SE Practical 03

1. **Draw the use case diagram and specify the role of each of the actors for the specified Case Study.**

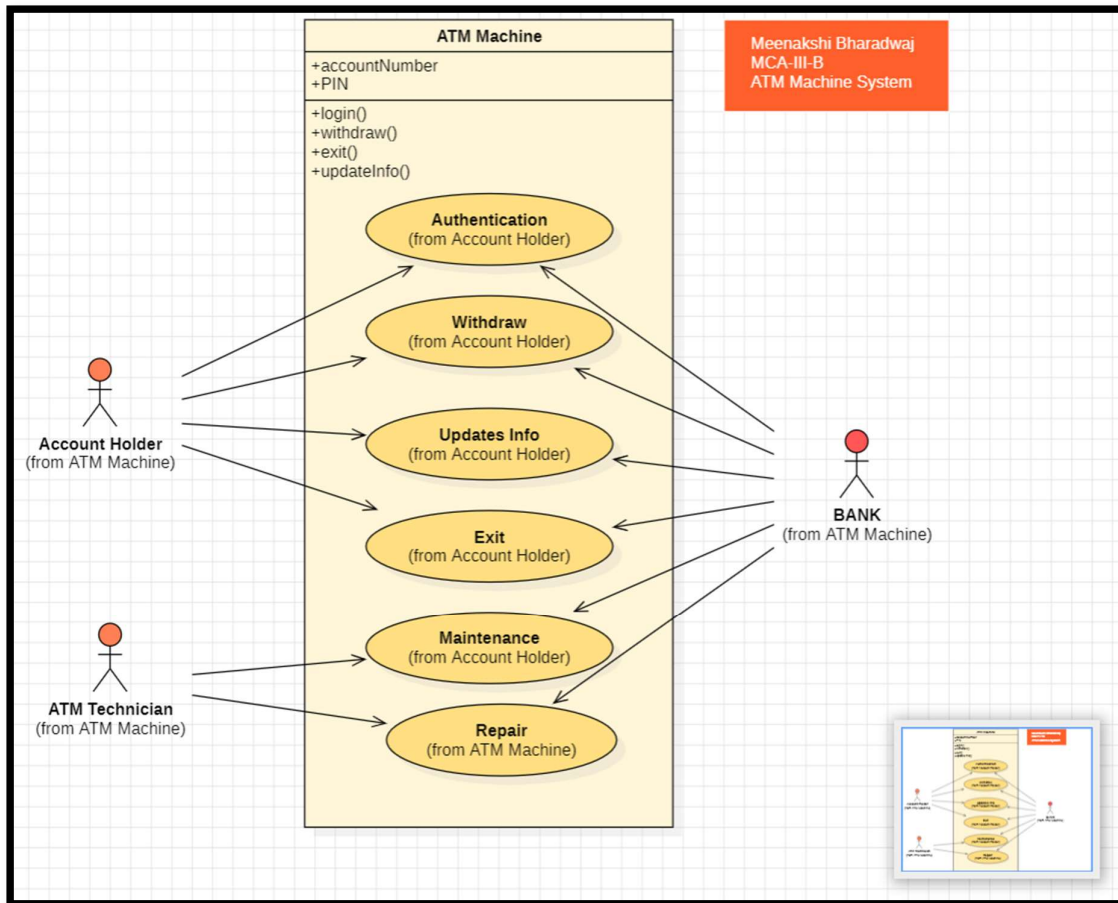For ATM Machine:

Figure 1: ATM Machine System

ACTORS:

1. **Account Holder:**
   a. Primary user of ATM system.

2. **ATM Technician:**
   a. Responsible for performing maintenance and troubleshooting on the ATM hardware and software.
   b. Ensures the ATM machine is operational by replenishing cash and addressing technical issues.

3. **Bank:**
   a. Processes and verifies all transactions initiated by the customer.
   b. Manages communication between the ATM and the bank, ensuring the security and validity of each transaction.
   c. Updates the customer's account information and ensures transaction accuracy.

Table 1: Use Case Table with Actors and their Use cases for ATM Machine System

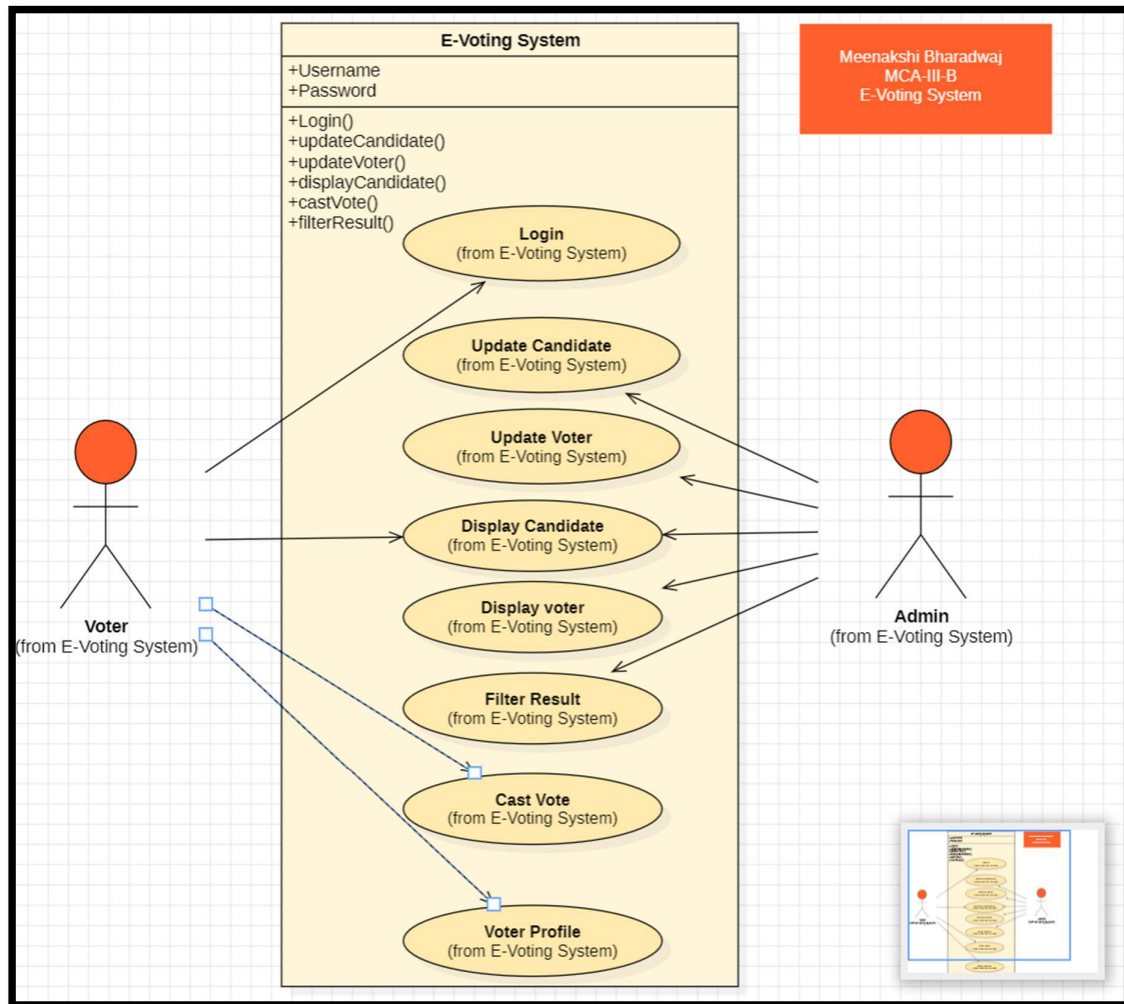| Use Case	Actor(s)	Description
Authenticate User	Customer	The ATM system verifies the user's identity by requesting a card and PIN input.
Check Balance	Customer, Bank	After authentication, the user can view their account balance.
Withdraw Cash	Customer, Bank	The user can withdraw cash from their account if sufficient funds are available.
Change PIN	Customer, Bank	The user can change their PIN to secure their account.
Print Receipt	Customer	The user can request a receipt for their transaction.
Update Account Details	Customer, Bank	The bank admin can update customer account details after customer updates it.
Block Card	Customer, Bank	The customer can request to block their card in case of loss or theft.
ATM Maintenance	Technician	A technician can perform maintenance tasks such as replenishing cash, fixing issues, or updating software.

For E-Voting System:

Figure 2: E-Voting System

ACTORS:

1. **Voter:**
   a. Primary user of the E-voting system.

2. **Administrator:**
   a. The system admin who manages voter data and election processes.

Table 2: Use Case Table with Actors and their Use cases for E-Voting System

Use Case	Actor(s)	Description
User Registration	Voter, Administrator	Voters register with the system by providing valid identification information. The administrator verifies the details.
Login	Voter	The voter logs into the system using their credentials (e.g., username, password, or other authentication methods).
Display Candidate	Voter, Administrator	The voter can view details about candidates who are participating in the elections.
Cast Vote	Voter	After logging in, the voter selects their preferred candidate and casts their vote.
Confirm Vote	Voter	The system allows the voter to review their vote before confirming it.
Logout	Voter	The voter logs out of the system after completing the voting process.
Update Voter	Administrator	The administrator can update or manage voter details such as addresses, eligibility, or corrections.
Update Candidate	Administrator	The administrator can update or manage candidate details such as addresses, election party, place of participation, or corrections.
Filter Results	Administrator	The administrator filters the results of the election after voting ends.