



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Discover. Learn. Empower.

Experiment -8

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Date of

Subject Name: Project-Based Learning in
Java with Lab

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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.*;
```

```
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)

```
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.*;
```

```
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");
```



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```
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)

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

2)

```
No employee found with ID 999
```

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
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 {
```



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```
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!
```