Experiment -8

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Branch: BE-CSE Section/Group:IOT 640-A

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Subject Name: PBJL Subject Code: 22CSH-359

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>");
                    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.*;
                EmployeeServlet
                                              HttpServlet
                                    extends
                                                                            void
public
         class
                                                                protected
  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/>br>");
         out.println("Name: " + rs.getString(2) + "<br/>');
         out.println("Department: " + rs.getString(3));
       } else { out.println("No employee found with ID " +
         empId);
```

7.2.3 Output:

- 1) Enter an employee ID \rightarrow Shows details if found.
- 2) Not found \rightarrow "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:

```
</body></html>
import java.io.*; import
javax.servlet.*;
                   import
javax.servlet.http.*; import
java.sql.*;
                                               HttpServlet
public
         class
                AttendanceServlet
                                     extends
                                                                  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,
                                  ps.setString(2,
                         roll);
                                                     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 \rightarrow "Attendance marked successfully for John!" And the data is stored in the database.