

CSCI 3308 Software Development Methods and Tools Fall 2018

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Submission Deadline: 24 hours from the end of your recitation

Lab 11: Unit testing

Exercises

- Review the Python 3 unit test framework documentation:
<https://docs.python.org/3/library/unittest.html>
- Clone a copy of the Lab11-Files repository named CU-CSCI3308-PythonUnitTesting by using the following command.

git clone <https://github.com/lizboese/CU-CSCI3308-PythonUnitTesting>

This repository includes a simple Python 3 module with a class called Processor that performs some basic analysis methods on the input text. The repository also contains the start of a Python 3 unittest file: textproc_test.py. Execute this file to confirm that the single, initial unit test passes.

- Review the test code in the textproc_test.py file.

Questions

Add the following tests to the textproc_test.py file:

1. Write a test to verify the constructor raises an error if passed something other than a string
2. Write one or more unit tests to test the count() method
3. Write one or more unit tests to test the count_alpha() method
4. Write one or more unit tests to test the count_numeric() method
5. Write one or more unit tests to test the count_vowels() method
6. Write one or more unit tests to test the is_phonenumber() method
7. Find and correct any bugs the tests turn up. Document the bugs that you have corrected in comments at the top of your textproc_test.py file, just underneath the comments that include your name(s).

Credit

To get credit for this lab exercise, turn `textproc_test.py` in on Moodle. Make sure that all partners' names are included in the file.