MANAGEMENT INFORMATION SYSTEM LAB 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 develop a **UML Diagram** for an **ATM System** using a CASE tool, illustrating how customers, the banking system, administrators, and technicians interact with the ATM.

PROCEDURE:

1. **Identify Key Actors:**

   - **Customer**: Uses the ATM for financial transactions.

   - **Banking System**: Handles transactions and account validation.

   - **Administrator**: Manages ATM software and settings.

   - **Technician**: Maintains and repairs the ATM machine.

2. **Define the Work Each Actor Can Do:**

   - **Customer:**

      - Insert Card

      - Enter PIN

      - Check Balance

      - Withdraw Cash

      - Deposit Money

      - Transfer Funds

      - Print Receipt

      - Exit

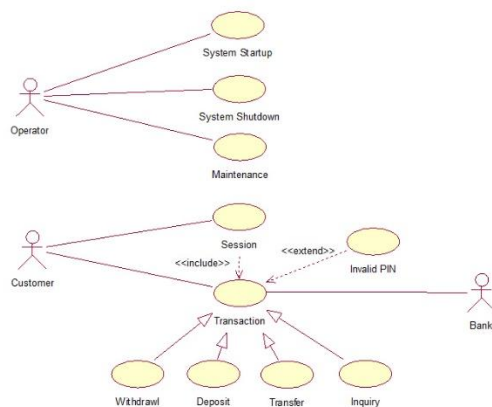   - **Banking System:**

      - Authenticate User

- Process Transactions

- Update Account Balance

- Maintain Transaction Logs

- **Administrator:**

  - Manage ATM Settings

  - Load Software Updates

  - Monitor Transactions

- **Technician:**

  - Perform Maintenance

  - Repair ATM Issues

  - Refill Cash

  - Check Hardware Status

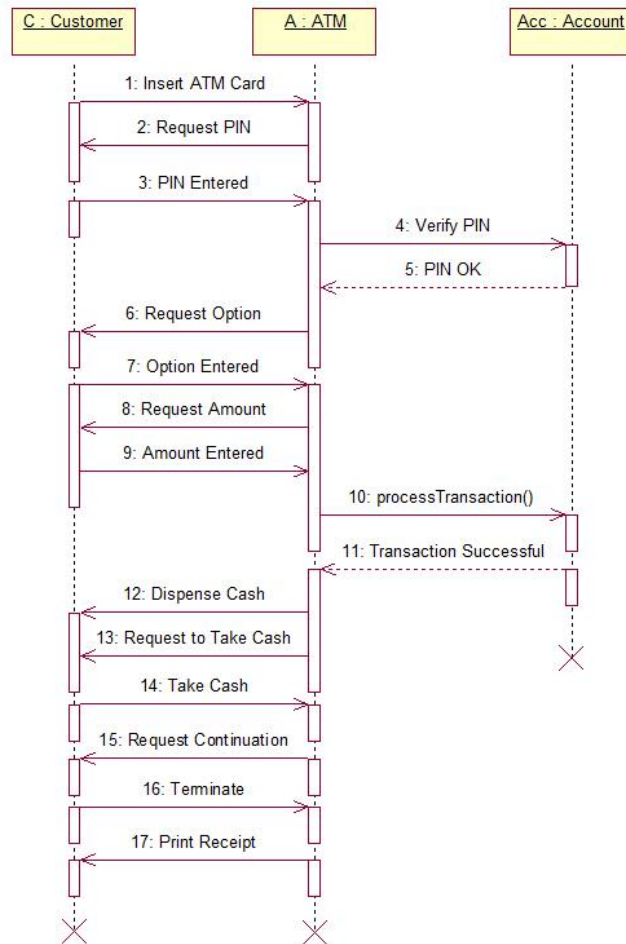3. **Establish Relationships:**

- The **Customer** interacts with the **ATM** to perform transactions.

- The **ATM System** communicates with the **Banking System** for authentication and processing.

- The **Administrator** configures and manages the **ATM System**.

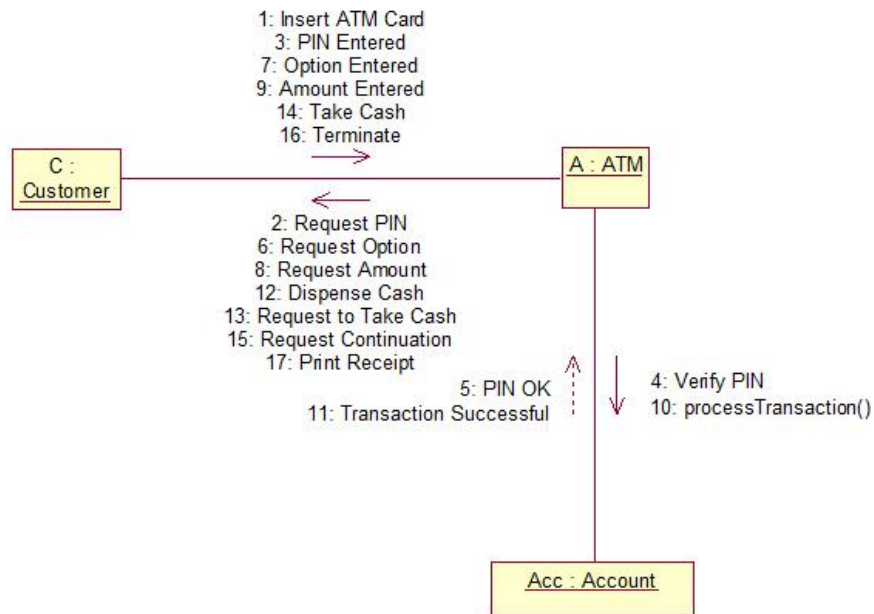- The **Technician** ensures the ATM is functional and replenished.
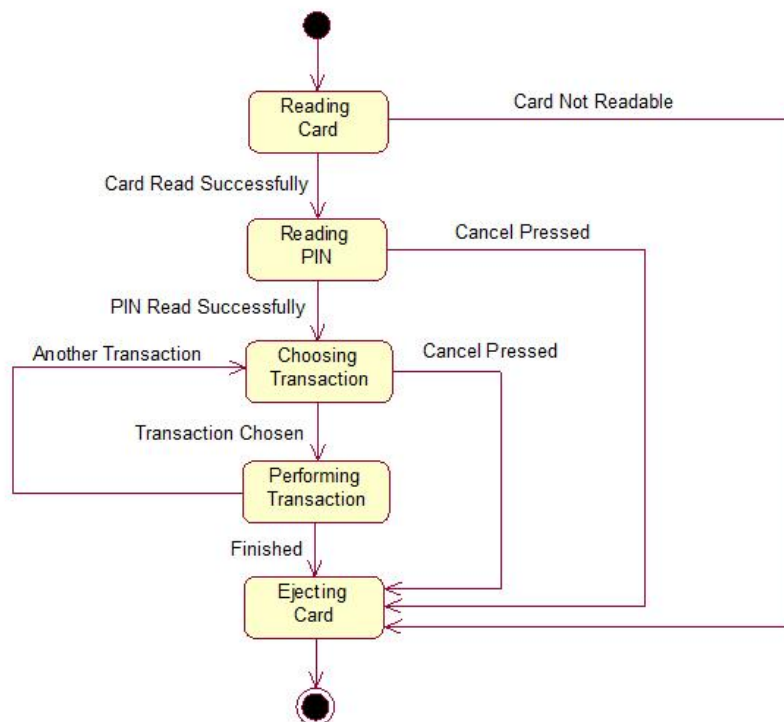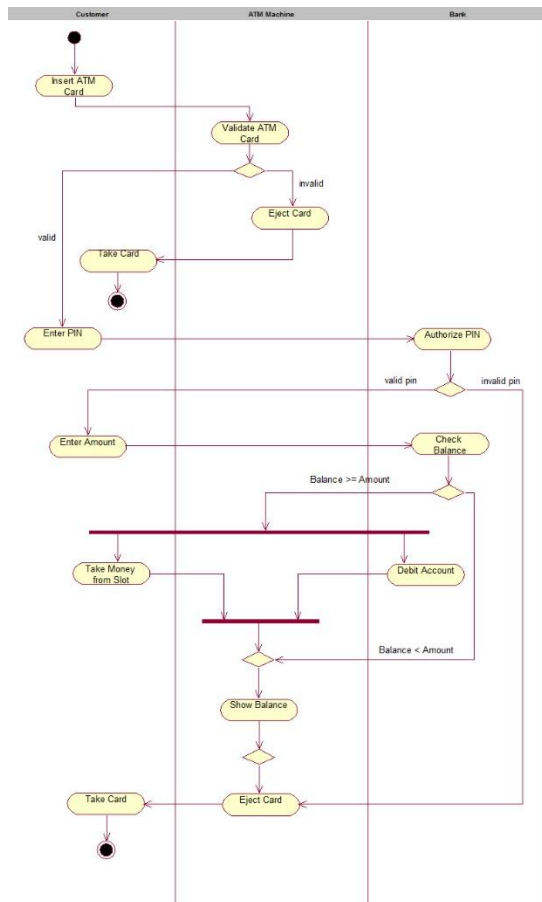

OUTPUT:

USECASE DIAGRAM:

SEQUENCE DIAGRAM:

COLLABORATION DIAGRAM:

1: Insert ATM Card
3: PIN Entered
7: Option Entered
9: Amount Entered
14: Take Cash
16: Terminate

C : Customer

A : ATM

2: Request PIN
6: Request Option
8: Request Amount
12: Dispense Cash
13: Request to Take Cash
15: Request Continuation
17: Print Receipt

5: PIN OK
11: Transaction Successful

4: Verify PIN
10: processTransaction()

Acc : Account

STATE DIAGRAM:

Reading Card

Card Not Readable

Card Read Successfully

Reading PIN

Cancel Pressed

PIN Read Successfully

Another Transaction

Choosing Transaction

Cancel Pressed

Transaction Chosen
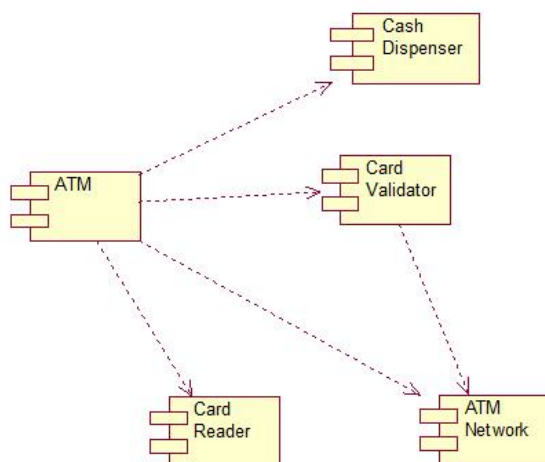
Performing Transaction

Finished

Ejecting Card

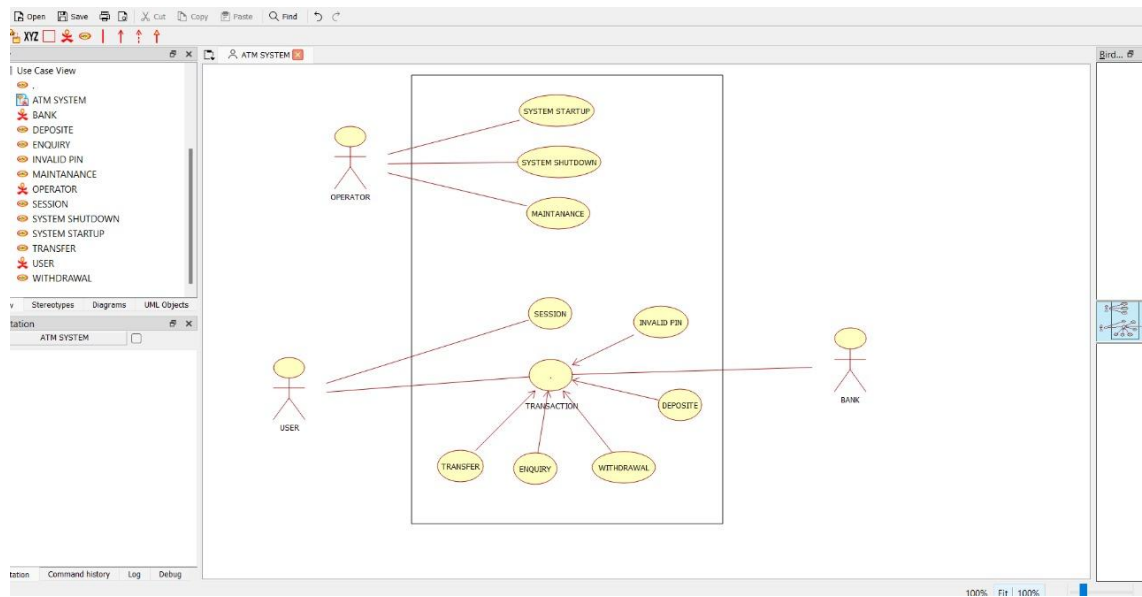## ACTIVITY DIAGRAM:

COMPONENT DIAGRAM:

ACTIVITY DIAGRAM:

RESULT:

- UML DIAGRAMS IS SUCCESFFULY DESIGNED.