



# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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## Experiment-8

**Student Name:** Palak Khullar

**UID:** 22BCS13306

**Branch:** BE-CSE

**Section/Group:** 618-B

**Semester:** 6th

**Date of Performance:** 28/03/25

**Subject Name:** Project Based Learning in Java

**Subject Code:** 22CSH-359

### EASY:

**Aim:** Write a servlet to accept user credentials through an HTML form and display a personalized welcome message if the login is successful.

**Objective:** To develop a servlet that accepts user credentials through an HTML form. It displays a personalized welcome message if the login is successful.

### **Implementation/Code:**

#### HTML FORM

```
<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>
```

#### SERVLET

```
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 {
```

```
    response.setContentType("text/html");
```

```
    PrintWriter out = response.getWriter();
```

```
    String user = request.getParameter("username");
```

```
    String pass = request.getParameter("password");
```

```
    if(user.equals("admin") && pass.equals("admin")) {
```

```
        out.println("<h1>Welcome " + user + "</h1>");
```

```
    } else {
```

```
        out.println("<h1>Invalid username or password</h1>");
```

```
    }
```

```
}
```

```
}
```

## Output

User Input:

Username: admin

Password: admin

Output:

Welcome admin



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## MEDIUM:

**Aim:** Create a servlet integrated with JDBC to display a list of employees from a database. Include a search form to fetch employee details by ID.

**Objective:** To create a servlet integrated with JDBC to fetch employee details from the database. It displays either all employees or a specific employee based on the entered ID.

## **Code/Implementation:**

### HTML

```
<form action="EmployeeServlet" method="get">  
    Enter Employee ID to Search: <input type="text" name="id"><br>  
    <input type="submit" value="Search">  
</form>
```

### SERVLET

```
import java.io.*;  
import javax.servlet.*;  
import javax.servlet.http.*;  
import java.sql.*;  
  
public class EmployeeServlet extends HttpServlet {  
    protected void doGet(HttpServletRequest request, HttpServletResponse  
response) throws ServletException, IOException {  
        response.setContentType("text/html");
```

```
PrintWriter out = response.getWriter();

String id = request.getParameter("id");

try {
    Class.forName("com.mysql.cj.jdbc.Driver");

    Connection con =
    DriverManager.getConnection("jdbc:mysql://localhost:3306/testdb", "root", "");

    Statement stmt = con.createStatement();

    ResultSet rs;

    if(id != null && !id.isEmpty()) {
        rs = stmt.executeQuery("SELECT * FROM employee WHERE id=" +
id);
    } else {
        rs = stmt.executeQuery("SELECT * FROM employee");
    }

    out.println("<table border='1'>");
    out.println("<tr><th>ID</th><th>Name</th><th>Position</th></tr>");

    while(rs.next()) {
        out.println("<tr><td>" + rs.getInt(1) + "</td><td>" + rs.getString(2) +
"</td><td>" + rs.getString(3) + "</td></tr>");
    }
}
```

```
        out.println("</table>");  
        con.close();  
    } catch(Exception e) {  
        out.println("Error: " + e);  
    }  
}  
}
```

## Output:

Enter Employee ID to Search: 2

Output:

ID	Name	Position
2	John Doe	Manager

## HARD:

**Aim:** Develop a JSP-based student portal. Include a form for entering attendance details and save them to the database using a servlet.

**Objective:** To design a JSP-based student portal for attendance entry. It collects attendance details and stores them into the database using a servlet.

## Code/Implementation:

### JSP

```
<form action="AttendanceServlet" method="post">
```

Student Name: <input type="text" name="name"><br>

Date: <input type="date" name="date"><br>



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Attendance (Present/Absent): <input type="text" name="status"><br>

<input type="submit" value="Submit Attendance">

</form>

## SERVLET

```
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 {
```

```
        response.setContentType("text/html");
```

```
        PrintWriter out = response.getWriter();
```

```
        String name = request.getParameter("name");
```

```
        String date = request.getParameter("date");
```

```
        String status = request.getParameter("status");
```

```
        try {
```

```
            Class.forName("com.mysql.cj.jdbc.Driver");
```

```
            Connection con =
```

```
            DriverManager.getConnection("jdbc:mysql://localhost:3306/testdb", "root", "");
```



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```
PreparedStatement ps = con.prepareStatement("INSERT INTO  
attendance(name, date, status) VALUES (?, ?, ?)");
```

```
ps.setString(1, name);
```

```
ps.setString(2, date);
```

```
ps.setString(3, status);
```

```
int i = ps.executeUpdate();
```

```
if(i > 0) {
```

```
    out.println("<h1>Attendance Saved Successfully</h1>");
```

```
} else {
```

```
    out.println("<h1>Attendance Not Saved</h1>");
```

```
}
```

```
con.close();
```

```
} catch(Exception e) {
```

```
    out.println("Error: " + e);
```

```
}
```

```
}
```

```
}
```

## Output:

```
Student Name: Ramesh
```

```
Date: 2025-03-28
```

```
Attendance (Present/Absent): Present
```

```
Output:
```

```
Attendance Saved Successfully
```



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## **Learning Outcome:**

1. We will be able to develop Java Servlets and JSP applications with form handling and database connectivity.
2. We will learn to implement dynamic web applications for real-time data processing and display.