**Requirements Document for CS 5103 Course Project:**

**Software Engineering Practice: Second Requirement Change**

1. **Introduction**

Word Replacement: As part of this requirement change all occurrences of a given word to a given replacement word. The functionality of this project should ensure that the replacement must happen only when the new word matches with the whole new replacing word. For example, for text “ab cd ef”, replace “a” with “b” will result in no change, while replace “ab” with “cd” will result in “cd cd ef”. The Input text string is passed to the program in a text file. These changes should be written in Python to replace all the occurrences of a given word in a text file with the replacement word. The program accepts the input from user(console) for the old and new word (the word to be replaced and the word to replace with respectively) and open and reads the text file. Then the program replaces all occurrences of the old word in the file with a new word. The words are recognized and delimited by spaces only. A space or empty word(empty string characters) is also considered as replacement word and replaces any actual word(not spaces/empty) with spaces.

1. **Out of scope functional requirements:**

A period (.) or, (comma) are not delimiters. This program does not correct spelling mistakes. It assumes users pass the strings words and sentences with meaning also this program will not correct grammatical errors. The lower case and upper case are treated as different words. The original word count, line count and character count are not considered as part of this phase.

1. **Other requirements:**

This program is developed in Python programming language using a VS code editor and is pushed to the GitHub for source control.

1. **Functional requirements:**
   1. The empty string should return/print a message saying **“Error: Input String is Empty”**
   2. If the replacing word or existing word are an empty string, should return/print a message saying “should return/print a message saying **“Error: Invalid Input”**
   3. When Replacing and Replaced words are same then an Information message should be printed/returned- **“Info: Input are same. No change..”**
   4. If a valid Input string and replacing words are passed to the program, Program should replace the correct words with one to the other.
   5. Should replace the words only if there is a complete match in the existing ones.