Java Word Counter

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**Overview:**

This application will open up any desired text file, read through it, and count how many times a word is used. It will then display to the user how many times each word was used in the file, listed in order of quantity. It will also ignore case and punctuation. In order for this program to sort the list of words, it will make use of the TreeMap java class. It will store the list of words inside of a TreeMap, which sorts the list as it goes in alphabetical order. The user will interact with the given UI to select their text file of choice. The program will then display a new window with a table that shows the user the list of sorted words in a table.

**Design:**

To have this program work correctly, it will implement the following two classes:

- JavaWordCounter – The main class where the GUI is instantiated and made visible.
- Window – Where the GUI is outlined, and where the functions are.

Inside of the Window class there are four functions:

- actionPerformed – Enables the user to pick their desired text file with the use of JFileChooser. Also calls the readCount function passing in the chosen file.

- readCount – This function will scan through the text and will count the words that are in the given file. It will account for ignoring case and punctuation. This will also call the write function.

- write – Displays the list of sorted words, and how many times each was used.

- showList – Sets up a new window to open that contains a table filled with all of the entries in the given TreeMap.