

LAB211 Assignment

Type:
Code:
LOC:
Slot(s):

Short Assignment
J1.S.P0075
100
2

Title

Handle file program (extraction from CBDT project)

Background

NA

Program Specifications

Develop a file processing program include functions:

- 1) Enter the path and then check it is exist or not? If path exist, that is file path or directory path?
- 2) Enter a directory path and then list all file with .java extension.
- 3) Enter a directory path and an integer n(KB). Find all the files with size $> n$ in the directory and print to the screen.
- 4) Enter file path then insert more content from the keyboard.
- 5) Enter a file txt path Count the number of word in the file (each word is separated by a whitespace)

Function details:

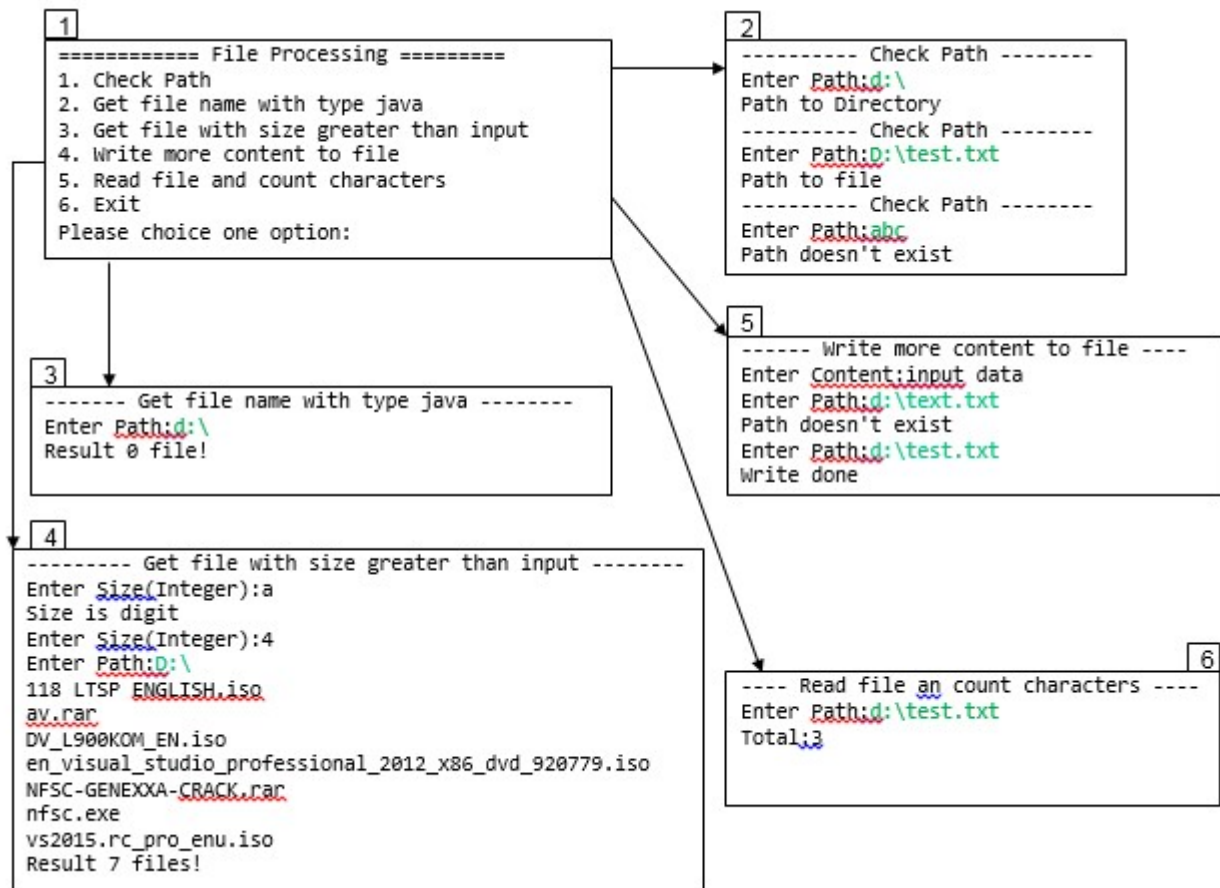
Function 1: Display a menu and ask users to select an option.

- 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: Check the path
 - Enter a path and check the path is exists or not ?
 - If not, display a notice : “Path doesn’t exist”
 - . If path exist, display a notice that is file path or directory path?
 -
- Option 2: Listed file .java
 - Enter a path and check the path is exists
 - If not, display a notice : “Path doesn’t exist”
 - Display quantity of .java file
- Option 3: List all files with file size larger than input size
 - Enter size n(KB) , Check n must be numeric , if it is the other type then display notice: “Value of size is digit”
 - Enter a path
 - If not exist display a notice : “Path doesn’t exist”, Please Try again.
 - Display quantities of file and print file name with size > n in the folder.
- Option 4: Enter file path then add more content from the keyboard.
 - Input content from keyboard that the user want to add to file
 - Enter file path
 - If not exist display a notice: “Path doesn’t exist” Please Try again.
 - Notice that successfully add content inputted from keyboard into file
- Option 5: Count word in .text file
 - Enter a path to.txt file
 - Print to screen total word of file
- Option 6: Exit program

Expectation of User interface:



Guidelines

Student must implement methods

checkInputPath
getAllFileNameJavaInDirectory
getFileWithSizeGreaterThanInput
appendContentToFile
countCharacter

in startup code.

Use the classes:

java.io.BufferedReader, java.io.BufferedWriter, java.io.File, java.io.FileFilter, java.io.FileReader, java.io.FileWriter, java.io.FilenameFilter, java.io.IOException, java.util.ArrayList, java.util.List;
to file manipulation.

Function 1: Check the path

- Implement function: public void checkInputPath(String path) throws Exception

- Input:
 - path: File path or Directory path
- Return value:
 - Exception("Path doesn't exist").
 - Exception("Path to file").

- Exception("Path to Directory").

Function 2: List all the java file .

- Implement function: List<String> getAllFileNameJavaInDirectory(String path) throws Exception
 - Input:
 - path: File path
 - Return value:
 - List of file name.
 - Exception("Path doesn't exist").

function 3: Search file with file size lager than n

- Implement function: public static File[] getFileWithSizeGreaterThanInput(String path, int size) throws Exception.
 - Input:
 - path: File path
 - size: file size
 - Return value:
 - List of file.
 - Exception("Path doesn't exist").

function 4: Add content from keyboard.

- Implement function: public boolean appendContentToFile(String path, String contentInput) throws Exception.
 - Input:
 - path:File path
 - contentInput: inputted content from keyboard
 - Return value:
 - Recording status file.
 - Exception("Path doesn't exist").

function 5: Count the number of character which are separated by a whitespace in file.

- Implement function: public int countCharacter(String path) throws Exception.
 - Input:
 - path: file path
 - Return value:
 - Number of character.

➤ `Exception("Path doesn't exist").`