Systems Use Case Specification Notes

# All About Pre-conditions

Simply put, pre-conditions identify the state of the system *before* the use case begins. Pre-conditions are not events that the system or any actors have to respond to, they are just the status of the system and actors.   
  
To help determine some pre-conditions, here are some questions you can ask:

* What does the actor need to have ready in order to start this scenario?
* What settings, status, or mode does the system need to be in before starting this scenario?

Use simple statements to define the state that the system will be in before the use case starts.  
  
Each scenario will have it's own set of pre-conditions. For example, "Maintain Bank Account" use case could include scenarios for "Withdraw Funds", "Transfer Funds", and "Deposit Funds" and could be given the following pre-conditions:  
  
For "Withdraw Funds":

* The account holder is logged into the machine, with a valid bank card and PIN.
* The system displays the main menu.

For "Transfer Funds":

* The account holder is logged into the machine, with a valid bank card and PIN.
* The account holder has at least two valid open bank accounts
* The system displays the main menu.

For "Deposit Funds":

* The account holder is logged into the machine, with a valid bank card and PIN.
* The account holder has a cheque or cash ready to deposit
* The system displays the main menu.

# All about Post-Conditions

While we have Pre-conditions to identify the state of the system *before* the use case begins, we also have Post-conditions which tell us the state of the system *at the conclusion* of the use case. Post-conditions are not triggers for other Use Cases; they are just summarizing the facts.  
  
To help determine some post-conditions, here are some questions you can ask:

* Does the completion of this use case leave the system in a state that may be a precondition for another use case?
* Is a stakeholder goal met?

As with pre-conditions, use simple statements to define the state that the system will be in when the use case finishes.  
  
Each scenario will have it's own set of post-conditions. For example, "Maintain Bank Account" use case could include scenarios for "Withdraw Funds", "Transfer Funds", and "Deposit Funds" and could be given the following post-conditions:  
  
For "Withdraw Funds":

* The user's funds have been withdrawn and the amount deducted from their total balance;
* Data is updated;
* Message is displayed to user.

For "Transfer Funds":

* The user's funds have been transferred and the amount deducted from their total balance and added to the payee's balance;
* Data is updated;
* Message is displayed to user.

For "Deposit Funds":

* The user's funds have been deposited and is awaiting 5 business days for the payment to clear;
* Data is updated;
* Message is displayed to user.

# Data Used Column

The **Data Used** column is where we indicate what data, *exactly*, will be either sent to or from the system.  
  
The data is referred to specifically and exactly.  
The following are **not** allowed:

* vague data
* general data
* data types
* "etc."

Format: **true camelCase**: *studentName*, *address*, *accountType*

We only need to include the data on the row in the scenario the first time it's referred to. Subsequent use of the exact same data does not need to be included again.