Laboratory Assignment 01

SE375 System Programming

February 11, 2019

Part 1: Word Count

Your task is to write a Java application that will count the words in a list of text files that are passed as parameters to the main function. The application will read the files line by line, split the lines using whitespace and keep a list of the words. At the end, it will ask the user for a word they are looking for, and will print the number of appearances of that word. You will be evaluated by your usage of data structures and application of algorithms.

Here's a sample run:

```
C:\java WordCount file1 file2 file3
Parsing file1...
Parsing file2...
Parsing file3...

Enter word: programming
The word programming appears 19 times.

Enter word: superman
The word superman does not exist in these files.
```

Part 2: Inverted Index

Consider the same task of word counting. However, this time you are asked to find the files the word appears in. You will be evaluated by your usage of data structures and application of algorithms.

Here's a sample run:

```
C:\java WordCount file1 file2 file3
Parsing file1...
Parsing file2...
Parsing file3...

Enter word: programming
The word programming appears in: file1, file3
```