Assignment 2 Report

What problems you encountered completing the assignment and how you overcame them

My word counts were too low, but then I changed the section which updates the shared dictionary to actually update the values instead of assigning the same word count to the dictionary again and again.

Any problems you weren't able to overcome or any bugs still left in the program

The word count may not be totally accurate since the regex is not very complicated.

About how long it took you to complete the assignment

The assignment took about 5-6 hours including time spent familiarizing myself with regular expressions.

Performance measurements (given in seconds) for 1, 2, 4, and 8 threads

1 Thread: 0.6174 seconds

2 Threads: 0.6322 seconds

4 Threads: 0.4651 seconds

8 Threads: 0.5532 seconds

A short analysis of why the program behaves as it does with an increasing number of threads:

I assume the measurements are roughly the same because the threads are each sharing the documents as they become available instead of splitting the work evenly which results in about the same synchronization time.

Observations/comments:

If the documents were longer, I suspect that there would still not be much of a difference in execution time because of how the work is scheduled.

Output from the cpuInfoDump.sh program:

model name : Intel(R) Core(TM) i7-8650U CPU @ 1.90GHz

4 36 216