7) Draw a UML diagram for online purchasing system. Provide top level use cases for a web customer making purchases online. Web customer actor uses some web site to make purchases online. Top level use cases are View Items, Make Purchase and Client Register.

AIM

To design and draw a **UML Use Case Diagram** for an **Online Purchasing System**, highlighting the top-level use cases for a web customer making purchases online.

PROCEDURE

1. Identify the System Requirements

Analyze the online purchasing system to understand how a web customer interacts with it.

2. Determine Actors

Identify the key actor:

 Web Customer: Uses the website to view items, register as a client, and make purchases.

3. List Use Cases

Identify the main actions performed by the web customer:

- o **View Items**: Browse the catalog to view available items.
- Make Purchase: Select items, provide payment details, and confirm the purchase.
- Client Register: Register to create an account for future purchases.

4. Define Relationships

Draw lines to show the interaction between the web customer and each use case. Relationships between use cases may include:

- o **Include**: Common functionality shared by multiple use cases.
- Extend: Optional functionality that may occur.

5. Draw the Use Case Diagram

- o Represent the **Web Customer** as a stick figure.
- Represent each Use Case as an oval.
- o Connect the actor to the use cases with lines.
- o Place all use cases inside the system boundary (rectangle).

6. Validate the Diagram

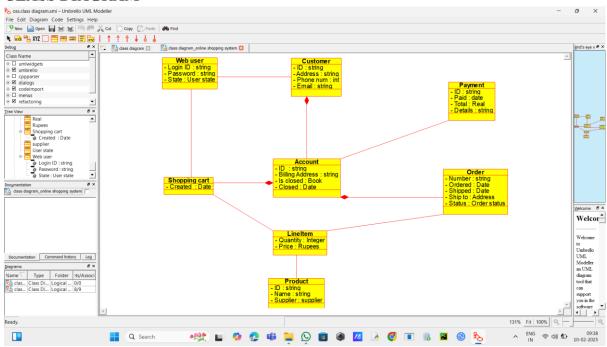
Ensure that all interactions and use cases are accurately represented. Verify the relationships and connections between actors and use cases.

7. Document the Diagram

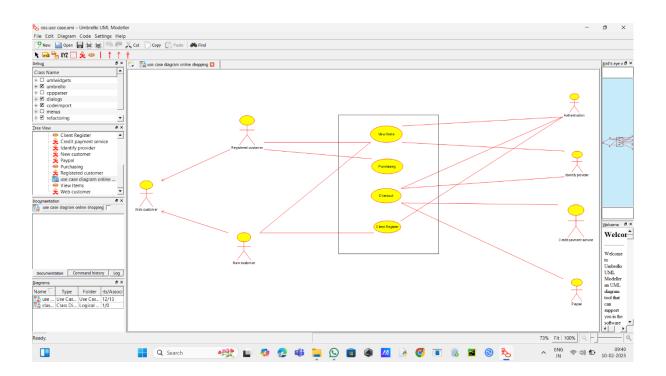
Label all components properly, save the diagram, and ensure it reflects the system's overall functionality.

OBSERVATION

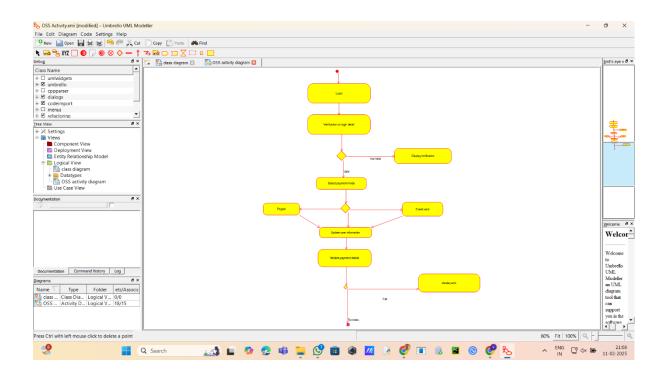
CLASS DIAGRAM



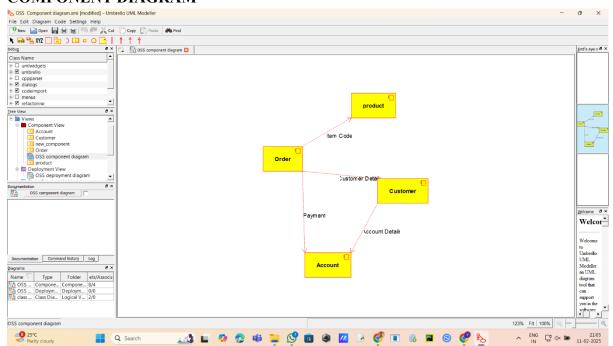
USE CASE DIAGRAM



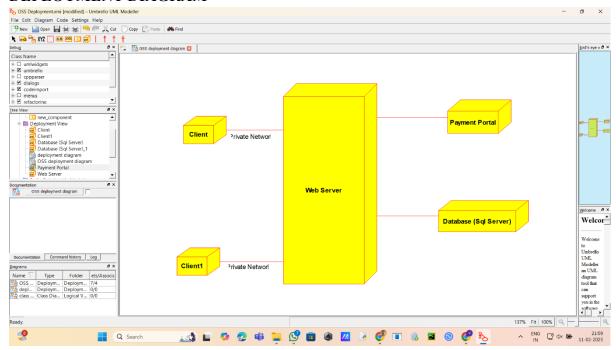
ACTIVITY DIAGRAM



COMPONENT DIAGRAM



DEPLOYMENT DIAGRAM



RESULT

A UML Use Case Diagram for the Online Purchasing System is successfully created, representing the interactions between the web customer and the system. This diagram helps visualize the functional requirements of the system for viewing items, making purchases, and registering as a client.