LAB TEST ①

JAVA & J2EE

1MS17IS051
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5-06-2020

④ Write a java Program using swings to validate user login information using dialog boxes. Once validated, allow the user to enter the customer id, if the person is a new customer, else check wether the customer exits in a collection and obtain the customer id. The customer id. The customer id can be obtained given a mobile number. Allow the user to enter the item purchased by giving the item name and the total Cost should appear in the corresponding GUI components. Using option dialog box, indicate the types of discount available for the customer. On clicking on the print button, print the details in information dialog box.

PROGRAM

```
import java.awt.event.*;
import java.util.*;
import javax.swing.*;
public class UserLogin {
HashMap<Long,Integer>hm = new HashMap<Long, Integer>();
Static ArrayList<ItemDetails> al_items = new ArrayList<ItemDetails>();
JFrame jf2;
JFrame jl1, jl2, jl3, jl4, jl5, jl6;
JButton display_item, check;
```

```
JTextfield  cid, phone, itemid, quan, itemname, itemc ;

void add_collection()
{
  hm.put (9887667887L, 123);
  hm.put(7665436788L, 232);
  hm.put(6474858692, 456);
}
int check_collection (Long val)
 {
     add_collection ();
     if (hm.containsKey (val)
          return hm.get (val);
      else
          return -1;
}
User Login ()
   this.jl =new  JFrame ("Customer information");
   this.j2 = new JFrame ("Customer information");
   this.j12 =new JLabel ("Enter customer id ");
   this.cid = new  JTextfield(10);
   this.j12 = new  JLabel("Enter  mobile number");
  this.phone = new JTextfield (12);
  this.check = new JButton ("Check phone");
  this.j13 = new JLabel ("Enter  item id");
  this.itemid= new JTextfield (10);
 this.j14 = new JLabel ("Enter quantity brought:");
  this.quan= new JTextfield(4);
 this.j15 =new  JLabel ("Item name");
  this.itemname = new JTextfield (30);
```

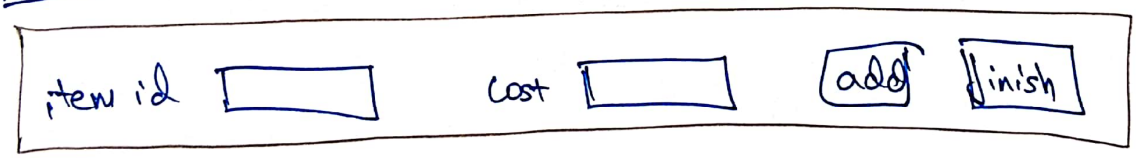
```
this.jl6 =new JLabel ("Item cost");
this itemc =new JTextfield (4);
this.display_item= new JButton ("Item Details");
String uname = JOptionPane.showInputDialog (null," Enter username");
String passwd= JOptionPane.showInputDialog (null," Enter password");
if(uname.equals ("uname@gmail.com") && passwd.equals ("pass"))
{
    JPanned jp= new JPanned();
     jp.add =new JPanned()
     jp.add (jl2);
     jp.add (phone);
     jp.add (check);
     dl.add (jp);
     dl.setSize(200,200);
     dl.setVisible (true);
     check.addActionListener (new ActionListener(){
         public void actionPerformed (ActionEvent evt){
           dl.setVisible (false);
         JPanned jp= new JPanned();
         jp.add(jl1);
         jp.add (cid);
         jp.add (jl3);
         jp.add(itemid);
         jp.add(jl4);
          jp.add (qnan);
          jp.add (display_item);
          jp.add (jl5);
           jp.add (itemname);
```

```
jp.add(jl6);
jp.add(itemc);
f2.add(jp);
// check collection
int v=check_collection(Long.parseLong(phone.getText()));
cid.setText(Integer.toString(v));
if(v==-1)
{
    String cid1 = JOptionPane.showInputDialog(null,"Enter
                                    customer id");
    cid.setText(cid1);
}
    f2.setVisible(true);
}
});
}
else
JOptionPane.showMessageDialog(null,"Invalid details Please run the
                code once again");
display_item.addActionListener(new ActionListener(){
    public void actionPerformed(ActionEvent evt){
        int v1=Integer.parseInt(itemid.getText());
        int qty=Integer.parseInt(qnan.getText());
        check_item(v1,qty);
    }
});
}
```

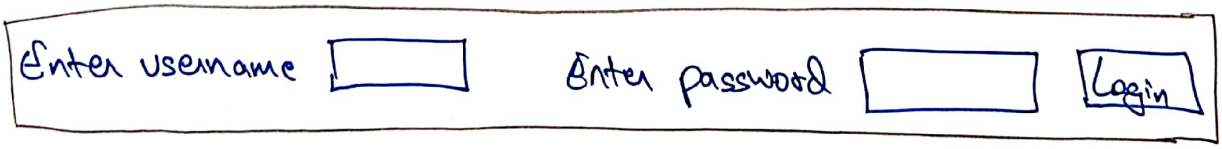
```
void check_item(int id, int qty)
{
    for (ItemDetails item : at_items)
    {
        if (item.item_id == id)
        {
            itemname.setText(item.item_name);
            itemc.setText(Float.toString(item.cost * qty));
        }
    }
public static void main(String args[])
{
    Scanner sc = new Scanner(System.in);
    for (int i=0; i<3; i++)
    {
        System.out.println("Enter item id");
        int id = Integer.parseInt(sc.nextLine());
        System.out.println("Enter item name");
        String item_name = sc.nextLine();
        System.out.println("Enter item cost");
        float cost = Float.parseFloat(sc.nextLine());
        ItemDetails it = new ItemDetails(id, item_name, cost);
        at_items.add(it);
    }
    UseLogin ul = new UseLogin();
    }
}
```

```
class ItemDetails{
int item_id;
 String item_name;
float cost;
 ItemDetails(int it , String iname, float c)
{   item_id = it;
    item_name = iname;
    cost = c;
}
  public String toString()
{
    return item_id +"  " + item_name +"  " + cost +"  ";
}}
```

OUTPUT:-

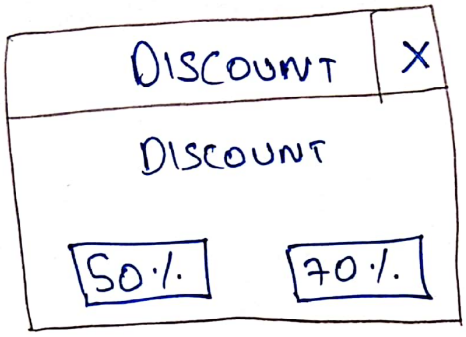


After finishing finish

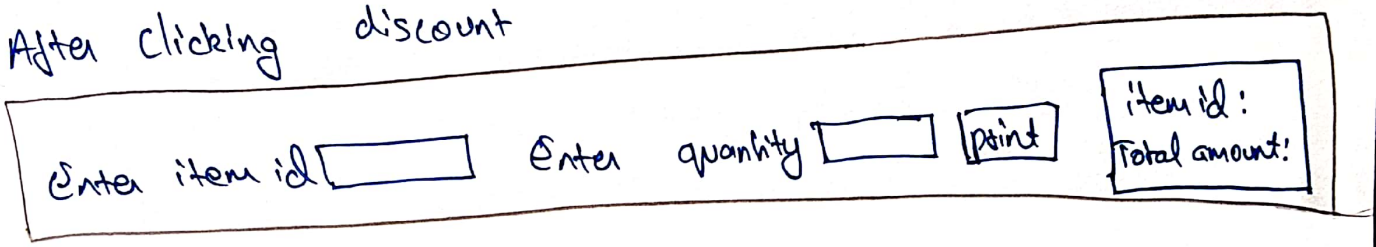


After entering correct details.

If customer id and phone number is valid then :



After clicking discount



LAB-TEST (2) (8)

5-06-20

1MS14IS051
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10. Write a program using JSP that helps a student to calculate the income tax on various annual incomes that he will be earning when he gets a job.

(a) Login.html will call dataCapture.jsp that should do the following:

(i) Use Java Collections to make a list valid users and facilitate user login functionality.

(ii) Give personalized welcome message and display todays data.

(iii) Have a Text Entry with label 'Name' to enter the name of the user

(iv) Give a list of Organisations to choose 'Place of work'

(v) Provide a Male or female option to choose the 'Gender'

(vi) Have a Text Entry with label 'Annual Income'

(vii) Give a submit button reading 'Calculate Tax'

(b) CalculateTax.jsp must calculate the interest based on the following business rules:

(i) Salary below 1,00,000 shall no have income-tax

(ii) Calculate 15% tax on 1,00,001 - 500000

(iii) Calculate 20% on 500001 onwards.

PROGRAM

DataCapture.jsp

```
<%@ page import = "java.util.*" %>
<%@ page import = "java.io.*" %>
<%@ page language = "java" contentType = "text/html; charset=UTF-8"
    pageEncoding = "UTF-8" %>
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01
    Transitional//EN" "https.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv = "Content-Type" content = "text/html; charset=
                                              UTF-8" >
<title> TITLE </title>
</head>
<body>
<%
    HashMap<String, String> hm = new HashMap<String, String>();
  hm.put ("name1", "pass1");
  hm.put ("Name2", "pass2");
  String name = request.getParameter ("name");
  String pass = request.getParameter ("pass");
  PrintWriter pout = response.getWriter();
  if (hm.containsKey(name) && pass.equals (hm.get(name))) {
    pout.println("Welcome" + name + "\n");
    pout.println (new Date());
%>
```

```
<form action = "CalculateTax.jsp" method = "get">
  Name : <input type = "text" name = "name">
  Profession <select name = "prof">
      <option> Engineer </option>
  </select> <br> Gender <select name = "gender">
  <option> Male </option>
  <option> Female </option>
  </select>
  Annual Income : <input type = "text" name = "salary">
  Calculate Tax <input type = "submit">
</form>
<%
    } else {
%>
<jsp:forward page = "login.html"></jsp:forward>
<%
    }
%>
</body>
</html>
```

Calculate Tax.Jsp

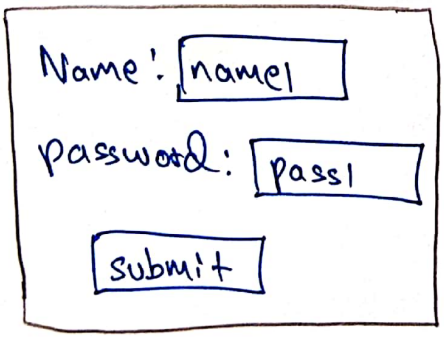
```
<%@page import = "java.io.*"%>
<%@page language = "java" contentType = "text/html; charset = UTF-8"
    pageEncoding = "UTF-8"%>
```

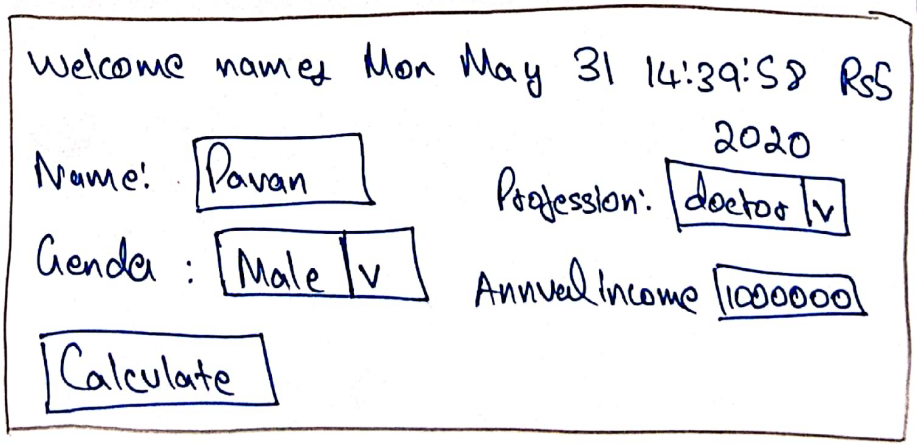
```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01 Transitional//
    EN" "http://www.w3.org/TR/html4/loose.dtd">
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>TITLE</title>
</head>
<body>
<%
 PrintWriter pout = response.getWriter();
 int income = Integer.parseInt(request.getParameter("salary"));
 double tax = 0;
 if(income <= 100000){
 }
 if(income>100000 && income<500000){
     tax = (income - 100000)*0.15;
 }
 if(income >500000){
 tax= (income-500000)*0.20+400000*0.15;
 }
  pout.print(tax);
 %>
 </body>
 </html>
```

index.html

```
<!DOCTYPE html>
<html>
<head>
<meta charset = "UTF-8">
<title>TITLE </title>
</head>
<body>
<form action= "DataCapture.jsp" method = "post">
Name: <input type = "text" name= "name">
Password : <input type = "text" name = "pass" >
<input type ="submit">
</form>
</body>
</html>
```

OUTPUT:-





Tax : 7500