NORTHWEST
MISSOURI STATE UNIVERSITY

CSIS 44-542 Object-Oriented Programming
Spring 2017

Programming Assignment 1

This is an out-of-class programming assignment. It is to be done individually. The assignment is to be submitted as a single zip file via canvas by **5pm Friday, February 17, 2017**.

The Flesch-Kincaid readability test is used to determine how difficult a passage of text is to read. Details of the test are provided by Wikipedia at :

https://en.wikipedia.org/wiki/Flesch%E2%80%93Kincaid_readability_tests.

This website defines two tests – one to calculate ethe ease of reading a passage and one for determining the grade level required for that passage.

In this assignment you are to write a program that:

1) Prompts the user for the name of a text file containing a passage of text.
2) If the file exists, then
    a. Open the file containing the text and processes it to calculate both the Flesch reding ease score and the Flesch-Kincaid grade level.
3) Else
    a. Display the following error message "File not found."
4) The program terminates

Hence if the file "MyText.txt" contains the following passage:

The Australian platypus is seemingly a hybrid of a mammal and reptilian creature.

Then the execution of the program would result in the following (user input shown in red):

```
Please enter the name of the file containing ths passage of text: MyText.txt
The passage has the following scores:-
      Flesch reading ease:          37.5 (College)
      Flesch-Kincaid grade level:   11.3
```

In this assignment you are asked to design and write the code to solve the problem (solutions sourced from the internet or other sources are *not* permitted). The code is to be carefully tested and submitted via Canvas in a single zip file. The zip file is to include:

- The source files.
- The test files that you used to verify the correctness of your code.

The source code is to be well written (follow a coding standard), well documented (use appropriate JavaDoc statements and comments), and use meaningful identifier names, All source code must begin with the following comments verifying that the source code is your own work:

```
/**
 * I certify that all code in this file is my own work.
 * This code is submitted as the solution to Assignment 1
 * in CSIS44542 Object-Oriented Programming, 2017, section <Your section number>
 *
 * Due date: 5pm, Friday, February 16, 2017.
 *
 * @author  <Your Name>
*/
```

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