Software Engineering

Sprint 2

Spring 2014

1. What features have been added to the program for this sprint?

There are 3 new features for this release.

1. you have the be able to process the whole class – You need to crawl through the subdirectories, find each program (.cpp file), compile, run tests in the tests subdirectory, and create a log file for each student. For simplicity, I will keep the subdirectory name and the .cpp name the same but it really shouldn’t matter to your program. So subdirectory student1 has a file student1.cpp that you will test.
2. Grading – You program will create a summary file for all the programs run. Certain tests will be designated as “acceptance tests”, meaning that no credit is given for the program if those tests don’t pass. Acceptance tests will end with xxxxx\_crit.tst All other tests will be recorded as right or wrong and a percentage assigned for each student.
3. You will generate test cases for the program with heavy constraints. You will generate test cases for programs that do simple list processing, such as a program that finds the largest number in a list. You will ask the user if she wants to automatically generate test cases. If so, what kind of element (only int or float for this sprint), and what the maximum list size is. Test cases will be stored in the tests subdirectory.

In addition, the following will be required:

1. By Friday, I need an assessment of the code and documentation you were given
   1. does it work?
   2. evaluate the documentation in and out of the code
2. Produce a Gantt chart using MS Project for this sprint. Hand that in by Wednesday 3/5
3. teammate evaluation – due with the code
4. updated version of the senior design document
5. How will the files be organized for the multiple student files?

There will be a root directory for the class and each student program will be in a subdirectory under it. For example, assume the root directory is called CS150. Assume I have 4 students in that class. The directory structure will be:

CS150

student1 student2 student3 student4 tests

1. Where is the log file stored for each student?

In the subdirectory for that student. So the student1 subdirectory will have a logfile called student1.log

in that directory.

1. Where will the summary grade file be located?

In the root directory for that program.

1. What will the summary file look like?

The name of the student, FAILED, or a percentage. Thus:

John Oliver FAILED

Louis Black 93%

Jason Jones 100%

Asif Mandvi FAILED

Jon Stewart 60%

FAILED is only for not passing the acceptance criteria. Otherwise, calculate a percentage of tests passed for each student and record it.

1. Where do I get the .ans file for my automatically generated test cases?

You can assume that a correct solution is stored in the root directory. Generate the corresponding answer file for each test case by running the test through that program and capturing the output.

The product owners have christened this “the golden cpp”.

1. When is this due?

Sunday, March 23 by midnight.