Team Kodo

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Software Engineering

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IP02 Testing Summary

Our unit tests within Introductory Project 2 consisted of two separate classes for unit testing on our ‘Processor’ and ‘Tally’ classes. Each of our test classes checks crucial functions for our program’s performance. Below we will discuss the findings from our tests.

**Tally Unit Test**

In general, most unit tests for the tally class passed on the first test as expected. With this class being somewhat simple, the tests created were pretty much knowingly going to work before we had even written them. However, we did have one unexpected test fail. In the test method ‘IncrementTallyOnce()’ we received a failure that stated that our expected tally of ‘2002’ was not met, and that it was actually still at the starting tally of ‘2001’. Our initial thought was that the start tally variable in the tally class had mistakenly been set to ‘2000’. Seeing that was not the case we decided to debug the test. There we noticed that the first call to ‘IncrementTally()’ had not actually done anything to the variable. The problem ultimately lied within the function itself. In the one line function our return statement initially read “return startTally++.ToString();”. We realized that for some reason we could not increment ‘startTally’ and all ‘ToString()’ all on the same line. To solve this ‘startTally’ had to be incremented on the line preceding the return statement.

For our remaining test methods, we’ve also incorporated a test to increment the tally a total of ‘n’ times. This insured us that the tally would consistently grow only by one after multiple times the function had been called. In the last test method, ‘tallyStartAt2001’ we assert that our tally variable always starts at ‘2001’.

**What Worked For Us**

Consistent with our last project, team Kodo displayed effective communication and cooperation on the second iteration of our introductory project. Using GroupMe we discussed problems/solutions, and even set up meeting times before classes on Tuesdays and Thursdays. During our meetings we discussed strategy, assigned work, and helped one another with any questions concerning the project or Git in general.