# **TP MOD 15**

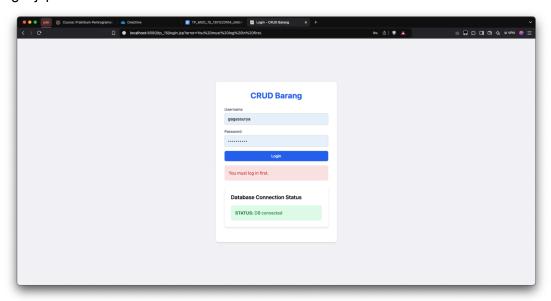
Penambahan fitur Login dan Delete dari project TP13

Nama: Gagas Surya Laksana

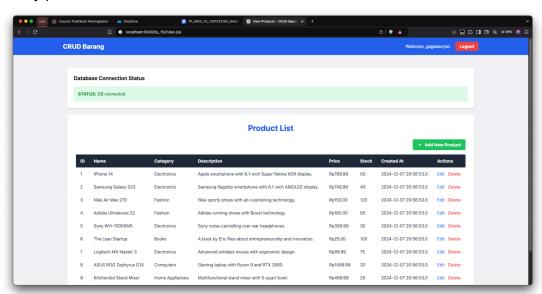
**NIM:** 1301223164 **Kelas:** IF-46-10

### Demo

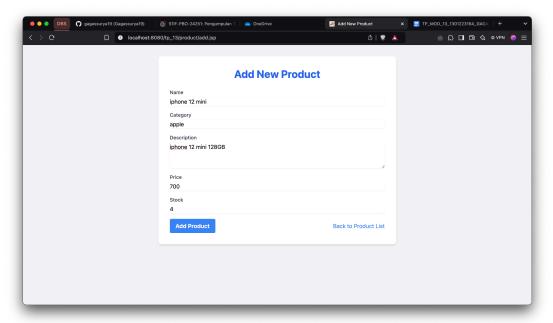
1. login.jsp



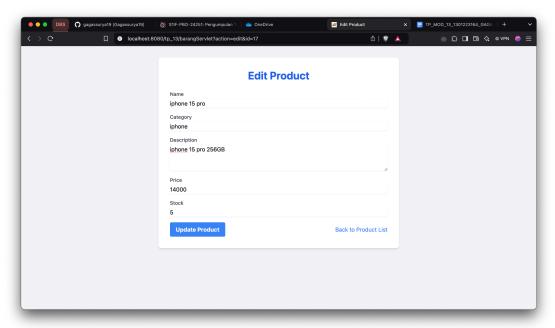
# 2. index.jsp



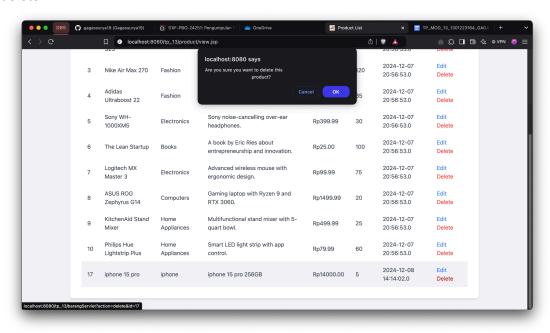
# 3. /product/add.jsp



# 4. /product/edit.jsp



### 5. delete



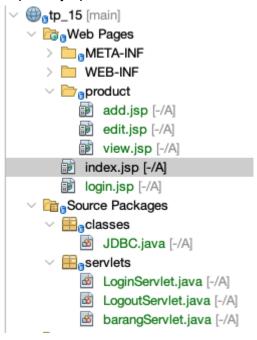
### Query untuk membuat database

CREATE DATABASE db\_barang;

```
CREATE TABLE products (
  id INT AUTO INCREMENT PRIMARY KEY,
  name VARCHAR(255) CHARACTER SET utf8mb4 COLLATE utf8mb4_0900_ai_ci NOT
NULL,
  category VARCHAR(100) CHARACTER SET utf8mb4 COLLATE utf8mb4_0900_ai_ci
NOT NULL,
  description TEXT CHARACTER SET utf8mb4 COLLATE utf8mb4 0900 ai ci,
  price DECIMAL(10,2) NOT NULL,
  stock INT NOT NULL.
  created_at TIMESTAMP DEFAULT CURRENT_TIMESTAMP
);
CREATE TABLE 'user' (
 'id' int NOT NULL AUTO INCREMENT,
 'username' varchar(255) DEFAULT NULL,
 'password' varchar(255) DEFAULT NULL,
 PRIMARY KEY ('id')
) ENGINE=InnoDB AUTO INCREMENT=3 DEFAULT CHARSET=utf8mb4
COLLATE=utf8mb4_0900_ai_ci;
INSERT INTO 'user' ('id', 'username', 'password') VALUES
(1, 'admin', 'admin'),
(2, 'gagassurya', 'gagassurya');
```

## Step by step

1. Import mysql connector dan membuat stuktur direktori seperti gambar berikut:



### 2. Code pada classes/JDBC.java

```
11
12
     public class JDBC {
13
         Connection con;
14
         Statement stmt;
         public boolean isConnected;
15
16
         public String message;
17
         public JDBC() {
18
19
20
                Class.forName("com.mysql.cj.jdbc.Driver");
                con = DriverManager.getConnection("jdbc:mysql://localhost:3306/db_barang",
21
                        "root", "Abcabc123#");
22
23
                stmt = con.createStatement();
24
                isConnected = true;
                message = "DB connected";
25
<u>Q.</u>
             } catch(Exception e) {
27
                isConnected = false;
28
                message = e.getMessage();
29
30
31
32 = 33 = 3
         public void disconnect() {
             try {
34
                stmt.close();
35
                con.close();
<u>Q.</u>
   卓
             } catch(Exception e) {
37
                message = e.getMessage();
38
39
40
41
   豆
         public ResultSet runQuery(String query) {
42
            ResultSet rs = null;
43
44
                rs = stmt.executeQuery(query);
Q
             } catch(Exception e){
46
                message = e.getMessage();
47
48
             return rs;
49
50
51
         public int runUpdate(String query) {
            int result = 0;
52
53
   卓
54
                result = stmt.executeUpdate(query);
Q
             } catch(Exception e){
                message = e.getMessage();
56
57
58
             return result;
59
     }
60
```

3. Code pada index.jsp (penambahan pada check session untuk login dan import page product secara langsung di index.js)

```
| Manual Content | Manu
```

### 4. Code pada servlets/barangServlet.java

```
package servlets;
 6
 7 ☐ import classes.JDBC;
     import java.io.IOException;
     import jakarta.servlet.ServletException;
     import jakarta.servlet.annotation.WebServlet;
10
     import jakarta.servlet.http.HttpServlet;
11
     import jakarta.servlet.http.HttpServletRequest;
12
     import jakarta.servlet.http.HttpServletResponse;
13
     import java.math.BigDecimal;
14
    import java.sql.ResultSet;
15
16
17 🖯 /**
18
      * @author gagas
19
20
     @WebServlet(name = "barangServlet", urlPatterns = {"/barangServlet"})
21
22
     public class barangServlet extends HttpServlet {
23
24
         @Override
         protected void doGet(HttpServletRequest request, HttpServletResponse response)
(0)
26 □
                 throws ServletException, IOException {
             JDBC db = new JDBC();
27
28
             String action = request.getParameter("action");
29
30
   白
31
                 int id = Integer.parseInt(request.getParameter("id"));
32
33
   \Box
                 if(action.equals("delete")){
                     db.runUpdate("DELETE FROM product WHERE id = " + id);
34
35
                     response.sendRedirect("product/view.jsp");
36
37
38
                 if(action.equals("edit")) {
39
                     ResultSet rs = db.runQuery("SELECT * FROM product WHERE id =" + id);
40
                     if(rs.next()) {
                        request.setAttribute("id", rs.getInt("id"));
41
                         request.setAttribute("name", rs.getString("name"));
42
                         request.setAttribute("category", rs.getString("category"));
43
                         request.setAttribute("description", rs.getString("description"));
44
                         request.setAttribute("price", rs.getBigDecimal("price"));
45
                         request.setAttribute("stock", rs.getInt("stock"));
46
47
48
                     request.getRequestDispatcher("product/edit.jsp").forward(request, response);
49
<u>Q.</u>
<u>Q.</u>
52
             } catch(Exception e) {
                 e.printStackTrace();
                 response.sendRedirect("product/view.jsp");
53
54
```

```
{}^{\textcircled{d}} JDBC.java \times {}^{\textcircled{p}} index.jsp \times {}^{\textcircled{d}} barangServlet.java \times {}^{\textcircled{p}} add.jsp \times {}^{\textcircled{p}} edit.jsp \times {}^{\textcircled{p}} view.jsp \times
         3
49
                 } catch(Exception e) {
<u>@</u>
<u>Q</u>
52
                      e.printStackTrace():
                       response.sendRedirect("product/view.jsp");
53
55
56
             @Override
            protected void doPost(HttpServletRequest request, HttpServletResponse response)
    F
58
                      throws ServletException, IOException {
                  JDBC db = new JDBC();
59
60
                 String action = request.getParameter("action");
61
62
63
                       String name = request.getParameter("name");
64
                       String category = request.getParameter("category");
65
                       String description = request.getParameter("description");
                       BigDecimal price = new BigDecimal(request.getParameter("price"));
66
67
                       int stock = Integer.parseInt(request.getParameter("stock"));
68
69
                       if(action.equals("create")) {
                           String query = "INSERT INTO product (name, category, description, price, stock) "
+ "VALUES ('" + name + "', '" + category + "', '" + description + "', "
                                      + "VALUES ('" + name + "', '"
+ price + ", " + stock + ")";
71
72
73
                            db.runUpdate(query);
74
                            response.sendRedirect("product/view.jsp");
75
76
77
                       if(action.equals("update")) {
                           int id = Integer.parseInt(request.getParameter("id"));

String query = "UPDATE product SET name = '" + name + "', category = '" + category + "', description = '" + description + "', price + ", stock = " + stock + " WHERE id = " + id;
78
79
80
81
82
                            db.runUpdate(query);
                            response.sendRedirect("product/view.jsp");
83
84
Q.
Q.
                 } catch(Exception e) {
                      e.printStackTrace();
87
                       response.sendRedirect("product/view.jsp");
88
89
90
91
    口
            public String getServletInfo() {
0
                 return "Short description";
93
94
             }// </editor-fold>
95
96
       }
97
```

5. Code pada /product/view.jsp (penambahan pada check session untuk login)

```
{}^{\underline{\hspace{-0.05cm}}\hspace{-0.05cm}} JDBC.java \times {}^{\underline{\hspace{-0.05cm}}\hspace{-0.05cm}} index.jsp \times {}^{\underline{\hspace{-0.05cm}}\hspace{-0.05cm}} barangServlet.java \times {}^{\underline{\hspace{-0.05cm}}\hspace{-0.05cm}} add.jsp \times {}^{\underline{\hspace{-0.05cm}}\hspace{-0.05cm}} edit.jsp \times
Source History 🖟 🖟 📲 🔻 🔽 🖓 🖶 🖫 🔓 🤮 🔮 🔘
     <%@page import="classes.JDBC, java.sql.ResultSet"%>
     <%@page contentType="text/html" pageEncoding="UTF-8"%>
      <!DOCTYPE html>
   □ <html lang="en">
   | <head>
 6
         <meta charset="UTF-8">
         <meta name="viewport" content="width=device-width, initial-scale=1.0">
         <title>Product List</title>
 8
         <script src="https://cdn.tailwindcss.com"></script>
 9
10
     </head>
     <body class="bg-gray-100 min-h-screen p-8">
11
         <div class="max-w-6xl mx-auto bg-white rounded-lg shadow-md p-8">
12
13
             <h1 class="text-3xl font-bold mb-6 text-center text-blue-600">Product List</h1>
14
15
             <!-- Flex container with justify-between -->
16
             <div class="flex justify-between mb-4">
17
                <div>
                    <a href="../index.jsp" class="bg-blue-500 hover:bg-blue-600 text-white font-bold</pre>
18
                      py-2 px-4 rounded inline-flex items-center">
19
                        Back to home
20
21
                </div>
 G
   中甲
23
                 <div>
24
                    <a href="add.jsp" class="bg-green-500 hover:bg-green-600 text-white font-bold py-2</pre>
25
                       px-4 rounded inline-flex items-center">
   卓
                        <svg xmlns="http://www.w3.org/2000/svg" class="h-5 w-5 mr-2" viewBox="0 0 20</pre>
26
                            20" fill="currentColor">
27
                            þ
28
29
                                 11-2 0v-3H6a1 1 0 110-2h3V6a1 1 0 011-1z" clip-rule="evenodd" />
                        </sva>
30
31
                        Add New Product
32
33
                 </div
34
             </div>
35
36
             <div class="overflow-x-auto">
   中中中中
37
                 38
                    <thead class="bg-gray-800 text-white">
39
                        40
                           ID
                            Name
41
42
                            Category
43
                           Description
44
                           Price
                           Stock
45
                           Created At
46
                           Actions
47
48
                        49
                    </thead>
50
                    自
51
                        <%
```

```
{}^{\underline{\hspace{-0.05cm}}\hspace{-0.05cm}} JDBC.java \times {}^{\underline{\hspace{-0.05cm}}\hspace{-0.05cm}} index.jsp \times {}^{\underline{\hspace{-0.05cm}}\hspace{-0.05cm}} barangServlet.java \times {}^{\underline{\hspace{-0.05cm}}\hspace{-0.05cm}} add.jsp \times {}^{\underline{\hspace{-0.05cm}}\hspace{-0.05cm}} edit.jsp \times
                        17
36
37
38
39
           <div class="overflow-x-auto">
              <thead class="bg-gray-800 text-white">
                    40
                       ID
                       Name
42
                       Category
                       Description
43
44
                       Price
                       Stock
45
                       Created At
46
                       Actions
47
                    48
49
                 </thead>
                 50
51
                       JDBC db = new JDBC();
52
53
                       ResultSet rs = db.runQuery("SELECT * FROM product");
54
                       while (rs.next()) {
55
56
                    57
                       <%= rs.getInt("id") %>
                       <%= rs.getString("name") %>
58
                       <%= rs.getString("category") %>
59
60
                       <%= rs.getString("description") %>
                       Rp<%= rs.getBigDecimal("price") %>
62
                       <%= rs.getInt("stock") %>
63
                       <%= rs.getTimestamp("created_at") %>
64
                       65
                          <a href="../barangServlet?action=edit&id=<%= rs.getInt("id") %>"
                            class="text-blue-500 hover:text-blue-700 mr-2">Edit</a>
66
  þ
                          <a href="../barangServlet?action=delete&id=<%= rs.getInt("id") %>"
67
                            class="text-red-500 hover:text-red-700"
68
69
                             onclick="return confirm('Are you sure you want to delete this \n\
                                product?')">Delete</a>
70
71
                       72
                    73
                    <%
74
75
                       db.disconnect();
76
77
                 78
              </div>
79
        </div>
80
81
     </body>
82
     </html>
83
84
```

6. Code pada /product/edit.jsp (penambahan pada check session untuk login)

```
<math display="block" | character |
```

```
<%@page import="classes.JDBC"%>
     <%@page contentType="text/html" pageEncoding="UTF-8"%>
     <!DOCTYPE html>
3
4 ☐ <html
5 ☐ <head>
     <html lang="en">
 6
         <meta charset="UTF-8">
         <meta name="viewport" content="width=device-width, initial-scale=1.0">
 8
         <title>Edit Product</title>
9
         <script src="https://cdn.tailwindcss.com"></script>
10
     </head>
     11
12
             <h1 class="text-3xl font-bold mb-6 text-center text-blue-600">Edit Product</h1>
13
14
15
             <form method="post" action="barangServlet?action=update" class="space-y-4">
                 <input type="hidden" name="id" value="<%= request.getAttribute("id") %>">
16
17
18
19
                     <label for="name" class="block text-sm font-medium text-gray-700">Name</label>
                     <input type="text" id="name" name="name"</pre>
20
21
                           value="<%= request.getAttribute("name") %>"
22
                            required
23
                            class="mt-1 block w-full rounded-md border-gray-300 shadow-sm
                            focus:border-blue-300 focus:ring focus:ring-blue-200
24
25
                            focus:ring-opacity-50">
26
                 </div>
27
28
                 <div>
29
                     <label for="category" class="block text-sm font-medium text-gray-700">
30
                        Category</label>
31
                     <input type="text" id="category" name="category"</pre>
32
                           value="<%= request.getAttribute("category") %>"
33
                            required
34
                            class="mt-1 block w-full rounded-md border-gray-300 shadow-sm
35
                            focus:border-blue-300 focus:ring focus:ring-blue-200
36
                            focus:ring-opacity-50">
37
                 </div>
38
39
                 <div>
40
                     <label for="description" class="block text-sm font-medium text-gray-700">
41
                        Description</label>
                     <textarea id="description" name="description" rows="3"</pre>
42
43
                              class="mt-1 block w-full rounded-md border-gray-300 shadow-sm
44
                               focus:border-blue-300 focus:ring focus:ring-blue-200
45
                              focus:ring-opacity-50"><%= request.getAttribute("description") %>
46
                     </textarea>
47
                 </div>
48
49
                 <div>
                     <label for="price" class="block text-sm font-medium text-gray-700">Price</label>
<input type="number" id="price" name="price" step="0.01"</pre>
50
51
```

```
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                                                                  class="mt-1 block w-full rounded-md border-gray-300 shadow-sm
 35
                                                                  focus:border-blue-300 focus:ring focus:ring-blue-200
36
                                                                  focus:ring-opacity-50">
37
                                         </div>
 38
 39
 40
                                                  <label for="description" class="block text-sm font-medium text-gray-700">
 41
                                                          Description</label>
                                                  <textarea id="description" name="description" rows="3"
        卓
 42
                                                                        class="mt-1 block w-full rounded-md border-gray-300 shadow-sm
 43
                                                                        focus:border-blue-300 focus:ring focus:ring-blue-200
 44
 45
                                                                        focus:ring-opacity-50"><%= request.getAttribute("description") %>
 46
 47
                                         </div>
 48
 49
                                         <div>
                                                  <label for="price" class="block text-sm font-medium text-gray-700">Price</label>
<input type="number" id="price" name="price" step="0.01"</pre>
 50
 51
 52
                                                                 value="<%= request.getAttribute("price") %>"
 53
 54
                                                                  class="mt-1 block w-full rounded-md border-gray-300 shadow-sm
 55
                                                                  focus:border-blue-300 focus:ring focus:ring-blue-200
                                                                  focus:ring-opacity-50">
 56
 57
                                         </div>
 58
 59
                                         <div>
                                                  <label for="stock" class="block text-sm font-medium text-gray-700">Stock</label>
<input type="number" id="stock" name="stock"</pre>
 60
 61
        自
                                                                 value="<%= request.getAttribute("stock") %>"
 62
 63
                                                                  required
 64
                                                                  class="mt-1 block w-full rounded-md border-gray-300 shadow-sm
 65
                                                                  focus:border-blue-300 focus:ring focus:ring-blue-200
 66
                                                                  focus:ring-opacity-50">
 67
                                         </div>
 68
 69
                                         <div class="flex items-center justify-between">
                                                  <br/>
<
 70
 71
                                                                   py-2 px-4 rounded focus:outline-none focus:shadow-outline">
 72
                                                           Update Product
 73
                                                   </button>
 74
                                                  <a href="product/view.jsp" class="text-blue-500 hover:text-blue-700">
 75
                                                          Back to Product List</a>
 76
                                         </div>
                                </form>
 77
                       </div>
 78
 79
              </body>
 80
              </html>
 81
 82
```

7. Code pada /product/add.jsp (penambahan pada check session untuk login)

```
<%@page contentType="text/html" pageEncoding="UTF-8"%>
     <!DOCTYPE html>
  □ <html lang="en">
□ <head>
3
4
         <meta charset="UTF-8">
 6
         <meta name="viewport" content="width=device-width, initial-scale=1.0">
         <title>Add New Product</title>
8
         <script src="https://cdn.tailwindcss.com"></script>
9
     </head>
     <body class="bg-gray-100 min-h-screen p-8">
10 |
         12
13
             <form method="post" action="../barangServlet?action=create" class="space-y-4">
14
15
                 <div>
                    <label for="name" class="block text-sm font-medium text-gray-700">Name</label>
16
17
                    <input type="text" id="name" name="name" required class="mt-1 block w-full</pre>
18
                           rounded-md border-gray-300 shadow-sm focus:border-blue-300 focus:ring
19
                           focus:ring-blue-200 focus:ring-opacity-50">
20
                 </div>
21
22
                <div>
                    <label for="category" class="block text-sm font-medium text-gray-700">
23
24
                        Category</label>
                    <input type="text" id="category" name="category" required</pre>
25
26
                           class="mt-1 block w-full rounded-md border-gray-300 shadow-sm
27
                           focus:border-blue-300 focus:ring focus:ring-blue-200
28
                           focus:ring-opacity-50">
29
                 </div>
P
31
                 <div>
   中日一日
                    <label for="description" class="block text-sm font-medium text-gray-700">
32
33
                        Description</label>
                    <textarea id="description" name="description" rows="3"
34
35
                             class="mt-1 block w-full rounded-md border-gray-300 shadow-sm
                              focus:border-blue-300 focus:ring focus:ring-blue-200
36
37
                              focus:ring-opacity-50"></textarea>
                 </div>
38
39
40
41
                    <label for="price" class="block text-sm font-medium text-gray-700">Price</label>
                    <input type="number" id="price" name="price" step="0.01" required</pre>
42
                           class="mt-1 block w-full rounded-md border-gray-300 shadow-sm
43
                           focus:border-blue-300 focus:ring focus:ring-blue-200
44
45
                           focus:ring-opacity-50">
46
                 </div>
47
48
                 <div>
                    <label for="stock" class="block text-sm font-medium text-gray-700">Stock</label>
49
50
                    <input type="number" id="stock" name="stock" required class="mt-1 block w-full</pre>
                           rounded-md border-gray-300 shadow-sm focus:border-blue-300 focus:ring
51
```

```
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21
22
   99-19
23
                       <label for="category" class="block text-sm font-medium text-gray-700">
                       Category</label>
<input type="text" id="category" name="category" required
class="mt-1 block w-full rounded-md border-gray-300 shadow-sm
24
25
26
                              focus:border-blue-300 focus:ring focus:ring-blue-200
27
28
                             focus:ring-opacity-50">
                   </div>
29
♀
31
                   <div>
32
                       <label for="description" class="block text-sm font-medium text-gray-700">
33
                          Description</label>
34
                       <textarea id="description" name="description" rows="3"
35
                                 class="mt-1 block w-full rounded-md border-gray-300 shadow-sm
36
                                 focus:border-blue-300 focus:ring focus:ring-blue-200
37
                                 focus:ring-opacity-50"></textarea>
38
                   </div>
39
40
                  <div>
                      <label for="price" class="block text-sm font-medium text-gray-700">Price</label>
41
                       <input type="number" id="price" name="price" step="0.01" required</pre>
42
                              class="mt-1 block w-full rounded-md border-gray-300 shadow-sm
43
44
                              focus:border-blue-300 focus:ring focus:ring-blue-200
45
                              focus:ring-opacity-50">
46
                   </div>
47
48
                   <div>
49
                       <label for="stock" class="block text-sm font-medium text-gray-700">Stock</label>
50
                      <input type="number" id="stock" name="stock" required class="mt-1 block w-full</pre>
                              rounded-md border-gray-300 shadow-sm focus:border-blue-300 focus:ring
51
52
                             focus:ring-blue-200 focus:ring-opacity-50">
                   </div>
53
54
                  <div class="flex items-center justify-between">
55
56
                       <button type="submit" class="bg-blue-500 hover:bg-blue-600 text-white font-bold</pre>
                              py-2 px-4 rounded focus:outline-none focus:shadow-outline">
57
58
                          Add Product
59
                       </button>
60
                       <a href="view.jsp" class="text-blue-500 hover:text-blue-700">
61
                         Back to Product List</a>
62
                   </div>
63
               </form>
64
          </div>
65
      </body>
66
      </html>
67
68
```

### 8. login.jsp

```
| Continue 
        45 46 47 48 49 50 51 - - 53 54 - 55 56 57
```

### 9. loginServlet.java

```
package servlets;

    import java.io.IOException;
    import java.sql.ResultSet;

        import java.sqt.Resuttset;
import jakarta.servlet.ServletException;
import jakarta.servlet.annotation.WebServlet;
        import jakarta.servlet.http.HttpServlet;
import jakarta.servlet.http.HttpServletRequest;
        import jakarta.servlet.http.HttpServletResponse;
import jakarta.servlet.http.HttpSession;
10
11
12
13
14
15
16
        import classes.JDBC;
        @WebServlet(name = "LoginServlet", urlPatterns = {"/LoginServlet"})
public class LoginServlet extends HttpServlet {
             protected void doPost(HttpServletRequest request, HttpServletResponse response)
18
19
                  throws ServletException, IOException {
String username = request.getParameter("username");
String password = request.getParameter("password");
20
21
22
23
                  JDBC jdbc = new JDBC();
24
25
                  if (!idbc.isConnected) {
                       response.sendRedirect("login.jsp?error=" + jdbc.message);
 26
27
28
29
30
31
32
                  boolean isValidUser = false;
                      ttring query = "SELECT * FROM user WHERE username = '" + username +
"' AND password = '" + password + "'";
ResultSet rs = jdbc.runQuery(query);
33
34
35
36
37
38
39
40
                      if (rs != null && rs.next()) {
   isValidUser = true;
                      }
                      if (rs != null) {
    rs.close();
}
response.sendRedirect("login.jsp?error=An error occurred: " + e.getMessage());
                  } finally {
 45
                      jdbc.disconnect();
 47
 48
48
                  if (isValidUser) {
                       HttpSession session = request.getSession();
50
                       nttpession session = request/ession(), session.setMaxInactiveInterval(30 * 60); // session aktif selama 30 menit
51
52
53
54
55
56
57
                       response.sendRedirect("index.jsp");
                  } else {
                       response.sendRedirect("login.jsp?error=Invalid username or password.");
        }
58
```

## 10. LogoutServlet.java

```
index.jsp [-/A] x illogin.jsp [-/A] x illoginServlet.java 
 package servlets;
   3 ☐ import java.io.IOException;
                   import jakarta.servlet.ServletException;
   4
                   import jakarta.servlet.annotation.WebServlet;
   6
                   import jakarta.servlet.http.HttpServlet;
                   import jakarta.servlet.http.HttpServletRequest;
              import jakarta.servlet.http.HttpServletResponse;
            import jakarta.servlet.http.HttpSession;
   9
 10
                  @WebServlet(name = "LogoutServlet", urlPatterns = {"/LogoutServlet"})
 11
 12
                   public class LogoutServlet extends HttpServlet {
 13
 14
                               @Override
   0
                               protected void doGet(HttpServletRequest request, HttpServletResponse response)
 16
                                                        throws ServletException, IOException {
 17
                                           HttpSession session = request.getSession(false);
                                           if (session != null) {
 18
 19
                                                       session.invalidate();
 20
 21
                                           response.sendRedirect("login.jsp?error=You have been logged out.");
 22
 23
                   }
 24
```