import java.io.File;

import java.io.IOException;

import java.util.Arrays;

import java.util.Scanner;

public class JavaProject {

static String dir;

File fol\_name;

public JavaProject() {

dir = System.getProperty("user.dir");

fol\_name = new File(dir+"/files");

if (!fol\_name.exists())

fol\_name.mkdirs();

System.out.println("dir : "+ fol\_name.getAbsolutePath());

}

private static final String WELCOME =

"\n SimpliLearn Phase1 Project "+

"\n Jeevanantham M \n";

private static final String MAIN\_MENU =

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

"1 : List files in dir\n"+

"2 : Add, Delete or Search\n"+

"3 : Exit Program";

private static final String SECONDARY\_MENU =

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

" a : Add a file\n"+

" b : Delete a file\n"+

" c : Search a file\n"+

" d : GoBack";

void showPrimaryMenu() {

System.out.println(MAIN\_MENU);

try{

Scanner sc= new Scanner(System.in);

int option = sc.nextInt();

switch (option){

case 1 : {

showFiles();

showPrimaryMenu();

}

case 2 : {

showSecondaryMenu();

}

case 3 : {

System.out.println("THANK YOU");

System.exit(0);

}

default: showPrimaryMenu();

}

}

catch (Exception e){

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

showPrimaryMenu();

}

}

void showSecondaryMenu() {

System.out.println(SECONDARY\_MENU);

try{

Scanner sc= new Scanner(System.in);

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

char option = input[0];

switch (option){

case 'a' : {

System.out.print("Please Enter a File Name To ADD : ");

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

addFile(filename);

break;

}

case 'b' : {

System.out.print("Please Enter a File Name To DELETE : ");

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

deleteFile(filename);

break;

}

case 'c' : {

System.out.print("Please Enter a File Name To SEARCH : ");

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

searchFile(filename);

break;

}

case 'd' : {

System.out.println("Going Back to MAIN menu");

showPrimaryMenu();

break;

}

default : System.out.println("Please enter a, b, c or d");

}

showSecondaryMenu();

}

catch (Exception e){

System.out.println("Please enter a, b, c or d");

showSecondaryMenu();

}

}

void showFiles() {

if (fol\_name.list().length==0)

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

else {

String[] list = fol\_name.list();

System.out.println("The files in "+ fol\_name +" are :");

Arrays.sort(list);

for (String str:list) {

System.out.println(str);

}

}

}

void addFile(String filename) throws IOException {

File filepath = new File(fol\_name +"/"+filename);

String[] list = fol\_name.list();

for (String file: list) {

if (filename.equalsIgnoreCase(file)) {

System.out.println("File " + filename + " already exists at " + fol\_name);

return;

}

}

filepath.createNewFile();

System.out.println("File "+filename+" added to "+ fol\_name);

}

void deleteFile(String filename) {

File filepath = new File(fol\_name +"/"+filename);

String[] list = fol\_name.list();

for (String file: list) {

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

System.out.println("File " + filename + " deleted from " + fol\_name);

return;

}

}

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

}

void searchFile(String filename) {

String[] list = fol\_name.list();

for (String file: list) {

if (filename.equals(file)) {

System.out.println("FOUND : File " + filename + " exists at " + fol\_name);

return;

}

}

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

}

public static void main(String[] args) {

System.out.println(WELCOME);

JavaProject menu = new JavaProject();

menu.showPrimaryMenu();

}

}