Computer Engineering 12
Project 1: Counting the Number of Words

Due: Sunday, Jan. 14th at 11:59 pm

1 Introduction

In this project, you will implement an application to read words from a text file. The filename will be supplied on the command line. Your program should display the total number of words in the file. (Consider a word to be a sequence of non-white-space characters.) Here is an example of how your program will be run:

```
$ ./a.out /scratch/coen12/Macbeth.txt
18464 total words
```

2 Implementation

This project is designed to refresh your programming skills, in addition to motivating later projects. If you need any help with the assignment, seek out help from the instructor or teaching assistant (but not from other students). There is no reason (besides lack of effort) why you should not receive a perfect score!

You can assume that there is a maximum word length. However, this value should be properly declared as a symbolic constant and documented:

```
# define MAX_WORD_LENGTH 30
```

Your program should work correctly on all of the example files under /scratch/coen12. To make grading easier, please match the example output shown above.

3 Submission

Call your source file count.c and submit the file using the online submission system on the course website. Your username is the same as your Design Center username, and your password is the last seven digits of your ID.

4 Grading

Your implementation will be evaluated as follows:

- correctness: 60 points

- clarity of implementation: 20 points

- commenting and style: 20 points

Your implementation must compile and run on the workstations in the lab. If your implementation does not compile, you will receive zero points toward correctness.