

## SE Practical 02

1. Prepare an SRS document in line with the IEEE recommended standards for the specified Case Study. (Non-Functional Requirements)

For ATM Machine:

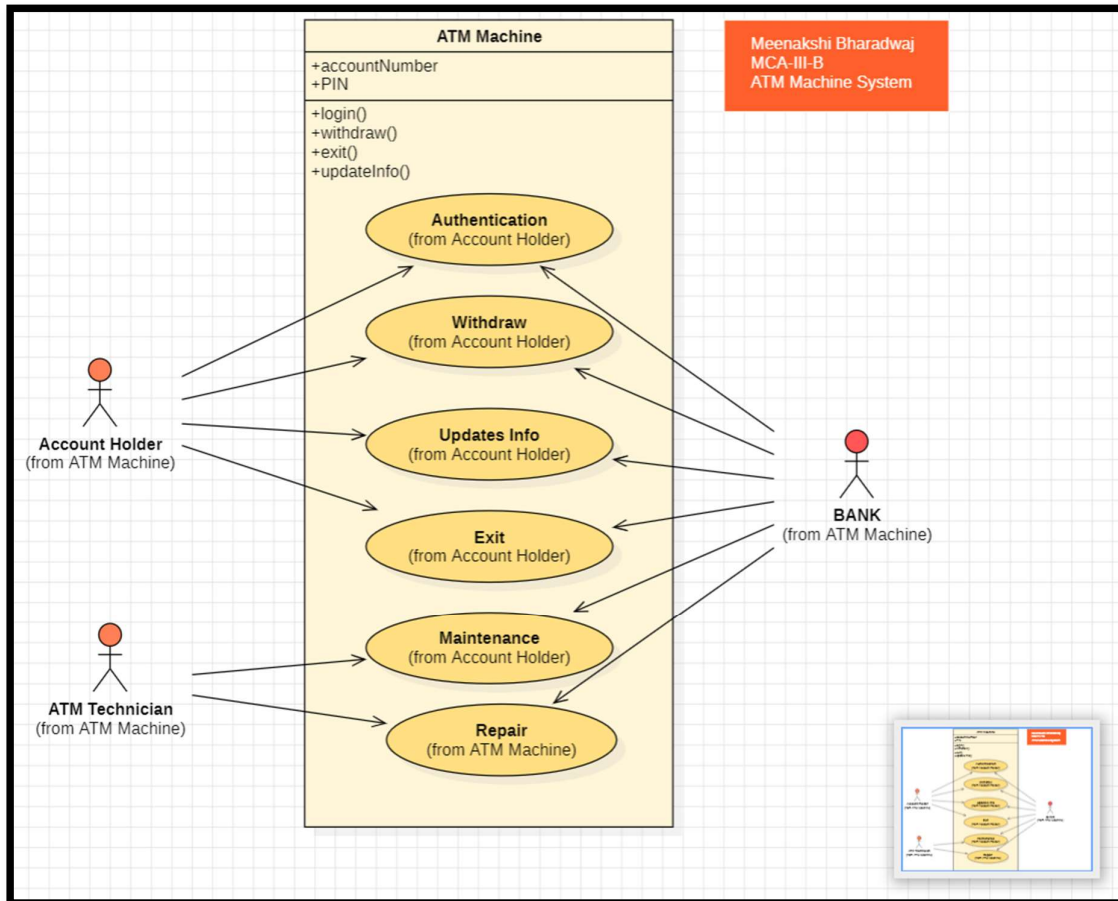


Figure 1: ATM Machine System

### Non-Functional Requirements for ATM Machine System:

#### 1. Performance Requirements

- The system shall respond to any user action within 2 seconds.
- The system shall be able to process at least 100 transactions per hour.

#### 2. Security Requirements

- The system shall encrypt all sensitive information, including PINs and account details, using industry-standard encryption protocols (e.g., AES-256).
- The system shall automatically log out users after 30 seconds of inactivity.

### 3. Availability Requirements

- The system shall be operational 99.9% of the time with minimal downtime for maintenance.

### 4. Usability Requirements

- The system shall have a user-friendly interface with simple instructions for each transaction type.
- The system shall support both English and local languages.

### For E-Voting System:

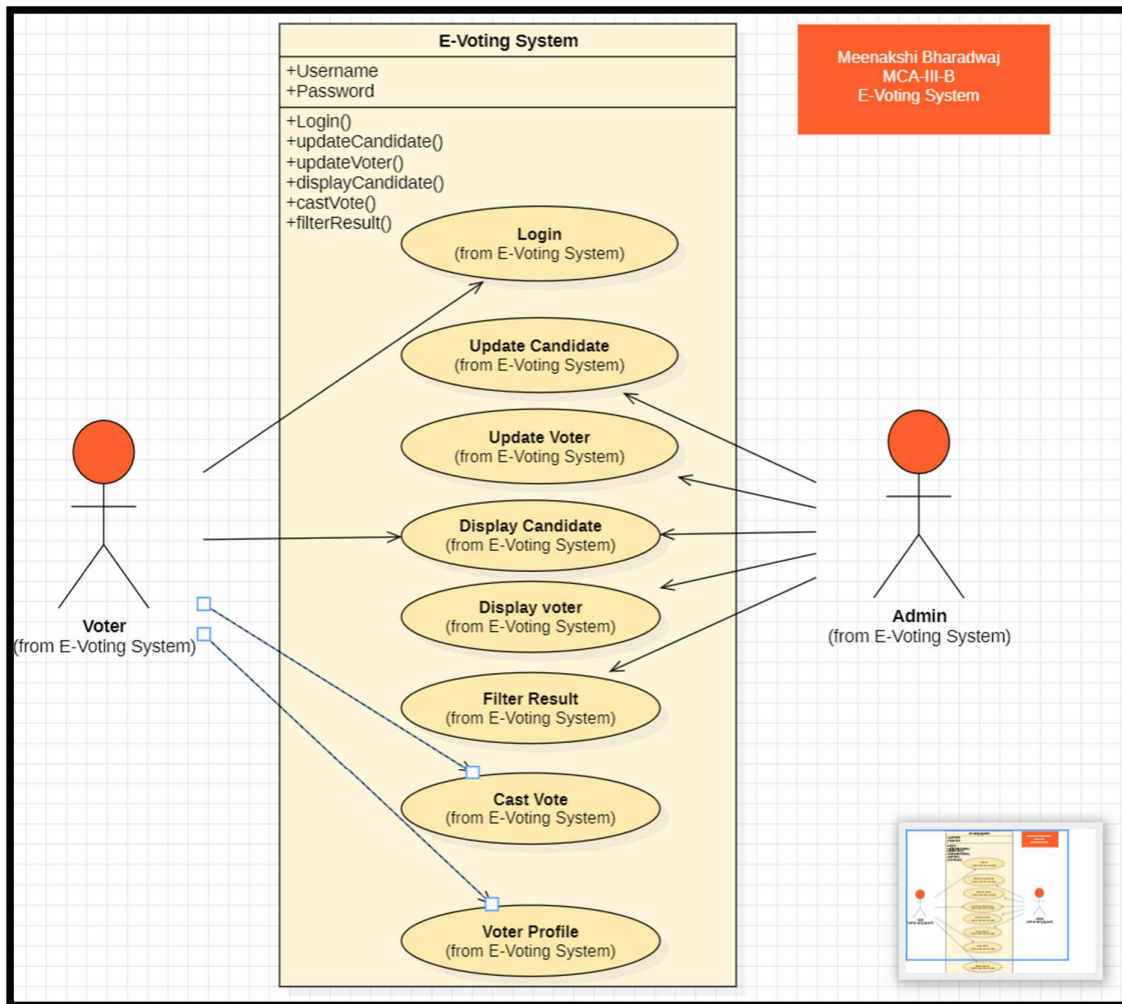


Figure 2: E-Voting System

### Non-Functional Requirements for E-Voting System:

#### 1. Performance Requirements

- The system shall support at least 10,000 concurrent users during peak voting periods.
- The system shall process vote submissions within 2 seconds.

## **2. Security Requirements**

- The system shall ensure that voter data and votes are encrypted using AES-256 encryption.
- The system shall implement multi-factor authentication for both voters and administrators.
- The system shall comply with all national election security standards.

## **3. Availability Requirements**

- The system shall maintain 99.99% uptime during the election period.
- The system shall provide real-time monitoring to ensure no interruptions occur during the election.

## **4. Usability Requirements**

- The system shall provide an intuitive and user-friendly interface for voters, accessible on both desktop and mobile platforms.
- The system shall be available in multiple languages depending on the region of operation.

## **5. Scalability Requirements**

- The system shall be scalable to handle elections at a national level with millions of users.

## **6. Data Integrity**

- The system shall ensure that data entered by voters during registration and voting is stored without any loss or corruption.