**Final Project Program:**

package assessment;

import java.io.File;

import java.io.IOException;

import java.util.Arrays;

import java.util.Scanner;

public class ProjectPhase1 {

static String DIRECTORY;

File folder\_name;

public ProjectPhase1() {

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

folder\_name = new File(DIRECTORY+"/files");

if (!folder\_name.exists())

folder\_name.mkdirs();

System.out.println("DIRECTORY : "+ folder\_name.getAbsolutePath());

}

private static final String WELCOME\_PROMPT =

"\n this is my application";

private static final String MAIN\_MENU\_PROMPT =

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

"1 -> List files in directory\n"+

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

"3 -> Exit Program";

private static final String SECONDARY\_MENU\_PROMPT =

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

" a -> Add a data\n"+

" b -> Delete a data\n"+

" c -> Search a data\n"+

" d -> Back";

void showPrimaryMenu() {

System.out.println(MAIN\_MENU\_PROMPT);

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

int option = scanner.nextInt();

switch (option){

case 1 : {

showFiles();

showPrimaryMenu();

}

case 2 : {

showSecondaryMenu();

}

case 3 : {

System.out.println("Thank you , Visit again");

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\_PROMPT);

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

{

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

char option = input[0];

switch (option){

case 'a' : {

System.out.print("↳ Adding a data...Please Enter data Name:");

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

addFile(filename);

break;

}

case 'b' : {

System.out.print("↳ Deleting a data...Please Enter data Name:");

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

deleteFile(filename);

break;

}

case 'c' : {

System.out.print("↳ Searching a data...Please Enter data Name:");

String filename = scanner.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 (folder\_name.list().length==0)

System.out.println("No files found");

else {

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

System.out.println("The data's in "+ folder\_name +" are :");

Arrays.sort(list);

for (String str:list) {

System.out.println(str);

}

}

}

void addFile(String filename) throws IOException {

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

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

for (String file: list) {

if (filename.equalsIgnoreCase(file)) {

System.out.println("data " + filename + " already exists at "+folder\_name);

return;

}

}

filepath.createNewFile();

System.out.println("data "+filename+" added to "+ folder\_name);

}

void deleteFile(String filename) {

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

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

for (String file: list) {

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

System.out.println("data " + filename + " deleted from " +folder\_name);

return;

}

}

System.out.println("FILE NOT FOUND");

}

void searchFile(String filename) {

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

for (String file: list) {

if (filename.equals(file)) {

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

return;

}

}

System.out.println("Data NOT Found (DNF)");

}

public static void main(String[] args) {

System.out.println("Application Name:File Handling Developer Name: Hemasree"+WELCOME\_PROMPT);

ProjectPhase1 menu = new ProjectPhase1();

menu.showPrimaryMenu();

}

}

OUTPUT:

Application Name:File Handling Developer Name: Hemasreethis is my application

DIRECTORY : C:\Users\HP\eclipse-workspace\PackagesLearn\files

MAIN MENU - Select any of the following:

1 -> List files in directory

2 -> Add, Delete or Search

3 -> Exit Program

1

The data's in C:\Users\HP\eclipse-workspace\PackagesLearn\files are :

file2

MAIN MENU - Select any of the following:

1 -> List files in directory

2 -> Add, Delete or Search

3 -> Exit Program

2

Select any of the following:

a -> Add a data

b -> Delete a data

c -> Search a data

d -> Back

a

↳ Adding a data...Please Enter data Name:file3

data file3 added to C:\Users\HP\eclipse-workspace\PackagesLearn\files

Select any of the following:

a -> Add a data

b -> Delete a data

c -> Search a data

d -> Back

c

↳ Searching a data...Please Enter data Name:file2

FOUND : data file2 exists at C:\Users\HP\eclipse-workspace\PackagesLearn\files

Select any of the following:

a -> Add a data

b -> Delete a data

c -> Search a data

d -> Back

e

Please enter a, b, c or d

Select any of the following:

a -> Add a data

b -> Delete a data

c -> Search a data

d -> Back

b

↳ Deleting a data...Please Enter data Name:file2

data file2 deleted from C:\Users\HP\eclipse-workspace\PackagesLearn\files

Select any of the following:

a -> Add a data

b -> Delete a data

c -> Search a data

d -> Back

d

Going Back to MAIN menu

MAIN MENU - Select any of the following:

1 -> List files in directory

2 -> Add, Delete or Search

3 -> Exit Program

4

MAIN MENU - Select any of the following:

1 -> List files in directory

2 -> Add, Delete or Search

3 -> Exit Program

3

Thank you , Visit again