

CSC 15: Chapter 4 Lab, Week 2

Problem

Write a program called `WordCounter` that prompts the user for the number of times that they would like to run the program, then loops for that many times. Each time the program loops you will prompt them to type a string then it will print out the number of words in that string. You will need to account for an indeterminate number of spaces separating the words. So, for instance, the following string:

```
This      string has      wide      spaces
has 5 spaces.
```

Requirements

You must have a helper class `WordHelper` with the following methods. It will be up to you to determine the return type and parameters required for each:

- `getNumTimes`: Get the number of times that the user would like to run the program
- `getNumWords`: Get the number of words in a text string
- `printDescription`: Output a description of the program

Also, you will need to have a driver class `WordCounter` with the following methods:

- `main`: Call the `runProgram` method, be sure to create your `Scanner` object here and pass it as a parameter
- `runProgram`: Use the methods in the helper class to solve the problem.

Submission

You are to work in teams of 2 but you each need your own copy of the code. To receive full credit you must have your code thoroughly documented with method-level and algorithm-level comments as well as have a header block on each class file. You must meet all the other requirements given in the requirements section and match the sample output.

Sample Output

```
How many times would you like to run this program? 5
Please enter a text string and hit enter:
This      string has      wide      spaces
This string has 5 words.
Please enter a text string and hit enter:
I      love   Java  programming.
This string has 4 words.
Please enter a text string and hit enter:
CSC 15 is the best!
This string has 5 words.
Please enter a text string and hit enter:
John      walked to the store
This string has 5 words.
Please enter a text string and hit enter:
      Conditional execution      is cool!
This string has 4 words.
Average number of words: 4.60
```