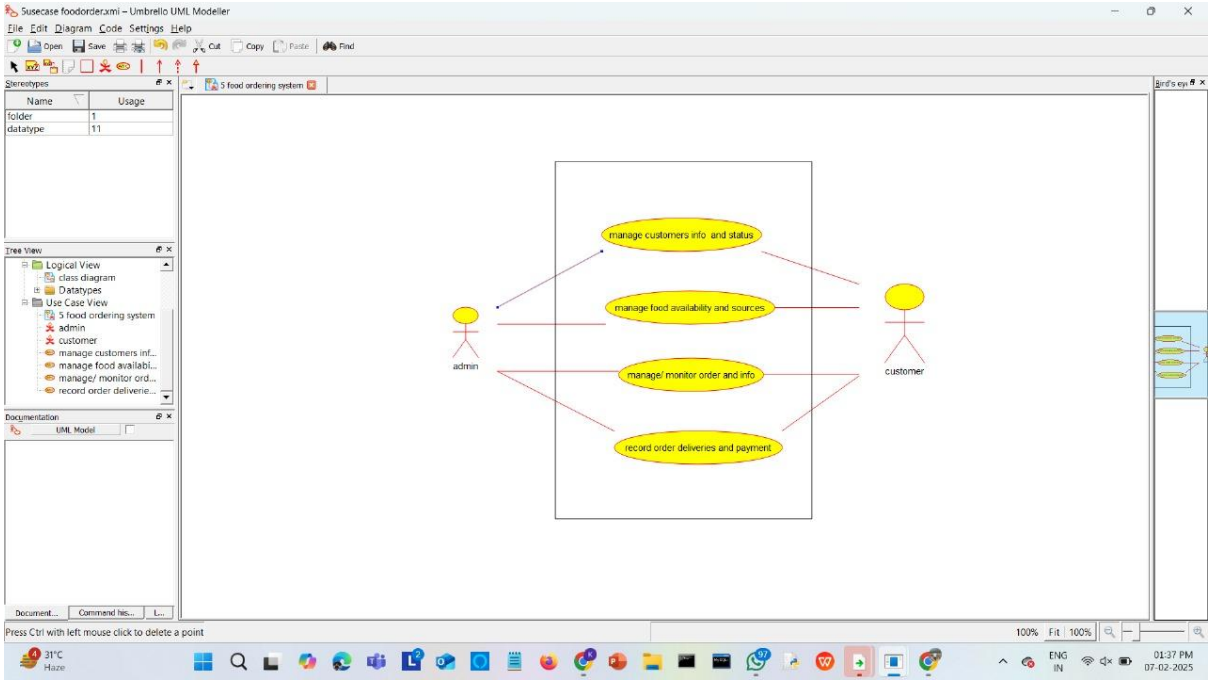
ER Diagram:



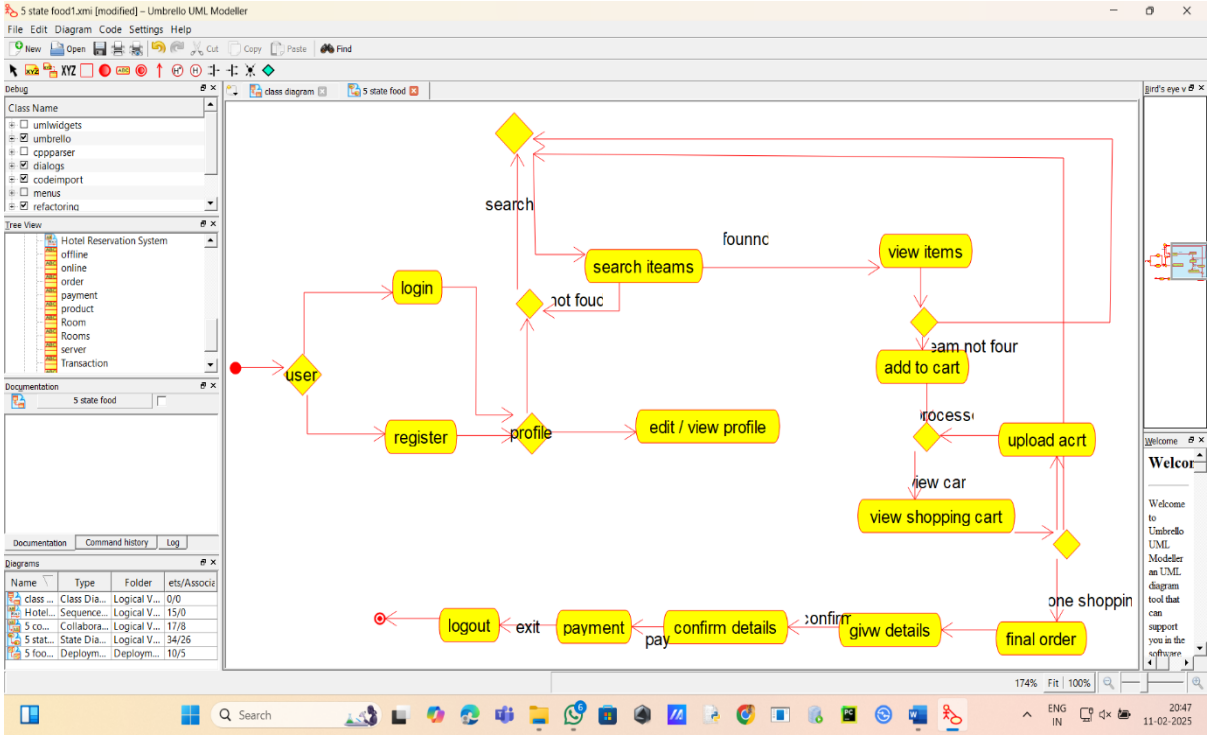
Deployment Diagram:



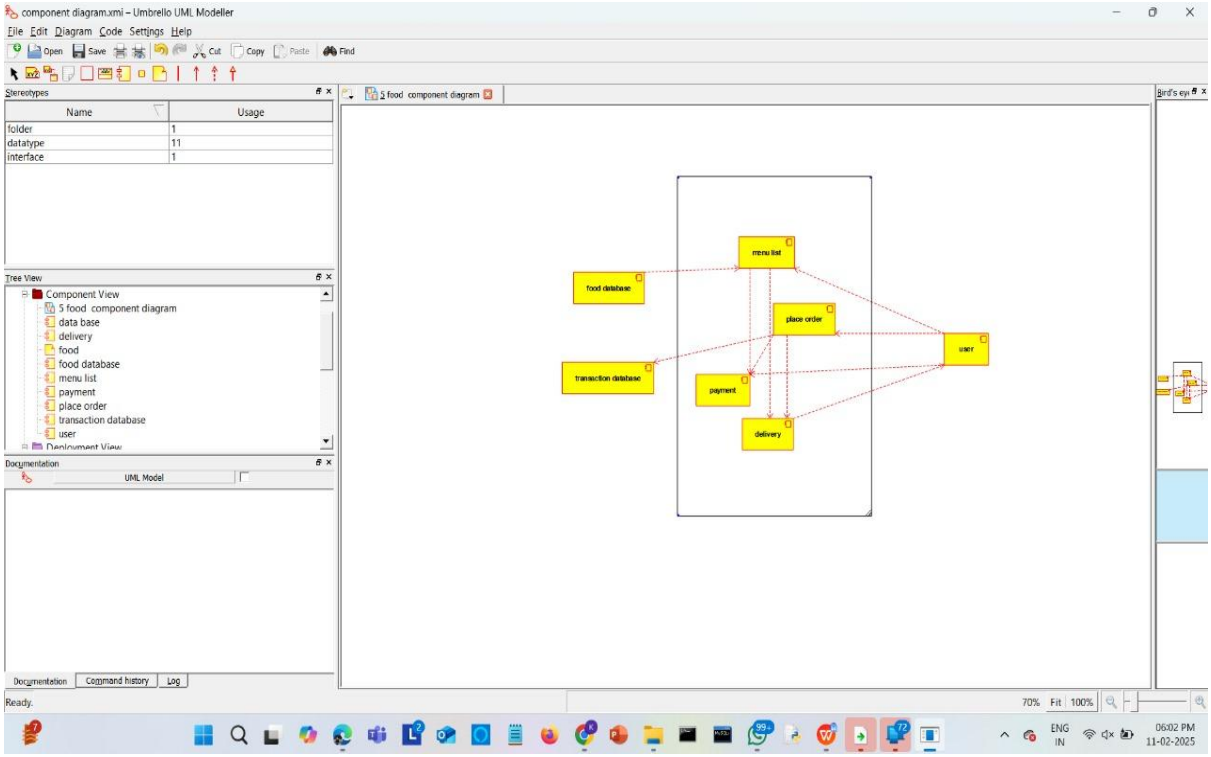
Use Case Diagram:



State Diagram:



Component Diagram:



Result:

A UML representation of a Food Ordering System that accurately models the workflow, user interactions, and system processes, aiding in the system's implementation and understanding.