Experiment:4

Draw a UML diagram for an 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 describing the work of this process and elaborate what the work can do by customer, banking system, administrator and technicians with the ATM system.

Aim:

To design a comprehensive UML Diagram for an ATM System that models interactions between the customer, banking system, administrator, and technicians, outlining the process flow and functionalities.

Procedures:

1. Identify actors: Customer, Banking System, Administrator, and Technician.
2. Define use cases for the customer like Withdraw Cash, Check Balance, Transfer Funds, and Change PIN.
3. Define use cases for the banking system like Process Transactions, Validate PIN, and Update Database.
4. Define use cases for the administrator like Manage ATM Settings, Monitor Transactions, and Handle System Errors.
5. Define use cases for technicians like Maintain ATM Hardware, Troubleshoot Errors, and Perform System Updates.
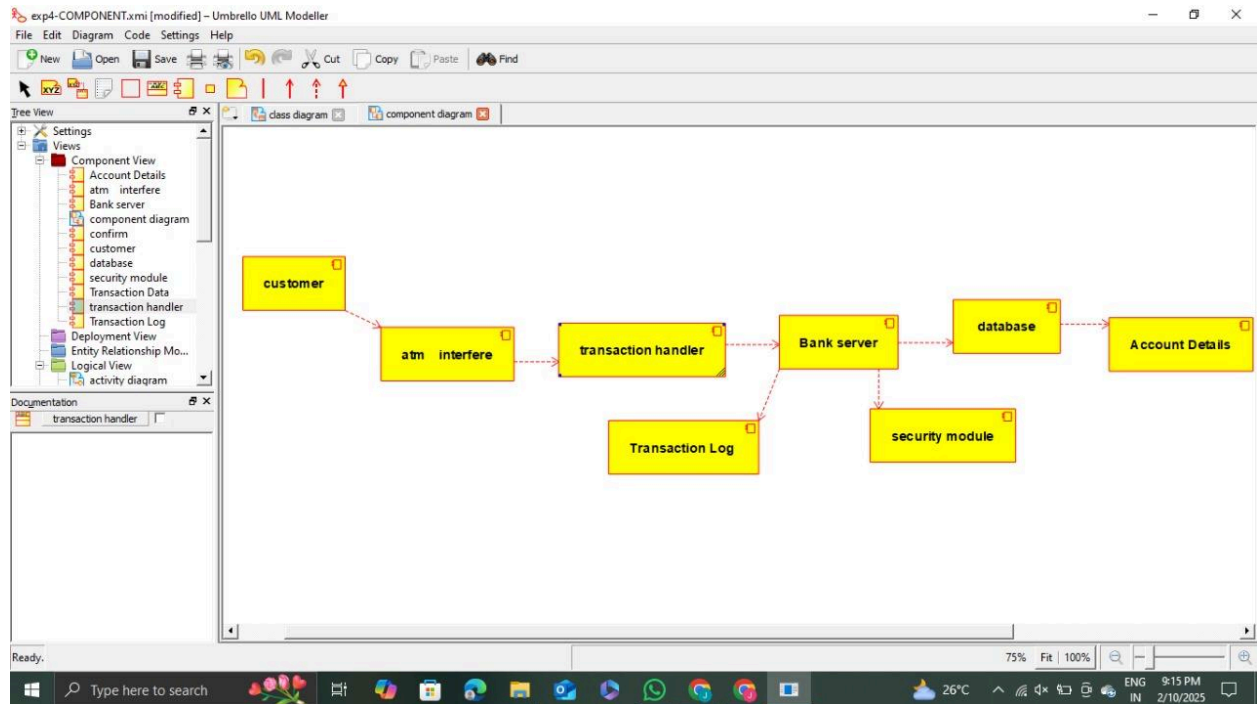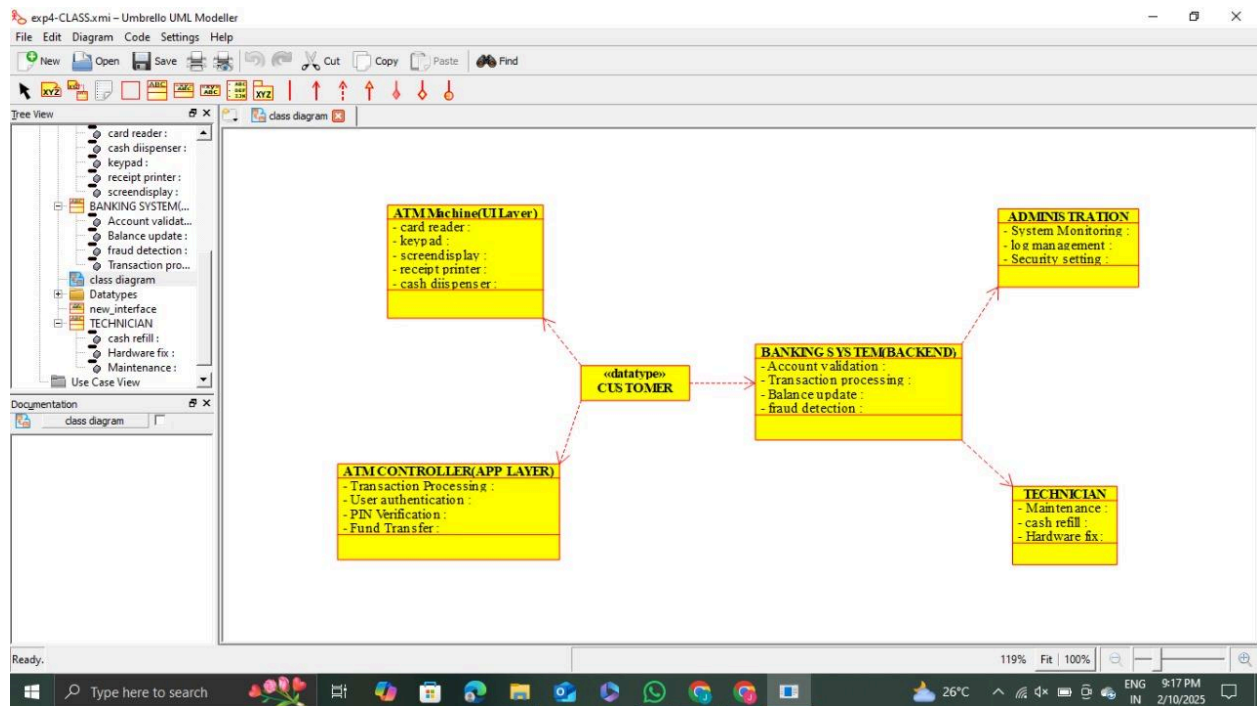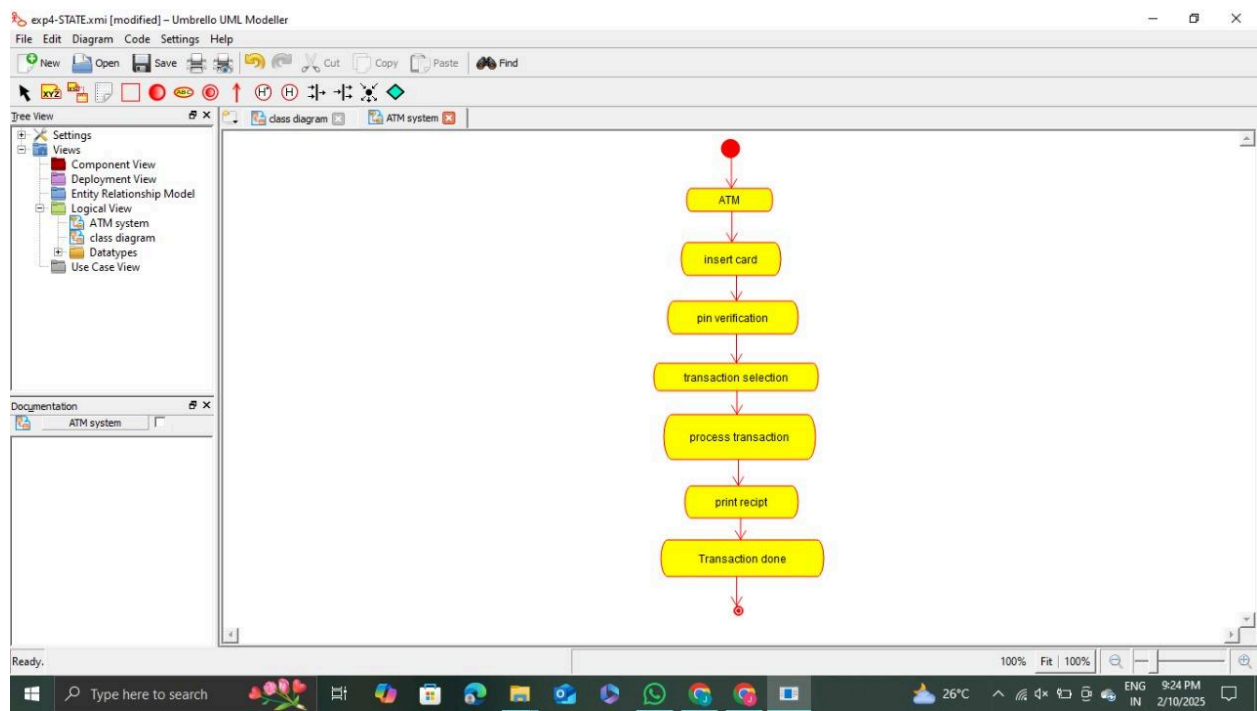
Deployment Diagram:
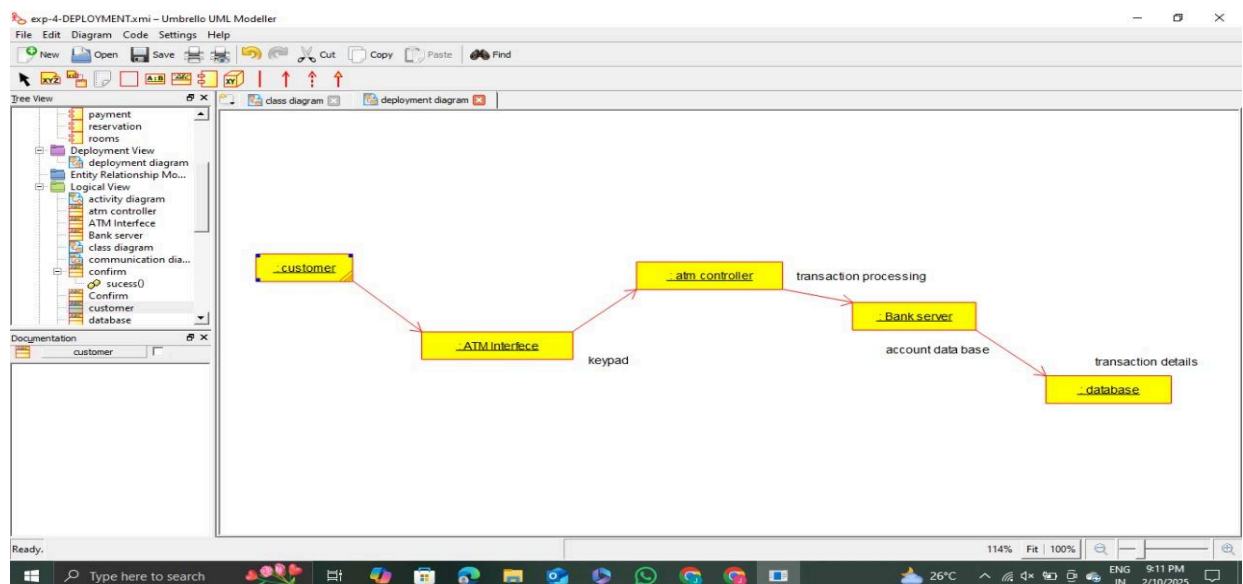
Activity Diagram:
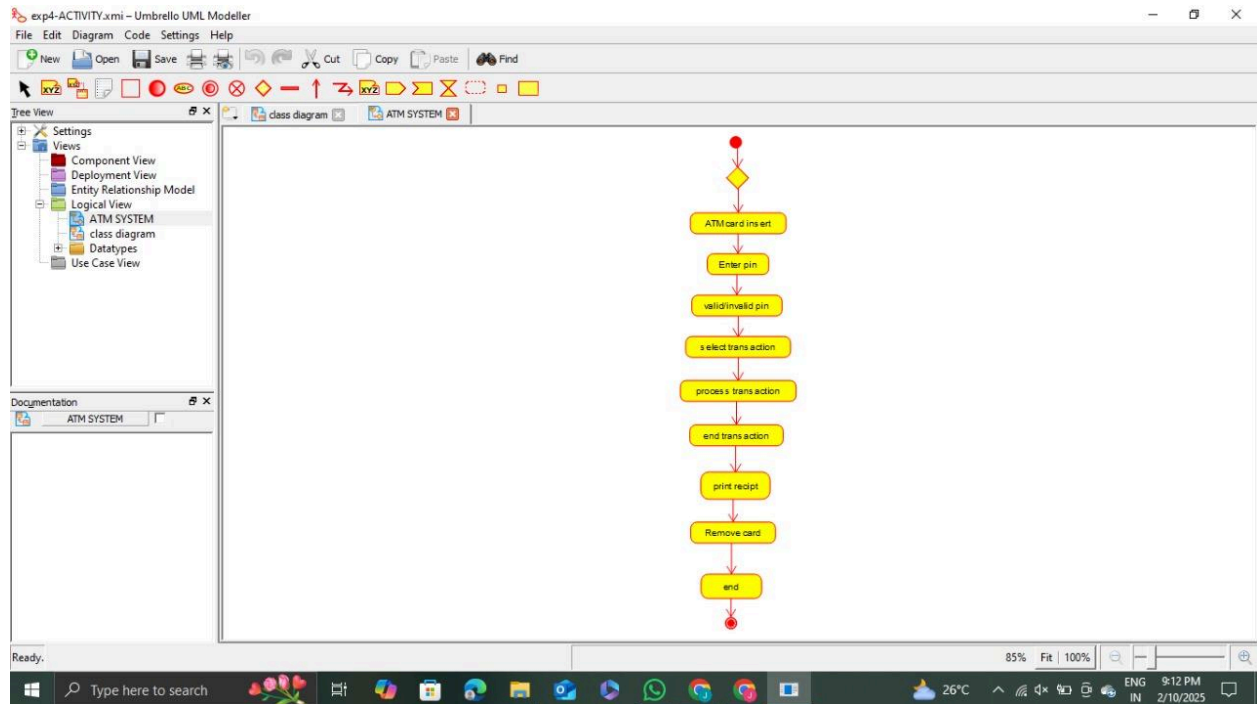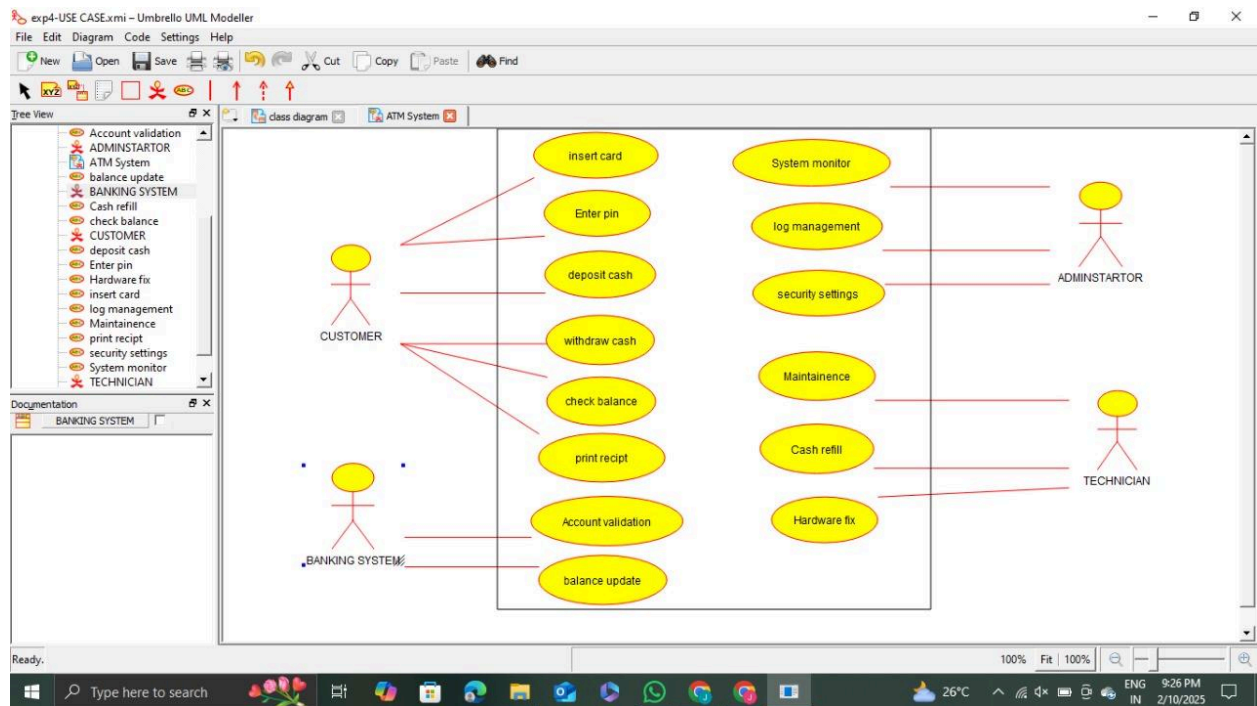

Component Diagram:
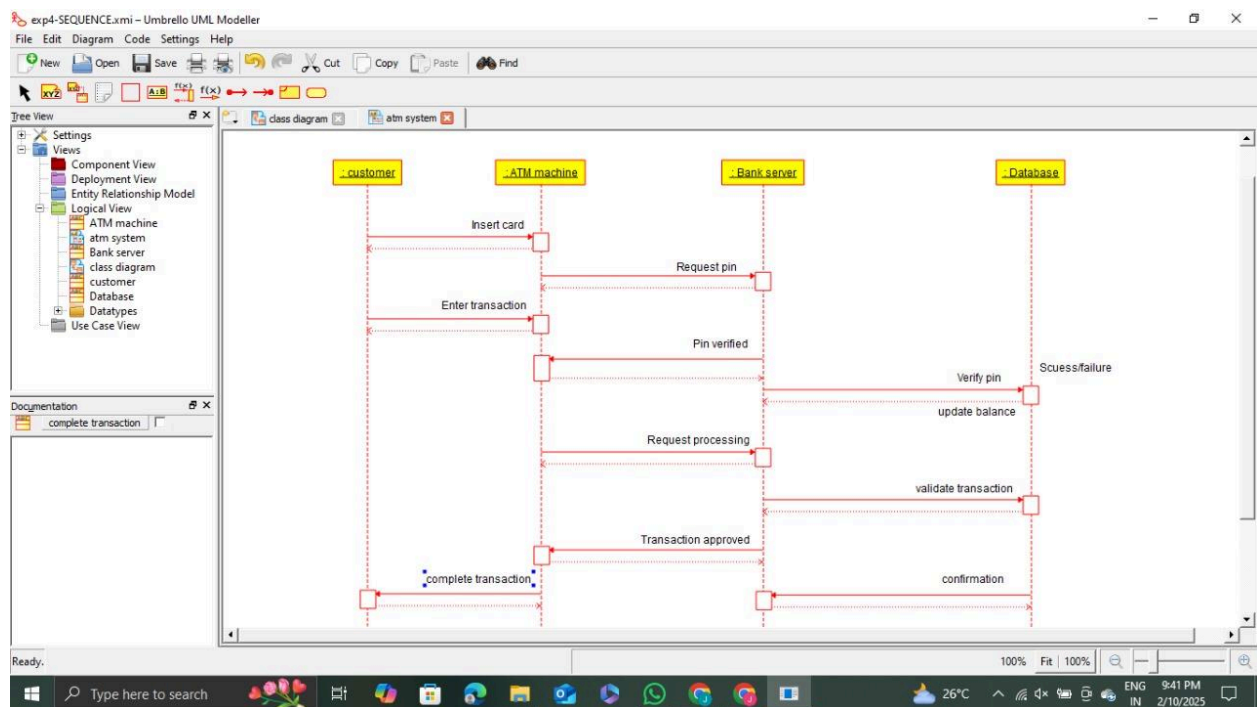
Class Diagram:

State Diagram:

Use case Diagram:

Sequence Diagram:

Result:

The UML Diagram for the ATM System was successfully developed, representing all actors, use cases, and their interactions within the system.