

**USE CASE:** provide ATM user with money.

**Scope:** ATM software application.

**Level:** user goal.

**Primary actor:** bank customer.

**Stakeholders and interests:**

1. Bank customer
  - a. Access to all funds in both their savings and checking.
  - b. Deposit checks.
  - c. Check balance.
  - d. Receive a receipt.
2. ATM
  - a. Provide funds available to customers.
  - b. Automatically update fund changes immediately.
  - c. Protect the bank and the customer from false cards or PINs.
3. Bank home office computer
  - a. Provide accurate account funds information.
  - b. Update immediately when a transaction occurs system wide.
4. Fraud department
  - a. If sent card information they will verify if the card is stolen.

**Preconditions:**

1. A valid card is entered.
2. A valid PIN is entered that matches with the card.

**Post conditions:**

1. Customer is happy with the transaction.
2. The transaction is disseminated to all bank systems.
3. A photo of the customer is taken.
4. Receipt is generated.
5. Card is provided back to the customer.

### Main success scenario:

1. The **ATM** displays a message on a screen identifying itself to **customer**.
2. The **customer** inserts his **card**.
3. The **ATM** verifying the legitimacy of the **card**.
4. The **bank computer** verifying the legitimacy of the **card**.
5. The **ATM** takes a photo of the **customer**.
6. The **ATM** requests that the **customer** enter the PIN.
7. The **ATM** verifies the legitimacy of the PIN.
8. The **ATM** asks the **customer** whether he want to remove funds or make a deposit.
9. If the **customer** requests to remove funds, the **ATM** asks if funds should be removed from checking or savings.
10. **Customer** decides which **account** to remove funds from.
11. The **ATM** asks the **customer** how much money to remove from the checking **account**.
12. The **customer** enters the amount to remove.
13. The **ATM** asks the **bank computer** to verify if funds are available.
14. The **bank computer** locks down the **account** from other **transactions**.
15. The **ATM** informs the **customer** that the **transaction** is being processed.
16. The **ATM** provides the specified funds to the **customer**.
17. The **ATM** asks the **customer** if he would like another **transaction**.
18. The **ATM** repeats steps 8 to 16 until the **customer** is finished.
19. The **bank computer** is informed of the **transaction**.
20. The **customer** receives the receipt.
21. The **customer** receives his **card**.

### Nouns:

1. **Customer.**
2. **ATM.**
3. **Transaction.**
4. **Bank computer.**
5. **Card.**

## **6. Account.**

## **7. Bank network.**

### **Extensions:**

- \*1. At any time if the ATM runs out of funds
  - a. Display a closed message.
  - b. Shutdown the machine.
  - c. Send a message that a technician needs to fill the ATM with funds.
- \*2. At any time if the ATM runs out of paper
  - a. Display a closed message.
  - b. Shutdown the machine.
  - c. Send a message that a technician needs to fill the ATM with paper.
- 3a. The card is from another bank
  - 1. Connect to the other bank to verify funds.
    - a. The other bank isn't reachable
      - 1. Inform the customer that a transaction can't be made.
      - 2. Provide the customer with his card.
      - 3. End transaction.
      - 4. Provide the customer with a receipt.
    - b. The other bank is reachable
      - 1. If the customer must pay a fee inform him of that.
        - a. Receive verification that the customer understands any fees.
          - 1. Add the fee as a part of the transaction if the customer allows.
        - 2. If the customer declines record that and provide the customer with his card and receipt.

### **Special requirements:**

- 1. The text must be readable by the color blind people.

2. The text must be readable by people who speaks other languages.

#### Data variation list:

1. All data uses 256 AES encryption.

#### Frequency occurrence:

- . Could be constantly.

#### Miscellaneous:

1. Is there anything we can do to improve user experience for the blind.
2. Can polarized screens help improve security?