Personal Finance Management Software

Use-Case Specification: <Use-Case Name>

Version 1.0

Revision History

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Use-Case Specification: <Use-Case Name>

People often do not really keep track of their personal finances because they think all is taken care of by the banks and/or their employers. The purpose of the App is to keep the user upto-date with their own financial affairs: be it tax payments, insurance payments, account installments, debit orders, credit card payments, cash withdrawal, etc.

This paper illustrates how to write a complete use case specification in order to capture the specific details of a use case, in order to capture the functional requirements of a system. Comprehensive use case specifications can help drive decisions about system architecture, user interface, manuals and tests, and more…

# Withdraw Money

## Brief Description

This use case describes how a Customer uses an ATM to withdraw money from a bank account.

# Flow of Events

## Basic Flow

# Insert Card

The use case begins when the actor Customer inserts their bank card into the card reader on the ATM.  
The system allocates an ATM session identifier to enable errors to be tracked and synchronized between the ATM and the Bank System.

1. **Read Card**

The system reads the bank card information from the card.

1. **Authenticate Customer**

Perform Subflow *Authenticate Customer* to authenticate the use of the bank card by the individual using the machine.

1. **Select Withdrawal**

The system displays the service optionsthat are currently available on the machine.  
The Customer selects to withdraw cash.

1. Select Amount

The system prompts for the amount to be withdrawn by displaying the list of **standard withdrawal amounts**.  
The Customer selects an amount to be withdrawn.

1. **Confirm Withdrawal**

Perform Subflow *Assess Funds on Hand*Perform Subflow *Conduct Withdrawal*

1. **Eject Card**

The system ejects the Customer’s bank card.  
The Customer takes the bank cardfrom the machine.

1. **Dispense Cash**

The system dispenses the requested amount of cash to the Customer.  
The system records a transaction logentry for the withdrawal.

1. **Use Case Ends**

The use case ends.

## Alternative Flows

### Customer Authentication

#### Handle No Communications with the Bank System

At the Validate Card Information step of Subflow Authenticate Customer if the Bank System cannot be  
contacted or does not reply within the set communication time out period.

1. If the communications link has failed more times than the communication retry number, then  
   the authentication attempt is abandoned and Basic Flow is resumed at Use Case Ends.
2. The system will attempt to contact the Bank System until it has completed the number of retry  
   attempts indicated by the communication retry number.
3. If communications is re-established the Basic Flow is resumed at Authenticate Customer.
4. If there is still no response from the Bank System the system creates an event log entry to record  
   the failure of the communications link to the Bank System. The event log entry includes the type  
   of failure.
5. The system sends the event log to the Service Administrator to inform them that  
   communications with Bank System has been lost.
6. Resume the Basic Flow at Use CaseEnds.

### Handle No Communications with the Customers’ Bank

At the Validate Card Information step of SubflowAuthenticate Customer if the Bank System reports  
that the Customer’s Bank cannot becontacted.

1. The system creates anevent log entry to record the fact that theCustomer’s Bank was  
   unavailable. Theevent log entry includes thebank card information (excluding the PIN).
2. The system informs the Customer that communications with their Bank is not possible and that the  
   Customer should try again later.
3. Resume the Basic Flow at Use Case Ends.

# Specialist Withdrawal Facilities

## Handle the Withdrawal of a Non-Standard Amount

At the Validate Card Informationstep of Subflow *Authenticate Customer*if the Bank System reports  
that the Customer’s Bank cannot be contacted.

1. The system creates an event logentry to record the fact that the Customer’s Bankwas  
   unavailable. The event log entry includes the bank card information(excluding the **PIN**).
2. The system informs the Customer that communications with their Bank is not possible and that the  
   Customer should try again later.
3. Resume the Basic Flow at Use Case Ends.

# Preconditions

* The bank Customer must possess a **bank card**.
* The network connection to the **Bank System** must be active.
* The system must have at least some cash that can be dispensed.
* The cash withdrawal **service option** must be available.

# Postconditions

* The ATM has returned the card and dispensed the cash to the Customer and the withdrawal is  
  registered on the Customer’s account.
* The ATM has returned the card to the Customer and no withdrawal is registered on the Customer’s account.
* The ATM has returned the card but has not supplied the amount of cash registered as withdrawn from the Customer’s account. The discrepancy is registered in the ATM’s log.
* The ATM has kept the card, no withdrawal has registered on the Customer’s account and the Customer has been notified where to contact for more information..]

# Extension Points

None

# Special Requirements

The ATM shall dispense the correct amount of cash in at least 99% of cash withdrawals.