CSCI 232 Lab 2

Due Monday May 22th @ 11:59 PM. Please submit this assignment (.java files) to the appropriate dropbox on D2L

Background and Instructions

In this lab, you will build three more methods for the **FileTree** class we have been working on in class. Use the code from class on May 17th or May 18th (both are `may17.zip`) as a starting point. You do not need to change any code beyond what is instructed. Complete the following tasks:

1. Fill in the body for the **public String getPath()** method. This method will return a String that shows the path from the root to current directory (e.g., /Outdoors/Trips/Summer).

2. Modify the existing method **public boolean moveDown(String directory)** so that instead of reading in a single directory and moving into that directory, it can read in a path (e.g., Outdoors/Trips/Summer) and navigate to the final directory in the path, if it exists. If the path is not valid, it should still print out an error message. You may assume that the path provided is relative to the current directory. Hint: you can use the Java `.split("/")` method on the String path to create a list of all the directories you need to move down into.

3. Fill in the body for the **public boolean remove(String directory)**. This method will remove the selected directory, and all of its subdirectories, from the file system. If the directory does not exist, the method should return false. If it does, remove it and return true. You may assume that the directory provided is a child of the current directory (if it exists).

4. Now test your methods. The **FileTreeManager** class has the code to run the methods you are writing. **getPath()** is executed by typing the `pwd` command, and **remove()** is execute by typing the `rm <directory_name>` command. **moveDown** () is still executed by typing the `cd <directory_name>` command. There is no code you need to add in this task, but make sure you test your methods before you submit this lab.

Grading

• getPath - 3 points

• moveDown - 4 points

• remove - 3 points

NOTE: If your code does not compile, correctness cannot be verified and you won't receive any points for your code. Turn in code that compiles!