Use Case Scenario

A use case defines the interactions between external actors (users) and the system under consideration to accomplish a goal. Actors must be able to make decisions, but need not be human: "An actor might be a person, a company or organization, a computer program, or a computer system — hardware, software, or both" [1]. Actors are always stakeholders, but many stakeholders are not actors, since they "never interact directly with the system, even though they have the right to care how the system behaves" [1]. For example, the owners of the system, a company's board of directors, for instance, could all be stakeholders but will not necessarily be actors.

For the M3 Design Document, the Use Case Scenario is a list with the following items:

- **Primary Actor**: This is the main actor using the system. In a system designed to give students access to their grades, the student would be a **Primary Actor.**
- **Level**: The student might not be the only **Actor** and, so, level determines how many interests are being served by the system. *User Level* indicates that it is the **Primary Actor** who is served by the system. An example of that is a Purchaser who buys stocks over the web. The system allows the Purchaser to browse stocks, buy them and update a portfolio automatically. Alternately, *Summary Level* refers to a system that benefits multiple users simultaneously. A system that allows students to register for courses online has such a scope. It serves both the student and the educational institution, by providing and keeping track of information pertinent to each.
- **Stakeholders and Interests**: This should be a familiar category, and you may wish to include a table that identifies the stakeholders in an appendix.
- **Precondition**: What has to be true in order for the system to function? There may be no precondition - using a search engine might be such a situation. However, having a UTOR account is a precondition for using Blackboard.
- **Minimal Guarantee** defines the minimal conditions to ensure that stakeholders' interests are protected. This may be as small as logging sufficient information to determine that something went wrong with the interaction and contact the **Primary Actor** for details.
- **Success Guarantee** defines the condition in which stakeholders' objectives have been met. In the case of online purchasing, the item has been selected, paid for and is scheduled for shipment.
- **Main Success Scenario**: This is the centre of the Use Case and it describes, in a numbered list, the sequence of events that takes place when the system is used successfully. Each step describes not only what the action is, but also who or what is initiating the action, e.g. "1. Student inputs login name and password. 2. Portal verifies login name and password. 3. Portal opens student's home page."
- **Extensions** is a list of what can happen differently. Each **Extension** is linked

to a step in the **Main Success Scenario.** For example, "1a. Student inputs incorrect password. 1a1. Portal prompts student to input password again." Another example might be "3a. Web failure during login. 3a1. Portal reports failure to student, asks student to try again at another time."

List of References:

[1] Alistair Cockburn, *Writing Effective Use Cases,* Boston, MA: Addison-Wesley, 2001.