



# Assignment IV

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## Overview

Designing an online apparel store using servlets. The store keeps records for its items in a database where some items may be discounted and some other items should be displayed as “new arrivals”. A user can search for a specific item. By default, when a user signs in, based on his/her profile (male/female etc.), show him/her preferred set of clothing. Users will be divided into two groups: some users looking for discounted items mainly, some others looking for new arrivals. So, depending on their preference already set in the database, their shopping experience would be different.

## Use

Java, tomcat, eclipse, jsp

## Structure

### 1. JSP

- a. **Index.jsp** : jsp file for the home page and login.
- b. **register.jsp** : jsp file for register page
- c. **logout.jsp** : jsp file for logout page
- d. **welcome.jsp** : jsp file for home page of customer and searching cloths
- e. **show.jsp** : jsp file to show cloths

### 2. Class

- a. Customer pkg:
  - i. register.java : save the customer data in database
  - ii. login.java : verify customer data in database and login



b. Dbconnection:

- i. MyListner.java : connect to the database

## Goals

1. Make a Web Application for a apparel Store
2. Use session/cookies to track the user.

## CODE SNIPPET

### index.jsp

```
<h1>Welcome to Apparel store</h1>
New customer ? <a href="http://localhost:8090/apparel/register.jsp">Register
Here</a><br><br>
<form action="login" method="post" style="position: absolute;width: 50%; height: 300px;
left: 50%; top:100px; margin: 0 0 0 -25%">
<h3>Login here!</h3>
<pre>
    Username: <input type="text" name="username" placeholder="Enter username here"
required/>

    Password: <input type="text" name="password" placeholder="Enter password here"
required/>

    <input type="submit" value="LOGIN"/>
</pre>
</form>
```

### register.jsp

```
<h1>Welcome to Apparel Store</h1>
```

```
Already registered? <a href="http://localhost:8090/apparel/index.jsp">Customer Login</a>
<br>
```

```
<form action="register" method="post" style="position: absolute; /*or fixed*/; width: 50%;
height: 300px; left: 50%; top:100px; margin: 0 0 0 -25%">
```

```
<h3>Register here!</h3>
```

```
<pre>
```

```
    Username: <input type="text" name="username" placeholder="Enter username
here" required/>
```

```
    Password: <input type="text" name="password" placeholder="Enter password here"
required/>
```

```
    Name:    <input type="text" name="name" placeholder="Enter name here"
required/>
```

```
        <select name="gender" >
        <option value="male">Male</option>
        <option value="female">Female</option>
        </select>
        <input type="submit" value="REGISTER"/>
```

```
</pre>
```

```
</form>
```

### logout.jsp

```
<%
session.removeAttribute("username");
session.invalidate();
response.sendRedirect("index.jsp");
%>
```

welcome.jsp

```

<body>
<h1>Welcome to Apparel Store</h1>
Want to logout? <a href="http://localhost:8090/apparel/logout.jsp">Logout</a><br><br>
<form name="searchform" action="show.jsp" method="post">
    New or Discounted : <select name="selection">
        <option value="discounted">Discounted</option>
        <option value="new arrival">New Arrival</option>
    </select><br><br>
    Types : <select name="type">
        <option value="formal">Formal</option>
        <option value="sportswear">Sports wear</option>
        <option value="outerwear">Outer wear</option>
        <option value="Others">Others</option>
    </select><br><br>
    <input type="submit" value="SEARCH">
</form><br><br>
</body>
<table border="1">
<tbody>
<tr>
<td>NAME</td>
<td>TYPE</td>
<td>GENDER</td>
<td>PRICE</td>
<td>Dis Or New</td>
</tr>
<%
String username= (String) session.getAttribute("username");
Connection conn = null;
conn=(Connection)getServletConfig().getServletContext().getAttribute("key2");
String query="select * from customer where username='"+username+"'";
PreparedStatement statement = conn.prepareStatement(query);
ResultSet resultset = statement.executeQuery();
if(resultset.next())
{
    String gender=resultset.getString("gender");
    String selec=resultset.getString("type");
    //response.getWriter().println(gender);
    if(selec.equals("both"))
    {
        query = "select * from items where cloth_gender='"+gender+"'";
    }
    else
    {

```

```

        query= "select * from items where cloth_gender='"+gender+"' and
selection='"+selec+"'";
    }
    statement = conn.prepareStatement(query);
    resultset = statement.executeQuery();
    while(resultset.next())
    {
        %>
        <tr>
            <td><%=resultset.getString("cloth_name") %></td>
            <td><%=resultset.getString("cloth_type") %></td>
            <td><%=resultset.getString("cloth_gender") %></td>
            <td><%=resultset.getInt("cloth_price") %></td>
            <td><%=resultset.getString("selection") %></td>
        </tr>
        <%
    }
}
%>
</tbody>
</table>

```

### **show.jsp**

```

<table border="1">
<tbody>
<tr>
<td>NAME</td>
<td>TYPE</td>
<td>GENDER</td>
<td>PRICE</td>
<td>Dis Or New</td>
</tr>
<%
String type = (String) request.getParameter("type");
String selection = (String) request.getParameter("selection");
String username= (String) session.getAttribute("username");

Connection conn = null;
conn=(Connection)getServletConfig().getServletContext().getAttribute("key2");
String query="select * from customer where username='"+username+"'";
PreparedStatement statement = conn.prepareStatement(query);
ResultSet resultset = statement.executeQuery();
if(resultset.next())
{
    String gender=resultset.getString("gender");
    //response.getWriter().println(gender);

```

```

        query = "select * from items where selection='"+selection+"' and
cloth_type='"+type+"' and cloth_gender='"+gender+"'";
        statement = conn.prepareStatement(query);
        resultSet = statement.executeQuery();
        while(resultSet.next())
        {
            %>
            <tr>
                <td><%=resultSet.getString("cloth_name") %></td>
                <td><%=resultSet.getString("cloth_type") %></td>
                <td><%=resultSet.getString("cloth_gender") %></td>
                <td><%=resultSet.getInt("cloth_price") %></td>
                <td><%=resultSet.getString("selection") %></td>
            </tr>
            <%
            }
            query="update customer set type='"+selection+"' where username='"+username+"'";
            statement = conn.prepareStatement(query);
            statement.executeUpdate();
        }
    %>
</tbody>
</table>

```

### **login.java**

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws IOException, ServletException

```

    {
        PrintWriter out = response.getWriter();
        String username = request.getParameter("username");
        String password = request.getParameter("password");
        try {
            String query = "select * from customer where username =?";
            Connection conn = null;

            conn=(Connection)getServletConfig().getServletContext().getAttribute("key2");
            PreparedStatement statement = (PreparedStatement)
            conn.prepareStatement(query);
            statement.setString(1,username);
            ResultSet resultSet = statement.executeQuery();
            if (resultSet.next())
            {
                if (resultSet.getString("password").equals(password))
                {
                    request.getSession().setAttribute("username",
username);

```

```

        response.sendRedirect("welcome.jsp");
    }
    else
    {
        out.println("<h1>Invalid Password for the given
username!</h1>");
        out.println("Want to go to home page? \r\n" +
            "<a
href=\"http://localhost:8090/apparel/index.jsp\">Home Page</a> ");
    }
}
else
{
    out.println("<h1>Customer does not exist in the
database!</h1>");
    out.println("Want to go to home page? \r\n" +
        "<a
href=\"http://localhost:8090/apparel/index.jsp\">Home Page</a> ");
}
}
catch(Exception e){
    e.printStackTrace();
}
}

```

### **register.java**

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws IOException

```

{
    response.setContentType("text/html");
    PrintWriter out = response.getWriter();
    String username = request.getParameter("username");
    String password = request.getParameter("password");
    String name = request.getParameter("name");
    String type="both";
    String gender =request.getParameter("gender");
    try {
        String query = "select * from customer where username =?";
        Connection conn = null;

        conn=(Connection)getServletConfig().getServletContext().getAttribute("key2");
        PreparedStatement statement = conn.prepareStatement(query);
        statement.setString(1,username);
        ResultSet resultset = statement.executeQuery();
        if (resultset.next())
        {

```



```

        out.println("<h1>Customer already exists in the database.
Please login.</h1>");
        out.println("Want to go to login page? \r\n" +
            "<a
href=\"http://localhost:8090/apparel/index.jsp\">Login Here</a> ");
    }
    else
    {
        query = "insert into customer values(?, ?, ?, ?, ?)";
        statement = (PreparedStatement)
conn.prepareStatement(query);
        statement.setString(1,username);
        statement.setString(2,password);
        statement.setString(3,name);
        statement.setString(4,type);
        statement.setString(5,gender);
        statement.executeUpdate();
        out.println("<h1>The customer has been registered!</h1>");
        out.println("Want to go to home page? \r\n" +
            "<a
href=\"http://localhost:8090/apparel/register.jsp\">Home Page</a> ");
    }
}
catch(Exception e) {
    e.printStackTrace();
}
}

```

### **MyListener.java**

```

package ass4.db;
import javax.servlet.ServletContext;
import javax.servlet.ServletContextEvent;
import javax.servlet.ServletContextListener;
import javax.servlet.annotation.WebListener;
import java.sql.*;

@WebListener
public class MyListener implements ServletContextListener {
    @Override
    public void contextInitialized(ServletContextEvent sce) {
        ServletContext sc = sce.getServletContext();
        String connString = sc.getInitParameter("key1");
        //sc.setAttribute("key2", connString);

        String connUser = sc.getInitParameter("key1User");
        sc.setAttribute("key3", connUser);
    }
}

```

```
String connPwd = sc.getInitParameter("key1Pwd");
//sc.setAttribute("key4", connPwd);
try{
    Class.forName("com.mysql.jdbc.Driver");
    Connection con=DriverManager.getConnection(
        connString,connUser,connPwd);
    sc.setAttribute("key2",con);

}catch(Exception e){ System.out.println(e);}

}
@Override
public void contextDestroyed(ServletContextEvent sce) {
    //ServletContext sc = sce.getServletContext();
    //sc.removeAttribute("key1");
    //sc.removeAttribute("key2");

    System.out.println("Value deleted from context.");
}
}
```

## Output

### Welcome to Apparel store

New customer ? [Register Here](#)

#### Login here!

Username:

Password:

### Welcome to Apparel Store

Want to logout? [Logout](#)

New or Discounted :

Types :

NAME	TYPE	GENDER	PRICE	Dis Or New
Grey Regular Shirt	Formal	male	900	Discounted
Hoodies	SportsWear	male	779	Discounted

NAME	TYPE	GENDER	PRICE	Dis Or New
Track Pants	SportsWear	male	769	New arrival

## Welcome to Apparel Store

Want to logout? [Logout](#)

New or Discounted : Discounted ▼

Types : Formal ▼

SEARCH

NAME	TYPE	GENDER	PRICE	Dis Or New
Black Slim Shirt	Formal	male	800	New arrival
Track Pants	SportsWear	male	769	New arrival
Jackets	OuterWear	male	3219	New Arrival

## Welcome to Apparel Store

Want to logout? [Logout](#)

New or Discounted : Discounted ▼

Types : Formal ▼

SEARCH

NAME	TYPE	GENDER	PRICE	Dis Or New
Solid Basic suit	Formal	female	999	New arrival
black lounge suit	Formal	female	849	Discounted
Trousers	SportsWear	female	559	Discounted
Leggings	SportsWear	female	699	New arrival

NAME	TYPE	GENDER	PRICE	Dis Or New
black lounge suit	Formal	female	849	Discounted