

JSP and Servlets Exercise 2 - Solution

1. Build a login page for online banking, accepting the user name and password. Use declarations to define the string variables. Include Java code in the scriptlet block to assign the details to the string variables entered by the user.

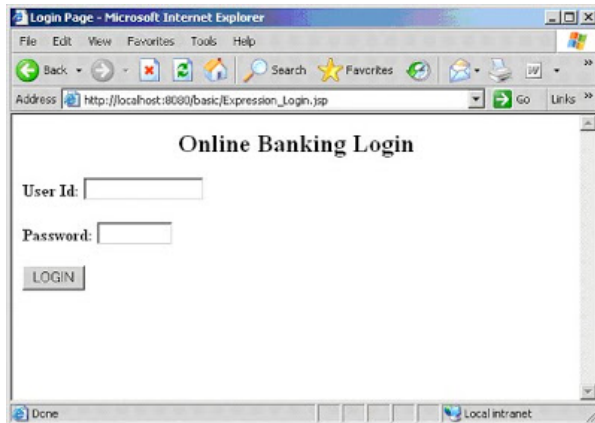
Solution:

```
// Expression_Login.jsp
```

```
<html>
<head>
<title>Login Page</title>
</head>
<body bgcolor="white">
<% if(request.getParameter("userid")==null &&
request.getParameter("password")==null ) { %>
<center>
<h2>Online Banking Login</h2>
</center>
<form method="GET" action="Login.jsp">
<b>User Id:</b> <input type="text" name="userid"
size=15>
<p>
<b>Password:<b> <input type="password"
name="password" size=8>
<p>
<input type="submit" value="LOGIN">
</form>
<% } else { %>
<%! String userid,password; %>
<%
userid = request.getParameter("userid");
password = request.getParameter("password");
%>
<% } %>
</body>
```

</html>

The output of the program.

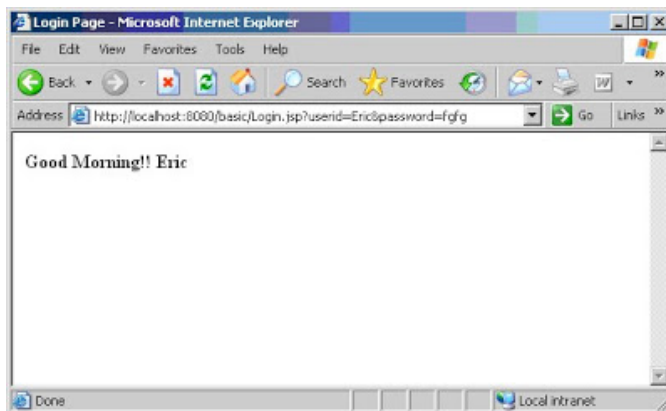


// Login.jsp

```
<html>
<head>
<title>Login Page</title>
</head>
<body bgcolor="white">
<%if(request.getParameter("userid")==null&&
request.getParameter("password")==null ) { %>
<center>
<h2>Online Banking Login</h2>
</center>
<form method="GET" action="http://localhost:8080/basic/Login.jsp">
<b>User Id:</b> <input type="text" name="userid" size=15>
<p>
<b>Password:<b> <input type="password" name="password"
size=8>
<P>
<input type="submit" value="LOGIN">
</form>
<% } else { %>
<%! String userid,password; %>
<%
userid = request.getParameter("userid");
password = request.getParameter("password");
```

```
%>
<p>
<b>Good Morning!! <%= userid %><p></b>
<% } %>
</body>
</html>
```

The output of the program:



2. Write a program to include an HTML file in a JSP page using RequestDispatcher interface method. The included file should display personal details form to the user. In addition, the form should provide a Submit and Reset button. Display the details entered by the user after the user clicks the Submit button.

Solution:

- 1. Main.jsp**
- 2. Personal.jsp**
- 3. Details.jsp**

[// Main.jsp](#)

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<html>
<head>
<title>Include Example</title>
```

```
</head>
<P>
<jsp:include page="Personal.jsp" flush="true"/>
</body>
</html>
```

```
// Personal.jsp
```

```
<html>
<head>
<title>Personal Details Form</title>
</head>
<body>
<Center><h1> Personal Details form </h1></Center>
<form action="Details.jsp" method="post">
```

First Name:

```
<input type="text" name="fname">
<br><br>
```

Last Name:

```
<input type="text" name="lname">
<br><br>
```

**Address:
**

```
<textarea name=address rows=3 cols=15></textarea>
<br><br>
```

Phone Number:

```
<input type="text" name="phone">
<br><br>
```

City:

```
<input type="text" name="city">
<br><br>
```

State:

```
<input type="text" name="state">
<br><br>
<input type="submit" name="submit" value="Submit">
</form>
</body>
```

```
</html>
```

```
// Details.jsp
```

```
<html>
```

```
<head>
```

```
<title>Example of Implicit objects</title>
```

```
</head>
```

```
<body>
```

```
<font face=Times New Roman size=3>
```

```
Thank you for your submission. Confirm the details:
```

```
<br><br>
```

```
<%
```

```
String sfName = request.getParameter("fname");
```

```
String slName = request.getParameter("lname");
```

```
String saddress = request.getParameter("address");
```

```
String sphone = request.getParameter("phone");
```

```
String scity = request.getParameter("city");
```

```
String sstate = request.getParameter("state");
```

```
%>
```

```
First Name:<%=sfName%><br>
```

```
Last Name:<%=slName%><br>
```

```
Address:<%=saddress%><br>
```

```
Phone:<%=sphone%><br>
```

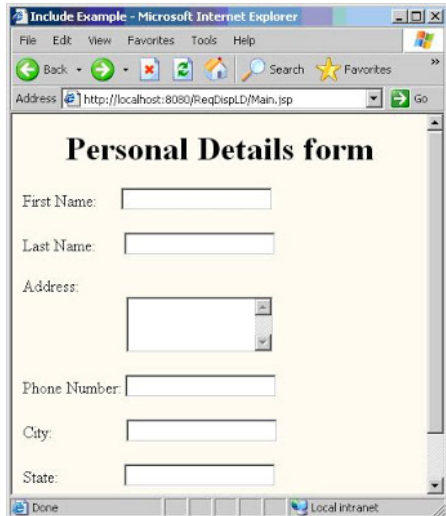
```
City:<%=scity%><br>
```

```
State:<%=sstate%><br>
```

```
</font>
```

```
</body>
```

```
</html>
```



3. (Servlet) Write a program to count and display the number of active sessions connected to the Tomcat server

Solution:

The files used in this exercise are:

1. session.jsp
2. web.xml
3. SessionCount.java

```
<html>
<head>
<title>Session</title>
</head>
<body>
<b1>Session</b1>
There are currently
<%=com.SessionCount.getNumberofSessions()%> active
sessions.
</body>
</html>
```

Save file above as "Session.jsp."

Change the file "web.xml." – might not have to change.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE web-app PUBLIC "-//Sun Microsystems, Inc.//DTD Web
Application 2.3//EN"
"http://java.sun.com/dtd/web-app_2_3.dtd">
<web-app>
<b><listener>
<b><listener-class>com.SessionCount</listener-class>
</listener>
<taglib>
<taglib-uri>http://java.sun.com/jstl/core</taglib-uri>
<taglib-location>/WEB-INF/c.tld</taglib-location>
</taglib>
</web-app>
```

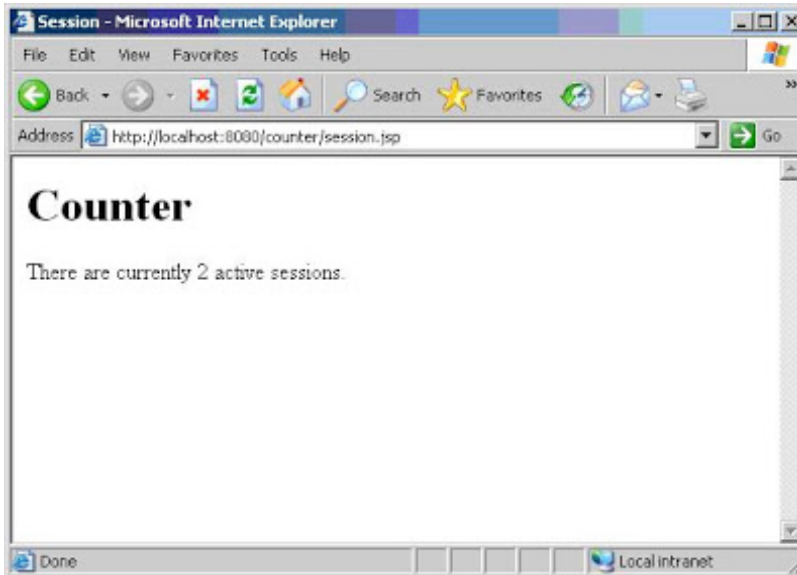
Save the file as "SessionCount.java."

package com;

import javax.servlet.http.*;

```
public class SessionCount implements HttpSessionListener
{
private static int numberOfSessions = 0;
public void sessionCreated (HttpSessionEvent evt)
{
numberOfSessions++;
}
public void sessionDestroyed (HttpSessionEvent evt)
{
numberOfSessions--;
}
public static int getNumberOfSessions()
{
return numberOfSessions;
}
}
```

The output of the program is as shown:



4. (Java Beans) Write a program to display the withdrawal status to the user. If the account number is valid, display the withdrawal screen to the user. The withdrawal screen should display the balance entered by the user on the withdrawal status screen and ask the user to enter the amount to be withdrawn. Display the balance to the user after withdrawing the amount.

Solution:

```
// withdraw.jsp
```

```
<html>
<head>
<title>Sample Withdrawal Program</title>
</head>
<body>
<H1 align="center"> Amount Withdrawal Screen</H1>
<%
String amt = request.getParameter("amt") ;
String balance = request.getParameter("bal");
if (amt == null)
{
%>
```



```

<form method="post">
<h3>
Your balance is <input type='text' readonly name='bal'
value='<%=balance%>'><br>
Please enter the amount to be withdrawn <input
type="text"
name="amt">
<input type="submit" value="Withdraw">
</form>
<%
}
else
{
%>
<jsp:useBean id="objW" class="test.AccountBean"
scope="page" />
<jsp:setProperty name="objW" property="balance"
value="<%=balance%>" />
<jsp:setProperty name="objW" property="amount"
value="<%=amt%>" />
<H3 align="center">Rs. <%=amt%> withdrawn from your
account
the new balance is <jsp:getProperty name="objW"
property="balance" />
</h3>
<%
}
%>
</body>
</html>

```

```
// AccountBean.java
```

```
package test;
```

```
public class AccountBean implements java.io.Serializable
{
private int amount = 0;
private int balance = 0;
```

```
public String getAmount() // throws Exception
```

```
{
return String.valueOf(amount);
}
public void setAmount(String strAmt) // throws Exception
{
this.amount=Integer.parseInt(strAmt);
}
public String getBalance()
{
if (balance < amount)
{
return "Balance is not sufficient to withdraw money.";
}
else
{
balance = balance - amount;
}
return (String.valueOf(amount)+" withdrawn from your
account. The new balance is " + String.valueOf(balance));
}
public void setBalance(String strBal)
{
balance = Integer.parseInt(strBal);
}
}
```