**LockMe App Source Code**

**Welcome.java**

package org.lockers.com;  
  
import java.util.Scanner;  
  
public class Welcome {  
 public static void main(String[] args) {  
  
 // Welcome Page  
  
 System.*out*.println("\* \*");  
 System.*out*.println("\* WELCOME TO LockMe.com APP \*");  
 System.*out*.println("\* This is developed by Anindita Tripathy \*");  
 System.*out*.println("\* \*");  
 System.*out*.println("==========================================");  
  
 System.*out*.println("Select an option and the press Enter");  
 System.*out*.println(" 1. Registration\n 2. Login\n");  
 int option = new Scanner(System.*in*).nextInt();  
 switch (option) {  
  
 case 1:  
 new Login().RegisterUser();  
 break;  
  
 case 2:  
 Boolean validation = new Login().login();  
  
 if (validation == true) {  
  
 // Call UserInterface function  
 UserInterface ui = new UserInterface();  
 ui.userInterface();  
 } else {  
 System.*out*.println("Not a valid User ");  
 }  
 break;  
   
   
 }  
 }  
}

**Login.java**

package org.lockers.com;  
  
import java.io.BufferedWriter;  
import java.io.File;  
import java.io.FileNotFoundException;  
import java.io.FileWriter;  
import java.io.IOException;  
import java.io.PrintWriter;  
import java.sql.DriverManager;  
import java.util.ArrayList;  
import java.util.Arrays;  
import java.util.Scanner;  
  
public class Login {  
 Scanner s = new Scanner(System.*in*);  
 public String dir = System.*getProperty*("user.dir").concat("\\userFiles\\UserCreds");  
 ArrayList list = new ArrayList();  
  
 boolean login() {  
 int count = 3;  
 File myObj = new File(dir);  
 Scanner myReader = null;  
 boolean flag = false;  
 try {  
 myReader = new Scanner(myObj);  
 while (myReader.hasNextLine()) {  
 String data = myReader.nextLine();  
 list.add(data);  
  
 }  
  
 while (count != 0) {  
 System.*out*.println("Enter your UserName :");  
 String userName = new Scanner(System.*in*).next();  
  
 System.*out*.println("Enter your password :");  
 String password = s.next();  
  
 String mergeCreds = userName.concat("/" + password);  
  
 for (int i = 0; i < list.size(); i++) {  
 if (mergeCreds.equals(list.get(i))) {  
 flag = true;  
 break;  
 } else  
 flag = false;  
 }  
 if (flag == true) {  
 System.*out*.println("Login succesfull\n ");  
 break;  
  
 } else {  
 count--;  
 if (count == 0) {  
 new UserInterface().exit();  
 } else {  
 System.*out*.println("\n Incorrect Username and Password. \n Attempts Remaining : " + count);  
 System.*out*.println("WARNING: After 3 consecutive Unsuccessfull login attempts, you will be exited from application");  
 System.*out*.println("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~\n");  
  
 }  
  
 }  
 }  
  
 // myReader.close();  
 } catch (FileNotFoundException e) {  
 // *TODO Auto-generated catch block* e.printStackTrace();  
 }  
 return flag;  
  
 }  
   
 void RegisterUser() {  
 Scanner s = new Scanner(System.*in*);  
 String dir = System.*getProperty*("user.dir").concat("\\userFiles\\UserCreds");  
  
 System.*out*.println("Enter UserName to Register:");  
 String userName = s.next();  
 System.*out*.println("Enter Password to Register:");  
 String pass = s.next();  
 s.close();  
 String mergeCreds = userName.concat("/" + pass);  
  
 try (FileWriter f = new FileWriter(dir, true);  
 BufferedWriter b = new BufferedWriter(f);  
 PrintWriter p = new PrintWriter(b);) {  
 p.println(mergeCreds);  
 System.*out*.println("Succesfully registered to locker.com\n");  
 System.*out*.println("~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~");  
   
  
 } catch (IOException i) {  
 i.printStackTrace();  
 }  
  
 }  
  
  
}

**UserInterface.java**

package org.lockers.com;  
  
import java.util.Scanner;  
  
public class UserInterface {  
   
   
 void exit()  
 {  
 System.*out*.println("Program exited succesfully !");  
 }  
   
 //Prompt user interface options.  
 void userInterface()  
 {  
 System.*out*.println("Select any option from below ");  
 System.*out*.println("1. Retrieving the file names in an ascending order");  
 System.*out*.println("2. Business Level Operations ");  
 System.*out*.println("3. Close the Application ");  
   
 //Read Input from user  
 Scanner input=new Scanner(System.*in*);  
 int option= input.nextInt();  
   
 switch(option)  
 {  
 case 1: new FileOperations().listFiles(); break;  
   
 case 2:new FileOperations().businessOperations(); break;  
   
 case 3: exit(); break;  
 }  
   
input.close();  
 }  
   
}

**FileOperations.Java**

package org.lockers.com;  
  
import java.io.File;  
import java.io.FileWriter;  
import java.io.IOException;  
import java.util.Arrays;  
import java.util.Scanner;  
  
public class FileOperations {  
  
 UserInterface ui = new UserInterface();  
 Scanner s = new Scanner(System.*in*);  
 public String dir = System.*getProperty*("user.dir").concat("\\userFiles\\");  
  
 void listFiles() {  
 // dir=dir.concat("\\userFiles\\");  
 File directoryPath = new File(dir);  
 String str[] = directoryPath.list();  
 String temp;  
 System.*out*.println("Strings in sorted order:");  
 for (int j = 0; j < str.length; j++) {  
 for (int i = j + 1; i < str.length; i++) {  
 // comparing adjacent strings  
 if (str[i].compareTo(str[j]) < 0) {  
 temp = str[j];  
 str[j] = str[i];  
 str[i] = temp;  
 }  
 }  
 System.*out*.println(str[j]);  
 }  
 System.*out*.println("\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-");  
 ui.userInterface();  
 }  
  
 void addFile() {  
 // Get relative path  
  
 File f = new File(dir);  
 f.mkdir();  
  
 System.*out*.println("Please Enter File name : ");  
 String fileName = s.next();  
  
 File stockFile = new File(dir + fileName);  
 try {  
  
 if (stockFile.createNewFile()) {  
 System.*out*.println(stockFile.getName() + " created succesfully");  
 } else {  
 System.*out*.println("File already exists.");  
 }  
  
 System.*out*.println("Do you want to insert content to your file:Y/N ");  
  
 String option = s.next();  
  
 if (option.equalsIgnoreCase("Y")) {  
 System.*out*.println("Enter contents to written in file :");  
 String contents = new Scanner(System.*in*).nextLine();  
 System.*out*.println(contents);  
 FileWriter writer = new FileWriter(stockFile);  
  
 writer.write(contents);  
 writer.close();  
 System.*out*.println("Successfully wrote to the file:" + stockFile.getName());  
  
 } else {  
 System.*out*.println("cannot be inserted");  
 }  
 } catch (IOException e) {  
  
 e.printStackTrace();  
 }  
  
 System.*out*.println("\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-");  
 ui.userInterface();  
 }  
  
 void deleteFile() {  
  
 System.*out*.println("enter file name to delete: ");  
 File deleteFile = new File(dir.concat(s.next()));  
  
 if (deleteFile.delete()) {  
 System.*out*.println("File: " + deleteFile.getName() + " Deleted succesfully");  
 } else {  
 System.*out*.println("File not found \n");  
 }  
 System.*out*.println("\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-");  
 ui.userInterface();  
 }  
  
 int fileSearch() {  
 File searchFile = new File(dir);  
 String[] fileNames = searchFile.list();  
 System.*out*.println(Arrays.*toString*(fileNames));  
 int min = 0, max = fileNames.length - 1;  
 int mid;  
  
 System.*out*.println("enter file name to search: ");  
 String key = s.next();  
  
 while (min <= max) {  
 mid = (min + max) / 2;  
 if (fileNames[mid].compareTo(key) < 0) {  
 min = mid + 1;  
 } else if (fileNames[mid].compareTo(key) > 0) {  
 max = mid - 1;  
 } else {  
 return 1;  
 }  
 }  
 return -1;  
 }  
  
 void businessOperations() {  
 // Business operations  
 System.*out*.println("select any option from below for business operation");  
 System.*out*.println(" 1) Add a file to the Application");  
 System.*out*.println(" 2) Delete an existing file from Application");  
 System.*out*.println(" 3) Search a file from an Application");  
 System.*out*.println(" 4) Return to Main context");  
 System.*out*.println(" 5) Close the Application");  
  
 // user input  
 // Scanner s=new Scanner(System.in);  
 int option = s.nextInt();  
  
 // UserInterface ui=new UserInterface();  
  
 switch (option) {  
 case 1:  
 addFile();  
 break;  
  
 case 2:  
 deleteFile();  
 break;  
  
 case 3:  
 int flag = fileSearch();  
 if (flag == 1) {  
 System.*out*.println("File found at directory:" + dir);  
 } else {  
 System.*out*.println("File Not found at directory:" + dir);  
 }  
  
 System.*out*.println("\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\*-\n");  
 ui.userInterface();  
 break;  
  
 case 4:  
 ui.userInterface();  
 break;  
  
 case 5:  
 ui.exit();  
 break;  
 }  
 }  
  
}

**FileWrite.java**

package org.lockers.com;  
  
import java.io.BufferedWriter;  
import java.io.FileWriter;  
import java.io.IOException;  
import java.io.PrintWriter;  
  
public class fileWrite {  
  
 public static void main(String[] args) {  
  
 String dir = System.*getProperty*("user.dir").concat("\\userFiles\\UserCreds");  
  
 try (FileWriter f = new FileWriter(dir, true);  
 BufferedWriter b = new BufferedWriter(f);  
 PrintWriter p = new PrintWriter(b);) {  
 p.println("Gaura/pass3");  
  
 } catch (IOException i) {  
 i.printStackTrace();  
 }  
 }  
}