

Main.java

In this class, there is a main method that guides the user, receives input, and performs functions based on the input. There are also some fields to be used within this method.

FileSystem.java

In this class, in addition to all the methods specified in the assignment PDF, there are also some auxiliary methods such as `getAbsolutePath()`.

1- `changeDirectory()`

This method makes `currentDirectory` equal to the path the user just entered. Before this operation, it checks whether the new path is valid or not.

2- `createDirectory` & `createFile`

These methods create a directory or file with the desired name under the current directory.

3- `listContents()`

This method lists the files and directories in the current directory. Prefixes directories with a '*' character before printing them.

4- `printDirectoryTree()`

This method prints the path from the root directory to the current directory in a tree structure.

5- `delete()`

This method deletes the desired file or directory from the current directory. If the item to be deleted is a directory, it also deletes the data under the directory recursively.

6- `move()`

This method moves a file or directory in the current directory to another directory specified by the user. There is no copying during the migration process.

7- `sortContentsByDateCreated()`

This directory sorts the files and directories in the current directory according to their creation date.

8- searchRecursive()

This method searches for the desired directory or file from the root directory and prints its path. It works recursively.

9- search()

It calls the searchRecursive() method.

10- getAbsolutePath()

Returns the absolute path of the sent directory.

11- getRoot()

Returns root.

Directory.java

This class contains the basic methods required for a directory and a LinkedList to hold the children of the directory. It inherits from the FileSystemElement class.

File.java

This class contains the basic methods required for the file. It inherits from the FileSystemElement class.

FileSystemElement.java

This class is an abstract class from which the Directory.java and File.java classes will inherit. It holds the basic fields and methods required for two classes.