

EXPERIMENT-4

4) Draw a UML diagram for ATM System using CASE tool. The banking system allows a customer to access the financial transactions by ATM System, it has a step-by-step process describe the work of this process and elaborate the what are the work can do by customer, banking system, administrator and technicians with the ATM system.

Aim:

To design a UML Diagram for an ATM System using a CASE tool, representing the interactions between customers, the banking system, administrators, and technicians.

Procedure:

1. Identify the Main Actors

- **Customer:** Withdraws cash, deposits money, checks balance, transfers funds.
- **Banking System:** Manages transactions, verifies accounts, updates balances.
- **Administrator:** Configures system settings, generates reports.
- **Technician:** Maintains ATM hardware, fixes errors.

2. Define Use Cases for Each Actor

- **Customer Actions:**
 - Insert Card
 - Enter PIN
 - Select Transaction (Withdraw, Deposit, Balance Inquiry, Transfer)
 - Receive Cash/Receipt
 - End Session
- **Banking System Actions:**
 - Verify Customer Credentials
 - Process Transactions
 - Update Account Balance
 - Log Transaction History
- **Administrator Actions:**
 - Manage User Accounts
 - Generate Reports
 - Configure System Settings
- **Technician Actions:**
 - Maintain ATM Hardware
 - Fix Errors and Software Issues

3. Establish Relationships

- **Customer ↔ Banking System:** Customer interacts with the banking system via ATM.
- **Banking System ↔ Administrator:** Admin manages the banking system.
- **Technician ↔ ATM System:** Technician maintains the ATM machine.

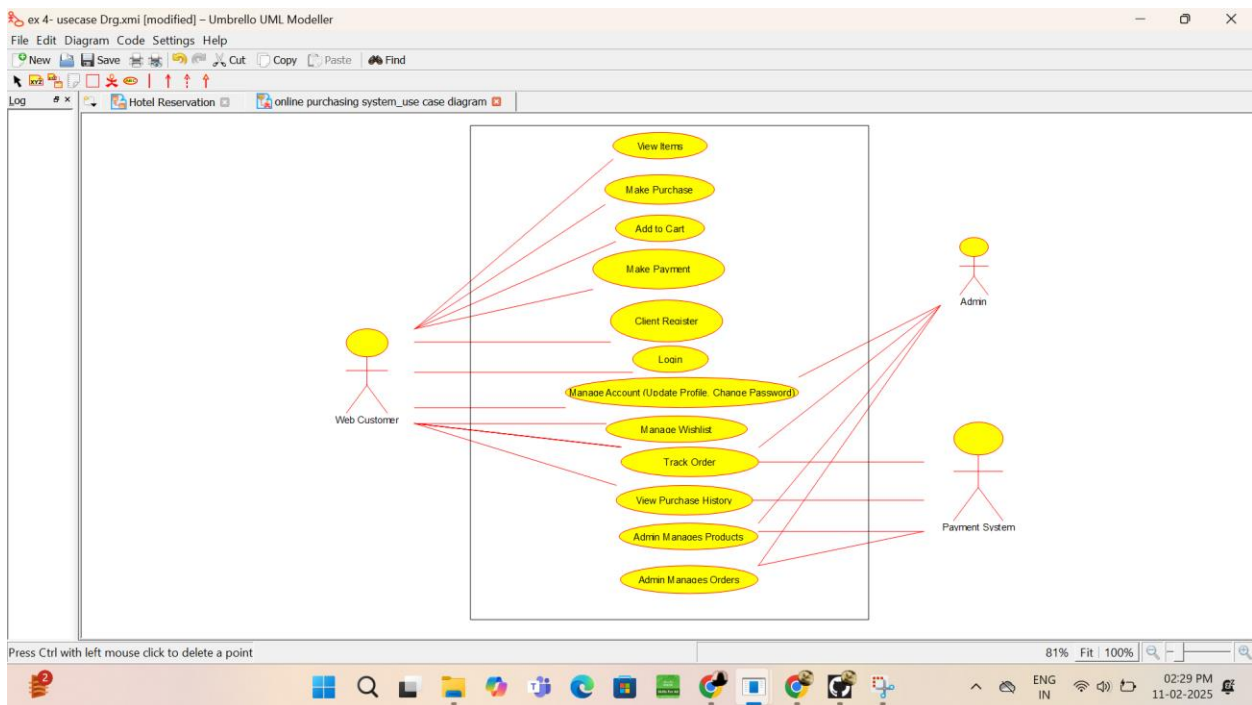
4. Draw the UML Diagram

- **Use Case Diagram:** Shows interactions between actors and ATM system functionalities.
- **Class Diagram:** Represents system components like **ATM**, **Customer**, **Bank Account**, **Transaction**, and **Banking System**.

5. Verify the Diagram

- Ensure that all actors and system functionalities are accurately represented.

Diagram:



Result:

A **UML Diagram** for the **ATM System** was successfully designed, showing the interaction of customers, banking system, administrators, and technicians with the ATM system.