**Experiment 8**

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**Subject Name: Project based learning java Subject Code:22CSH-359**

**Easy Level: Servlet for User Login**

**LoginForm.html (Place inside webapp folder)**

html

<!DOCTYPE html>

<html>

<head>

<title>Login</title>

</head>

<body>

<h2>Login</h2>

<form action="LoginServlet" method="post">

Username: <input type="text" name="username" required><br>

Password: <input type="password" name="password" required><br>

<input type="submit" value="Login">

</form>

</body>

</html>

**LoginServlet.java**

java

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.\*;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/LoginServlet")

public class LoginServlet extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

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

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

try {

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

Connection conn = DriverManager.getConnection("jdbc:mysql://127.0.0.1:3306/mylocal", "root", "Dontaskme1@");

PreparedStatement stmt = conn.prepareStatement("SELECT \* FROM Users WHERE username=? AND password=?");

stmt.setString(1, username);

stmt.setString(2, password);

ResultSet rs = stmt.executeQuery();

response.setContentType("text/html");

PrintWriter out = response.getWriter();

if (rs.next()) {

out.println("<h2>Welcome, " + username + "!</h2>");

} else {

out.println("<h2>❌ Invalid Credentials</h2>");

}

conn.close();

} catch (Exception e) {

e.printStackTrace();

}

}

}

**3. Medium Level: Servlet to Display Employees**

**EmployeeServlet.java**

java

import java.io.IOException;

import java.io.PrintWriter;

import java.sql.\*;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/EmployeeServlet")

public class EmployeeServlet extends HttpServlet {

protected void doGet(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

response.setContentType("text/html");

PrintWriter out = response.getWriter();

try {

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

Connection conn = DriverManager.getConnection("jdbc:mysql://127.0.0.1:3306/mylocal", "root", "Dontaskme1@");

out.println("<h2>Employee List</h2>");

out.println("<form action='EmployeeServlet' method='get'>");

out.println("Search by ID: <input type='text' name='empId'><input type='submit' value='Search'>");

out.println("</form><br>");

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

String query = (empId != null && !empId.isEmpty()) ?

"SELECT \* FROM Employees WHERE id=" + empId : "SELECT \* FROM Employees";

Statement stmt = conn.createStatement();

ResultSet rs = stmt.executeQuery(query);

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

while (rs.next()) {

out.println("<tr><td>" + rs.getInt("id") + "</td><td>" + rs.getString("name") + "</td><td>" + rs.getString("department") + "</td></tr>");

}

out.println("</table>");

conn.close();

} catch (Exception e) {

e.printStackTrace();

}

}

}

**4️ Hard Level: JSP-Based Student Portal**

**AttendanceForm.jsp (Place inside webapp folder)**

<%@ page import="java.sql.\*" %>

<html>

<head>

<title>Student Attendance</title>

</head>

<body>

<h2>Student Attendance Form</h2>

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

Student Name: <input type="text" name="student\_name" required><br>

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

Status: <select name="status">

<option value="Present">Present</option>

<option value="Absent">Absent</option>

</select><br>

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

</form>

</body>

</html>

**AttendanceServlet.java**

java

import java.io.IOException;

import java.sql.\*;

import javax.servlet.ServletException;

import javax.servlet.annotation.WebServlet;

import javax.servlet.http.HttpServlet;

import javax.servlet.http.HttpServletRequest;

import javax.servlet.http.HttpServletResponse;

@WebServlet("/AttendanceServlet")

public class AttendanceServlet extends HttpServlet {

protected void doPost(HttpServletRequest request, HttpServletResponse response) throws ServletException, IOException {

String studentName = request.getParameter("student\_name");

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

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

try {

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

Connection conn = DriverManager.getConnection("jdbc:mysql://127.0.0.1:3306/mylocal", "root", "Dontaskme1@");

PreparedStatement stmt = conn.prepareStatement("INSERT INTO Attendance (student\_name, date, status) VALUES (?, ?, ?)");

stmt.setString(1, studentName);

stmt.setString(2, date);

stmt.setString(3, status);

stmt.executeUpdate();

response.getWriter().println("<h2>✅ Attendance Recorded Successfully!</h2>");

conn.close();

} catch (Exception e) {

e.printStackTrace();

}

}

}

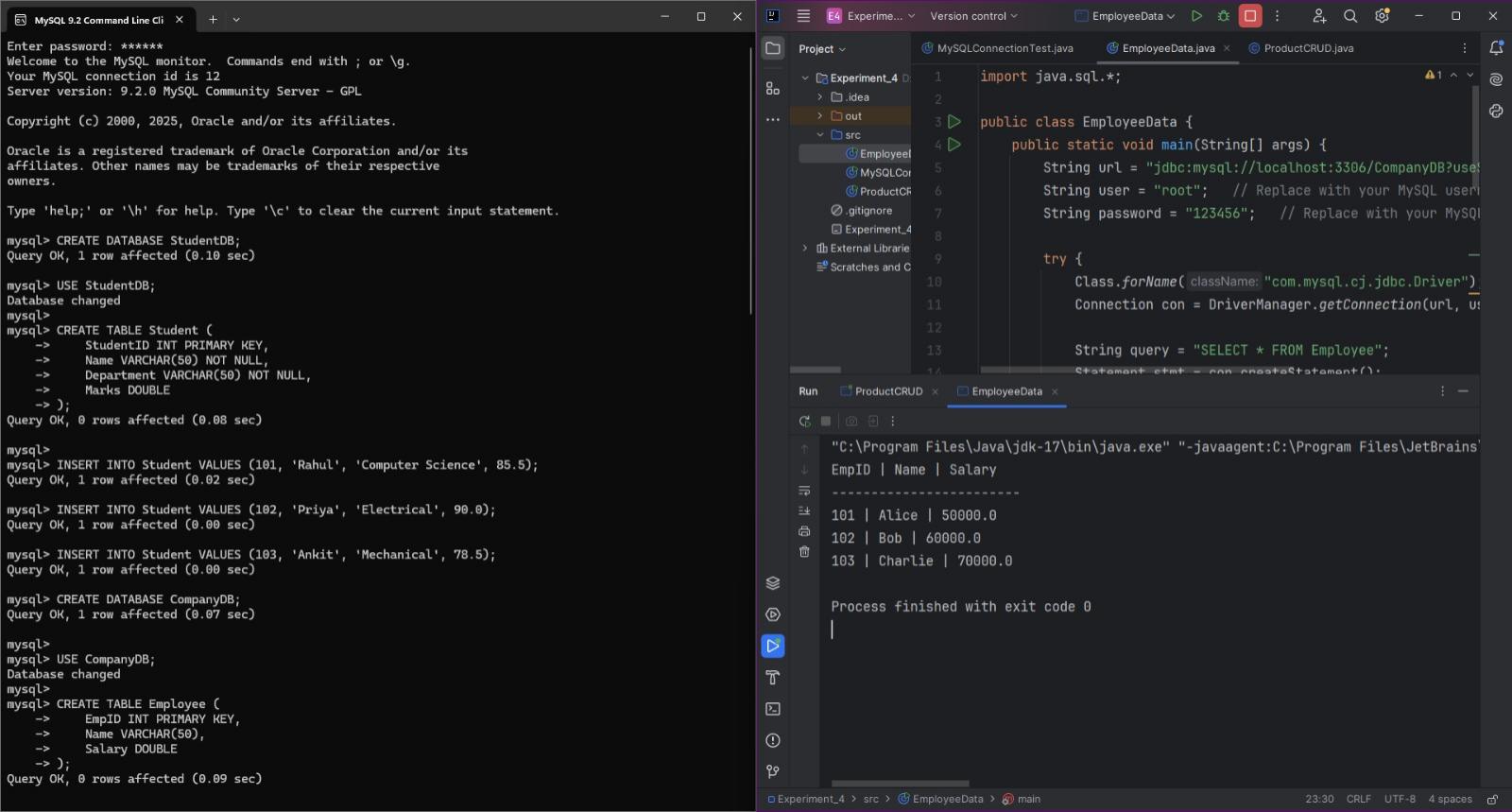
**Output:**

**Easy:**

A login screen with blue and black text

AI-generated content may be incorrect.

**Medium:**

****

**Hard:**

A screen shot of a student attendance form

AI-generated content may be incorrect.