Experiment -8

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Branch: BE-CSE Section/Group: KRG 2B

Semester:6th Date of

Subject Name: Project-Based Learning in Performance: 17/03/2025

Java with Lab Subject Code: 22CSH-359

Aim: To develop a servlet that accepts user credentials from an HTML form and displays a personalized welcome message on successful login.

Objective: Learn form handling with Servlets Understand HTTP request/response handling Practice doPost() method

Code:

```
<!DOCTYPE html>
<html>
<head><title>Login</title></head>
<body>
 <form action="LoginServlet" method="post">
  Username: <input type="text" name="username"><br>
  Password: <input type="password" name="password"><br>
  <input type="submit" value="Login">
 </form>
</body> </html>
import java.io.*; import
javax.servlet.*;
                   import
javax.servlet.http.*;
                 LoginServlet
                                            HttpServlet
                                                                           void
public
         class
                                 extends
                                                               protected
  doPost(HttpServletRequest request, HttpServletResponse
                                                              response) throws
  ServletException, IOException {
     String user = request.getParameter("username");
     String pass = request.getParameter("password");
    response.setContentType("text/html"); PrintWriter
     out = response.getWriter(); if ("admin".equals(user)
```

```
&&
                    "1234".equals(pass))
    out.println("<h2>Welcome, " + user + "!</h2>");
                    out.println("<h2>Login Failed. Invalid
       credentials.</h2>");
  }
<web-app>
 <servlet>
  <servlet-name>LoginServlet</servlet-name>
  <servlet-class>LoginServlet</servlet-class>
 </servlet>
 <servlet-mapping>
  <servlet-name>LoginServlet</servlet-name>
  <url>pattern>/LoginServlet</url-pattern></url
 </servlet-mapping>
</web-app>
```

Output:

1)

```
Enter username: admin
Enter password: 1234
Welcome, admin!
```

2)

```
Enter username: user
Enter password: password
Login Failed. Invalid credentials.
```

Experiment -8.2

Aim: To build a servlet integrated with JDBC that displays all employees and enables search by employeeID.

Objective: 1) Use JDBC with Servlet

- 2) Fetch and display records
- 3) Implement search functionality

Code:

```
<!DOCTYPE html>
<html>
<head><title>Search Employee</title></head>
<body>
 <form action="EmployeeServlet" method="post">
  Enter Employee ID: <input type="text" name="empId">
  <input type="submit" value="Search">
 </form>
</body>
</html>
import java.io.*;
                   import
javax.servlet.*;
                   import
javax.servlet.http.*; import
java.sql.*;
                EmployeeServlet
                                             HttpServlet
                                                                           void
public
         class
                                   extends
                                                                protected
  doPost(HttpServletRequest request,
                                       HttpServletResponse response) throws
  ServletException, IOException {
     String empId = request.getParameter("empId");
     response.setContentType("text/html");
     PrintWriter out = response.getWriter();
    try {
       Class.forName("com.mysql.jdbc.Driver");
```

Connection con =

```
DriverManager.getConnection("jdbc:mysql://localhost:3306/company", "root", "password");
String query = "SELECT * FROM employees WHERE emp id=?";
       PreparedStatement ps = con.prepareStatement(query); ps.setString(1,
       empId);
       ResultSet rs = ps.executeQuery();
if (rs.next()) { out.println("<h2>Employee
       Details</h2>"); out.println("ID: " + rs.getInt(1) +
       "<br/>'"); out.println("Name: " + rs.getString(2) +
       "<br/>br>"); out.println("Department: " +
       rs.getString(3));
       } else { out.println("No employee found with ID " +
         empId);
       con.close();
     } catch (Exception e) { out.println("Error:
     " + e.getMessage()); }
}
```

Output:

1)

```
Employee Details
ID: 101
Name: John Doe
Department: HR
```

2)

Experiment -8.3

Aim: To develop a JSP-based student portal that accepts attendance data and saves it to the database using a servlet.

Objective: 1) Combine JSP for UI and Servlets for logic

```
2) Perform INSERT using JDBC
       3) Build a real-world web flow Code:
<%@ page language="java" %>
<html>
<head><title>Student Attendance</title></head>
<body>
 <h2>Mark Attendance</h2>
 <form action="AttendanceServlet" method="post"> Roll
  No: <input type="text" name="roll"><br> Name:
  <input type="text" name="name"><br> Status: <select</pre>
  name="status">
    <option>Present
    <option>Absent
  </select><br>
  <input type="submit" value="Submit">
 </form>
</body> </html>
import java.io.*;
                  import
javax.servlet.*;
                   import
javax.servlet.http.*; import
java.sql.*;
public
         class
                  AttendanceServlet
                                       extends
                                                  HttpServlet
                                                                                  void
                                                                     protected
  doPost(HttpServletRequest
                                           HttpServletResponse
                               request,
                                                                   response)
                                                                               throws
  ServletException, IOException {
    String roll = request.getParameter("roll"); String name
    = request.getParameter("name"); String status
    = request.getParameter("status");
response.setContentType("text/html"); PrintWriter out =
response.getWriter();
```

```
Class.forName("com.mysql.jdbc.Driver");
       Connection con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/student portal",
                                                                                "root",
"password");
       String query = "INSERT INTO attendance (roll no, name, status) VALUES (?, ?,
?)";
       PreparedStatement ps = con.prepareStatement(query); ps.setString(1, roll);
      ps.setString(2, name); ps.setString(3,
       status);
      int i = ps.executeUpdate(); if
       (i > 0) { out.println("<h3>Attendance marked successfully for " + name +
       "!</h3>"); }
      con.close();
    } catch (Exception e) { out.println("Error:
    " + e.getMessage()); }
}
CREATE
           TABLE
                      attendance
                                      id
                                           INT
  AUTO INCREMENT PRIMARY KEY,
  roll no VARCHAR(20),
  name VARCHAR(100),
  status VARCHAR(10)
);
```

OUTPUT:

Attendance marked successfully for John Doe!