



# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Discover. Learn. Empower.

## Experiment -8

Student Name: Amartya Raj

UID:22BCS13164

Branch: BE-CSE

Section/Group:IOT\_638-B

Semester:6th

Date of Performance:17/03/2025

Subject Name: Project-Based Learning  
Lab

Subject Code: 22CSH-359 in Java with

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

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

### **7.1.3 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>
```

### **Output:**

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

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

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

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

### **7.2.2 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());  
}  
}  
}
```

### 7.2.3 Output:

1) Enter an employee ID → Shows details if found.

2) Not found → "No employee found with ID X"

**7.3.1 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 name="status">  
            <option>Present</option>  
            <option>Absent</option>  
        </select><br>  
        <input type="submit" value="Submit">  
    </form>  
</body> </html>
```



# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Discover. Learn. Empower.

```
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());
    }
}
```



# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

}

```
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.