CS 3331 Use Case Template

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

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

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

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

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)

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)

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

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