Test Plan Document

**1. Introduction**

Our project is Fleet Destroyer. This is an online version of the board game battleship. This is a standalone java based game that client side runs on a local machine and sends information to a google bases server to update all game information for clients that are running. Here we will test to the main components of the game. The actual engine that runs client side and send information to the server to use.

**2. Quality Control**

**2.1 Test Plan Quality**

**Classes to Test:**

* The only module that we are going to test on our program is the game engine that takes in a send out user input to the server, this is most important because if we send improper information than the game can’t be run properly
* We will also test that the client receives input properly and changes the board accordingly

**Test Scripts**

* We are going to use Junit for our unit testing. This will allow us to check the values that get sent from the client and make sure they match the input provided

**2.2 Adequacy Criterion**

Our testing would be considered done once we have tested all valid location for each client. If they can send all values on the board properly, then the game engine works. Also if the client can receive all values on the board properly then the game engine works.

**3. Test Strategy**

The testing tool that we used was Junit. This allows us to test the individual java class that holds our game engine. Our first test case is to make sure that inputs from the user match outputs from the client. Our second test case will be to make sure that input from the server to client match what is happening in the game engine.

**4. Test Cases**

Our group was unable to get our class to build properly on travis. This is due to an error that we could not figure out. Listed below would be all of the test cases that we would use to test our engine class

|  |  |
| --- | --- |
| **Operation Performed** | **Condition tested** |
| Placing ships on Board | All ships images should be placed on the board on the correct places |
| Getting a hit on a ship | Space where ship is should turn red |
| Getting a miss on a ship | Space where ship is should turn white |
| Sending hit info to server | Server receives same hit coordinate that was typed in the client |

**Because our game could not be run on travis we were unable to see if these test cases actually passed however when testing manually we have yet to find a bug or miss interpretation of data.**