Instructor: Chris Womack

Unit testing

Objectives

- Practice unit testing
- You can pair program today. (Optional)

Exercise

First review the Python 3 <u>unittest framework documentation</u>.

Next clone a copy of the <u>Lab10-Files</u> 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. Review the code files for details.

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.

Please 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

Credit

To get credit for this lab exercise, show TA the unit test cases for all the above questions and any bugs that turned up during testing and your corresponding fixes.

