

JSP Directives

Step 1: Creating a dynamic web project

- Open Eclipse
- Go the File menu. Choose New->Dynamic Web Project
- Enter the project name as JSPDirectives. Click on Next
- Enter nothing in the next screen and click on Next
- Check the checkbox Generate web.xml deployment descriptor and click on Finish
- This will create the project files in the Project Explorer

Step 2: Creating a JSP file index.jsp

- In the Project Explorer, expand the project JSPDirectives
- Expand WebContent. Right click on WebContent. Choose New->JSP File
- Enter the filename as index.jsp and click on Finish
- Enter the following code:

```
<%@ page language="java" contentType="text/html; charset=UTF-8"
pageEncoding="UTF-8"%>
```

```
<%@ taglib prefix="c" uri="http://java.sun.com/jsp/jstl/core" %>
```

```
<%@ taglib prefix="fmt" uri="http://java.sun.com/jsp/jstl/fmt"%>
```

```
<!DOCTYPE html>
```

```
<!--
```

```
Download jstl.jar from
```

```
http://central.maven.org/maven2/javax/servlet/jstl/1.2/jstl-1.2.jar
```

```
-->
```

```
<html>
```

```
<head>
<meta charset="UTF-8">
<title>JSP Directives</title>
</head>
<body>
```

This is content from the main file.

```
<%@ include file="included.jsp" %>
```

```
<hr>
```

Example of using JSTL taglibs for formatting output


```
<p>
```

```
    Currency = <fmt:formatNumber value = "145" type =
"currency"/>
```

```
<p>
```

```
<p>
```

```
    <c:set var = "now" value = "<%= new java.util.Date()%>" />
```

```
    Current date and time is <fmt:formatDate pattern = "yyyy-MM-dd
hh:mm:ss" value = "${now}" />
```

```
</p>
```

```
</body>
```

```
</html>
```

- Click on the Save icon

Step 3: Creating a JSP file included.jsp

- In the Project Explorer, expand the project JSPDirectives
- Expand WebContent. Right click on WebContent. Choose New->JSP File
- Enter the filename as included.jsp and click on Finish
- Enter the following code:

```
<% out.println("This is content from included file.<br><br>"); %>
```

- Click on the Save icon

Step 4: Checking for servlet-api.jar

- Before building the project, we need to add servlet-api.jar to the project
- Servlet-api.jar file is already present in your practice lab. (Refer FSD: Lab Guide - Phase 2)
- To add it to the project, follow the below-mentioned steps:
 - In the Project Explorer, right click on JSPDirectives and choose Properties
 - Select Java Build Path from the options on the left
 - Click on Libraries tab on the right
 - Under ClassPath, expand the node that says Apache Tomcat
 - If there is an existing entry for servlet-api.jar, then click on Cancel and exit the window
 - If it is not there, then click on Classpath entry and click on Add External JARs button on the right
 - From the file list, select servlet-api.jar file and click on Ok
 - Click on Apply and Close

Step 5: Building the project

- From the Project menu at the top, click on Build
- If any compile errors are shown, fix them as required

Step 6: Publishing and starting the project

- If you do not see the Servers tab near the bottom of the IDE, go to Window menu and click on Show View->Servers
- Right click on the Server entry and choose Add and Remove
- Click the Add button to move JSPDirectives from the Available list to the Configured list
- Click on Finish
- Right click on the Server entry and click on Publish
- Right click on the Server entry and click on Start
- This will start the server

Step 7: Running the project

- To run the project, open a web browser and type:
<http://localhost:8080/JSPDirectives>

Step 8: Pushing the code to your GitHub repositories

- Open your command prompt and navigate to the folder where you have created your files.

`cd <folder path>`

- Initialize your repository using the following command:

```
git init
```

- Add all the files to your git repository using the following command:

```
git add .
```

- Commit the changes using the following command:

```
git commit . -m "Changes have been committed."
```

- Push the files to the folder you initially created using the following command:

```
git push -u origin master
```

