EXERCISE-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.

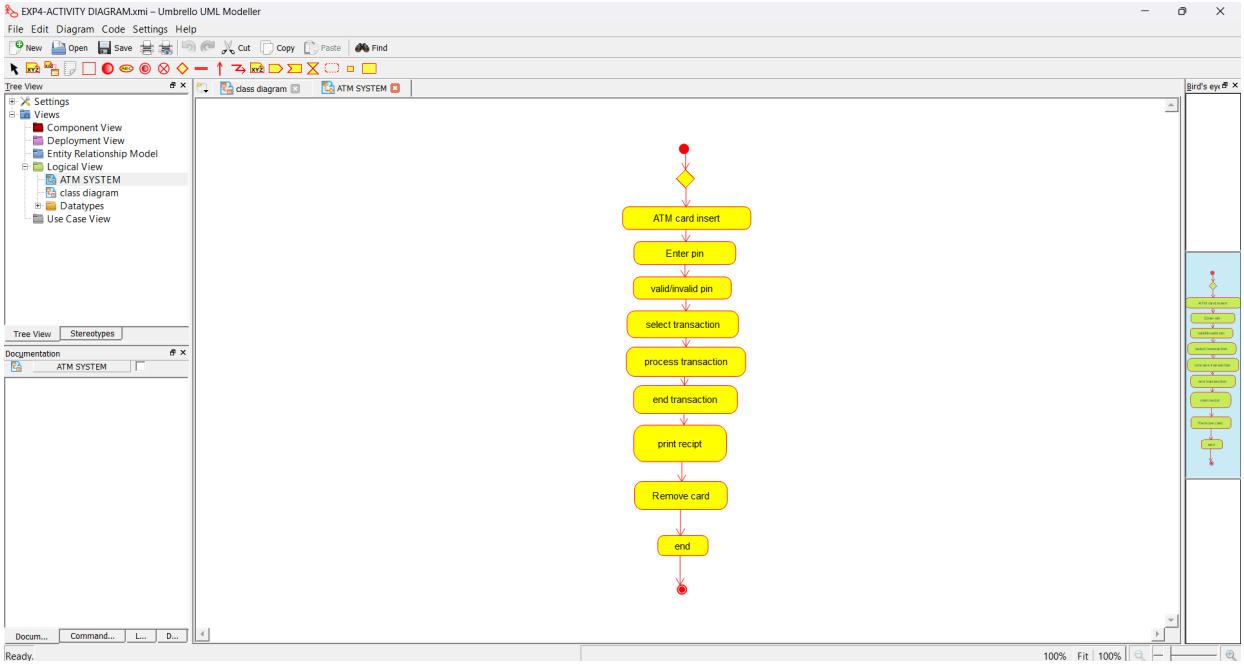
Aim:

To develop a **UML Diagram** for an **ATM System** using a CASE tool, illustrating interactions between the customer, banking system, administrator, and technicians.

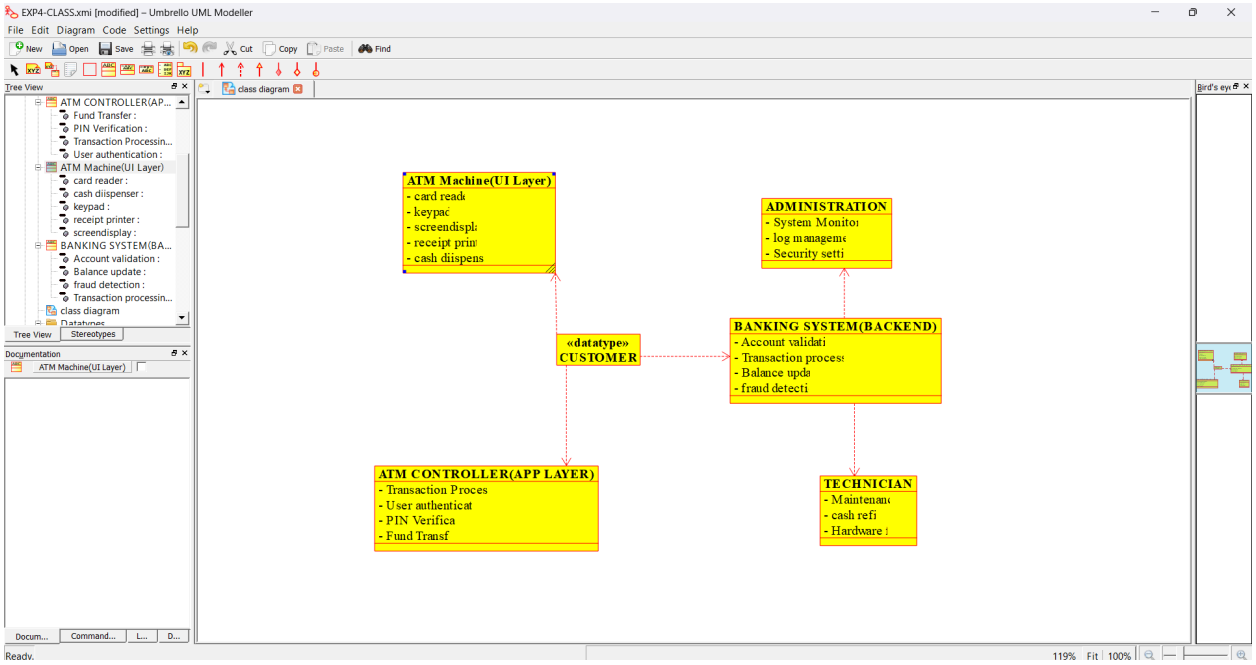
Procedure:

1. **Identify Actors** – Define key users: Customer, Banking System, Administrator, and Technician.
2. **Define Use Cases for Customer** – Include actions like Insert Card, Enter PIN, Withdraw Cash, Check Balance, Deposit Money, and Print Receipt.
3. **Define Use Cases for Banking System** – Handle customer authentication, transaction processing, and fund verification.
4. **Define Use Cases for Administrator** – Manage user accounts, set withdrawal limits, and monitor transactions.
5. **Define Use Cases for Technicians** – Perform ATM maintenance, hardware diagnostics, and software updates.
6. **Establish System Interactions** – Show how each actor interacts with the ATM system using use case relationships.
7. **Draw UML Diagram** – Use CASE tool to represent actors as stick figures, use cases as ellipses, and relationships with lines.
8. **Review and Validate** – Ensure completeness, correctness, and clarity of relationships and system functionalities.

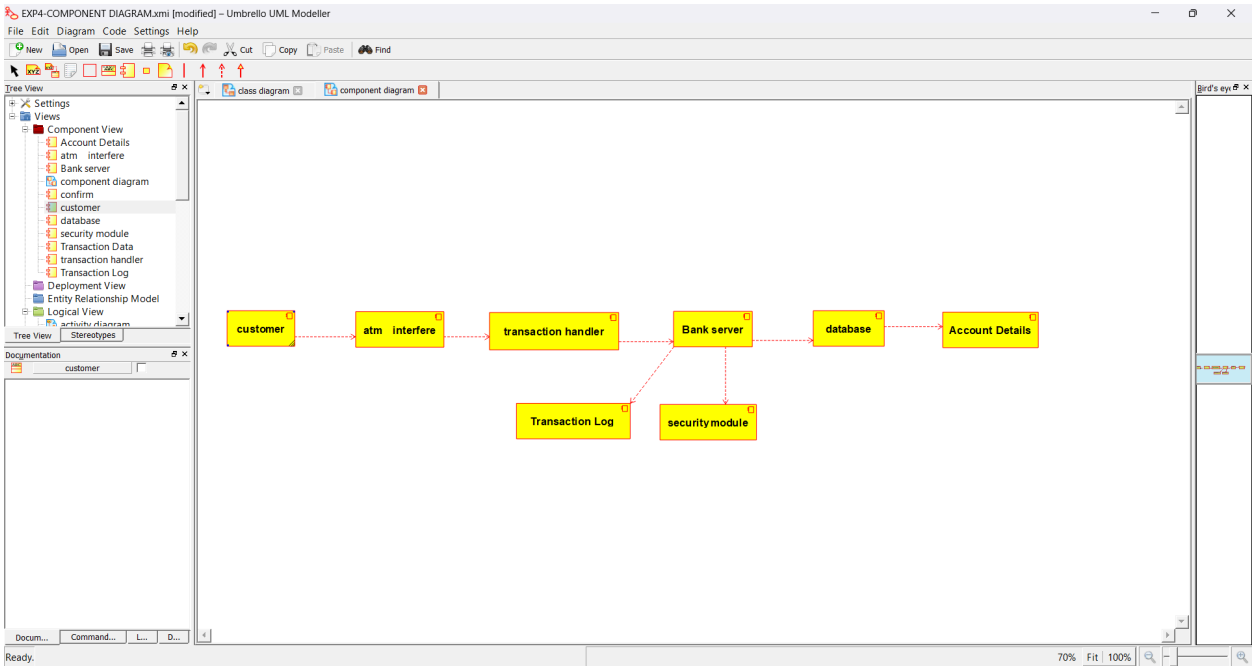
Activity Diagram:



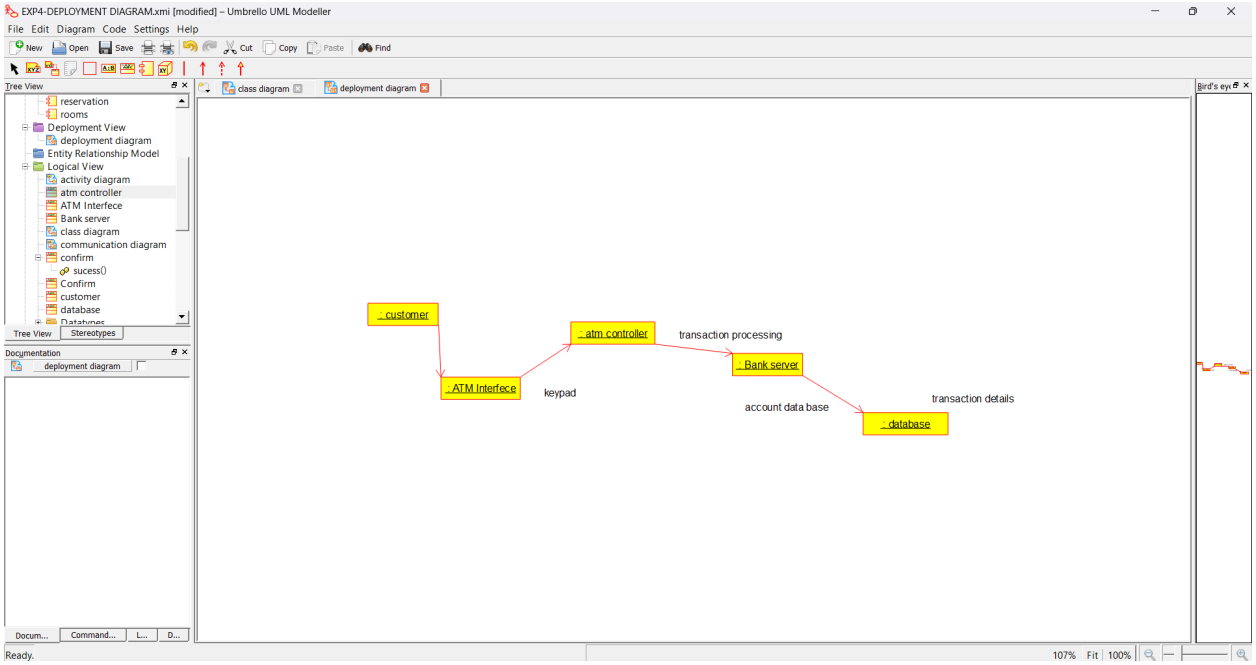
Class Diagram:



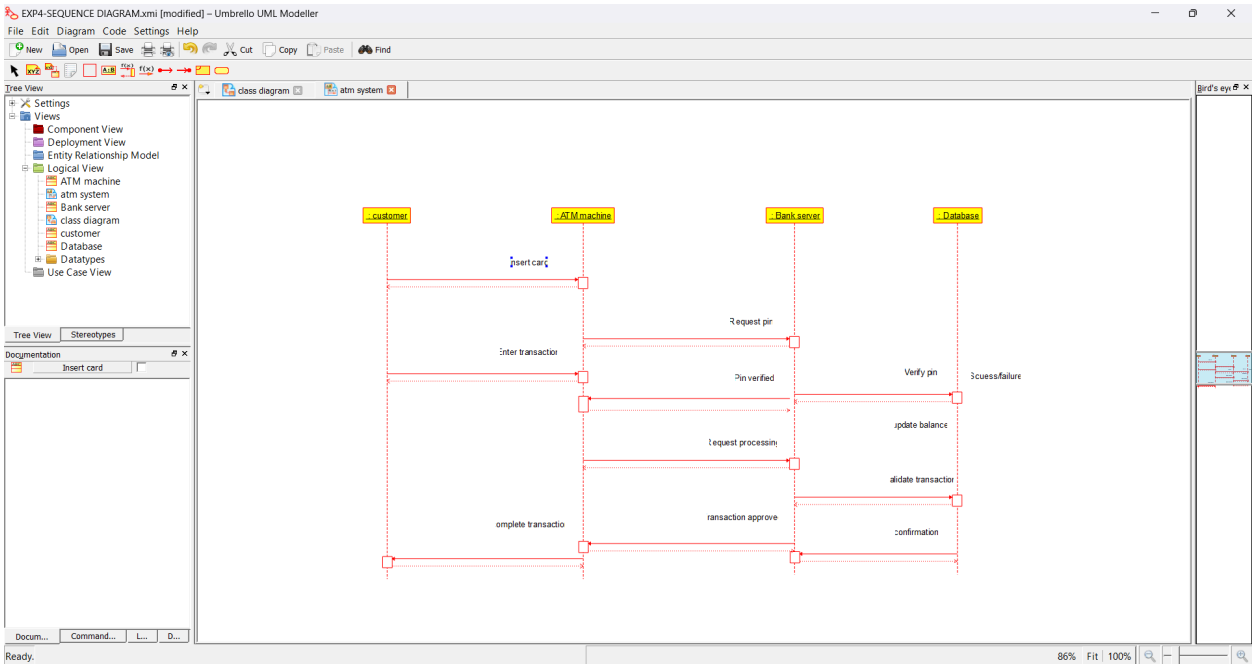
Component Diagram:



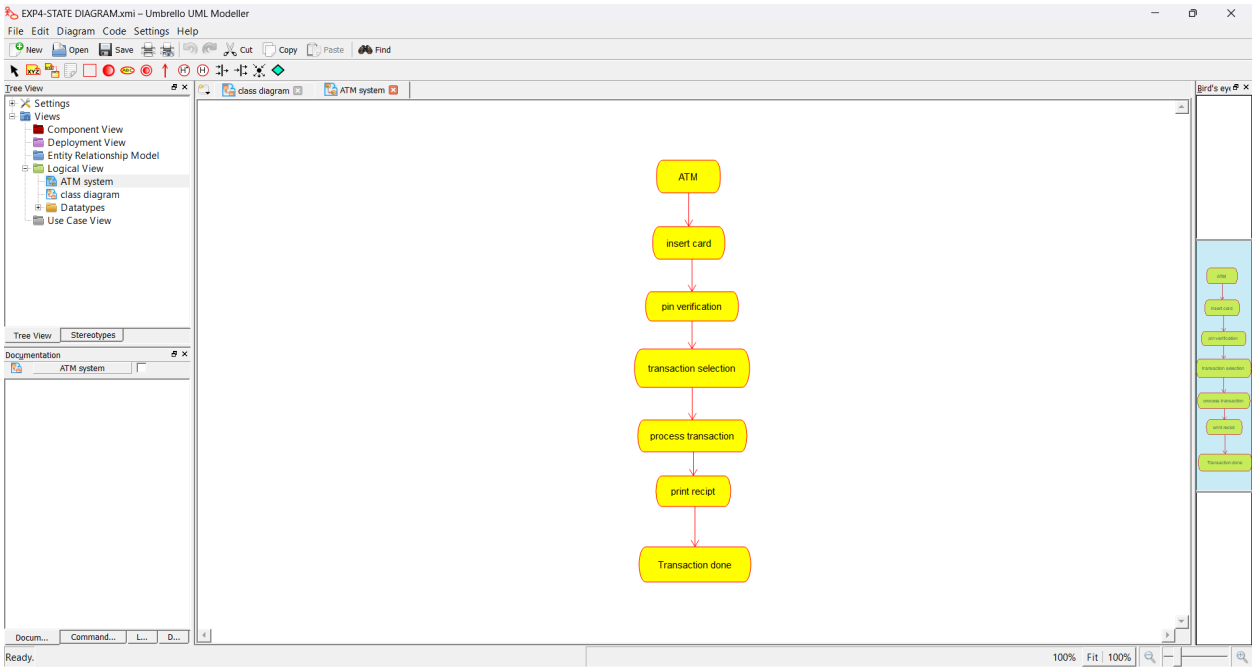
Deployment Diagram:



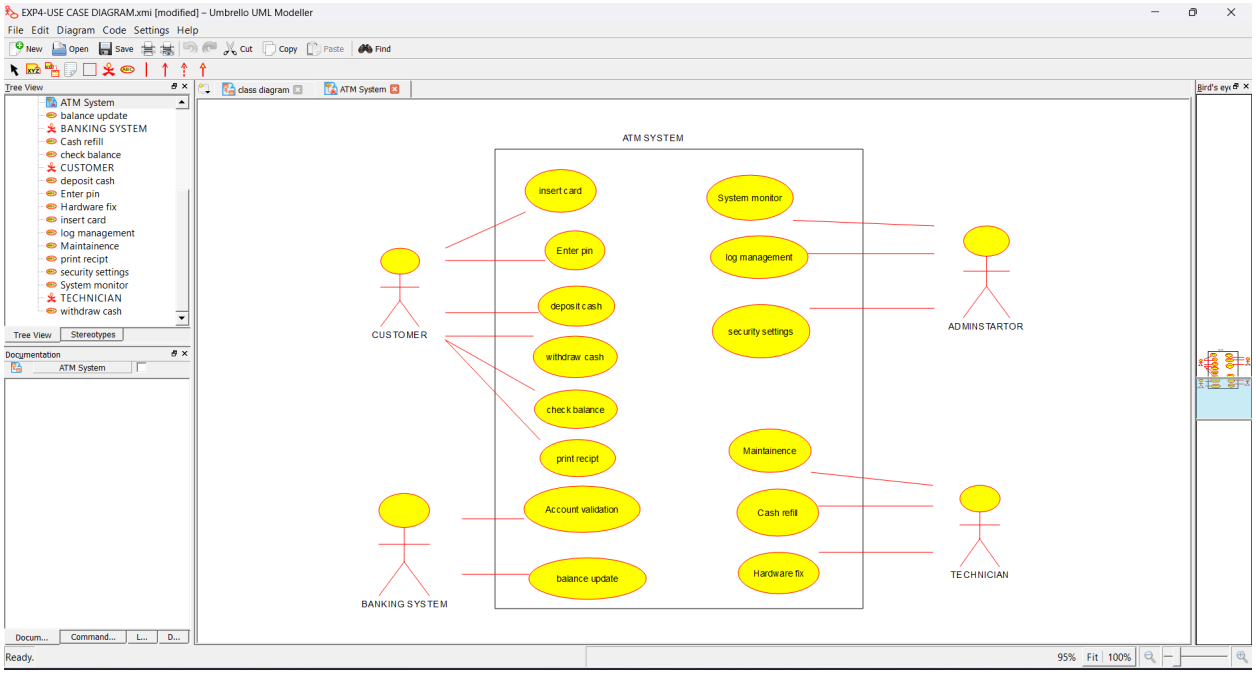
Sequence Diagram:



State Diagram:



Use Case Diagram:



Result:

A **UML Diagram** for the **ATM System** was successfully developed, detailing the roles of customers, banking system, administrator, and technicians.