**Programming Assignment #1: Read the Book!**

Reading external files is an essential skill. Write a program to read the file (book) Oliver (Oliver.txt) and produce the following results.

**Find the number of lines and words.** Calculate the average number of words per line. Find and display the longest word and finally calculate the time needed to perform these tasks.

When reading ‘oliver.txt’ file, you are required to remove any special characters in the file and consider only the alphabetical words.

**What to Turn in: (All typed)**

**Cover page (page 1):** Your name, assignment number, assignment title, and due date.

**One page abstract (page 2):** Describe the problem (description is given above), then explain the algorithm (design details are accepted, **but not implementation detail**), finally explain your observations and the results of the algorithm. *Make sure to check spellings and grammar.* The abstract should be typed in Times New Roman style font with single spacing and the font size of 12.

**Source Program(s):** Turn in Java source code(s) and output including EVERYTHING put on a word or PDF document. All programs must follow Object Oriented Programming Principles and include proper **Javadoc** comments **including pre/post conditions.**

**Outputs:** Turn in a PDF or Word containing counters for total number of words, lines, average words per line, the longest word and the execution time. Must include proper labels to identify these outputs.