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**Experiment -8**

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**Branch: BE-CSE Section/Group: 903-DL(B)**

**Semester:6th Date of Performance:**

**Subject Name: Project-Based Learning Subject Code: 22CSH-359**

**in Java with Lab**

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

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

**3.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.\*;

public class LoginServlet extends HttpServlet {

protected void 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>");

} else {

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>

</servlet-mapping>

</web-app>

**4.Output:**

* + - 1. On correct login: Welcome, Sarthak!
      2. On failure: Login Failed. Invalid credentials.

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

**Objective**: 1) Use JDBC with Servlet

* + - 1. Fetch and display records
      2. 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.\*;

public class EmployeeServlet extends HttpServlet {

protected void 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>"); 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. Enter an employee ID → Shows details if found.
2. Not found → "No employee found with ID X

**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

* + - 1. Perform INSERT using JDBC
      2. 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 name="status">

<option>Present</option>

<option>Absent</option>

</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 {

protected void doPost(HttpServletRequest request, HttpServletResponse 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();

try {

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

Form submission → "Attendance marked successfully for John!" And the data is stored in the database.