Java Server Pages (JSP)

Lesson 07: JSP Directives

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Lesson Objectives

In this lesson, you will learn about:

- JSP Directives
  - What is a JSP Directive?
- JSP Page Directive
- JSP Include Directive

What is a JSP Directive?

Directives are messages to the JSP container.

Instruction for the JSP engine that are processed when the JSP page is translated into servlet.

A JSP Directive affects the overall structure of the servlet class.
It has the form, as shown below:
- <%@ directive {attribute = "value"}* %>

Types of Directives in JSP 2.2:
- page
- Include

The Page Directive

The JSP page directive defines a number of page dependent properties and communicates these to the JSP container.

JSP page directive applies to the entire JSP file and any of its static include files called as translation unit.

- It can be used more than once in a translation unit.
- All attributes except "import" can be used only once per translation unit.

The Page Directive

Syntax

```
<%@ page
{language="scriptingLanguage"}
{ extends="className" }
{ import="importList" }
{ session="true|false" }
{ buffer="none|sizekb" }
{ autoFlush="true|false" }
{ isThreadSafe="true|false" }
```

The Page Directive

Syntax

{ info="info_text" }

{ errorPage="error_url" }

{ isErrorPage="true|false" }

{ contentType="ctinfo" }

{ pageEncoding="peinfo" }

{ isELIgnored="true|false" }

Demo

Demo on:
- exel.jsp
- excelhtml.jsp
- computespeed.jsp; speederror.jsp
- index.jsp

The Include Directive

The include directive includes files at the time the JSP page is translated into a servlet.

Syntax:

<%@include file="relativeURL"%>

- The included file can be an HTML file, a JSP file, a text file or a Java code file.

- The include process is static.

- Change in the included file will not be reflected in the JSP file in which it is included (this behavior is dependent on JSP container).

Example for JSP Include Directive

```
<HTML>
<HEAD> <TITLE>Include Directive </TITLE> </HEAD>
<BODY>
<%@ include file="header.html" %>
Page Body
<!-- Part specific to this page ... -->
<%@ include file="footer.html" %>
</BODY>
</HTML>
```

Demo

DemoJSPDirectives

- include.jsp
- header.html
- footer.html

Lab

Lab 3.2

Summary

In this lesson, you have learnt the following concepts:

- JSP Page Directive
- JSP Include Directive

Review Questions

Question 1: Directives are _____ to JSP Container.

Question 2: Which directive helps you to import classes?

Question 3: If you want the JSP container to send client request one at a time to the JSP page, then which attribute of the page directive will need to be set?

Review Questions

Question 4: The default value for the buffer attribute of the page directive is ____ kb.

Question 5: JSP include directive follows a ____ include process:
- Option 1: static
- Option 2: dynamic
- Option 3: both