**CSC 232 – Software Development**

**Project Assignment #5 - Finishing the Game!**

# Due Monday, December 4, by the beginning of class

For this assignment, you will be finishing up a playable version of the project. You are required to complete the items labelled “required” below; other features labelled “extra-credit” will grant varying levels of extra-credit if they are implemented.

***Invisible and/or Disguised Items and/or Locations [Required]:***

One way to implement actions in an adventure game is to wrap items and locations in “decorator” objects that hide the contained object unless the game is in an appropriate state (for example, a door might appear locked until the player holds/uses the correct key, or a treasure chest might be invisible until the player turns on a light). The exact details of how to implement this are left up to your group, but one approach might be to intercept calls to getShortName and getDescription on the hidden object, returning null, an empty string, or something else, unless the player’s inventory contains a particular item or items.

***Build Out Your Game [Required]:***

You should add more Locations and Items to your game. There should be at least seven Locations, and it should be possible to move around all of them and solve some simple puzzles (such as finding a key in one room that unlocks a door or a treasure chest in another). You will construct all of these locations and the items contained in them as part of initializing the game; there should be a class with a main method that does all of this initialization and starts the game loop running.

***Further Work [Extra-Credit]:***

You have many options to do further work on the project, which could award you some extra-credit points. Some possible options include the following:

* Allow the user to save and load the game.
* Increase the size and complexity of the game *significantly*.
* Allow “items” to act on their own (imitating people or animals in the game).

The amount of extra-credit awarded will depend on the work done, but will never exceed 10 points (added to the project grade). Additionally, extra-credit will not be awarded if the fundamental requirements of the project are not working properly.