import java.io.File;

import java.io.IOException;

import java.util.Arrays;

import java.util.Scanner;

public class ProjectPhase1 {

static String MY\_Dir;

File myFolder;

public ProjectPhase1() {

MY\_Dir = System.getProperty("user.dir");

myFolder = new File("D:\\Java Files");

if (!myFolder.exists())

myFolder.mkdirs();

System.out.println("MyFilePath : "+ myFolder.getAbsolutePath());

}

private static final String WELCOME\_TO\_MY\_COMPANY\_PORTAL =

"\n Welcome to Project Phase\_1 " + " " + "\n By My Company Pvt.Ltd " + " " + "\n The name is : vani ";

private static final String The\_LOGIC\_PART =

"\nMAIN MENU - Select any of the following operations: \n"+

"1 -> List the types of files in directory\n"+

"2 -> Perform functions like Add, Delete or Search\n"+

"3 -> Exit Program";

private static final String THE\_FUNCTIONALITY\_PART =

" \nSelect any of the following operations: \n"+

" 1 -> Add a file\n"+

" 2 -> Delete a file\n"+

" 3 -> Search a file\n"+

" 4 -> GoBack to Logic Part";

void firstView() {

System.out.println(The\_LOGIC\_PART);

try(Scanner scanner = new Scanner(System.in)){

int option = scanner.nextInt();

switch (option){

case 1 : {

showListOfFiles();

firstView();

}

case 2 : {

secondView();

}

case 3 : {

System.out.println("Thank You");

System.exit(0);

}

default: firstView();

}

}

catch (Exception e){

System.out.println("Please enter 1, 2 or 3");

firstView();

}

}

void secondView() {

System.out.println(THE\_FUNCTIONALITY\_PART);

try(Scanner scanner = new Scanner(System.in))

{

char[] input = scanner.nextLine().toLowerCase().trim().toCharArray();

char logic = input[0];

switch (logic){

case '1' : {

System.out.print("Please Enter a File Name you want to Add : ");

String filename = scanner.next().trim().toLowerCase();

addFileMethod(filename);

break;

}

case '2' : {

System.out.print("Please Enter a File Name you want to Delete : ");

String filename = scanner.next().trim();

deleteFileMethod(filename);

break;

}

case '3' : {

System.out.print("Please Enter a File Name you want to Search For : ");

String filename = scanner.next().trim();

searchFileMethod(filename);

break;

}

case '4' : {

System.out.println("Going back to main logic part");

firstView();

break;

}

default : System.out.println("Please enter correct values to search the data in list");

}

secondView();

}

catch (Exception e){

System.out.println("Please enter correct values to search the data in list");

secondView();

}

}

void showListOfFiles() {

if (myFolder.list().length==0)

System.out.println("The folder is empty");

else {

String[] list = myFolder.list();

System.out.println("The files in "+ myFolder +" are :");

Arrays.sort(list);

for (String str:list) {

System.out.println(str);

}

}

}

void addFileMethod(String filename) throws IOException {

File filepath = new File(myFolder +"/"+filename);

String[] list = myFolder.list();

for (String file: list) {

if (filename.equalsIgnoreCase(file)) {

System.out.println("File " + filename + " already exists at " + myFolder);

return;

}

}

filepath.createNewFile();

System.out.println("File "+filename+" added to "+ myFolder);

}

void deleteFileMethod(String filename) {

File filepath = new File(myFolder +"/"+filename);

String[] list = myFolder.list();

for (String file: list) {

if (filename.equals(file) && filepath.delete()) {

System.out.println("File " + filename + " deleted from " + myFolder);

return;

}

}

System.out.println("Delete Operation failed. FILE NOT FOUND");

}

void searchFileMethod(String filename) {

String[] list = myFolder.list();

for (String file: list) {

if (filename.equals(file)) {

System.out.println("FOUND : File " + filename + " exists at " + myFolder);

return;

}

}

System.out.println("File Not found (FNF)");

}

public static void main(String[] args) {

System.out.println(WELCOME\_TO\_MY\_COMPANY\_PORTAL);

ProjectPhase1 menu = new ProjectPhase1();

menu.firstView();

}

}