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package com.LockedMe;

import java.io.File;
import java.io.IOException;
import java.util.ArrayList;
import java.util.Collections;
import java.util.List;

public class UserFile implements FileAPI {

    /*
     * Method Name:addFile
     * this method add a file in the root directory if it is not present
     * @param (String) fileName i.e file name to be added
     * @return boolean
     */
    @Override
    public boolean addFile(String fileName) {
        boolean isFileCreated = false;
        try {

            File file = getDirectoryPath(fileName);

            if (isFileCreated = file.createNewFile()) {
                System.out.println("File "+file.getName()+ " successfully got
created!\n");
            } else {
                System.out.println("File "+file.getName()+ " already
exists!!\n");
            }

        } catch (IOException e) {
            System.out.println("An error occured\n\n");
            e.printStackTrace();
        }
        return isFileCreated;
    }

    /*
     * Method Name:searchFile
     * this method searches for a file in the root directory
     * @param (String) fileToBeSearched i.e file name to be searched
     * @return void
     */
    @Override
    public void searchFile (String fileToBeSearched){

        File file = getDirectoryPath(fileToBeSearched);

        String[] fileList = getDirectoryPath().list();

        for (String tempFileName: fileList) {
            if (tempFileName.equals(fileToBeSearched+".txt")) {

                System.out.println("Successfully found the file " + "'" +

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file.getName() + "'\n");
        return ;
    }
}
System.out.println("Requested file "+ fileToBeSearched +" is not
found\n");
}

/*
 * Method Name:deleteFile
 * this method deletes a file in the root directory if it exists
 * @param (String) fileToDelete i.e file name to be deleted
 * @return void
 */

@Override
public void deleteFile (String fileToDelete){
    File file = getDirectoryPath(fileToDelete);

    String[] fileList = getDirectoryPath().list();

    for (String tempFileName: fileList) {
        if (tempFileName.equals(fileToDelete+".txt")) {
            if (file.delete()) {
                System.out.println("File: " + "'" +file.getName()+ "' "+ "got
deleted\n");
                return;
            }
        }
    }
    System.out.println("Specified file: "+"'" +fileToDelete+"'"+" not
found\n");
}

//Returns File object with root directory+fileName
private static File getDirectoryPath(String fileName){
    String directoryPath = System.getProperty("user.dir")+"\\root\\";
    fileName+="." + "txt";
    File file = new File(directoryPath+fileName);
    return file;
}
//Returns File object with root directory.
private static File getDirectoryPath() {
    String directoryPath = System.getProperty("user.dir")+"\\root\\";
    File file = new File(directoryPath);
    return file;
}

// lists the files in ascending order
public static void listFilesInAsc() {
    // Add files to this fileList
    List<String> fileList = new ArrayList<>();
    File file = getDirectoryPath();

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System.out.println("Path Directory:"+file.toPath()+"\n");
String a[] =file.list();
if (a.length>=1){
    for (String fileName:a){
        fileList.add(fileName);
    }
    Collections.sort(fileList);
    System.out.println("Here is the list of files");
    for (String s:fileList) {
        System.out.println(s);
    }
}
else {
    System.out.println("The specified directory is empty please add a
file\n");
}

}

}
```