

Automatic Teller Machine Simulator - Alistair Cockburn Format - Common Fully Dressed Usage case

Use Case: Provide Customer with cash from savings/checking accounts

Scope: ATM software

Level: User Goal

Primary Actor: Bank Customer

Stake holders:

1. Bank Customer
 - a. Inserts valid ATM Card
 - b. Provides valid PIN
 - c. Select a bank account with funds
 - d. Select amount less than total amount in bank account
 - e. collects cash
2. ATM
 - a. Validates ATM card
 - b. validates PIN
 - c. Connects to the Bank server
3. Bank Server
 - a. validate account selected
 - b. validate amount entered

Preconditions:

- Machine is ready to receive card (Machine is powered, Machine has network connection to bank server and card reader flashes green)
- Valid card
- valid PIN

Post Conditions:

- Customer account is updated with changes
- Disburse requested cash amount to Customer in a secured manner
- Print receipt reflecting amount cashed out by customer
- Customer is happy, bank is happy

Main Success Scenario:

01. Customer inserts an ATM card into the card reader of ATM
02. Card is validated by the system
03. PIN is requested from Customer
04. Customer provides PIN
05. PIN is validated by the system
06. Customer is asked to select a bank account
07. Customer selects a bank account
08. Customer is prompted for the amount to withdraw from the selected bank account
09. Customer enters amount to withdraw either in \$10 or \$20
10. Amount is validated by the Bank
11. System begins a transaction
12. Amount is disbursed
13. Customer is prompted if he wants another transaction
- 13a. Customer says yes, and is taken back to -Customer is prompted for the amount to withdraw
- 13b. Customer says no, card is ejected
14. Receipt is printed and emitted
15. Machine is ready to receive another customer

Extensions

- card is invalid
 - reject card and notifies customer
- card is stolen
 - swallows card and notifies bank
- PIN is invalid
 - prompt again and swallows card and three wrong attempts
- Amount is more than amount available in bank account
 - inform customer
- Amount not available in the machine
 - inform customer and indicate the limit
- ATM out of paper
 - display notice on screen - out of service
 - don't take any cards
- ATM out of cash
 - display notice on screen - out of service
 - don't take any cards

- ATM can't connect to bank server
 - display notice on screen - out of service
 - don't take any cards

Special Requirements

- All characters must be legible within 1 meter from the ATM
- Delays of not more than 30 seconds for all responses

Data Variation List:

- All data should be 256-bit AES encryption

Miscellaneous:

- Anything we can do to improve user experience