CS 112 Lab Assignment

Instructor: Dan Fleck
Lab: Software design and documentation
Due Date: As with all labs, this lab is due one week from your lab section!

Overview

Throughout the semester you have hopefully been writing pseudocode and adding good comments to your assignments. In this lab, you will do these two things for the third project.

Pseudocode is structured English to help you think about and determine what your functions/classes should do. A basic introduction to Pseudocode is here:

http://www.minich.com/education/psu/cplusplus/stylesheets/pseudocode.htm

There is no formal "syntax" though… write what makes sense to you and helps you understand what the program should do. For this lab you will generate pseudocode for the main algorithms needed for project three.

In order to continue your design and development of project three you will then generate function headers for your project. Function headers are just the definition line (specifying the name of the function and formal parameters) and the doc string to document what the function should do.

By looking at your pseudocode and function headers another person can determine if your algorithm is sound and you're on the right track. This second person will be your TA. If you turn Lab 10 in **early**, ask the TAs for feedback on your design. This feedback can help you progress faster and easier on the project. Note: TAs will only be able to give you feedback if you turn it in early. Lab 10 is due the week before the project. The TAs will not get feedback to 150 people in a week! If you want feedback, turn it in early **and email your TA** to ask for feedback.

Assignment

1. Write the pseudocode for the following algorithms

- Save button
- Delete button
- Moving the slider

The pseudocode should say (in structured English) what happens when the user pushes the save or delete button or moves the slider in project three. The goal of this is to really think through all the steps you must do to implement the required functionality. Try to get to a very detailed level, but not worry about the Python syntax to make it work.

2. Write function headers for the functions you describe in the pseudocode. Include in these headers the docstring.

Example:

```
def removeVowels(name, address):
        """This function accepts the name and address for a
        person and then deletes all vowels from both, returning the
        updated name and address. """
```

Note: It is likely that you will have more than 3 functions here --- pushing the save button will call a function, but that function will probably call other functions. You should strive for this type of modular design.

3. Use pydoc to generate HTML files for your two modules. This is done using the pydoc command from the command prompt:

```
pydoc –w AddressBook Contact
```

What to turn in:

1. Pseudocode for your modules.
2. Two HTML files, for the Contact module and the AddressBook module.