

JavaServer Pages (JSP) :

JavaServer Pages (JSP) is a technology used in web development that allows you to create dynamic web pages with Java. JSP is a part of the Java EE (Enterprise Edition) platform and is commonly used for building web applications. It provides a way to embed Java code within HTML, making it easier to generate dynamic content for web pages.

Here's an introduction to JSP with two code examples:

Example 1: Creating a Simple JSP Page

In this example, we'll create a basic JSP page that displays a "Hello, World!" message.

****Step 1: Create a JSP File****

Create a file with a ".jsp" extension, e.g., `hello.jsp`, and add the following content:

```
```.jsp
<!DOCTYPE html>
<html>
<head>
 <title>My First JSP Page</title>
</head>
<body>
 <h1>Hello, World!</h1>
</body>
</html>
```.
```

This JSP page is similar to an HTML page but can include Java code within ``<% %>`` tags.

****Step 2: Deploy and Access the JSP Page****

You can deploy this JSP page on a web server like Apache Tomcat. Once it's deployed, you can access it through a web browser by entering the URL, e.g., `http://localhost:8080/your-web-app/hello.jsp`.

Example 2: Using Java Code in JSP

JSP allows you to embed Java code within your HTML to generate dynamic content. In this example, we'll create a JSP page that displays the current date and time.

****Step 1: Create a JSP File****

Create a file, e.g., `datetime.jsp`, and add the following content:

```
```.jsp
<%@ page language="java" contentType="text/html; charset=UTF-8" pageEncoding="UTF-8"
%>
<!DOCTYPE html>
<html>
<head>
 <title>Current Date and Time</title>
</head>
<body>
 <h1>Current Date and Time:</h1>
 <p><%= new java.util.Date() %></p>
</body>
</html>
```.
```

In this example, we use the ``<%= ... %>`` tag to embed Java code that retrieves the current date and time and displays it in the web page.

****Step 2: Deploy and Access the JSP Page****

Deploy this JSP page as in the previous example, and you can access it through a web browser to see the current date and time displayed on the page.

These are simple examples of JSP pages. JSP can be used for more complex web applications by incorporating Java logic, connecting to databases, and interacting with other web technologies. It allows you to create dynamic and interactive web pages by seamlessly blending HTML and Java code.