

Samuel Hall  
03/18/2018  
Barbarian  
Final Project

### **Design:**

Text based game in which a Barbarian is thrown into the depths of Hell and must find the portal back to Earth. But beware, as Hell's armies have just noticed your arrival and plan on feeding your soul to the damned.

### **Character Classes**

#### Character

- Barbarian
  - Modified to have inventory, will be players character
- Minion
  - Low level enemy
- Overlord
  - Mid level enemy
- Lucifer
  - Final Boss to fight once portal is found
- Potion
  - Potion item
- Portal
  - Portal item

Note: Items were originally going to be separate classes, but ended up using the Character class as base class for ease of use.

### **Space Classes**

#### Space

- Floor Space (does not hold a data member)
- Item Space
  - Holds items
- Monster Space
  - Holds monsters

### **Map Class**

- Links spaces together to form map, drives gameplay

**Reflection:****Design Changes and Implementation:**

Originally the design plan was to have separate item classes to hold items but ended up using Character class as base class for ease of use. Additionally a Game Class was going to be used to drive the gameplay and interact between the player and map, but this was scrapped do to an easier implementation in the Map class.

**Enhancements:**

Future enhancements primarily would be to the Map Class. In the class, the map could be auto generated based on a number of desired spaces. The orientation of the map as well as the contents (monster, floor, or item) would be randomized ultimately with the portal at the end. Additionally a movement menu to allow the user to choose his/her direction would be a nice enhancement to give the user a sense of control.

**Test Table:**

Test Case	Section	Prompt	Expected	Observed
User enters non-integer value	main	Begin?	Input must be int between 1-2. Reprompt	Input must be int between 1-2. Reprompt
User enters integers outside of limits (not 1-5)	main	Begin?	Input must be int between 1-2. Reprompt	Input must be int between 1-2. Reprompt
User Enters an integer within bounds	main	Begin?	Game begins	Game begins
User Enters an integer within bounds (1)	Traverse Map	Monster Encountered, Fight or Flee	Combat between monster and player	Combat between monster and player
User Enters an integer within bounds (2)	Traverse Map	Monster Encountered, Fight or Flee	50/50 fight or flee	flee
User Enters an integer within bounds (1)	Traverse Map	Item Found, Pick up?	Item added to inventory	Item added to inventory
User Enters an integer within bounds (2)	Traverse Map	Item Found, Pick up?	Item not added to inventory	Item not added to inventory
User Enters an integer within bounds (1)	Traverse Map	Use Item?	Prompts user to select item in inventory	Prompts user to select item in inventory
User Enters an integer within bounds (2)	Traverse Map	Use Item?	Do not use item	Do not user item