ChronoTimer Project

CS 361 – Intro to Software Engineering

Group – Zero Cool

**Test Plan**

Sprint 0 – There is no test plan for Sprint 0 release as the purpose of sprint 0 was to get everything set so we could do Sprint 1.

Sprint 1 – Our test plan this iteration is focused on both white and black box testing. Our plan for white box testing includes setting up JUnit tests for every class and ensuring that each public method does what its purpose is. This means measuring good inputs and bad inputs and making sure if some data is passed to a method that is not what it should be that the appropriate response is taken (ie. Exception thrown, returns false, does nothing, etc).

For black box tests we plan to use the file provided on D2L to ensure our system can run it like it should as well as our own additional text files that we come up with. We also plan to test the system manually from the console using a Driver to ensure that individually typed commands can be executed as stated by the requirements document.

Sprint 2 – The test plan for this iteration is going to ensure that multiple channels can be used and that exporting of data is correct. As far as white box testing is concerned there are going to be more JUnits made for all the different Event types, expanded channel and sensor tests.

For black box testing we plan on testing the system through our newly made Java GUI and through the test input provided on D2L.

Sprint 3 – The test plan for this sprint involves a detailed assessment and analysis of previously written JUnit tests for all event types. This sprint’s white box testing will focus on specific detailed tests involving each event. Erroneous data such as starting the same participant twice, or finishing an empty event are such examples. Also start and finish sensor correlations will be tested to validate that each event reacts as it should to its respective sensors; meaning IND will start via one start sensor and finish via one finish sensor, whereas GRP will start every participant via one start sensor, then each subsequent finish can be triggered via any sensor toggled on and connected.

The focus of black box testing for this sprint will involve testing the GUI interface (keypad buttons, radio buttons, function commands, power buttons, usb port…etc) using all previous testing logic and test input via D2L.

Sprint 4 – This test plan focuses more on the transfer of data from our local system to our newly constructed app servlet, correct display of webpages and data within, and newly refactored execute commands abstracted for executing various function commands. White box testing will focus on running various events through the GUI, and validating that the data sent to the servlet correlates with the event data on the GUI. Also testing on multiple internet hosts such as Chrome, Firefox, Safari, IE will be completed.

Black box testing for this sprint mainly involves running real life scenarios through the GUI, and accessing the data online through our web servlet and webpages as a user would. Also final examination of Project Management materials will be scrutinized.