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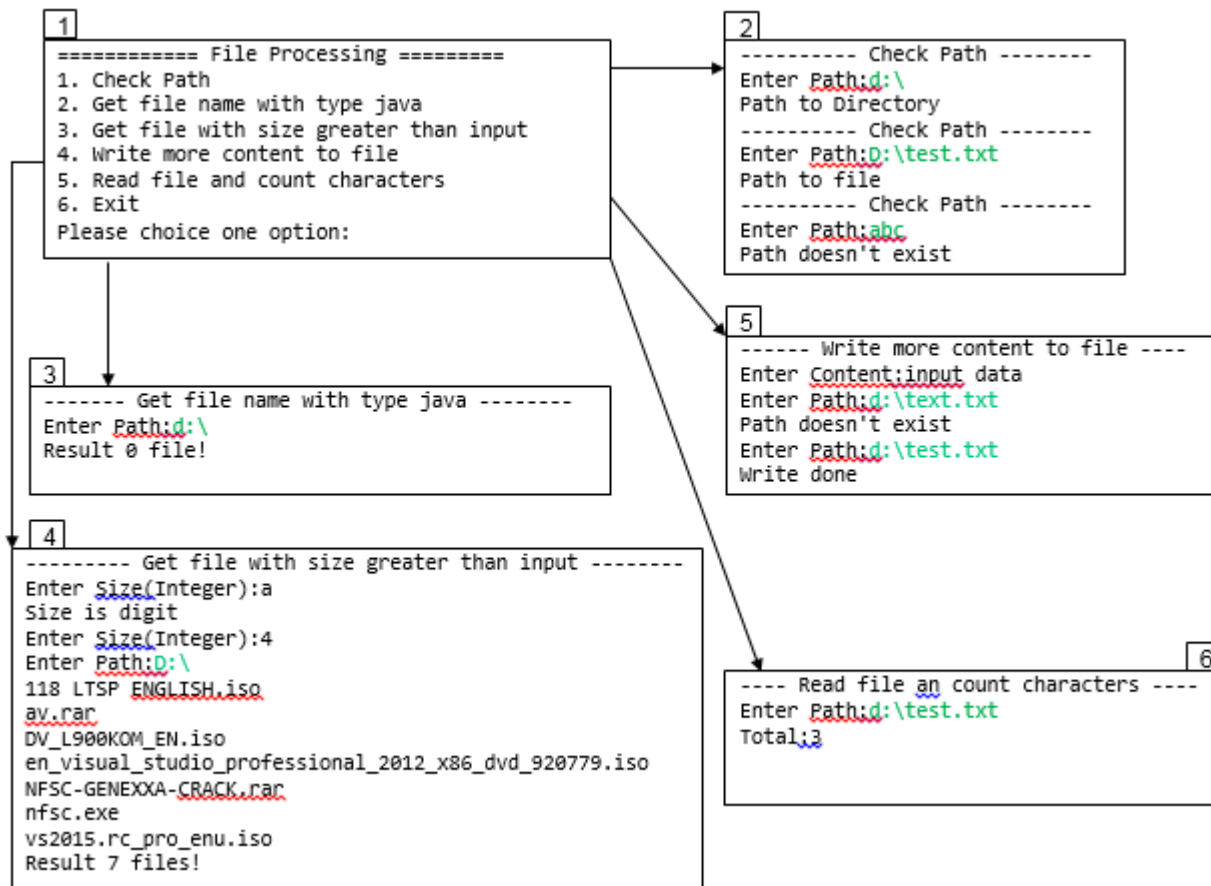
- Users run the program. The program prompts users to select an option.
- Users select an option, perform **Function 2**.

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

- Option 1: Check the path

    o Enter a path and check the path is exits or not ?

    o If not, display a notice : "Path doesn't exist"

    o If path exist, display a notice that is file path or directory path?

- Option 2: Listed file .java

    o Enter a path and check the path is exits

    o If not, display a notice : "Path doesn't exist"

    o Display quantity of .java file

- Option 3: List all files with file size larger than input size

    o Enter size n(KB) , Check n must be numeric , if it is the other type then display notice: "Value of size is digit"

- o Enter a path

- o If not exist display a notice : "Path doesn't exist", Please Try again.

- o 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.

  - o Input content from keyboard that the user want to add to file

  - o Enter file path

  - o If not exist display a notice: "Path doesn't exist" Please Try again.

  - o Notice that successfully add content inputted from keyboard into file

- Option 5: Count word in .text file

  - o Enter a path to.txt file

  - o Print to screen total word of file

- Option 6: Exit program

Expectation of User interface:

```
1
============ File Processing =========
1. Check Path
2. Get file name with type java
3. Get file with size greater than input
4. Write more content to file
5. Read file and count characters
6. Exit
Please choice one option:
```

```
2
---------- Check Path --------
Enter Path:d:\
Path to Directory
---------- Check Path --------
Enter Path:D:\test.txt
Path to file
---------- Check Path --------
Enter Path:abc
Path doesn't exist
```

```
3
------- Get file name with type java --------
Enter Path:d:\
Result 0 file!
```

```
5
------ Write more content to file ----
Enter Content:input data
Enter Path:d:\text.txt
Path doesn't exist
Enter Path:d:\test.txt
Write done
```

```
4
--------- Get file with size greater than input --------
Enter Size(Integer):a
Size is digit
Enter Size(Integer):4
Enter Path:D:\
118 LTSP ENGLISH.iso
av.rar
DV_L900KOM_EN.iso
en_visual_studio_professional_2012_x86_dvd_920779.iso
NFSC-GENEXXA-CRACK.rar
nfsc.exe
vs2015.rc_pro_enu.iso
Result 7 files!
```

```
6
---- Read file an count characters ----
Enter Path:d:\test.txt
Total:3
```

Guidelines

Student must implement methods

      checkInputPath

      getAllFileNameJavaInDirectory

      getFileWithSizeGreaterThanInput

      appendContentToFile

      countWord

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

- o 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 .

- o 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

- o 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.
- o 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 word which are separated by a whitespace in file.
- o Implement function: public int countWord(String path) throws Exception.

  - Input:

    ➢ path: file path

  - Return value:

    ➢ Number of word.

    ➢ Exception("Path doesn't exist").