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UNIVERSITY INSTITUTE OF ENGINEERING

Project Based Learning in Java

Experiment 9

23CSP-304

Submitted To:

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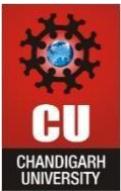
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Semester: 5th



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Experiment 9: Servlet for Login Validation

Aim

To write a Java Servlet that accepts user credentials through an HTML form and displays a personalized welcome message upon successful login.

Objectives

- To understand how to link an HTML form with a Java Servlet.
- To handle HTTP POST requests using doPost() method.
- To retrieve and validate form data using HttpServletRequest.
- To generate a response dynamically using HttpServletResponse.
- To learn basic Servlet configuration using annotations or web.xml

Code Implementation

1. HTML Form (login.html)

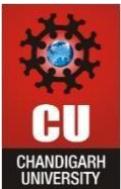
```
<!DOCTYPE html>
<html>
<head>
<title>Login Page</title>
</head>
<body>
<h2>Login Form</h2>
<form action="LoginServlet" method="post">
Username: <input type="text" name="username" required><br><br>
Password: <input type="password" name="password" required><br><br>
<input type="submit" value="Login">
</form>
</body>
</html>
```

2. Java Servlet (LoginServlet.java)

```
import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.*;
import javax.servlet.http.*;

@WebServlet("/LoginServlet")
public class LoginServlet extends HttpServlet {
protected void doPost(HttpServletRequest request, HttpServletResponse
response)
throws ServletException, IOException {

// Step 1: Set content type
response.setContentType("text/html");
PrintWriter out = response.getWriter();
```



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```
// Step 2: Retrieve form data
String username = request.getParameter("username");
String password = request.getParameter("password");

// Step 3: Validate credentials (hardcoded)
if ("John".equals(username) && "12345".equals(password)) {
    out.println("<h2>Welcome, " + username + "! Login Successful.</h2>");
} else {
    out.println("<h2>Invalid credentials! Please try again.</h2>");
}

out.close();
}
```

Output

Case 1: Successful Login

Welcome, John! **Login** Successful.

Case 2: Invalid Credentials

Invalid credentials! Please **try** again.

Learning Outcomes

- Learned how to create and configure a **Java Servlet**.
- Understood how to **link HTML forms** with Servlets using POST requests.
- Practiced retrieving form data using `request.getParameter()`.
- Implemented basic **login validation logic** in Servlets.
- Learned how to send **dynamic responses** to the client browser.