Use Case Specification Document

Use Case ID: UC01

Use Case Name: cash withdraw at the bank

Relevant Requirements:

-the customer should have an account

-The maximum valid withdraw amount should be within limit set by bank

Primary Actor: bank clerk

Pre-conditions:

-The customer has an account in the bank

-The bank has cash available

Post-conditions:

The customer successfully withdraw money and their account balance gets updated

Basic Flow or Main Scenario:

1 Ask to enter the bank account number

2 The clerk enters the customer account number

3 Check if given account number exists

4 Ask for PIN number and verify

5 Ask to enter the withdraw amount

5 The clerk enters the amount

6 The clerk gives the money to the user

7 Update the customers bank balance and bank cash amount

8 Print receipt of transaction

9 The use case ends successfully.

Exceptions:

Invalid account number:

-if bank account number is invalid then display the message on screen and ask to re-enter

Invalid pin:

-if invalid pin is entered then display invalid pin message and ask to re-enter

Invalid amount:

-if entered amount exceeds customer's account balance then display message and ask to re -enter the amount

Exceeds withdrawal limit

-allow to withdraw money within the withdraw limit of bank

-if amount entered exceeds bank withdraw limit then display message and ask to re -enter the amount

Insufficient Cash

-Bank runs out of cash and tell user to not able to process their request

Quit

-cancel the withdraw transaction and end the process

Related use cases: In this use case, the clerk interacts with the system to withdraw money from the requested account.

Use Case ID: UC02

Use Case Name: Check account balance at the bank

Relevant Requirements:

-the customer should have account in the bank

Primary Actor: bank clerk

Pre-conditions:

-The customer has an account in the bank

Post-conditions:

The clerk is able to check customer's current bank balance

Basic Flow or Main Scenario:

1 Ask to enter the bank account number

2 The clerk enters the customer account number

3 Check if given account number exists

4 Ask for PIN number and verify

5 The clerk gets current balance of requested account

6 The use case ends successfully.

Exceptions:

Invalid account number:

-if bank account number is invalid then display the message on screen and ask to re-enter

Invalid pin:

-if invalid pin is entered then display invalid pin message and ask to re-enter

Quit

-user decide to not check their account balance and end the process

Related use cases: In this use case, the clerk interacts with the system to check the balance of the requested account.

Use Case ID: UC03

Use Case Name: Make deposit using check or cash at the bank

Relevant Requirements:

-The user should have an account in the bank

-The maximum valid amount to deposit should be within limit set by bank

Primary Actor: bank clerk

Pre-conditions:

-The user has an account in the bank

Post-conditions:

The clerk successfully deposit amount to given account number

Basic Flow or Main Scenario:

1 Ask to enter the bank account number

2 The clerk enters the customer account number

3 Check if given account number exists

4 Ask for PIN number and verify

5 Ask if its cash or check

6 Ask to enter the amount

7 The clerk enters the amount

8 The clerk take money from customer and bank cash get updated if its cash

9 Update the customers bank balance

10 Print receipt of transaction

11 The use case ends successfully.

Exceptions:

Invalid account number:

-if bank account number is invalid then display the message on screen and ask to re-enter

Invalid pin:

-if invalid pin is entered then display invalid pin message and ask to re-enter

Invalid amount:

-if user enter amount that exceeds user account balance then display message and ask to re -enter the amount

Exceeds deposit limit

-allows to deposit money within the deposit limit of bank

-if amount entered exceeds bank deposit limit then display message and ask to re -enter the amount

Quit

-user can decide to quit at any stage and end the process

Related use cases: In this use case, clerk interacts with the system to deposit money to the given account number.

Use Case ID: UC04

Use Case Name: open new account

Relevant Requirements:

-The customer should provide personal information: ID, social security number, birthday, current address

-Check if customer have other accounts with the bank

Primary Actor: clerk

Pre-conditions:

-The customer should able to provide ID, social security number, current address

Post-conditions:

-The customer successfully opened new account

Basic Flow or Main Scenario:

1 Ask the type of account to open

2 Ask to enter the personal information: ID, social security number, birthdate, current address

3 Verify the personal information

4 The use case ends successfully.

Exceptions:

Invalid ID

-check if user ID is correct otherwise ask to re-enter

Invalid social security number

-check if user SSN is correct otherwise ask to re-enter

Invalid birthdate

-check if user birthdate is correct otherwise ask to re-enter

Invalid address

check if user address is correct otherwise ask to re-enter

Quit
-If user is not able to provide personal information then end the process.

Related use cases: In this use case, clerk interacts with the system to open a new account

Use Case ID: UC05

Use Case Name: close an account

Relevant Requirements:
-customer should be able to verify their identity
-customer should provide valid account number

Primary Actor: clerk

Pre-conditions:
-customer should be able to verify their identity
-customer should provide valid account number

Post-conditions:
The customer successfully closed their account

Basic Flow or Main Scenario:
1 Ask the clerk to enter ID
2 Verify the given ID
3 Ask the clerk to enter account number and verify

4 Ask the clerk to enter pin and verify
5 The use case ends successfully.

Exceptions:
Invalid ID:
-if ID number is invalid then display the message on screen and ask to re-enter

Invalid account number:
-if bank account number is invalid then display the message on screen and ask to re-enter

Invalid pin:
-if invalid pin is entered then display invalid pin message and ask to re-enter

Quit:
-user can decide to quit at any stage and end the process

Related use cases: In this use case, clerk interacts with the system to close given account number

Use Case ID: UC06

Use Case Name: Transfer money to another account

Relevant Requirements:
-The customer should have accounts
-The customer should provide both account number

Primary Actor: Clerk

Pre-conditions:

-The customer should have accounts

-The customer should provide both account number

Post-conditions:

The customer successfully transfer money from one account to another

Basic Flow or Main Scenario:

-ask to enter account number from which money needs to transfer

-The clerk enters the account number.

-Verify account number

-Ask to enter the pin

-Verify PIN number

-Ask to enter account number which is receiving the money

-Verify account number

-Ask to enter the amount

-print receipt of transaction

Use case ends successfully

Exceptions:

Invalid ID:

-if ID number is invalid then display the message on screen and ask to re-enter

Invalid account number:

-if bank account number is invalid then display the message on screen and ask to re-enter

Invalid pin:

-if invalid pin is entered then display invalid pin message and ask to re-enter

Invalid amount:
-if user account balance is less than the entered amount then ask to re-enter

Quit:
-user can decide to quit at any stage and end the process

Related use cases: In this use case, clerk interacts with the system to transfer money from customer one account to another

Use Case ID: UC07

Use Case Name: withdraw money from an account using ATM

Relevant Requirements:
-The maximum valid withdraw amount
-type of bill to give cash

Primary Actor: Bank customer

Pre-conditions:
-The user has an account in the bank
-ATM has cash available
ATM has active connection to the bank

Post-conditions:
The user get the requested cash and their account balance gets updated

Basic Flow or Main Scenario:
1 The customer inserts their bank card into the ATM machine.
2 Checks user identity

3 The ATM machine shows menu with different options to choose from

4 The user selects the option to withdraw

5 The ATM ask to select the account

6 The user selects an account

7 The ATM prompts for an amount

8 The user enter the amount

9 The ATM machine sends card ID and PIN to the back and tells if transaction is ok or not

10 The ATM gives the money to the user

11 The ATM return bank card to the user

12 The ATM prints receipt to the user

Exceptions:

Invalid user:

-if ATM get wrong bank card then gives card bank and end the session

Invalid account:

-if user gives invalid account then gives error message

Invalid amount:

-if user enter amount that ATM is not allowed to process then gives invalid amount error

Exceeds withdrawal limit

-only allows to withdraw money within the withdraw limit and based on user account balance

Insufficient Cash

-ATM runs out of cash and display insufficient cash and sends message to bank

Quit

-user can decide to quit at any stage then ATM returns the card and ends the session

Related use cases: In this use case, customer interacts with ATM machine to withdraw money.

Use Case ID: UC08

Use Case Name: deposit money to an account using ATM

Relevant Requirements:
-The maximum and minimum valid amount for deposit
-type of bill for deposit

Primary Actor: bank customer

Pre-conditions:
a) user has an account with bank
b) ATM has active connection to the bank

Post-conditions:
-User successfully deposit amount to their account

Basic Flow or Main Scenario:
1 The customer inserts their bank card into the ATM machine.
2 Checks user identity
3 The ATM machine shows menu with different options to choose from
4 The user selects the option to deposit
5 The ATM shows the option to select account
6 The user selects an account

7 The ATM prompts for an amount
8 The user enter the amount
9 The ATM machine sends card ID and PIN to the back and tells if transaction is ok or not
10 The user ask to insert bills into the ATM
11 The ATM return bank card to the user
12 The ATM prints receipt to the user

Extensions or Alternate Flows:

Exceptions:
Invalid user:
-if ATM get wrong bank card then gives card back to the user and end the session

Invalid account:
-if user gives invalid account then gives error message

Invalid amount:
-if user enter amount that ATM is not allowed to process then gives invalid amount error

Exceeds deposit limit
-only allows to deposit money within the bank limit

Quit
-user can decide to quit at any stage then ATM returns the card and ends the session

Related use cases: In this use case, customer interacts with ATM machine to deposit money.

Use Case ID: UC09

Use Case Name: check balance using ATM

Relevant Requirements:

-the customer should have an account in the bank

Primary Actor: customer

Pre-conditions:

-The customer has an account in the bank

-ATM has active connection to the bank

Post-conditions:

User successfully checks their bank balance

Basic Flow or Main Scenario:

1 The customer inserts their bank card into the ATM machine.

2 Checks user identity

3 The ATM machine shows menu with different options to choose from

4 The user selects the option to check balance

5 The ATM shows the option to select account

6 The user selects an account

7 Ask for PIN number

8 The ATM shows current balance of that account

9 The user select to quit

10 The ATM return bank card to the user

11 The use case ends successfully.

Exceptions:

Invalid account number:

-if bank account number is invalid then display the message on screen and ask to re-enter

Invalid pin:
-if invalid pin is entered then display invalid pin message and ask to re-enter

Quit
-user can decide to quit at any stage then ATM returns the card and ends the session

Related use cases: In this use case, customer interacts with ATM to check their account balance.