

CptS 322 Software Engineering Principles I

Spring 2023

Project Milestone 7

(Due May 2nd, 2023 on Canvas)

Milestone Description:

After the design is implemented, the next step is to check if your implementation works as expected with respect to the design and requirements. This milestone focuses on testing, which is also part of the *construction* (framework) activity. Your team will develop test cases to test your code.

Specifically, you will give at least one unit test case for each component (with respect to your architecture and component-level design). Recall the test inputs we derived in class using basis path testing --- each of those test inputs corresponds to a unit test case. Given each **test input**, there should be an output of the tested unit that is correct, called **expected output**. For the test input, what your program actual produces is called *actual output*.

What to submit:

A single PDF, where you:

- Describe at least one unit test case for each of your components

For each test case, use the following description template:

Test type	<i>Unit test – the unit (method) under test</i>
Test target	<i>The name of target component</i>
Test input	<i>Refer to the example given in class</i>
Expected output	<i>Refer to the example given in class</i>

Accordingly, if you have N components, you should give N such tables.

*Implementing these use cases in code is NOT required for this milestone.

Hints:

-As suggested earlier in class, the team should split the implementation tasks among the team members such that each team member will be responsible for implementing one or more components. Now it would be the best to let the member who implemented a component to figure out a unit test case for that component.

-Note that when we talked about basis path testing in class, we looked at a method as an example. Here, when you think about the unit test for each component, you may just do this for any one of the methods of that component.