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| **LAB211 Assignment** | **Type:** | **Short Assignment** |
| **Code:** | **J1.S.P0077** |
| **LOC:** | **100** |
| **Slot(s):** | **2** |

**Title**

Writing module to list and search file by content (CBDT project).

**Background**

NA

**Program Specifications**

Write the functions to list and search file by content including the following requirements:

1. Count number of occurrences of a word in a file.
2. Search file have content which contain inputted word.
3. Exit.

When the user chooses 1:

Require user enter a txt file include multiple rows. Enter a word and then count number of occurrences of this word in a file.

When the user chooses 2:

Require user enter in a folder’s path. Then, enter a word and then list all file name which contain this word

***Function details:***

**Function 1:** Display a menu and ask users to select an option.

* Users run the program. The program prompts users to select an option.
* Users select an option, perform **Function** **2**.

**Function 2:** Perform function based on the selected option..

* Option 1: Counting words in a file.
* Enter path of .text file
* Enter a word to count
* Output number of occurrences of a word in a file
* Option 2: Search files which contain entered word.
* Enter the folder path.
* Enter a word to search
* Output name of files which contain entered word.
* Option 3: Exit the program.

### *Expectation of User interface:*

-------- Count Word --------

Enter Path:d:\text.txt

Enter Word:test

Bout: 12

============ Word Program =========

1. Count Word In File  
2. Find File By Word  
3. Exit

-------- Find File By Word --------

Enter Path:d:\data

Enter Word: content

------------ File Name ------------  
file name 1.txt  
file name 2.txt

2

1

3

**Guidelines**

**Student must implement methods**

countWordInFile

getFileNameContainsWordInDirectory

**in startup code.**

**Function 1:** Counting words in file

* Implement function: public int countWordInFile(String fileSource, String word) throws Exception
  + Input:
* fileSource: The folder’s path.
* word: Key words need search.
  + Output values:
* number of occurrences of a word in a file.
* List of exception.

**Function 2:** Search file follow the input

* Implement function: public List<String> getFileNameContainsWordInDirectory(String source, String word) throws Exception
  + Input:
* Source: Folder’s path.
* Word: Key words need search.
  + Output value:
* The list of found Files.
* List of exception.