**Usage Scenarios: An Agile Introduction**

A usage scenario, or scenario for short, describes a real-world example of how one or more people or organizations interact with a system.

They describe the steps, events, and/or actions which occur during the interaction.

Usage scenarios can be [very detailed](http://agilemodeling.com/artifacts/usageScenario.htm#DetailedScenario), indicating exactly how someone works with the user interface, or reasonably [high-level](http://agilemodeling.com/artifacts/usageScenario.htm#HighLevelScenario) describing the critical business actions but not the indicating how they're performed.

The basic strategy is to identify a path though a use case, or through a portion of a use case, and then write the scenario as an instance of that path.

For example, the text of the "Withdraw Funds" use case would indicate what should happens when everything goes right, in this case the funds exist in the account and the ATM has the funds. This would be referred to as the "happy path" or basic course of action. The use case would include alternate paths describing what happens when mistakes occur, such as there being insufficient funds in the account or the ATM being short of cash to disburse to customers.

You would write usage scenarios that would explore the happy path, such as the first scenario above, as well as each of the alternate courses. You would then develop a sequence diagram exploring the implementation logic for each scenario.

**High-Level Example**

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| **Scenario: ATM banking for the week.**   1. Sally Jones places her bank card into the ATM. 2. Sally successfully logs into the ATM using her personal identification number. 3. Sally deposits her weekly paycheck of $350 into her savings account. 4. Sally pays her phone bill of $75, her electric bill of $145, her cable bill of $55, and her water bill of $85 from her savings account 5. Sally attempts to withdraw $100 from her savings account for the weekend but discovers that she has insufficient funds 6. Sally withdraws $40 and gets her card back |

**Detailed Example**

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| **Scenario: A successful withdrawal attempt at an automated teller machine (ATM).**   1. John Smith presses the "Withdraw Funds" button 2. The ATM displays the preset withdrawal amounts ($20, $40, and so on) 3. John chooses the option to specify the amount of the withdrawal 4. The ATM displays an input field for the withdrawal amount 5. John indicates that he wishes to withdraw $50 dollars 6. The ATM displays a list of John's accounts, a checking and two savings accounts 7. John chooses his checking account 8. The ATM verifies that the amount may be withdrawn from his account 9. The ATM verifies that there is at least $50 available to be disbursed from the machine 10. The ATM debits John's account by $50 11. The ATM disburses $50 in cash 12. The ATM displays the "Do you wish to print a receipt" options 13. John indicates "Yes" 14. The ATM prints the receipt |

As you can imagine, there are several differences between [use cases](http://agilemodeling.com/artifacts/systemUseCase.htm) and scenarios. First, a use case typically refers to generic actors, such as Customer, whereas scenarios typically refer to examples of the actors such as John Smith and Sally Jones. There's nothing stopping you from writing a generic scenario, but it's usually better to personalize the scenarios to increase their understandability. Second, usage scenarios describe a single path of logic whereas use cases typically describe several paths (the basic course plus any appropriate alternate paths)

**Use Case Diagrams**

These are diagrams that can be used to more clearly illustrate the set of use cases that are provided by the functionality in a system. The diagrams contain both the external entities that will be using the system (also known as "actors") and the discrete use cases (or goals) that the users will be carrying out.

