EXPERIMENT 11

Aim: Write a JSP which insert the details of the 3 or 4 users who register with the web site by using registration form. Authenticate the user when he submits the login form using the user name and password from the database.

STEP 1. CREATE A DATABASE

```
| Limit to 1000 rows ▼ | ☆ | ● Q ¶ □
      CREATE DATABASE UserDB:
       use UserDB;
 3 • G CREATE TABLE users (
           id INT AUTO INCREMENT PRIMARY KEY,
 5
           username VARCHAR(50) NOT NULL UNIQUE,
 6
           password VARCHAR(50) NOT NULL,
 7
           email VARCHAR(100),
 8
           phone VARCHAR(15)
      );
10 •
      INSERT INTO users (username, password, email, phone)
11
       ('user1', 'pwd1', 'user1@example.com', '1234567890'),
       ('user2', 'pwd2', 'user2@example.com', '0987654321');
13
14
       select * from users;
15 •
```

STEP 2. CREATE A REGISTRATION.JSP PAGE:

```
</head>
<body>
    <h1>Register Users</h1>
    <form method="post">
        <label>Username:</label>
        <input type="text" name="username" required><br><br></pr>
        <label>Password:</label>
        <input type="password" name="password" required><br><br>
        <label>Email:</label>
        <input type="email" name="email" required><br><br><</pre>
        <label>Phone:</label>
        <input type="text" name="phone" required><br><br><<br>
        <input type="submit" value="Register">
    </form>
    <%
        if (request.getMethod().equalsIgnoreCase("POST")) {
            String username = request.getParameter("username");
            String password = request.getParameter("password");
            String email = request.getParameter("email");
            String phone = request.getParameter("phone");
            Connection con = null;
            PreparedStatement ps = null;
            try {
                // Database connection
                Class.forName("com.mysql.cj.jdbc.Driver");
                con =
DriverManager.getConnection("jdbc:mysql://localhost:3306/UserDB", "root",
 'password");
                // Insert query
                String query = "INSERT INTO users (username, password, email,
phone) VALUES (?, ?, ?, ?)";
                ps = con.prepareStatement(query);
                ps.setString(1, username);
                ps.setString(2, password);
                ps.setString(3, email);
                ps.setString(4, phone);
```

```
int result = ps.executeUpdate();
    if (result > 0) {
        out.println("Registration successful!");
    } else {
        out.println("Registration failed!");
    }
} catch (Exception e) {
        out.println("Error: " + e.getMessage() + "");
} finally {
        try { if (ps != null) ps.close(); } catch (Exception e) {}
        try { if (con != null) con.close(); } catch (Exception e) {}
}

}

%
</body>
</html>
```

STEP3. CREATE A LOGIN.JSP PAGE:

```
<%@ page import="java.sql.*" %>
<!DOCTYPE html>
<html>
<head>
    <title>Login Form</title>
</head>
<body>
    <h1>Login</h1>
    <form method="post">
        <label>Username:</label>
        <input type="text" name="username" required><br><br></pr>
        <label>Password:</label>
        <input type="password" name="password" required><br><br></pr>
        <input type="submit" value="Login">
    </form>
    <%
        if (request.getMethod().equalsIgnoreCase("POST")) {
            String username = request.getParameter("username");
            String password = request.getParameter("password");
```

```
Connection con = null;
            PreparedStatement ps = null;
            ResultSet rs = null;
            try {
               // Database connection
               Class.forName("com.mysql.cj.jdbc.Driver");
DriverManager.getConnection("jdbc:mysql://localhost:3306/UserDB", "root",
'password");
               // Authentication query
               String query = "SELECT * FROM users WHERE username = ? AND
password = ?";
               ps = con.prepareStatement(query);
               ps.setString(1, username);
               ps.setString(2, password);
               rs = ps.executeQuery();
               if (rs.next()) {
                   out.println("Login successful! Welcome, " +
rs.getString("username") + ".");
                } else {
                    out.println("Invalid username or password!");
            } catch (Exception e) {
                out.println("Error: " + e.getMessage() + "");
            } finally {
               try { if (rs != null) rs.close(); } catch (Exception e) {}
               try { if (ps != null) ps.close(); } catch (Exception e) {}
               try { if (con != null) con.close(); } catch (Exception e) {}
            }
       }
    %>
</body>
```