

Customer Gets Cash from an ATM

Primary Actor

Customer of a bank who has an ATM card

Actor's Goals

Customer needs cash

Scope

Anywhere there is an ATM

Stakeholders and Their Interests

1. Customer's bank wants to account for the ATM transaction
2. ATM vendor wants to provide cash in a secure manner
3. ATM vendor wants to account for the transaction
4. ATM vendor wants to be paid a fee for the transactions

Assumptions

1. Customer has an ATM card
2. The ATM is working properly

Action Preconditions

1. Customer located an ATM and approached it

Action Post-Conditions

1. Customer walked away from ATM

Minimum Guarantees the System Ensures

1. ATM scanned the customer's ATM card

Success Guarantees the System Ensures

1. Customer received cash
2. ATM logged the transaction

Triggers

1. Customer needs cash

Main Course of Events

1. Customer runs ATM card through card reader
2. ATM reads the bank ID and account number
3. ATM asks customer for whether to proceed in Spanish or English
4. Customer selects English
5. ATM asks for PIN number and to press Enter
6. Customer enters PIN number and presses Enter
7. ATM validates PIN with bank ID and account number
8. ATM presents list of activities for Customer to perform
9. Customer selects "withdraw cash"

10. ATM asks customer to select amount of cash in multiples of \$5 from a menu of buttons
11. Customer selects the amount and presses Enter
12. ATM notifies banking system of customer account and the amount being withdrawn
13. Banking system accepts the withdrawal and tells ATM the new balance
14. ATM delivers the cash
15. ATM asks if customer would like a receipt
16. Customer replies "yes"
17. ATM issues receipt showing new account balance and amount withdrawn
18. ATM logs the transaction

Alternative Paths

11. Customer enters a specific amount for withdrawal
 - a. ATM confirms amount is a multiple of \$5
 - i. Amount is not a multiple of \$5: repeat Main Course, step 10
 - b. Continue with Main Course, step 12
16. Customer replies "no"; continue with Main Course, step 18

Exception Paths

11. ATM does not have adequate cash for the transaction
 - a. ATM notifies Customer of inadequate available cash
 - b. Repeat Main Course, step 10
13. Banking system rejects the withdrawal
 - a. ATM notifies Customer of rejection
 - b. Repeat Main Course, step 8

Technology and Data Variations

1. ATM does not respond to the Customer

Response Time

ATM should respond within 10 seconds of a Customer interaction

Frequency of Use

Varies widely; a customer may visit an ATM 1 – 2 times each week, or once every six months. An ATM should handle up to 500 transactions per day

Communication Channel to Primary Actor

Customer recognizes he or she does not have adequate cash for an anticipated disbursement

Secondary Actors and Communications to Them

Customer contacts bank if he or she has a question regarding the transaction

Business Rules

1. Customer withdrawal amount cannot exceed bank balance
2. Entered PIN must match Customer PIN assigned to the account
3. Fees may be assessed as part of a successful withdrawal
4. ATM offers money in increments of \$5 up to a maximum of \$200 per withdrawal

Open Issues

1. Where in the Main Course or Alternative Paths should "fees" be addressed?
2. Are there limits to the number of times a Customer may withdraw within a specific period?

Owner

Consumer Transactions