JSP directives provide directions and instructions to the container, telling it how to handle certain aspects of JSP processing.

A JSP directive affects the overall structure of the servlet class. It usually has the following form:

```
<%@ directive attribute="value" %>
```

Directives can have a number of attributes which you can list down as key-value pairs and separated by commas.

The blanks between the @ symbol and the directive name, and between the last attribute and the closing %>, are optional.

There are three types of directive tag:

Directive	Description
<%@ pag e %>	Defines page-dependent attributes, such as scripting language, error page, and buffering requirements.
<%@ include %>	Includes a file during the translation phase.
<%@ tag lib %>	Declares a tag library, containing custom actions, used in the page

The page Directive:

The **page** directive is used to provide instructions to the container that pertain to the current JSP page. You may code page directives anywhere in your JSP page. By convention, page directives are coded at the top of the JSP page.

Following is the basic syntax of page directive:

```
<%@ page attribute="value" %>
```

You can write XML equivalent of the above syntax as follows:

```
<jsp:directive.page attribute="value" />
```

Attributes:

Following is the list of attributes associated with page directive:

Attribute	Purpose
buffer	Specifies a buffering model for the output stream.
autoFlush	Controls the behavior of the servlet output buffer.
contentType	Defines the character encoding scheme.
errorPage	Defines the URL of another JSP that reports on Java unchecked runtime exceptions.
is Error Pag e	Indicates if this JSP page is a URL specified by another JSP page's errorPage attribute.

extends	Specifies a superclass that the generated servlet must extend
import	Specifies a list of packages or classes for use in the JSP as the Java import statement does for Java classes.
info	Defines a string that can be accessed with the servlet's getServletInfo() method.
isThreadSafe	Defines the threading model for the generated servlet.
lang uag e	Defines the programming language used in the JSP page.
session	Specifies whether or not the JSP page participates in HTTP sessions
is ELIg nored	Specifies whether or not EL expression within the JSP page will be ignored.
is Scripting Enable d	Determines if scripting elements are allowed for use.

Check more detail related to all the above attributes at Page Directive.

The include Directive:

The **include** directive is used to includes a file during the translation phase. This directive tells the container to merge the content of other external files with the current JSP during the translation phase. You may code *include* directives anywhere in your JSP page.

The general usage form of this directive is as follows:

```
<%@ include file="relative url" >
```

The filename in the include directive is actually a relative URL. If you just specify a filename with no associated path, the JSP compiler assumes that the file is in the same directory as your JSP.

You can write XML equivalent of the above syntax as follows:

```
<jsp:directive.include file="relative url" />
```

Check more detail related to include directive at Include Directive.

The taglib Directive:

The JavaServer Pages API allows you to define custom JSP tags that look like HTML or XML tags and a tag library is a set of user-defined tags that implement custom behavior.

The **tag lib** directive declares that your JSP page uses a set of custom tags, identifies the location of the library, and provides a means for identifying the custom tags in your JSP page.

The tag lib directive follows the following syntax:

```
<%@ taglib uri="uri" prefix="prefixOfTag" >
```

Where the **uri** attribute value resolves to a location the container understands and the **prefix** attribute informs a container what bits of markup are custom actions.

You can write XML equivalent of the above syntax as follows:

```
<jsp:directive.taglib uri="uri" prefix="prefixOfTag" />
```

Check more detail related to tag lib directive at <u>Tag lib Directive</u>.