Lab05

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✓ *Lab05.1*

```java
import java.text.ParseException;
import java.text.SimpleDateFormat;
import java.time.DayOfWeek;
import java.util.Calendar;
import java.util.Date;
import java.util.Scanner;

public class Lab05_1 {
    static Scanner sc=new Scanner(System.in);
    public static void Menu() throws Exception {
        System.out.println("==== Menu ===\n" +
                "1. Current date and time\n" +
                "2. Calculate days btw two dates\n" +
                "3. Find the day of the week\n" +
                "4. Quit\n");
        System.out.print("Choose an opt: ");
        int opt=sc.nextInt();
        switch (opt) {
            case 1->CurrentDateTime();
            case 2->CalculateBetweenDate();
            case 3->FindDayOfWeek();
            case 4->System.out.println("Exited");
            default -> Menu();
        }
    }
    public static void CurrentDateTime() throws Exception {
        Date date=new Date();
        SimpleDateFormat fm=new SimpleDateFormat("dd/MM/yyyy HH:mm:ss");
        System.out.println(fm.format(date));
        Menu();
    }
    public static void CalculateBetweenDate() throws Exception {
        System.out.print("First date (dd/mm/yyyy): ");
        String date1=sc.next();
        System.out.print("Second date (dd/mm/yyyy): ");
        String date2=sc.next();
        SimpleDateFormat fm=new SimpleDateFormat("dd/MM/yyyy");
        Date dt1=fm.parse(date1);
        Date dt2=fm.parse(date2);
        long dtms1=dt1.getTime();
        long dtms2=dt2.getTime();
        long dtms=Math.abs(dtms1-dtms2);
        long days=dtms/(24*60*60*1000);
        System.out.println("Difference between two dates is: "+days);
        Menu();
    }
    public static void FindDayOfWeek() throws Exception {
        System.out.print("Input a date (dd/mm/yyyy): ");
        String strdate = sc.next();
        SimpleDateFormat fm=new SimpleDateFormat("dd/MM/yyyy");
        Calendar cal = Calendar.getInstance();
        cal.setTime(fm.parse(strdate));
        int mm=cal.get(Calendar.DAY_OF_WEEK)-1>0?cal.get(Calendar.DAY_OF_WEEK)-1:7;
        System.out.println("The day is: "+ DayOfWeek.of(mm));
        Menu();
    }
    public static void main(String[] args) throws Exception{
        Menu();
    }
}
```

```
==== Menu ===
1. Current date and time
2. Calculate days btw two dates
3. Find the day of the week
4. Quit

Choose an opt: 1
11/02/2023 18:07:22
```

```
Choose an opt: 2
First date (dd/mm/yyyy): 12/04/2022
Second date (dd/mm/yyyy): 6/01/2022
Difference between two dates is: 96
```

```
Choose an opt: 3
Input a date (dd/mm/yyyy): 25/04/2003
The day is: FRIDAY
```

✓ Lab05.2

```java
import java.util.ArrayList;
import java.util.Scanner;
import java.util.concurrent.atomic.AtomicInteger;

class Student{
    int id;
    String name;
    int age;
    public Student(int id, String name,int age){
        this.id = id;
        this.name = name;
        this.age = age;
    }
}
public class Lab05_2 {
    static Scanner sc=new Scanner(System.in);
    static ArrayList<Student> list=new ArrayList<Student>();
    public static void Menu(){
        System.out.println("==== Menu ===\n" +
                "1. Add new students\n" +
                "2. Delete multiple students\n" +
                "3. Quit");
        System.out.print("Choose an opt:");
        int opt=sc.nextInt();
        switch (opt) {
            case 1->Add();
            case 2->Delete();
            case 3->System.out.println("Exited");
            default -> Menu();
        }
    }
    public static void Add(){
        int k=1;
        char ch;
        do{
            System.out.println("Student #"+k+":");
            System.out.print("ID: ");
            int id=sc.nextInt();
            System.out.print("Name: ");
            sc.nextLine();
            String name=sc.nextLine().trim();
            System.out.print("Age: ");
            int age=sc.nextInt();
            list.add(new Student(id, name, age));
            k++;
            System.out.print("Do you want to add more (y/n)?: ");
            ch=sc.next().toLowerCase().charAt(0);
        }while(ch=='y');
        Menu();
    }
    public static void Delete(){
        System.out.println("=============================================");
        System.out.println("| No\t| ID\t| Name\t\t\t\t| Age\t|");
```

```
        System.out.println("=============================================");
        AtomicInteger k=new AtomicInteger(1);
        list.forEach(e->{
            System.out.println("| "+k.get()+"\t\t| "+e.id+"\t| "+e.name+"\t\t |"+e.age+"\t|");
            k.set(k.get()+1);
        });
        System.out.println("=============================================\n");
        System.out.println("==== DELETION =====");
        ArrayList<String> listDelete = new ArrayList<String>();
        char ch;
        do{
            System.out.print("Input student # ID: ");
            int id = sc.nextInt();
            ArrayList<Student> students=new ArrayList<Student>();
            list.forEach(e->{
                if(e.id!=id){
                    students.add((Student)e);
                }
            });
            if(list.size()==students.size()){
                listDelete.add("Student with "+id+" not found!");
            }else{
                listDelete.add("Student with "+id+" deleted");
                list=students;
            }
            System.out.print("Do you want to delete more (y/n)?: ");
            ch=sc.next().toLowerCase().charAt(0);
        }while (ch=='y');
        listDelete.forEach(System.out::println);
        Menu();
    }

    public static void main(String[] args){
        Menu();
    }
}
```

```
==== Menu ===
1. Add new students
2. Delete multiple students
3. Quit
Choose an opt:1
Student #1:
ID: 1002
Name: Tet Davann
Age: 29
Do you want to add more (y/n)?: y
Student #2:
ID: 1003
Name: Spider Man
Age: 45
Do you want to add more (y/n)?: n
```

```
Choose an opt:2
=============================================
| No    | ID    | Name              | Age   |
=============================================
| 1     | 1002  | Tet Davann         |29    |
| 2     | 1003  | Spider Man         |45    |
=============================================

==== DELETION =====
Input student # ID: 1002
Do you want to delete more (y/n)?: y
Input student # ID: 1001
Do you want to delete more (y/n)?: n
Student with 1002 deleted
Student with 1001 not found!
==== Menu ===
1. Add new students
2. Delete multiple students
3. Quit
Choose an opt:2
=============================================
| No    | ID    | Name              | Age   |
=============================================
| 1     | 1003  | Spider Man         |45    |
=============================================
```

✓ Lab05.3

```
import java.util.ArrayList;
import java.util.HashMap;
import java.util.Scanner;
import java.util.concurrent.atomic.AtomicInteger;

class Shape{
    public void ShapeLine(int length){
        for(int i=0;i<length;i++){
            System.out.print("_");
        }
        System.out.println();
    }
    public void ShapeRectangle(int width, int height){
       for(int i=0;i<height;i++){
           for(int j=0;j<width;j++){
               if(i==0||i==height-1){
                   System.out.print("*");
               }else{
                   if(j==0||j==width-1){
                       System.out.print("*");
                   }else{
                       System.out.print(" ");
                   }
               }
           }
           System.out.println();
       }
    }
    public void ShapeTriangle(int hw){
        for(int i=0; i<hw; i++){
            for(int j=0;j<hw*2;j++){
                if(j>=hw-i&&j<=hw+i){
                    System.out.print(" *");
                }else{
                    System.out.print("  ");
                }
            }
            System.out.println();
        }
    }
}
public class Lab05_3 {
    static ArrayList<Integer> line= new ArrayList<>();
    static ArrayList<Integer> triangle= new ArrayList<>();
    static HashMap<String,Integer> map= new HashMap<>();
    static ArrayList<HashMap<String,Integer>> rectangle= new ArrayList<>();
    static Scanner sc=new Scanner(System.in);
    static Shape shape=new Shape();
    private static void Line(){
        System.out.println("==== List all lines ====");
        AtomicInteger k = new AtomicInteger(1);
        line.forEach(e->{
            System.out.println(k.get()+". length="+e);
            shape.ShapeLine(e);
            k.set(k.get()+1);
        });
        Menu();
    }
    private static void Rectangle(){
        System.out.println("==== List all rectangle ====");
        AtomicInteger k = new AtomicInteger(1);
        rectangle.forEach(e->{
            System.out.println(k.get()+". width="+e.get("w")+" height="+e.get("h"));
            shape.ShapeRectangle(e.get("w"),e.get("h"));
            k.set(k.get()+1);
        });
        Menu();
    }
```

```
    private static void Triangle(){
        AtomicInteger k = new AtomicInteger(1);
        System.out.println("==== List all triangle ====");
        triangle.forEach(e->{
            System.out.println(k.get()+". height="+e);
            shape.ShapeTriangle(e);
            k.set(k.get()+1);
        });
        Menu();
    }
    private static void addNew(){
        System.out.println("==== Add new shape ====\n" +
                "Select a shape:\n" +
                "1. Line\n" +
                "2. Rectangle\n" +
                "3. Triangle");
        System.out.print("Choose an opt: ");
        int opt=sc.nextInt();
        switch(opt){
            case 1->{
                System.out.print("Input Length: ");
                int lth=sc.nextInt();
                line.add(lth);
                Menu();
            }
            case 2->{
                System.out.print("Input Width: ");
                int w=sc.nextInt();
                System.out.print("Input Height: ");
                int h=sc.nextInt();
                map.put("w",w);
                map.put("h",h);
                rectangle.add(map);
                Menu();
            }
            case 3->{
                System.out.print("Input Height: ");
                int h=sc.nextInt();
                triangle.add(h);
                Menu();
            }
            default -> addNew();
        }
    }
    private static void Menu(){
        System.out.println("==== Menu ===\n" +
                "1. View all lines\n" +
                "2. View all rectangles\n" +
                "3. View all triangles\n" +
                "4. Add a new shape\n" +
                "5. Quit");
        System.out.print("Choose an opt: ");
        int opt = sc.nextInt();
        switch (opt) {
            case 1->Line();
            case 2->Rectangle();
            case 3->Triangle();
            case 4->addNew();
            case 5->System.out.println("Quited");
            default -> Menu();
        }
    }
    public static void main(String[] args){
        Menu();
    }
}
```

```
==== Menu ====
1. View all lines
2. View all rectangles
3. View all triangles
4. Add a new shape
5. Quit
Choose an opt: 4
==== Add new shape ====
Select a shape:
1. Line
2. Rectangle
3. Triangle
Choose an opt: 1
Input Length: 10
==== Menu ====
1. View all lines
2. View all rectangles
3. View all triangles
4. Add a new shape
5. Quit
Choose an opt: 1
==== List all lines ====
1. length=10
----------
```

```
Choose an opt: 4
==== Add new shape ====
Select a shape:
1. Line
2. Rectangle
3. Triangle
Choose an opt: 2
Input Width: 8
Input Height: 6
==== Menu ====
1. View all lines
2. View all rectangles
3. View all triangles
4. Add a new shape
5. Quit
Choose an opt: 2
==== List all rectangle ====
1. width=8 height=6
********
*      *
*      *
*      *
*      *
********
```

```
Select a shape:
1. Line
2. Rectangle
3. Triangle
Choose an opt: 3
Input Height: 10
==== Menu ====
1. View all lines
2. View all rectangles
3. View all triangles
4. Add a new shape
5. Quit
Choose an opt: 3
==== List all triangle ====
1. height=10
                   *
                  * * *
                 * * * * *
                * * * * * * *
               * * * * * * * * *
              * * * * * * * * * * *
             * * * * * * * * * * * * *
            * * * * * * * * * * * * * * *
          * * * * * * * * * * * * * * * * *
        * * * * * * * * * * * * * * * * * * *
      * * * * * * * * * * * * * * * * * * * * *
```

✓ Lab05.4

```java
import java.io.File;
import java.io.PrintWriter;
import java.util.ArrayList;
import java.util.Scanner;

public class Lab05_4 {
    static Scanner sc=new Scanner(System.in);
    static Scanner fread;

    static int row=0;

    private static void view() throws Exception {
        fread = new Scanner(new File("src/data.txt"));

        int k=1;
        row = 0;
        while (fread.hasNext()) {
            System.out.println(k+"| "+fread.nextLine());
            k++;
            row++;
        }
        fread.close();
    }
    private static void edit() throws Exception {
        view();
        System.out.print("*****************************\n" +
                "1. Append new line\n" +
                "2. Update at line\n" +
                "3. Delete line\n" +
                "Choose an opt: ");
        int opt=sc.nextInt();
        fread = new Scanner(new File("src/data.txt"));
        switch (opt){
            case 1->{

                ArrayList<String> lines = new ArrayList<>();
                while (fread.hasNext()){
                    lines.add(fread.nextLine());
                }
                PrintWriter fwrite=new PrintWriter("src/data.txt");
               System.out.println("Input a string for line "+(row+1)+"#:");
               sc.nextLine();
               String text=sc.nextLine();
               lines.forEach(fwrite::println);
                fwrite.println(text);
                System.out.println("Line #"+(row+1)+" is appended to the note.");
                fwrite.close();
            }
            case 2->{

                System.out.print("Update line number: ");
                int line =sc.nextInt();
                System.out.print("Line "+line+"#: ");
                sc.nextLine();
                String text=sc.nextLine();

                ArrayList<String> lines = new ArrayList<>();
                while (fread.hasNext()){
                    //fwrite.println(fread.nextLine());
                    lines.add(fread.nextLine());
                }
                PrintWriter fwrite=new PrintWriter("src/data.txt");
                for(int i=1; i<=lines.size(); i++){
                    if(i==line){
                        System.out.println(text);
                        fwrite.println(text);
                    }else{
                        fwrite.println(lines.get(i-1));
                        System.out.println(lines.get(i-1));
                    }
```

```
                }
                fwrite.close();
            }
            case 3->{
                System.out.print("Delete line number: ");
                int line =sc.nextInt();

                ArrayList<String> lines = new ArrayList<>();
                while (fread.hasNext()){
                    //fwrite.println(fread.nextLine());
                    lines.add(fread.nextLine());
                }

                PrintWriter fwrite=new PrintWriter("src/data.txt");
                for(int i=1; i<=lines.size(); i++){
                    if(i==line){
                       continue;
                    }else{
                        fwrite.println(lines.get(i-1));
                    }

                }
                fwrite.close();
            }
            default -> Menu();
        }

        edit();
    }
    private static void Menu() throws Exception {
        System.out.print("=== Menu ===\n" +
                "1. View my note\n" +
                "2. Edit\n" +
                "3. Quit\n" +
                "Choose an option:");
        int opt = sc.nextInt();
        switch (opt) {
            case 1->{
                System.out.println("==== View note ====\n" +
                                   "****************************");
                view();
                Menu();
            }
            case 2->{
                System.out.println("==== Edit following note ====\n" +
                                   "****************************");
                edit();
            }

            case 3->System.out.println("Quited");
            default -> Menu();
        }
    }
    public static void main(String[] args) throws Exception {
        Menu();
    }

}
```

```
=== Menu ===
1. View my note
2. Edit
3. Quit
Choose an option:2
==== Edit following note ====
*****************************
1| aaaaaaaaaaaaaaaaaaa
2| bbbbbbbbbbbbbbbbbbb
3| ccccccccccccccccccc
4| ddddddddddddddddddddd
*****************************
1. Append new line
2. Update at line
3. Delete line
Choose an opt:
```

```
Choose an opt: 1
Input a string for line 5#:
eeeeeeeeeeeeeeee
Line #5 is appended to the note.
1| aaaaaaaaaaaaaaaaaaa
2| bbbbbbbbbbbbbbbbbbb
3| ccccccccccccccccccc
4| ddddddddddddddddddddd
5| eeeeeeeeeeeeeeee
```

```
Choose an opt: 2
Update line number: 2
Line 2#: updated
aaaaaaaaaaaaaaaaaaa
updated
ccccccccccccccccccc
ddddddddddddddddddddd
eeeeeeeeeeeeeeee
1| aaaaaaaaaaaaaaaaaaa
2| updated
3| ccccccccccccccccccc
4| ddddddddddddddddddddd
5| eeeeeeeeeeeeeeee
```

```
==== Edit following note ====
*****************************
1| aaaaaaaaaaaaaaaaaaa
2| updated
3| ccccccccccccccccccc
4| ddddddddddddddddddddd
5| eeeeeeeeeeeeeeee
*****************************
1. Append new line
2. Update at line
3. Delete line
Choose an opt: 3
Delete line number: 2
1| aaaaaaaaaaaaaaaaaaa
2| ccccccccccccccccccc
3| ddddddddddddddddddddd
4| eeeeeeeeeeeeeeee
```

```
=== Menu ===
1. View my note
2. Edit
3. Quit
Choose an option:1
==== View note ====
*****************************
1| aaaaaaaaaaaaaaaaaaa
2| ccccccccccccccccccc
3| ddddddddddddddddddddd
4| eeeeeeeeeeeeeeee
```

✓ Lab05.5

```java
import java.io.File;
import java.io.PrintWriter;
import java.util.ArrayList;
import java.util.Scanner;

public class Lab05_5 {
    static Scanner sc=new Scanner(System.in);
    private static void Menu() throws Exception{
        System.out.print("=== Menu ===\n" +
                "1. View all\n" +
                "2. Add new\n" +
                "3. Quit\n" +
                "Choose an option:");
        int opt=sc.nextInt();
        switch (opt) {
            case 1->View();
            case 2->addNew();
            case 3->System.out.println("Quited");
            default -> Menu();
        }
    }
    private static void addNew() throws Exception {
        System.out.print("==== Add new resource ====\n" +
                "1. Teacher\n" +
                "2. Student\n" +
                "3. Security guard\n" +
                "Choose an opt:");
        int opt=sc.nextInt();
        Scanner fread=null;
        PrintWriter fwrite=null;
        String text="";
        ArrayList<String> lines = new ArrayList<>();
        switch (opt) {
            case 1-> {
                System.out.print("Firstnanme: ");
                String fname = sc.next();
                System.out.print("Lastnanme: ");
                String lname = sc.next();
                System.out.print("Sex: ");
                char sex= sc.next().toUpperCase().charAt(0);
                System.out.print("Email: ");
                String email = sc.next().toLowerCase();
                System.out.print("Subject: ");
                sc.nextLine();
                String subject = sc.nextLine();
                System.out.print("Salary: ");
                String salary = sc.nextLine();
                fread = new Scanner(new File("src/teacher.txt"));
                while (fread.hasNext()){
                    lines.add(fread.nextLine());
                }
                text=fname+";"+lname+";"+sex+";"+email+";"+subject+";"+salary;
                fwrite=new PrintWriter("src/teacher.txt");
            }
            case 2-> {
                System.out.print("Firstnanme: ");
                String fname = sc.next();
                System.out.print("Lastnanme: ");
                String lname = sc.next();
                System.out.print("Sex: ");
                char sex= sc.next().toUpperCase().charAt(0);
                System.out.print("Email: ");
                String email = sc.next().toLowerCase();
                System.out.print("Year: ");
                sc.nextLine();
                String year = sc.nextLine();
                System.out.print("Major: ");
                String major = sc.nextLine();
                fread = new Scanner(new File("src/student.txt"));
                while (fread.hasNext()){
```

```
                    lines.add(fread.nextLine());
                }
                text=fname+";"+lname+";"+sex+";"+email+";"+year+";"+major;
                fwrite=new PrintWriter("src/student.txt");

            }
            case 3-> {
                System.out.print("Firstnanme: ");
                String fname = sc.next();
                System.out.print("Lastnanme: ");
                String lname = sc.next();
                System.out.print("Sex: ");
                char sex= sc.next().toUpperCase().charAt(0);
                System.out.print("Email: ");
                String email = sc.next().toLowerCase();
                System.out.print("Position: ");
                sc.nextLine();
                String position = sc.nextLine();
                fread = new Scanner(new File("src/securityguard.txt"));
                while (fread.hasNext()){
                    lines.add(fread.nextLine());
                }
                text=fname+";"+lname+";"+sex+";"+email+";"+position;
                fwrite=new PrintWriter("src/securityguard.txt");

            }
            default -> Menu();
        }
        if(fwrite != null){
            lines.forEach(fwrite::println);
            fwrite.println(text);
            fwrite.close();
        }
        addNew();
    }
    private static void View()throws Exception{
        Scanner fread=null;
        System.out.println("=== Teacher ===");
        fread = new Scanner(new File("src/teacher.txt"));
        int k=1;
        while (fread.hasNext()){
            String [] ln = fread.nextLine().split(";");
            System.out.println(k+". ["+ln[0]+"
"+ln[1]+"]"+"["+ln[2]+"]"+"["+ln[3]+"]"+"["+ln[4]+"]"+"["+ln[5]+"$]");
            k++;
        }
        fread.close();
        System.out.println("=== Student ===");
        fread = new Scanner(new File("src/student.txt"));
        k=1;
        while (fread.hasNext()){
            String [] ln = fread.nextLine().split(";");
            System.out.println(k+". ["+ln[0]+"
"+ln[1]+"]"+"["+ln[2]+"]"+"["+ln[3]+"]"+"["+ln[4]+"]"+"["+ln[5]+"]");
            k++;
        }
        fread.close();
        System.out.println("=== Security guard ===");
        fread = new Scanner(new File("src/securityguard.txt"));
        k=1;
        while (fread.hasNext()){
            String [] ln = fread.nextLine().split(";");
            System.out.println(k+". ["+ln[0]+"
"+ln[1]+"]"+"["+ln[2]+"]"+"["+ln[3]+"]"+"["+ln[4]+"]");
            k++;
        }
        fread.close();
        Menu();
    }
    public static void main(String[] args) throws Exception{
        Menu();
```

```
    }
}
```

```
Choose an option:2
==== Add new resource ====
1. Teacher
2. Student
3. Security guard
Choose an opt:3
Firstnanme: Tet
Lastnanme: Davann
Sex: M
Email: davanncr@gmail.com
Position: Security
```

```
=== Menu ===
1. View all
2. Add new
3. Quit
Choose an option:1
=== Teacher ===
1. [Tet Davann][M][davanncr@gmail.com][CS][2000$]
2. [Davann Tet][F][name@gmail.com][c++ java][3000$]
=== Student ===
1. [Tet Davann][F][name1@gmail.com][2][Computer Science]
=== Security guard ===
1. [Tet Davann][M][davanncr@gmail.com][Security]
```

✓ Lab05.6

```
import java.io.File;
import java.io.PrintWriter;
import java.util.ArrayList;
import java.util.Scanner;
public class Lab05_6 {
    private static Scanner sc=new Scanner(System.in);
    private static void Menu() throws Exception{
        System.out.print("==== Menu ===\n" +
                "1. Login\n" +
                "2. Register\n" +
                "3. Quit\n" +
                "Choose an option:");
        int opt = sc.nextInt();
        switch (opt) {
            case 1->Login();
            case 2->Register();
            case 3->System.out.println("Quited");
            default -> Menu();
        }
    }
    private static void Login()throws Exception {
        System.out.println("=== Login ===");
        boolean lg=false;
        do{
            System.out.print("Email or Username: ");
            String emus = sc.next().toLowerCase();
            System.out.print("Password:");
            String password = sc.next();
            Scanner fread=null;
            fread = new Scanner(new File("src/user.txt"));
```

```
            while (fread.hasNext()){
                String [] ln = fread.nextLine().split(";");

if((emus.equals(ln[2])&&password.equals(ln[4]))||(emus.equals(ln[3])&&password.equals(ln[4]))){
                    lg=true;
                    System.out.println("=== User Info ===");
                    System.out.println("Hi "+ln[0]+" "+ln[1]
                            +"\nYour username is: " + ln[2]
                            +"\nYour email is: " + ln[3]
                    );
                }

            }
            if(!lg){
                lg=false;
                System.out.println("User not found. Please try again!\n");
            }
        }while (!lg);
        Menu();
    }
    private static void Register() throws Exception{
        System.out.println("===  Register a new user ===");
        System.out.print("Firstnanme: ");
        String fname = sc.next();
        System.out.print("Lastnanme: ");
        String lname = sc.next();
        System.out.print("Username: ");
        String username = sc.next().toLowerCase();
        System.out.print("Email: ");
        String email = sc.next().toLowerCase();
        System.out.print("Password: ");
        String password = sc.next();
        System.out.println("\nYou are successfully registered~");
        Scanner fread=null;
        PrintWriter fwrite=null;
        String text="";
        ArrayList<String> lines = new ArrayList<>();
        fread = new Scanner(new File("src/user.txt"));
        while (fread.hasNext()){
            lines.add(fread.nextLine());
        }
        text=fname+";"+lname+";"+username+";"+email+";"+password;
        fwrite=new PrintWriter("src/user.txt");
        lines.forEach(fwrite::println);
        fwrite.println(text);
        fwrite.close();
        Menu();
    }
    public static void main(String[] args) throws Exception {
        Menu();
    }
}
```

```
==== Menu ===
1. Login
2. Register
3. Quit
Choose an option:2
===  Register a new user ===
Firstnanme: vanda
Lastnanme: van
Username: vanda
Email: vanda@gmail.com
Password: 12345
```

```
Choose an option:1
=== Login ===
Email or Username: jonh
Password:12345
User not found. Please try again!

Email or Username: vanda
Password:12345
=== User Info ===
Hi vanda van
Your username is: vanda
Your email is: vanda@gmail.com
```