CS 3331 Use Case Template

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| **USE CASE # 002** | Withdraw money |
| * **Main objective** | Allows the user to withdraw money from their bank account using the ATM |
| **Scope and level** | Main because this achieves a specific user goal that is withdrawing money from an atm which comes from your account. |
| **Preconditions** | * User must have an bank account * ATM must be able to interact with the bank * User must be logged in somehow via card or pin |
| **Condition for a success final** | * Whatever money the user inputs, if the user has the correct funds, atm dispenses the amount |
| **Actors** | User in front of an ATM |
| **Trigger condition (event)** | User selecting the withdraw menu on an ATM |

For the scenarios use the following template

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|  | **Scenario name:** | **Ok or UC name with specific characteristic** |  |  |
|  | **Note: one action/response x line**  **Actor action** | **System Response** |  |  |
| 1 | User inserts ATM card. | / / / / / / / / |  |  |
|  |  | System verifies ATM card is a valid card. |  |  |
| 2 | / / / / / | System prompts for a pin number associated with account. |  |  |
| 3 | User enters the pin. |  |  |  |
| 4 |  | System verifies the pin. |  |  |
| 5 |  | System displays main menu. |  |  |
| 6 | User selects Withdraw. |  |  |  |
| 7 |  | System displays user’s balance |  |  |
| 8 |  | System prompts user for the amount to withdraw |  |  |
| 9 | User inputs amount |  |  |  |
| 10 |  | System verifies amount |  |  |
| 11 |  | System confirms with user the amount to withdraw |  |  |
| 12 | User selects Yes |  |  |  |
|  |  | System checks if it has the amount in itself |  |  |
| 13 |  | System tells bank to subtract $ from account |  |  |
| 14 |  | System dispenses cash |  |  |
| 15 |  | System displays remaining cash |  |  |
| 16 |  | System returns to user’s main menu |  |  |
|  |  | \* Do not write actions and responses in the same row \* use one row per system response |  |  |
| Sub-flows address how to handle failed verifications | |  |  |  |
|  | - you need a sub-flow for each of the verifications in the scenario   - There are two possible options: 1. being able to handle errors or   2. Send a message and terminate UC  - A sub-flow follows the same rules as a scenario.  - Start your scenario with the same number of the associated verification activity   and write the same verification activity  - Sub-flows may also include actors inputs if needed  - An example of a sub-flow that deals with errors and comebacks to step in the main flow | |  |  |
|  |  |  |  |  |
|  | **Sub-flow name:** | Verification atm card read |  |  |
|  | Actor action | System Response |  |  |
| #2 |  | System verifies ATM card is a valid card. |  |  |
| #2.1 |  | System detects ATM card is not valid card |  |  |
| #2.2 |  | System spits out card |  |  |
| #2.3 |  | System displays Invalid card |  |  |
| #2.4 |  | Goto 1 |  |  |

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|  | **Sub-flow name:** | Verification pin fail |  |
|  | Actor action | System Response |  |
| #4 |  | System verifies the pin. |  |
| #4.1 |  | System sees that user entered pin != actual pin associated with account |  |
| #4.2 |  | System displays Invalid pin |  |
| #4.3 |  | Goto 2 |  |

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|  | **Sub-flow name:** | Main menu verification |
|  | Actor action | System Response |
| #4 |  | System displays main menu. |
| #5 | User exits the main menu |  |
| #5.1 |  | System displays that it logs out of the account |
| #4.3 |  | Terminate UC |

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|  | **Sub-flow name:** | Money verification |
|  | Actor action | System Response |
| #10 |  | System verifies amount |
| #10.1 |  | System determined that amount entered is less than what user has in account |
| #10.2 |  | Display error in amount |
| #10.3 |  | Goto 5 (main menu) |

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|  | **Sub-flow name:** | Withdraw verification |
|  | Actor action | System Response |
| #11 |  | System confirms with user the amount to withdraw |
| #12 | User inputs No |  |
| #12.1 |  | System displays that it canceled withdraw |
| #12.2 |  | Goto 5 (main menu) |

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|  | **Alternate Scenarios: other ways to provide the same service (use case)** | |
|  | Alternate scenario name: | Withdraw Cash |
|  | Alternate scenario name: | Quick withdraw |

Use the following checklist

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| **Category** | **Criteria** | Pass Y/N | Comment |
| **Steps** | are numbered | yes | Steps are numbered correctly |
| sequential order | yes | Steps follow typical logical order |
| Sub-flow # starts with the verification activity number | yes | Matches main flow steps |
| Start with an actor or system + verb | yes |  |
| **Flow** | Start with an actor | yes |  |
| After actor action must follow system actions | yes |  |
| must include system verifications | yes | verification steps at 2,4,10,11 |
| **Sub-flows** | Sub-flow name is the failed verification activity | yes |  |
| start number at verification action number | yes |  |
| must terminate the scenario or go back to the scenario | yes | labeled with goto/terminate |