**WORD COUNTER**

*Godwill Afolabi*

**Department of Information Technology**

**Augsburg University**

February 2023

SUMMARY AND PURPOSE

1.0 Summary and Purpose

**1.0 Summary and Purpose**

**1.1 Summary and Purpose**

*Summary and Purpose:*

The word counter program is a GUI application which can open up a text document, read in and count all the occurrences of each word, and write the counts into a separate text file.

The word counter program helps to accurately count the number of words in a document and the occurrences of every word.

**1.1 System Requirements**

* Java Development Kit (JDK) version 8 or higher
* Text Document in plain text format

2.0 System Features

**2.0 SYSTEM FEATURES**

* Reading in a text document
* Removes punctuations, hyphens, and other unwanted characters
* Counts the occurrence of every word
* Writes the counts into a separate output text file
* Provides a way to count the total number of words in the document

2.0 Requirements

**2.0 Requirements**

**2.1 Functional Requirements**

* The program must allows the user to enter a specific path for the document to be read in
* The program must read the document and counts the occurrences of every word
* The program must remove all punctuations, hyphens, and other unwanted characters from the document
* The program must output another text file with the results
* The program must get a total count of all the words in the document

**2.1 Non-Functional Requirements**

* The program must all small and large input files
* The program must be easy to use and require minimal user inputs
* The program must be reliable and produce accurate results
* The program must be efficient and use minimal system resources (no unnecessary methods or unused resources)

3.0 Architecture

**3.0 Architecture**

The project uses different Java imports/libraries to execute the word count including: BufferedReader, BufferedWriter, FileReader, FileWriter, HashMap, and Map. Other methods include:

‘removePunctuations’

This method takes in a string as a parameter and removes all punctuations, such as commas, periods, and quotation marks.

‘removeHyphens’

This method takes in a string as a parameter and removes all hyphens.

‘getWordCount’

This method takes in the file path of the output file as a parameter and returns the total word count