

Today we will know about JSTL (Java Standard.

Tag Library).

It is nothing complicated but a set of tags used to simplify Java Server Page development.

Advantages of JSTL is as follows:-

1. Using JSTL we can develop a JSP page simply and fastly.
2. We can use JSTL tags on various pages.
3. We have no need to use scriptlet tags, hence we need to just place JSTL tags there.

JSTL tags :-

There are mainly five types of JSTL tags:-

(i) **Core tags** - The JSTL core tag provides variable support, url management, flow control. The url for the core tags - <http://java.sun.com/jsp/jstl/core>. The prefix of core tag is - `c`. Later we will see each tag of core type, with its examples.

(ii) **Function tags** - Provides support for String manipulation such as length of string, reverse of string etc.

The url of function tags - <http://java.sun.com/jsp/jstl/functions>. The prefix is - `fn`.

(iii) **Formatting tags** - Provides support for message formatting, number and date formatting, etc.

The url for the formatting tags -

<http://java.sun.com/jsp/jstl/fmt>.

The prefix of formatting tag is - `fmt`.

(iv) XML tags - Provides flow control, transformation etc.

The url for the XML tags is —

<http://java.sun.com/jsp/jstl/xml>.

The prefix of XML tag is — `x`.

(v) SQL tags — Provides SQL Support. The url for the SQL tag is — <http://java.sun.com/jsp/jstl/sql>.
The prefix is — `sql`.

Note:- For creating JSTL application, you need to load the jstl.jar file.

Currently — jstl-1.2.jar file is available for download.

JSTL Core Tags :— There are 14 JSTL Core tags —

`c:out` `c:import` `c:set` `c:remove` `c:catch`
`c:if` `c:choose` `c:when` `c:otherwise` `c:forEach`
`c:forTokens` `c:param` `c:redirect` `c:url`

There are 15 JSTL function tags —

`fn:contains()` `fn:containsIgnoreCase()` `fn:endsWith()`
`fn:escapeXml()` `fn:indexOf()` `fn:trim()`
`fn:startsWith()` `fn:split()` `fn:toLowerCase()`
`fn:toUpperCase()` `fn:substring()` `fn:substringAfter()`
`fn:substringBefore()` `fn:length()` `fn:replace()`

These are 9 JSTL Formatting tags —

fmt:parseNumber

fmt:timeZone

fmt:formatNumber

fmt:parseDate

fmt:bundle

fmt:setTimeZone

fmt:setBundle

fmt:message fmt:formatDate

There are 9 JSTL XML tags —

x:out

x:parse

x:set

x:choose

x:when

x:otherwise

x:if

x:transform

x:param

There are 6 JSTL SQL tags —

sql:setDataSource sql:query sql:update

sql:param

sql:dateParam

sql:transaction

Syntax of JSTL Core tag:-

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

CoreTags ————— Description

c:out — displays the result of an expression.

e.g:- <c:out value="\${'Hello World'}"/>

c:import — Retrieves relative or absolute URL and display the contents to either a String in var , a Reader in varReader or the page.

Core tags — Description

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eg:-

```
{<c:import var="data" url="http://www.google.co.in"/>
  <c:out value="$\{data\}" />}
```

The above code fetches the complete content from google.co.in and store it in variable-data which gets printed by c:out.

c:set — Sets the result of an expression under evaluation in a scope variable.

c:remove — Used for removing the specified scoped variable from a particular scope

c:catch — Used for catches any throwable exception that occurs in the body.

c:if — It is conditional tag used for testing the condition and display the body content only if the expression evaluates is true.

c:choose — Simple conditional tag that includes its body content if the evaluated condition is true.

c:when —

c:otherwise —

c:forEach — It is the basic iteration tag, which repeats the nested body & content for fixed number of times or over collection.

c:forTokens — It iterates over tokens which is separated by the supplied delimiter.

c:param — Adds a parameter in a containing import tag's url.

c:redirect — Redirects the browser to a new URL.

c:url — creates a url with optional query parameters. In next class - We will deal with examples.