# Use Case Details - Structured

Final versions of the requirements documents used for walk-throughs with the main stakeholders.

IDs can be anything from consecutive numbers to meaningful acronyms about what kind of use case this is and what system it is a part of.

## UC1 Withdraw Cash

### General info

#### Description:

The actor goes to the ATM with his card, requests cash amount, receives cash and receipt.

#### Actors: Customer

#### Supporting roles/systems: Bank

#### Type: System

#### Pre-conditions:

ATM must have ? how much cash.

### Scope info

#### Level: Goal

#### Includes:

The use cases that are extracted out of this use case and given a special name, so they can be reused. They are required to be a part of this use case. This use case can be considered a grouped use case if it includes one of a group of partial goal use cases.

#### Included in:

The use case(s) that uses this one as a necessary part of it.

#### Use cases grouped by this ID:

If it doesn’t have an included group above, then it will be a category for several use cases.

#### Grouped by:

The group that has others like this one.

### Tracking info

#### Author: Drew and Doug

#### Date created: 11/1/18

#### Date revised:

### Project info

#### Design constraints:

ATM chassis Cashalot YRYR89484800300000

ATMNet

#### Priority: 9

#### Value to sponsor:

Will save overhead costs for labor and office expenses.

#### Sponsor:

Fred.

### Course of Events

The sequence of tasks in conversation format between actor and system. For best linking to other steps, start each number with a system task except for the trigger. Combine actor responses to system events when well. Rules are placed under the task unless they can be reused and then they are referenced and placed in a separate file.

The number of tasks per number is usually small and starts with the system or the role. Tasks are individually stated so the system/role can do multiple things but in separate sentences. The last task will prepare the state of the system so that this use case can be performed again. There will be no condition statements to branch into two separate use cases. There may be a section that is removed to a named partial use case and called an <<include>> to shorten the detailed use case.

References that can be used here to document anything other than a functional requirement are:

* **T#** - Text file item number – used for error messages and small prompts
* **D#** - Design file item number – used for web pages, full screen menus, etc.
* **R#** - Report file item number – used for printed or on-screen report formats
* **\* -**  a Data Dictionary item – used to refer to data description and validation so that the detail doesn’t have to be specified here. Also bolded and colored is good.
* **Rule#** - Rule file item number – used to refer to process rules. Generally, this will follow one path only and another use case will pick up any other options. Some data validation rules find their way here but should be collected under the Data Dictionary. Unnumbered rules are not reusable and will just be defined below their functional requirement.

1. The use case starts when the actor inserts card.
2. The system prompts for a PIN from the actor (D#1). The actor enters PIN.
3. The system requests account info from the bank. The bank sends account info. The system makes a log entry of the communication.
4. The system prompts (D#2) for account to use. The actor selects account.
5. The system prompts actor for amount to withdraw (D#3). The actor enters amount to withdraw and confirms.
6. The system prompts the actor (D#4) if amount is correct. The actor confirms.
7. The system validates the amount requested.
   1. **RULE** - **$20 increment withdraw** – Amount must be in even increments of $20 and not zero.
   2. **RULE – customer limit $200** – amount of requested withdrawal added to the Account amount withdrawn since midnight\* must be equal or less than ATM Daily cash withdrawal limit per customer\*
   3. **RULE – sufficient funds** – amount of requested withdrawal must be equal to or less than Account available balance\*
8. The system requests the bank to debit the account. The bank sends confirmation. The system makes a log entry of the communication.
9. The system dispenses amount requested in cash. The system makes a log entry of the cash dispensing. The actor takes the cash.
10. The system prompts actor for another transaction (D#5). The actor declines.
11. The system prints receipt (D#6) and returns card. The actor takes the receipt and the card.
12. The system displays the idle screen (D#0).

### Alternate flows (errors, exceptions)

The error flows are where a rule is broken, or something interrupts the normal “happy path” of the course of events. This often is during communication or other type of I/O.

* **Insufficient funds** (7c) -

### Alternate flows (extension points)

An exception to branching is when there is an optional <<extends>> of a partial use case. But the use case returns to where the option was taken.

* <Name> (<number(s) in course of events where this could occur>) – <description of what to do and where to return in the course of events>
* <Name> (<number(s) in course of events where this could occur>) – <description of what to do and where to return in the course of events>

### Post-conditions

What are your tests that tell you that this is a successful completion of a use case? It may be a repetition of one of the tasks or a file or document that has been completed. But there are minimal ways to complete the goal and there are very excellent ways to complete it. Put both down. Some people use MoSCow – must have, should have, could have instead of min and max conditions.

* <Name of goal>
  + <minimum set of qualifications>
  + <maximum set of what could be>

### Notes/ Special Requirements

Any kind of quality, capacity, security, availability, disaster recovery information that is because of this use case. Maybe you also have ideas about design, or people who need to be checked with, etc.



# Design

(Separate file)

### D#1 PIN entry

