



Week 6

# JSP: Saving and Retrieving Data from Database

Web Programming 2

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Name: NURHASLINDA BINTI  
BAHARUDDIN

Matric #: S67383

Semester: 4

Lab: 6

Demonstrator: SIR ARIZAL

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Lecturers

## Task 1: Using JSP Page to Access a Simple MySQL Database

Code:

//SampleInsertRecord.jsp

```
6
7 <%page contentType="text/html" pageEncoding="UTF-8"%>
8 <%page language="java"%>
9 <%page import="java.sql.*"%>
10 <!DOCTYPE html>
11 <html>
12 <head>
13 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
14 <title>JSP Page</title>
15 </head>
16 <body>
17 <h1>Lab 6 - Task 1 - Sample Insertion records into MySQL through JSP's page</h1>
18 <%
19     int result;
20     Class.forName("com.mysql.jdbc.Driver");
21     out.println("Step 1: MySQL driver loaded...!");
22 %>
23 <br>
24 <%
25     String myURL = "jdbc:mysql://localhost:3306/";
26     Connection myConnection = DriverManager.getConnection(myURL, "root", "admin");
27     out.println("Step 2: Database is connected...!");
28 %>
29 <br>
30 <%
31     out.println("Step 3: Prepared Statements created...!");
32     String sinsertQry = "INSERT INTO FirstTable VALUE(?)";
33     PreparedStatement myPS = myConnection.prepareStatement(sinsertQry);
34 %>
35 <br>
36 <%
37     out.println("Step 4: Perform insertion of record...!");
38     String name = "Welcome to access MySQL database with JSP...!";
39     myPS.setString(1, name);
40     result = myPS.executeUpdate();
41     if (result > 0) {
42 %>
43 <br>
44 <%
45         out.println("Step 5: Close database connection...!");
46         out.println(" ");
47         out.print("<p>" + "The record:(" + name + ") is successfully created.." + "</p>");
48     }
49     myConnection.close();
50 %>
51 </body>
52 </html>
```

## //SampleInsertionRecord.jsp

```
6
7 <%page contentType="text/html" pageEncoding="UTF-8"%>
8 <%page language="java"%>
9 <%page import="java.sql.*"%>
10
11 <!DOCTYPE html>
12 <html>
13 <head>
14 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
15 <title>JSP Page</title>
16 </head>
17 <body>
18 <h1>Lab 6 - Task 1 - Sample Insertion records into MYSQL through JSP's page</h1>
19
20 <%
21 int result;
22 Class.forName("com.mysql.jdbc.Driver");
23 out.println("Step 1: MySQL driver loaded...!");
24
25 %>
26
27 <br>
28
29 <%
30 String myURL = "jdbc:mysql://localhost/cse3209";
31 Connection myConnection = DriverManager.getConnection(myURL, "root", "admin");
32 out.println("Step 2: Database is connected...!");
33
34 %>
35
36 <br>
37
38 <%
39 out.println("Step 3: Prepared Statements created...!");
40 String sInsertQry = "INSERT INTO FirstTable VALUE(?)";
41 PreparedStatement myPS = myConnection.prepareStatement(sInsertQry);
42
43 %>
44
45 <br>
46
47 <%
48 out.println("Step 4: Perform insertion of record...!");
49 String name = "Welcome to access MySQL database with JSP...!";
50 myPS.setString(1, name);
51
52 result = myPS.executeUpdate();
53 if (result>0) {
54
55 %>
56
57 <br>
58
59 <%
60 out.println("Step 5: Close database connection...!");
61 out.println(" ");
62 out.print("<p>" + "The record: (" + name + ") is successfully created.." + "</p>");
63
64 }
65 myConnection.close();
66
67 %>
68
69 </body>
70 </html>
```

## Outputs:

### **Lab 6 - Task 1 - Sample Insertion records into MYSQL through JSP's page**

Step 1: MySQL driver loaded...!  
Step 2: Database is connected...!  
Step 3: Prepared Statements created...!  
Step 4: Perform insertion of record...!  
Step 5: Close database connection...!

The record:(Welcome to access MySQL database with JSP...!) is successfully created..!

## Task 2: Create Records via JSP Page

Code:

//Author.java

```
package Lab6.com;

public class Author {
    private String authno;
    private String name;
    private String address;
    private String city;
    private String state;
    private String zip;

    public String getAuthno() { ...3 lines ... }
    public void setAuthno(String authno) { ...3 lines ... }
    public String getName() { ...3 lines ... }
    public void setName(String name) { ...3 lines ... }
    public String getAddress() { ...3 lines ... }
    public void setAddress(String address) { ...3 lines ... }
    public String getCity() { ...3 lines ... }
    public void setCity(String city) { ...3 lines ... }
    public String getState() { ...3 lines ... }
    public void setState(String state) { ...3 lines ... }
    public String getZip() { ...3 lines ... }
    public void setZip(String zip) { ...3 lines ... }
}
```

//insertAuthor.jsp

```
<%page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>JSP Page</title>
</head>
<body>
<h1>Lab 6 - Task 2 - Perform creating and retrieving records via JSP page</h1>
<fieldset>
<legend>Author Registration</legend>
<form action="processAuthor.jsp">
<table>
<tr>
<td><label for="authno">Label</label></td>
<td><input type="text" name="authno" placeholder="E.g. UKXXXXXX"></td>
</tr>
<tr>
<td><label for="name">Name</label></td>
<td><input type="text" name="name" placeholder="Enter your name"></td>
</tr>
<tr>
<td><label for="address">Address</label></td>
<td><input type="text" name="address" placeholder="Enter your address"></td>
</tr>
<tr>
<td><label for="city">City</label></td>
<td><input type="text" name="city" placeholder="Enter your city"></td>
</tr>
<tr>
<td><label for="state">State</label></td>
<td><input type="text" name="state" placeholder="Enter your state"></td>
</tr>
<tr>
<td><label for="zip">Zip</label></td>
<td><input type="text" name="zip" placeholder="Enter your zip"></td>
</tr>
<tr>
<td><input type="submit" name="Submit"><input type="reset" name="Cancel"> </td>
</tr>
</table>
</form>
</fieldset>
<p>scopy2024-Linda</p>
</body>
</html>
```

//processAuthor.jsp

```
7 <%@page contentType="text/html" pageEncoding="UTF-8"%>
8 <!DOCTYPE html>
9 <html>
10 <head>
11 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
12 <title>JSP Page</title>
13 </head>
14 <body>
15 <h1>Lab 6 - Task 2 - Perform creating and retrieving records via JSP page</h1>
16 <fieldset>
17 <legend>Author Registration</legend>
18 <form action="processAuthor.jsp">
19 <table>
20 <tr>
21 <td><label for="authno">Label</label></td>
22 <td><input type="text" name="authno" placeholder="E.g. UXXXXXX"></td>
23 </tr>
24 <tr>
25 <td><label for="name">Name</label></td>
26 <td><input type="text" name="name" placeholder="Enter your name"></td>
27 </tr>
28 <tr>
29 <td><label for="address">Address</label></td>
30 <td><input type="text" name="address" placeholder="Enter your address"></td>
31 </tr>
32 <tr>
33 <td><label for="city">City</label></td>
34 <td><input type="text" name="city" placeholder="Enter your city"></td>
35 </tr>
36 <tr>
37 <td><label for="state">State</label></td>
38 <td><input type="text" name="state" placeholder="Enter your state"></td>
39 </tr>
```

Outputs:

## Lab 6 - Task 2 - Perform creating and retrieving records via JSP page

Author Registration	
Label	<input type="text" value="E.g. UKXXXXXX"/>
Name	<input type="text" value="Enter your name"/>
Address	<input type="text" value="Enter your address"/>
City	<input type="text" value="Enter your city"/>
State	<input type="text" value="Enter your state"/>
Zip	<input type="text" value="Enter your zip"/>
<input type="button" value="Submit"/> <input type="button" value="Reset"/>	

## Lab 6 - Task 2 - Perform creating and retrieving records via JSP page

Record successfully added into Author table...!

Record with author no gsk23322 successfully created..!

Details of record are;

Name : Foad

Address : Malaysia

City : KT

State : UMT

Zip : 23

Reflection

1. I learned to retrieve records to database and retrieve it back.
2. Steps
  - i) I import the getter and setter using JavaBeans and setProperty.
  - ii) I import JDBC library.
  - iii) I use PreparedStatement to input all the input that I entered.
  - iv) I print everything out.

## Task 3: : Create Records Constrained by Regular Expression In JSP

//Code

//Student.java

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package Lab6.com;

import java.util.regex.*;

public class Student {

    private String stuno;
    private String name;
    private String program;
    private String valid;
    private String invalid = "invalid";

    public String getStuno() {
        ...3 lines ...
    }

    public void setStuno(String stuno) {
        ...3 lines ...
    }

    public String getName() {
        ...3 lines ...
    }

    public void setName(String name) {
        ...3 lines ...
    }

    public String getProgram() {
        ...3 lines ...
    }

    public void setProgram(String program) {
        ...3 lines ...
    }
}
```

//insertStudent.jsp

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
<!DOCTYPE html>
<html>
<head>
<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
<title>JSP Page</title>
</head>
<body>
<fieldset>
<legend>Student Registration</legend>
<form action="processStudent.jsp">
<table>
<tr>
<td>Student No</td>
<td><input type="text" name="stuno" placeholder="E.g: URXXXXXX"></td>
</tr>
<tr>
<td>Name</td>
<td><input type="text" name="name" placeholder="Enter your name"></td>
</tr>
<tr>
<td>Program</td>
<td><select name="program">
<option value="BSc. Soft. Eng.">BSc. Soft. Eng.</option>
<option value="BSc. with IM">BSc. with IM</option>
<option value="BSc. in Networking">BSc. in Networking</option>
<option value="BSc. in Robotics">BSc. in Robotics</option>
</select></td>
</tr>
<tr>
<td><input type="submit" name="Reset"><input type="reset" name="Cancel"></td>
</tr>
</table>
</form>
<p>©copy2021-Linda</p>
</fieldset>
</body>
```



## //processStudent.jsp

```
6 <%page contentType="text/html" pageEncoding="UTF-8"%>
7 <%page language="java" %>
8 <%page import="java.sql.*" %>
9 <%page errorPage="errorStudent.jsp" %>
10 <!DOCTYPE html>
11 <html>
12 <head>
13 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
14 <title>JSP Page</title>
15 <style>
16 {
17     color:blue
18 }
19 </style>
20 </head>
21 <body>
22 <jsp:useBean id="myStudent" class="Lab6.com.Student" scope="request">
23 </jsp:useBean>
24 <jsp:setProperty name="myStudent" property="*" />
25
26 <%
27     int result;
28
29     Class.forName("com.mysql.jdbc.Driver");
30     System.out.println("Step1: MySQL driver loaded...");
31
32     String myURL = "jdbc:mysql://localhost/cse3209";
33     Connection myConnection = DriverManager.getConnection(myURL, "root", "admin");
34     System.out.println("Step 2: Database is connected...!");
35
36     System.out.println("Step 3: Prepared Statement created...!");
37
38     String sInsertQry = "INSERT INTO STUDENT (stuno,stuname,stuprogram) VALUES(?,?,?)";
39     System.out.println("\tSQL Query: " + sInsertQry);
40
41     PreparedStatement myPS = myConnection.prepareStatement(sInsertQry);
42
43     System.out.println("Step 4: Perform insertion of record...!");
44     myPS.setString(1, myStudent.getStuno());
45     myPS.setString(2, myStudent.getName());
46     myPS.setString(3, myStudent.getProgram());
47
48     result = myPS.executeUpdate();
49     if (result > 0) {
50         System.out.println("\tRecord successfully added into Book's table...!");
51         out.print("<p>" + "Record with student no. " + myStudent.getStuno() + " successfully created..!" + "</p>");
52         out.print("<p>" + "Details of record are:" + "</p>");
53         out.print("<p>" + "Student ID : " + myStudent.getStuno() + "</p>");
54         out.print("<p>" + "Name : " + myStudent.getName() + "</p>");
55         out.print("<p>" + "Program : " + myStudent.getProgram() + "</p>");
56     }
57
58     System.out.println("Step 5: Close database connection...!");
59     myConnection.close();
60     System.out.println(" ");
61     System.out.println("Database connection is closed...!");
62 %>
63 </body>
64 </html>
```

## //errorStudent.jsp

```
6 <%page contentType="text/html" pageEncoding="UTF-8"%>
7 <!DOCTYPE html>
8 <html>
9 <head>
10 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
11 <title>JSP Page</title>
12 </head>
13 <body>
14 <form id="errorFrm" action="insertStudent.jsp" method="post">
15 <h1>Lab 6-Task 3 - Perform Creating and retrieving records via JSP page</h1>
16 <p>Error when inserting record...!</p>
17 <p><jsp:expression> exception.getMessage()</jsp:expression></p>
18 </form>
19 </body>
20 </html>
```

//outputs

Student Registration

Student No

UK88888

Name

Mohamad Nor Hasan

Program

BSc. Soft. Eng. ▼

Submit

Reset

Record with student no UK88888 successfully created..!

Details of record are;

Student ID : UK88888

Name : Mohamad Nor

Program :Bsc. in Networking

Reflection

1. I learned to retrieve records to database and retrieve it back.
2. Steps
  - i) I import the getter and setter using JavaBeans and setProperty.
  - ii) I import JDBC library.
  - iii) I use PreparedStatement to input all the input that I entered.
  - iv) I print everything out.

## Task 4: Perform Retrieving Records Via JSP Page

Code:

//queryStudent.jsp

```
4
5
6 <%page contentType="text/html" pageEncoding="UTF-8"%>
7 <%page import="java.sql.*" %>
8 <!DOCTYPE html>
9 <html>
10 <head>
11 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
12 <title>Lab 6 - Task 4</title>
13 <style>
14 table{
15     border-collapse:collapse;
16 }
17 td,th{
18     border:1px solid #999;
19     padding:0.5rem;
20     text-align: left;
21 }
22 th{
23     background:gold;
24 }
25 </style>
26 </head>
27 <body>
28 <h3>Lab 6 - Task 4: Retrieving record via JSP page.</h3>
29
30 <%
31     out.print("<table>");
32     out.print("<thead>");
33     out.print("<tr>");
34     out.print("<th>" + "ISBNNo" + "</th>");
35     out.print("<th>" + "Author" + "</th>");
36     out.print("<th>" + "Title" + "</th>");
37     out.print("</tr>");
38     out.print("</thead>");
39     out.print("<tbody>");
40 %>
41
42 <%
43     Class.forName("com.mysql.jdbc.Driver");
44     System.out.println("Step 1:MySQL driver loaded...!");
45
46     String myURL = "jdbc:mysql://localhost:3306/";
47     Connection myConnection = DriverManager.getConnection(myURL, "root", "admin");
48     System.out.println("Step 2: Database is connected...!");
49
50     Statement myStatement = myConnection.createStatement();
51
52     String myQuery = "select * from student";
53     ResultSet myResultSet = myStatement.executeQuery(myQuery);
54
55     while (myResultSet.next()) {
56         out.print("<tr>");
57         out.print("<td width='20%'>" + myResultSet.getString(1) + "</td>");
58         out.print("<td width='40%'>" + myResultSet.getString(2) + "</td>");
59         out.print("<td width='40%'>" + myResultSet.getString(3) + "</td>");
60         out.print("</tr>");
61     }
62
63     System.out.println("Step 3:Close database Connection...!");
64     myConnection.close();
65     System.out.println(" ");
66     System.out.println("Database connection is closed...!");
67
68     out.print("</tbody>");
69     out.print("</table>");
70
71 %>
72 </body>
73 </html>
```

Outputs:

### Lab 6 - Task 4: Retrieving record via JSP page.

ISBNNo	Author	Title
UK12489	Ahmad Salam	BSc. with IM.
UK56789	Rosmah Azman	BSc Soft. Eng.
UK67342	Liew Cheng Huat	BSc in Robotics
UK88888	Mohamad Nor	Bsc. in Networking

## Reflection

1. I learn to extract data from database.
2. `PreparedStatement()` is used to input data and `Statement()` is used to get data.

# Task 5: Create A Record Using JSP Model 1

Code:

//Database.java

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package Lab6.com;

import java.sql.Connection;
import java.sql.DriverManager;
import java.sql.SQLException;

/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */

public class Database {
    private static Connection myConnection = null;
    private static String myURL = "jdbc:mysql://localhost:3306/cse3209";

    public static Connection getConnection() throws ClassNotFoundException {
        if(myConnection != null){
            return myConnection;
        }else try{
            Class.forName("com.mysql.jdbc.Driver");
            myConnection = DriverManager.getConnection(myURL, "root", "admin");
        } catch (SQLException e) {
            e.printStackTrace();
        }
        return myConnection;
    }

    public void closeConnection() throws ClassNotFoundException {
        try{
            myConnection.close();
        }catch(SQLException e){
            e.printStackTrace();
        }
    }
}
```

//Marathon.java

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package Lab6.com;

public class Marathon {

    private String icno;
    private String name;
    private String category;

    public String getIcno() {
        ...3 lines ...
    }

    public void setIcno(String icno) {
        ...3 lines ...
    }

    public String getName() {
        ...3 lines ...
    }

    public void setName(String name) {
        ...3 lines ...
    }

    public String getCategory() {
        ...3 lines ...
    }

    public void setCategory(String category) {
        ...3 lines ...
    }
}
```

## //MarathonDAO.java

```
/*
 * To change this license header, choose License Headers in Project Properties.
 * To change this template file, choose Tools | Templates
 * and open the template in the editor.
 */
package Lab6.com;
import java.sql.Connection;
import java.sql.PreparedStatement;

public class MarathonDAO {
    private Connection connection;
    private int result = 0;

    public MarathonDAO() throws ClassNotFoundException {
        connection = Database.getConnection();
    }

    public int addDetails(Marathon marathon) {
        try {
            String mySQL = "INSERT INTO marathon (icno, name, category) VALUES (?, ?, ?)";
            PreparedStatement preparedStatement = connection.prepareStatement(mySQL);

            System.out.println("IC No      " + marathon.getIcno());
            System.out.println("Name      " + marathon.getName());
            System.out.println("Category  " + marathon.getCategory());

            preparedStatement.setString(1, marathon.getIcno());
            preparedStatement.setString(2, marathon.getName());
            preparedStatement.setString(3, marathon.getCategory());

            result = preparedStatement.executeUpdate();
        } catch (Exception e) {
            e.printStackTrace();
        }
        return result;
    }
}
```

## //registerMarathon.jsp

```
<%page contentType="text/html" pageEncoding="UTF-8"%>
<DOCTYPE html>
<html>
<head>
    <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
    <title>Lab6 - Task 5</title>
</head>
<body>
    <fieldset>
        <legend>
            Marathon Registration
        </legend>
        <form action="processMarathon.jsp">
            <table>
                <tr>
                    <td>IC No</td>
                    <td>
                        <input type="text" placeholder="E.g: 991110-10-0514" name="icno">
                    </td>
                </tr>
                <tr>
                    <td>Name</td>
                    <td>
                        <input type="text" placeholder="Enter your name" name="name">
                    </td>
                </tr>
                <tr>
                    <td>Category</td>
                    <td>
                        <select name="category">
                            <option value="5 KM">5 KM</option>
                            <option value="7 KM">7 KM</option>
                            <option value="10 KM">10 KM</option>
                        </select>
                    </td>
                </tr>
            </table>
            <input type="submit" value="Submit"><input type="reset" value="Cancel">
        </form>
    </fieldset>
    <p>©copy2021-Linda</p>
</body>
</html>
```

## //processMarathon.jsp

```
6
7 <%@page contentType="text/html" pageEncoding="UTF-8"%>
8 <%@page import="java.sql.*"%>
9 <%@page import="Lab6.com.Database"%>
10 <%@page import="Lab6.com.Marathon"%>
11 <%@page import="Lab6.com.MarathonDAO"%>
12
13 <html>
14 <head>
15 <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
16 <title>Lab6 - Task 5</title>
17 <style>
18 p{
19     color: red
20 }
21 </style>
22 </head>
23 <body>
24 <jsp:useBean id="myMarathon" class="Lab6.com.Marathon" scope="request"/>
25 <jsp:setProperty name="myMarathon" property="*"/>
26 <%
27     int result;
28     Database myDB = new Database();
29     MarathonDAO object1 = new MarathonDAO();
30     result = object1.addDetails(myMarathon);
31
32     if (result > 0) {
33         out.println("\tRecord successfully added into marathon table...!");
34         out.print("<p>" + "Record with IC No " + myMarathon.getIcno()
35             + " successfully created..!" + "</p>");
36         out.print("<p>" + "Details of record are: " + "</p>");
37         out.print("<p>IC No : " + myMarathon.getIcno() + "</p>");
38         out.print("<p>Name : " + myMarathon.getName() + "</p>");
39         out.print("<p>Category : " + myMarathon.getCategory() + "</p>");
40     }
41     myDB.closeConnection();
42 %>
43 </body>
44 </html>
```

## Outputs:

Marathon Registration

IC No

890710-11-2369

Name

Mohamad Nor Hassan

Category

7 KM

▼

Submit

Cancel

Record successfully added into marathon table...!

Record with IC No 890710-11-2369 successfully created..!

Details of record are:

IC No : 890710-11-2369

Name : Mohamad Nor Hassan

Category : 7 KM

Reflection

1. I learn to create an external class for database.
2. It is easy and compact, they are very easy to create and use.



# Exercise

## Code:

### //insertUser.html

```
1 <!DOCTYPE html>
2 <html>
3 <head>
4 <title>Register User</title>
5 </head>
6 <body>
7 <h2>Register New User</h2>
8 <form action="processUser.jsp" method="post">
9 Username: <input type="text" name="username"><br>
10 Password: <input type="password" name="password"><br>
11 First Name: <input type="text" name="firstname"><br>
12 Last Name: <input type="text" name="lastname"><br>
13 <input type="submit" value="Register">
14 </form>
15 </body>
16 </html>
```

### //processUser.jsp

```
1 <%@page contentType="text/html" pageEncoding="UTF-8"%>
2 <%@ page import="java.sql.*"%>
3 <%
4 String username = request.getParameter("username");
5 String password = request.getParameter("password");
6 String firstname = request.getParameter("firstname");
7 String lastname = request.getParameter("lastname");
8
9 // Code to insert the user into the database
10 // Assuming you have a Connection object conn
11 try {
12 Class.forName("com.mysql.jdbc.Driver");
13 Connection conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/lab6", "root", "admin");
14 String query = "INSERT INTO userprofile (username, password, firstname, lastname) VALUES (?, ?, ?, ?)";
15 PreparedStatement statement = conn.prepareStatement(query);
16 statement.setString(1, username);
17 statement.setString(2, password);
18 statement.setString(3, firstname);
19 statement.setString(4, lastname);
20 int rowsInserted = statement.executeUpdate();
21 if (rowsInserted > 0) {
22 out.println("User registered successfully!");
23 }
24 conn.close();
25 } catch (Exception e) {
26 out.println("Error: " + e.getMessage());
27 }
28 }%>
```

### //login.jsp

```
1 <%@page contentType="text/html" pageEncoding="UTF-8"%>
2 <!DOCTYPE html>
3 <html>
4 <head>
5 <title>Login</title>
6 </head>
7 <body>
8 <h2>Login</h2>
9 <form action="doLogin.jsp" method="post">
10 Username: <input type="text" name="username"><br>
11 Password: <input type="password" name="password"><br>
12 <input type="submit" value="Login">
13 </form>
14 </body>
15 </html>
```

## //doLogin.jsp

```
7 <%@page contentType="text/html" pageEncoding="UTF-8"%>
8 <%@ page import="java.sql.*" %>
9 <%
10     String username = request.getParameter("username");
11     String password = request.getParameter("password");
12
13     // Code to validate username and password
14     // Assuming you have a Connection object conn
15     try {
16         Class.forName("com.mysql.jdbc.Driver");
17         Connection conn = DriverManager.getConnection("jdbc:mysql://localhost:3306/lab6", "root", "admin");
18         String query = "SELECT * FROM userprofile WHERE username=? AND password=?";
19         PreparedStatement statement = conn.prepareStatement(query);
20         statement.setString(1, username);
21         statement.setString(2, password);
22         ResultSet result = statement.executeQuery();
23         if (result.next()) {
24             // Successful login, redirect to main.jsp
25             session.setAttribute("username", username);
26             session.setAttribute("firstname", result.getString("firstname"));
27             session.setAttribute("lastname", result.getString("lastname"));
28             response.sendRedirect("main.jsp");
29         } else {
30             // Invalid login, redirect back to login.jsp with message
31             response.sendRedirect("login.jsp?message=invalid username or password..");
32         }
33         conn.close();
34     } catch (Exception e) {
35         out.println("Error: " + e.getMessage());
36     }
37 %>
```

## //main.jsp

```
6 <%@page contentType="text/html" pageEncoding="UTF-8"%>
7 <!DOCTYPE html>
8 <html>
9 <head>
10 <title>Main Page</title>
11 </head>
12 <body>
13 <h2>Welcome, <%= session.getAttribute("firstname")%> <%= session.getAttribute("lastname")%></h2>
14 <p>Your username is: <%= session.getAttribute("username")%></p>
15 </body>
16 </html>
```