CS 3331 Use Case Template

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| **USE CASE # 003** | Change PIN |
| * **Main objective** | Allows the user to change the PIN for their card |
| **Scope and level** | Main because this achieves a specific user goal that is changing the pin associated to your account |
| **Preconditions** | * User must have an bank account * User must be logged in somehow via card or current pin |
| **Condition for a success final** | * New pin is saved into the user’s account and replaces the old one |
| **Actors** | User in front of an ATM |
| **Trigger condition (event)** | User selecting the “change pin” 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. | / / / / / / / / |  |  |
| 2 |  | System verifies ATM card is a valid card. |  |  |
| 3 | / / / / / | System prompts for a pin number associated with account. |  |  |
| 4 | User enters the pin. |  |  |  |
| 5 |  | System verifies the pin. |  |  |
| 6 |  | System displays main menu. |  |  |
| 7 | User selects change pin. |  |  |  |
| 8 |  | System prompts for a new pin |  |  |
| 9 | User enters new pin |  |  |  |
| 10 |  | System prompts for pin again |  |  |
| 11 | User enters same pin again |  |  |  |
| 12 |  | System verifies if the two pins are the same |  |  |
| 13 |  | System updates the current pin as the new pin |  |  |
| 14 |  | System returns to the 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 |
| #6 |  | System displays main menu. |
| #7 | User exits the main menu |  |
| #7.1 |  | System displays that it logged out of the account |
| #7.3 |  | Terminate UC |

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|  | **Sub-flow name:** | New Pin verification |
|  | Actor action | System Response |
| #12 |  | System verifies if the two pins are the same |
| #12.1 |  | System says no |
| #12.2 |  | Display error |
| #12.3 |  | Goto 6 (main menu) |

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|  | **Alternate Scenarios: other ways to provide the same service (use case)** | |
|  | Alternate scenario name: | Pin change at bank  Mobile app PIN change |

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 2,5,12 |
| **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 |