Exercise 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 a Use Case Diagram for an Online Purchasing System, showcasing interactions between web customers and the system.

Procedure

1. **I**dentify Key Actors – Define the main actor as the Web Customer, who interacts with the system.

2. Define Use Cases – Determine primary use cases, including View Items, Make Purchase, and Client Register.

3. Establish Relationships – Connect the Web Customer to each use case through associations.

4. Define System Processes – Incorporate sub-use cases under Make Purchase, such as Search Items, Add to Cart, Provide Payment Details, Confirm Order, and Receive Confirmation.

5. Create the Use Case Diagram – Illustrate actors, use cases, and their relationships in a structured diagram.

6. Introduce Additional Actors – Add the Payment System for transaction processing and Admin for product management.

7. Review and Refine – Verify accuracy, ensure logical connections, and optimize for clarity and completeness.

Output
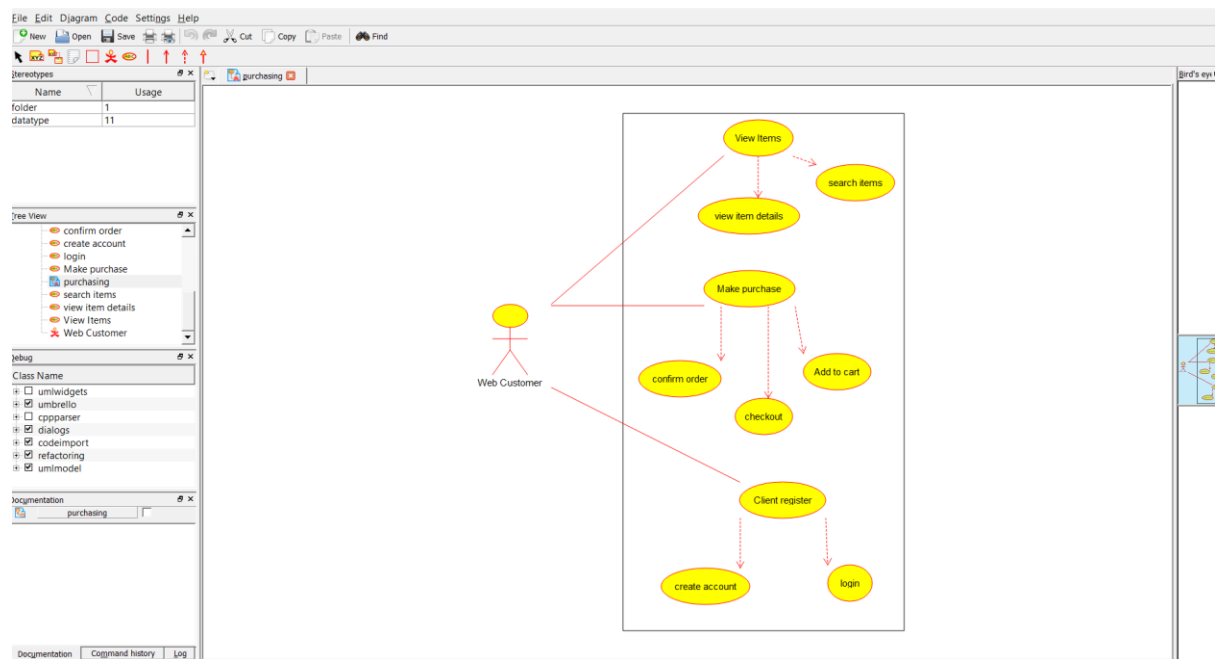
Result

Thus the UML diagram for the Online Purchasing System has been implemented successfully.