
CS355: Web Technologies Lab

Lab 8: JSP

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1. JSP

Java Server Pages (JSP) is a server-side programming technology that enables the creation of dynamic, platform-independent method for building Web-based applications. JSP have access to the entire family of Java APIs, including the JDBC API to access enterprise databases.

JavaServer Pages (JSP) is a technology for developing Webpages that supports dynamic content. This helps developers insert java code in HTML pages by making use of special JSP tags, most of which start with `<%` and end with `%>`.

There are different JSP tag types, depend on what you want to do with Java:

- `<%= expression %>` : The expression is evaluated, and the result is inserted into the HTML.
Ex:

```
<body>
  <h1>Hello World!</h1>
  Converting to Upper <%= new String("Dima").toUpperCase() %><br>
</body>
```

- `<% code %>`: The code is inserted into the servlet's service method **scriptlet**.

```
<%
    for(int i=1; i<=5; i++)
        out.println("<br> "+i+ " Web Lab");
%>
```

- `<%!declarations %>` The declarations are inserted into the servlet class.

```
<%!
    String lowerstring(String st){
        return st.toLowerCase();
    }
%>
lowercase of "Great Day" is <%=lowerstring("Great Day")%>
```

2. JSP Variables

You can declare your own variables, but also JSP provides several predefined variables:

- 1- request : Each time a client requests a page, the JSP engine creates a new object to represent that request. Methods:
 - a. `getArrayName()`
 - b. `getAttributeNames()`
 - c. `getSession()`
 - d. `getAttribute(String name)`
 - e. `getParameter(String name)`

ex:

```
<form action = "main.jsp" method = "GET">  
First Name: <input type = "text" name ="first_name"> <br />  
<input type = "submit" value ="Submit" /> </form>
```

In jsp:

```
<p><b>First Name: </b> <%= request.getParameter("first_name")%> </p>
```

- 2- response
- 3- Session
- 4- out

3.Task

Write an html that accept the pizza choices as follows then a JSP should show the order summary

choose Your Pizza

Pizza Size:

- ☒ Small
- ☐ Medium
- ☐ Large

Crust Type:

- ☒ Thin Crust
- ☐ Thick Crust
- ☐ Stuffed Crust

Toppings:

- ☒ Pepperoni
- ☒ Mushrooms
- ☐ Onions
- ☐ Sausage

Order Summary

Thank you for your order!

Pizza Size: small

Crust Type: thin

Toppings:

- pepperoni
- mushrooms