**PHASE 1 – FINAL ASSESMENT**

**VIRTUAL KEY FOR REPOSITORY**

**Rajagopal Sai Krishna**

**2499086**

**Source Codes:**

1. **FileOperations.java**

**package** VirtualKey;

**import** java.util.\*;

**import** java.io.\*;

**public** **class** FileOperations {

**static** String *DIRECTORY*;

File folder\_name;

**public** FileOperations() {

*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());

}

**void** SortingFiles() {

**if** (folder\_name.list().length==0)

System.***out***.println(" Folder is Empty \n Add Some Files");

**else** {

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

System.***out***.println(" Files 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("File " + filename + " is already exists at " + folder\_name);

**return**;

}

}

filepath.createNewFile();

System.***out***.println("File "+filename+"is added to "+ folder\_name+" Successfully");

}

**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("File " + filename + " deleted from " + folder\_name);

**return**;

}

}

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

}

**void** SearchFile(String filename) {

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

**for** (String file: list) {

**if** (filename.equals(file)) {

System.***out***.println("FOUND : File " + filename + " Exists at " + folder\_name);

**return**;

}

}

System.***out***.println("File not found");

}

}

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1. **MainMenu.java:**

**package** VirtualKey;

**import** java.util.\*;

**public** **class** MainMenu **extends** FileOperations{

FileOperations fo = **new** FileOperations();

**public** **static** String *MainMenu* = "\n"

+ "MAIN MENU - choose following option to experience lockedMe.com :"

+ "\n1 -- List files in directory"

+ "\n2 -- Add,Search or Delete"

+ "\n3 -- Exit Program";

**void** Main\_Menu() {

System.***out***.println(*MainMenu*);

**try**{

Scanner sc = **new** Scanner(System.***in***);

**int** choose = sc.nextInt();

**switch** (choose){

**case** 1 : {

fo.SortingFiles();

Main\_Menu();

}

**case** 2 : {

Sub\_Menu();

}

**case** 3 : {

System.***out***.println("Thank You For Using LockedMe Directory");

System.*exit*(0);

}

**default**: Main\_Menu();

}

sc.close();

}

**catch** (Exception e){

System.***out***.println("Please Enter Option 1, 2 or 3");

Main\_Menu();

}

}

**void** Sub\_Menu() {

System.***out***.println("\nSelect any of the following Option: \n"+

" 4 -- Add a file\n"+

" 5 -- Search a file\n"+

" 6 -- Delete a file\n"+

" 7 -- Go Back menu1");

**try**{

Scanner sc = **new** Scanner(System.***in***);

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

**int** i = input[0];

**switch** (i){

**case** '4' : {

System.***out***.println();

System.***out***.print("For Adding a File into Directory \n Please Enter a File Name : ");

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

fo.AddFile(filename);

**break**;

}

**case** '5' : {

System.***out***.println();

System.***out***.print("For Searching a File from Directory \n Please Enter a File Name : ");

String filename = sc.next();

fo.SearchFile(filename);

**break**;

}

**case** '6' : {

System.***out***.print("For Deleting a File from Directory. \n Please Enter a File Name : ");

String filename = sc.next();

fo.DeleteFile(filename);

**break**;

}

**case** '7' : {

System.***out***.println();

System.***out***.println("return to main menu");

Main\_Menu();

**break**;

}

**default** : System.***out***.println("Please enter Otion 4, 5, 6 or 7");

}

Sub\_Menu();

sc.close();

}

**catch** (Exception e){

System.***out***.println("Please enter Option 4, 5, 6 or 7");

Sub\_Menu();

}

}

}

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1. **LockedMeDir.java**

**package** VirtualKey;

**public** **class** LockedMeDir **extends** MainMenu{

**public** **static** String *Welcome* = "\n \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Locked Me Dir\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*" + "\n Developed By: RAJAGOPAL SAI KRISHNA\n";

**public** **static** **void** main(String[] Args) {

System.***out***.print(*Welcome*);

MainMenu menu = **new** MainMenu();

menu.Main\_Menu();

}

}