**Project 3**

For this project, you will be designing your game using the **Mercury** Java library. You should use the game labs you have done up to this point to help you in your development. This project is very free-form to past projects. This means that you do not have a details requirements to follow, but more a set of general guidelines that are expected. Because this project is more independent, you should use several different sets of resources to help you in developing your game. Here are some examples:

* <http://mercurylib.com/> - The website for the **Mercury** Java library. This website contains several, useful features that will help you, such as:
  + Wiki - Shows several, simple examples to get you started on some of its features
  + JavaDoc - Lists out all of the classes and methods you can use in **Mercury**, along with some basic explanations of how they work. Use your “**How To Read A JavaDoc”** for help on using this.
  + GitHub - This is where the code for **Mercury** exists. You are allowed to and encouraged to try looking through it if you ever get stuck or you want to see how something works
* <http://opengameart.org/> - A website that hosts free content that can be used for developing games. Includes images, sounds, music, and much more.
* Game Design Document - Your design document is more than just for a grade, it’s actually meant as a tool to help you with what it is you what your game to be. Use it as a way to write down your ideas and to refine them into actionable things as well. As you game changes, so should your design document to reflect it.
* Teachers/TAs - Use us as resources to help you! If have an idea, but you’re not sure how you could go about doing it, talk to us about. If you know exactly what you need to do, but you’re not sure what class to use or what methods to call, talk to us about it.

Your project will be graded in two parts; half will be the design document and the other half will be your actual game. Your design document will be graded based on the following criteria:

* Is it completely filled out?
* How detailed is the document?
  + (Can someone who only reads it know what your game is going to be like?)
* How accurate is it compared to your actual game?

Your game will be graded based off of the following criteria:

* How many new or improved features does your game have compared to ones learned throughout the tutorials?
* How complex are the features that are being used?
* How much content do your game contain? (levels, enemies, in-game abilities, etc)
* How bug-free is your game? (Are there a lot of issues while playing your game?)

**Testing:** You will be in charge of testing your game and determining what is and is not acceptable. Since the quality of your game (how bug-free your game?) is one of the parts you will be graded on, you must figure out how to test your game correctly. Here are some examples ideas to get you started:

* Can you jump/move/fall through platforms that you’re not supposed to?
* Do the controls not work correctly all the time?
* Does the game crash often or when a specific set of steps occur?

**Submission:** To order to turn in your program, you must upload all of the files for your project, including any pictures, fonts, or audio; as well as your design document. You will upload them to the **Project 3** assignment.

**Grading**: (30 points total)

* Design Document = 15 points
* Game = 15 points