Finish the code

Pradipa Falah Putra Setiawan

IF-46-06 | 1301220270

```
AddUserServlet.java × 🗷 DeleteUserServlet.java × 🛣 EditUserServlet.java × 🛣 LoginController.java × 🛣 LogoutController.java × 🛣 UserListServlet.java ×
1 - /*
        * Click <u>nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt</u> to change this license
       * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
      package com.mycompany.latihanwebmvc.Controller;
       * @author helmy
 10
 11 📮 import com.mycompany.latihanwebmvc.Database.DBUtil; //import class DBUtil
 12
       import com.mycompany.latihanwebmvc.Model.User; //import class User dari Package Model
       import jakarta.servlet.ServletException;
 13
 14
       import jakarta.servlet.http.*;
       import jakarta.servlet.annotation.WebServlet;
 16
17
      import java.io.IOException;
       import java.sql.Connection;
 19
       import java.sql.PreparedStatement;
 20
      import java.sql.SQLException;
 21
 22
      @WebServlet("/addUser")
 23
 24
       public class AddUserServlet extends HttpServlet {
 25
26
② 📮
           protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
 28
               String username = request.getParameter("username");
 29
               String password = request.getParameter("password");
 30
               String fullName = request.getParameter("fullName");
 31
               User user = new User(username, password, fullName);
 33
               try (Connection conn = DBUtil.getConnection()) {
   String query = "INSERT INTO users (username, password, fullName) VALUES (?, ?, ?)";
 34
 35
                   try (PreparedStatement stmt = conn.prepareStatement(query)) {
 36
                       stmt.setString(1, user.getUsername());
 37
                       stmt.setString(2, user.getPassword());
 38
                       stmt.setString(3, user.getFullName());
                       stmt.executeUpdate();
 41
                   response.sendRedirect("userList"); // Redirect ke halaman list setelah berhasil
 42
               } catch (SQLException e) {
                   e.printStackTrace();
                   response.sendRedirect("error.jsp");
45
46
       }
```

```
🔞 DeleteUserServlet.java × 🔞 EditUserServlet.java × 🚳 LoginController.java × 🔞 LogoutController.java × 🔞 UserListServlet.java ×
1 📮 /*
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8
9
10
      * @author helmy
 11 📮 import com.mycompany.latihanwebmvc.Database.DBUtil; //import class DBUtil
 9
13
      import com.mycompany.latihanwebmvc.Model.User; //import class User dari Package Model
      import jakarta.servlet.ServletException;
      import jakarta.servlet.http.*;
 15
      import jakarta.servlet.annotation.WebServlet;
      import java.io.IOException;
 16
 17
      import java.sql.Connection;
 18
      import java.sql.PreparedStatement;
 import java.sql.SQLException;
      import java.util.logging.Level;
import java.util.logging.Logger;
 23
      @WebServlet("/deleteUser")
24
25
      public class DeleteUserServlet extends HttpServlet {
 26
 ⊚ 📮
          protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException (
28
29 =
              int userId = Integer.parseInt(request.getParameter("id"));
              try (Connection conn = DBUtil.getConnection()) {
                String query = "DELETE FROM users WHERE id = ?";
 30
 31
                  try (PreparedStatement stmt = conn.prepareStatement(query)) {
                  stmt.setInt(1, userId);
 32
                     stmt.executeUpdate();
 33
 34
 35
                  response.sendRedirect("userList");
 } catch (SQLException e) {
                 e.printStackTrace();
                 response.sendRedirect("error.jsp");
 39
40
41
```

```
1 - /*
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11
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      import com.mycompany.latihanwebmvc.Model.User; //import class User dari Package Model
      import jakarta.servlet.ServletException;
14
      import jakarta.servlet.http.*;
      import jakarta.servlet.annotation.WebServlet;
      import java.io.IOException;
17
      import java.sql.Connection;
18
      import java.sql.PreparedStatement;
19
      import java.sql.ResultSet;
20
      import java.sql.SQLException;
 9<u>4</u>
      import java.util.logging.Level;
      import java.util.logging.Logger;
23
24
      @WebServlet("/editUser")
      public class EditUserServlet extends HttpServlet {
26
27
 ⊚ □
          protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
29
              int userId = Integer.parseInt(request.getParameter("id"));
              User user = null;
31
              try (Connection conn = DBUtil.getConnection()) {
                  String query = "SELECT * FROM users WHERE id = ?";
32
33
                  try (PreparedStatement stmt = conn.prepareStatement(query)) {
                     stmt.setInt(1, userId);
35
                      ResultSet rs = stmt.executeQuery();
                      if (rs.next()) {
36
                          user = new User(
37
38
                            rs.getInt("id"),
                             rs.getString("username"),
                             rs.getString("password"),
                             rs.getString("fullName")
42
43
                     1
44
                  request.setAttribute("user", user);
46
                 request.getRequestDispatcher("/editUser.jsp").forward(request, response);
47
              } catch (SQLException e) {
                 e.printStackTrace();
                  response.sendRedirect("error.jsp");
50
51
(a) (=
         protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
55
              int userId = Integer.parseInt(request.getParameter("id"));
56
              String username = request.getParameter("username");
57
              String password = request.getParameter("password");
58
             String fullName = request.getParameter("fullName");
59
60
              User user = new User(userId, username, password, fullName);
61
              try (Connection conn = DBUtil.getConnection()) {
62
                 String query = "UPDATE users SET username = ?, password = ?, fullName = ? WHERE id = ?"; try (PreparedStatement stmt = conn.prepareStatement(query)) {
63
                     stmt.setInt(4, user.getId());
65
                     stmt.setString(1, user.getUsername());
66
                     stmt.setString(2, user.getPassword());
stmt.setString(3, user.getFullName());
67
                     stmt.executeUpdate();
69
70
                 response.sendRedirect("userList");
             } catch (SQLException e) {
                  e.printStackTrace();
73
                response.sendRedirect("error.jsp");
75
```

```
1 📮 /*
 2 3 4
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       * @author helmy
 10
 11 🗦 import com.mycompany.latihanwebmvc.Model.User; //import class User dari Package Model
12
      import jakarta.servlet.ServletException;
      import jakarta.servlet.http.*;
13
      import jakarta.servlet.annotation.WebServlet;
15
      import java.io.IOException;
16
17
18
      @WebServlet("/login")
19
      public class LoginController extends HttpServlet {
20
21
          @Override
 © 📮
          protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
23
              try {
24
                  // Ambil parameter dari view form login
                  String username = request.getParameter("username");
25
                  String password = request.getParameter("password");
26
27
28
                     create objek User dari inputan form login
29
                  User user = new User(username, password);
31
                  // panggil method Validasi login dari objek User
32
                  if (user.isValidUser()) {
                      // Jika login berhasil, arahkan ke halaman welcome.jsp
34
                      HttpSession session = request.getSession();
                      session.setAttribute("user", user); // Menyimpan objek User dalam session
35
                      response.sendRedirect("welcome.jsp");
36
                  } else {
    // Jika login gagal, set error message dan tampilkan lagi login.jsp
    request.setAttribute("errorMessage", "username atau password anda salah!");
37
38
39
40
                      request.getRequestDispatcher("/login.jsp").forward(request, response);
41
42
              } catch (ServletException | IOException e) {
43
                  response.sendError(HttpServletResponse.SC INTERNAL SERVER ERROR, "Terjadi kesalahan dalam memproses request");
44
46
47
48
49
```

```
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5
6
7
8
9
       * @author helmy
11
12 import jakarta.servlet.ServletException;
13 import jakarta.servlet.annotation.WebServlet;
14
15
      import jakarta.servlet.http.*;
      import java.io.IOException;
16
17
      @WebServlet("/logout")
      public class LogoutController extends HttpServlet {
19
 o -
           protected void doGet (HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
22
23
               HttpSession session = request.getSession(false);
               if (session != null) {
24
25
                   session.invalidate(); // Menghapus session yang aktif
26
27
               response.sendRedirect("login.jsp"); // Arahkan ke halaman login setelah logout
28
29
30
```

```
■ UserListServlet.java ×

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      * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template
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 7 📮 import com.mycompany.latihanwebmvc.Database.DBUtil; //import class DBUtil
      import com.mycompany.latihanwebmvc.Model.User; //import class User dari Package Model
      import jakarta.servlet.ServletException;
      import jakarta.servlet.http.*;
11
      import jakarta.servlet.annotation.WebServlet;
12
      import java.io.IOException;
14
      import java.sql.Connection;
15
      import java.sql.ResultSet;
      import java.sql.SQLException;
17
      import java.sgl.Statement;
18
      import java.util.ArrayList;
19
      import java.util.List;
20
22
      * @author helmy
23
25
26
      @WebServlet("/userList")
      public class UserListServlet extends HttpServlet {
27
28

    □

         protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {
              List<User> users = new ArrayList<>();
31
              try (Connection conn = DBUtil.getConnection()) {
                  String query = "SELECT * FROM users";
32
                  try (Statement stmt = conn.createStatement()) {
33
34
                     ResultSet rs = stmt.executeQuery(query);
35
36
Q
                      while (rs.next()) {
                         User user = new User(
                            rs.getInt("id"),
39
                              rs.getString("username"),
```

```
Source History
      * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt to change this license
     * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit this template */
 3
 5
     package com.mycompany.latihanwebmvc.Database;
 6
      /**
 8
      * @author helmy
 9
      */
10
11 [ import java.sql.Connection;
     import java.sql.DriverManager;
12
    import java.sql.SQLException;
13
14
15
     public class DBUtil {
        private static final String URL = "jdbc:mariadb://localhost:3306/jdbc_latihan"; //url database
16
         private static final String USER = "root";  // user database
private static final String PASSWORD = "";  // password database
17
18
19
20 📮
          static {
21
            try {
                 Class.forName("org.mariadb.idbc.Driver");
22
23
            } catch (ClassNotFoundException e) {
 <u>Q</u>
                 e.printStackTrace();
              }
25
26
          }
27
28 📮
          public static Connection getConnection() throws SQLException {
29
             return DriverManager.getConnection(URL, USER, PASSWORD);
30
31
32
```

```
1 - /*
 2
      * Click nbfs://nbhost/SystemFileSystem/Templates/Licenses/license-default.txt
      * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Class.java to edit th
 3
     package com.mycompany.latihanwebmvc.Model;
 6
 7 - /**
 8
      * @author helmy
 9
     */
10
11
     public class User {
12
13
         private int id;
         private String username;
14
15
         private String password;
16
         private String fullName;
17
         // default Constructor
18
         public User() {
19 📮
20
         }
21
22 =
         public User(String username, String password) {
23
            this.username = username;
24
             this.password = password;
25
         1
         // Constructor dengan parameter
26
27
         public User(String username, String password, String fullName) {
28
            this.username = username;
29
             this.password = password;
30
             this.fullName = fullName;
31
         }
32
33 -
         public User(int id, String username, String password, String fullName) {
            this.id = id;
34
35
             this.username = username;
36
             this.password = password;
37
             this.fullName = fullName;
38
         1
39
```

```
// Getter dan Setter untuk username
40
         public int getId() {
41
42
         return id;
43
44
45 =
         public void setId(int id) {
         this.id = id;
46
47
48
49 -
         public String getUsername() {
50
         return username;
51
52
53 =
         public void setUsername(String username) {
         this.username = username;
54
55
56
         public String getPassword() {
57 =
58
         return password;
59
60
61 -
         public void setPassword(String password) {
         this.password = password;
62
63
64
65 =
         public String getFullName() {
         return fullName;
66
67
68
         public void setFullName(String fullName) {
69 =
70
         this.fullName = fullName;
71
72
73
         // Validasi login (contoh saja kita kasih hardcode untuk username "admin" da
74
         public boolean isValidUser() {
75
            return "aa".equals(username) && "aaa".equals(password);
76
77
     }
78
```

```
■ UserList.jsp ×

Source History 🖟 😼 🔻 🗸 🗸 🖓 🖶 🖟 🔥 🤮 🖆 🖭 🔘 🗆
₩ - <%--
        Document : UserList
        Created on : Dec 3, 2024, 7:09:32 AM
 3
        Author : helmy
 4
 5
 6
 7
     <%@ page contentType="text/html;charset=UTF-8" language</pre>
8
 9
     ="java" %>
     <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
10
11
12 - <%
        if (session.getAttribute("user") == null) {
13
            response.sendRedirect("login.jsp");
14
15
16
     %>
17 🖯 <html>
18 - <head>
19
      <title>User List</title>
20
   </head>
22
        <h2>User List</h2>
23
24
        25
            <thead>
26
               27
                  ID
28
                  Username
29
                   >Full Name
30
                  Actions
31
               32
            </thead>
33
            34
               <c:forEach var="user" items="${users}">
35 🖨
36
                  37
                      ${user.id}
                      ${user.username}
38
                      ${user.fullName}
39
40
41
                      <a href="editUser?id=${user.id}">Edit</a> |
42
43
                        <a href="deleteUser?id=${user.id}">Delete</a>
44
                   45
               </c:forEach>
46
            47
48
        49
50
        <a href="addUser.jsp">Tambah User Baru</a>
51
    - </body>
52
     </html>
53
54
```

```
    addUser.jsp 

    ad
  Source History | Market Source | History | Histo
    ₽-□ <%--
     2
                                           Document : addUser
                                             Created on : Dec 11, 2024, 9:13:35 PM
     3
     4
                                             Author : dipay
     5
     6
                           <%@page contentType="text/html" pageEncoding="UTF-8"%>
     7
     8
                           <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
    9
  10 📮 <%
                                            if (session.getAttribute("user") == null) {
  11
  12
                                                            response.sendRedirect("login.jsp");
  13
  14
                         <!DOCTYPE html>
  15
  16 🖵 <html>
  17
                                           <head>
                                                            <meta http-equiv="Content-Type" content="text/html; charset=UTF-8">
  18
  19
                                                              <title>JSP Page</title>
                                        </head>
  20
  21
                                        <body>
  22
                                                          <h1>Tambahkan user</h1>
  23
  24
                                                              <form action="addUser" method="post">
                                                              <input type="hidden" name="id" value="${user.id}">
  25
                                                               <label for="username">Username:</label>
  26
                                                               <input type="text" name="username" value="${user.username}" required><br>><br>>
  27
  28
  29
                                                               <label for="password">Password:</label>
                                                               <input type="password" name="password" value="${user.password}" required><br><br>
  30
  31
  32
                                                              <label for="fullName">Full Name:</label>
                                                              <input type="text" name="fullName" value="${user.fullName}" required><br>><br>>
  33
  34
                                                              <button type="submit">Add User
  35
                                              </form>
  36
  37
                                             </body>
                          </html>
  38
  39
```

```
Source History 🖟 🗸 🔻 🗸 🗸 🖓 🖶 🖫 🔓 😭 🖆 🖭 🔘 🗆
₩ -- <%--
 2
          Document : editUser
 3
          Created on : Dec 3, 2024, 7:10:29 AM
 4
         Author
                   : helmy
      <%@ page contentType="text/html;charset=UTF-8" language="java" %>
 7
 8
      <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
9 🖵 <%
10
          if (session.getAttribute("user") == null) {
11
             response.sendRedirect("login.jsp");
12
   %>
13
14 📮 <html>
15 🖹 <head>
16
          <title>Edit User</title>
    </head>
17
18 - <body>
19
         <h2>Edit User</h2>
20
         <form action="editUser" method="post">
21 -
22
             <input type="hidden" name="id" value="${user.id}">
             <label for="username">Username:</label>
23
             <input type="text" name="username" value="${user.username}" required><br><br><br><br>
24
25
26
             <label for="password">Password:</label>
             <input type="password" name="password" value="${user.password}" required><br><br><br>
27
28
29
             <label for="fullName">Full Name:</label>
             <input type="text" name="fullName" value="${user.fullName}" required><br/><br/><br/><br/>
30
31
32
             <button type="submit">Update User</button>
33
         </form>
      </body>
34
35
      </html>
```

```
index.html ×
      Source
     <!DOCTYPE html>
 1
 2
  <html>
 3
     <head>
        <meta charset="UTF-8">
 4
 5
        <title>Halaman login</title>
     </head>
 6
 7
  _
     <body>
 8
         <h1>Selamat Datang di halaman login</h1>
 9
        <a href="login.jsp">klik disini untuk login</a>
     </body>
10
   L </html>
11
12
```

```
iii login.jsp 

x

Source History 🖟 🖟 🔻 🗸 🗸 👇 🔛 💢 🚱 😂 💇 🗶 📗
 ₽-□ <%--
         Document : login
 2
         Created on: 26 Nov 2024, 10.58.49
 4
         Author : helmy
 5
      <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
 7
 9 📮 <html>
10 - <head>
11
        <title>Halaman Login</title>
12
     </head>
13 - <body>
14
         <h2>Login</h2>
15
16
          <form action="login" method="post">
17
             <label for="username">Username:</label>
             <input type="text" id="username" name="username" required><br><br>
18
19
20
             <label for="password">Password:</label>
             <input type="password" id="password" name="password" required><br><br></pr>
21
22
             <button type="submit">Login
23
         </form>
24
25
26
          <!-- Tampilkan pesan error jika login gagal -->
27
          <c:if test="${not empty errorMessage}">
28
             ${errorMessage}
29
          </c:if>
30
31
         <!-- Cek apakah pengguna sudah login, jika sudah, redirect ke welcome.jsp -->
32
          <c:if test="${not empty user}">
33
            You are already logged in. <a href="welcome.jsp">Go to Welcome Page</a>
34
         </c:if>
     </body>
35
36
     </html>
37
```

```
    welcome.jsp 

    welcome.jsp 

   welcome.jsp 

   welcome.jsp 

   welcome.jsp 

   welcome.jsp 

   welcome.jsp 

   welcome.jsp 

   welcome.jsp 

   welcome.jsp 

   welcome.jsp 

   welcome.jsp 

   welcome.jsp 

   welcome.jsp 

   welcome.jsp 

   welcome.jsp 

   welcome.jsp 

Source History 🖟 🖟 🔻 🖓 🖶 🖟 🦂 🤮 🚉 🖢 🗶
     ₽-□ <%---
                                        Document : welcome
Created on : 26 Nov 2024, 11.03.33
                                          Author : helmy
                          <%@page contentType="text/html" pageEncoding="UTF-8"%>
                         <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
    12
                                         <title>Welcome Page</title>
               - </head>
    13
    14
                                          <h2>Selamat datang, ${user.username}! anda berhasil Login!</h2> <!-- Menampilkan nama pengguna yang login -->
    15
    16
    17 - <form action="userList" method="get">
                                                    <button type="submit">List</button>
   18
                                        </form>
    19
   20
  21 <!-- Tombol untuk logout -->
22 - <form action="logout" method="get">
    23
                                                         <button type="submit">Logout</button>
                   - </body>
 </html>
   25
   26
   27
  28
```

Demo:



















