Dt: 20/6/2022

Expression Language(EL) in JSP:

=>This EL simplifies the accessibility of data stored in java Bean component and other objects like request, session, application, etc..

Note:

It is newly added feature in JSP technology.

syntax of EL:

\$(expression)

The following are the implicit objects of EL:

pageScope : It maps the given attribute name with the value,set in the vxvc v page scope

requestScope: It maps the given attribute name with the value set inthe request scope

sessionScope : It maps the given attribute name with the value set inthe session scope

applicationScope: It maps the given attribute name with the value set inthe application scope param: It maps the request parameter to the single value paramValues: It maps the request parameters to the array of values header: It maps the request header name to the single value headerValues: It maps the request header names to the array of values cookie: It maps the cookie name to the cookie value initParam: It maps the Initialization parameter pageContext: It provides access to many objects request, session,... Summery of Objects Generated: CoreJava Objects: 1.UserDefined Class objects 2.WrapperClass objects (i)Byte Object (ii)Short Object

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(iii)Integer object
 (iv)Long Object
 (v)Float Object
 (vi)Double Object
 (vii)Character object
 (viii)Boolean Object
3.String Objects
  (i)String Object
  (ii)StringBuffer object
  (iii)StringBuilder object
4.Array Objects
  (i)User defined Class Array
   (ii)String Array
   (iii)WrapperClass Array
   (iv)Object Array
   (v)Jagged Array
5.Collection<E> Objects
 (a)Set<E>
  (i)HashSet<E> object
  (ii)LinkedHashSet<E> Object
  (iii)TreeSet<E> Object
(b)List<E>
  (i)ArrayList<E> Object
  (ii)Vector<E> Object
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|->Stack<E> Object
    (iii)LinkedList<E> Object
 (c)Queue<E>
   (i)PriorityQueue<E> Object
   |->Deque<E>
     (ii)ArrayDeque<E> Object
 6.Map<K,V> Objects
   (i)HashMap<K,V> Object
   (ii)LinkedHashMap<K,V> Object
   (iii)TreeMap<K,V> Object
   (iv)Hashtable<K,V> Object
 7.Enum<E> objects
JDBC Objects:
 1.Connection Object
 2.Statement Object
 3.PreparedStatement Object
 4.CallableStatement object
 5.Scrollable ResultSet Object
 6.Non-Scrollable ResultSet Object
 7.DatabaseMetaData object
 8.ParameterMetaData object
 9.ResultSetMetaData object
 10.RowSet Object
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## 11.Connection pooling object

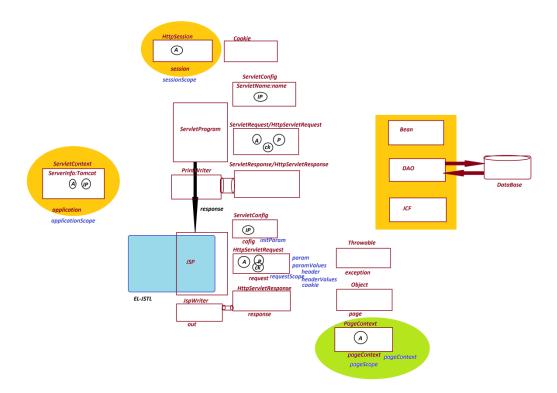
## Servlet Objects:

- 1.ServletContext object
- 2.ServletConfig Object
- 3.ServletRequest object/HttpServletRequest object
- 4. ServletResponse object/HttpServletResponse object
- 5.PrintWriter object
- 6.HttpSession object
- 7.Cookie object
- 8.DAO Layer object
- 9.JavaBean object
- 10.JCF Object

## JSP objects:

- 1.application
- 2.config
- 3.request
- 4.response
- 5.out
- 6.session
- 7.exception
- 8.page

9.pageContext	
JSP EL objects:	
1.pageScope	
2.sessionScope	
3.requestScope	
4.applicationScope	
5.param	
6.paramValues	
7.cookie	///0
8.pageContext	
9.header	
10.headerValues	
11.initParam	
Note:	
=>In realtime JSPEL replaces with SpEL.	
Constitution of the parties of the p	
Objects Layout diagram:	



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JSTL(JSP Standard Tag Lib):

=>This JSTL represents a set of tags to simplify the JSP development.

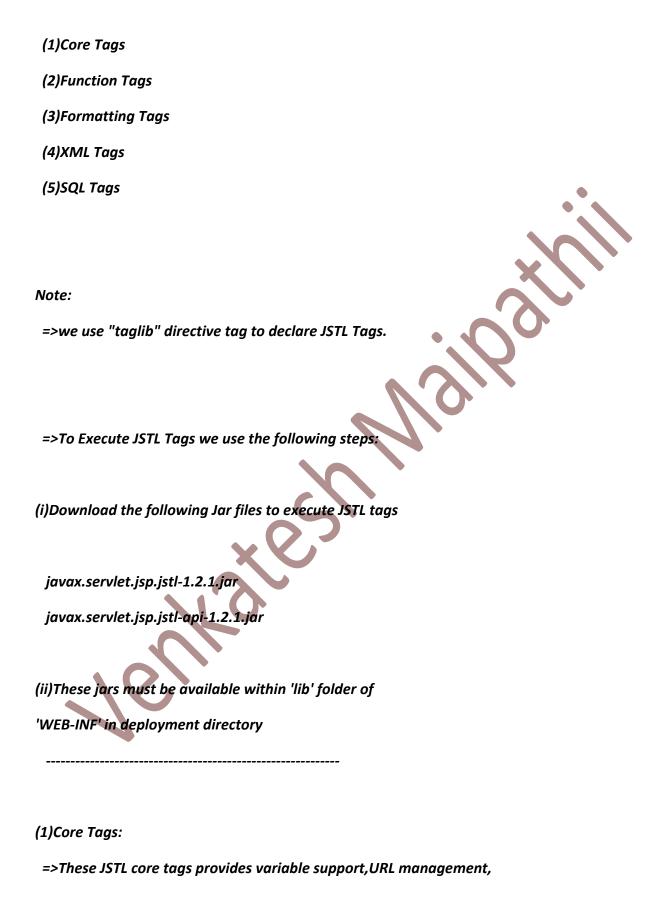
Advantages of JSTL:

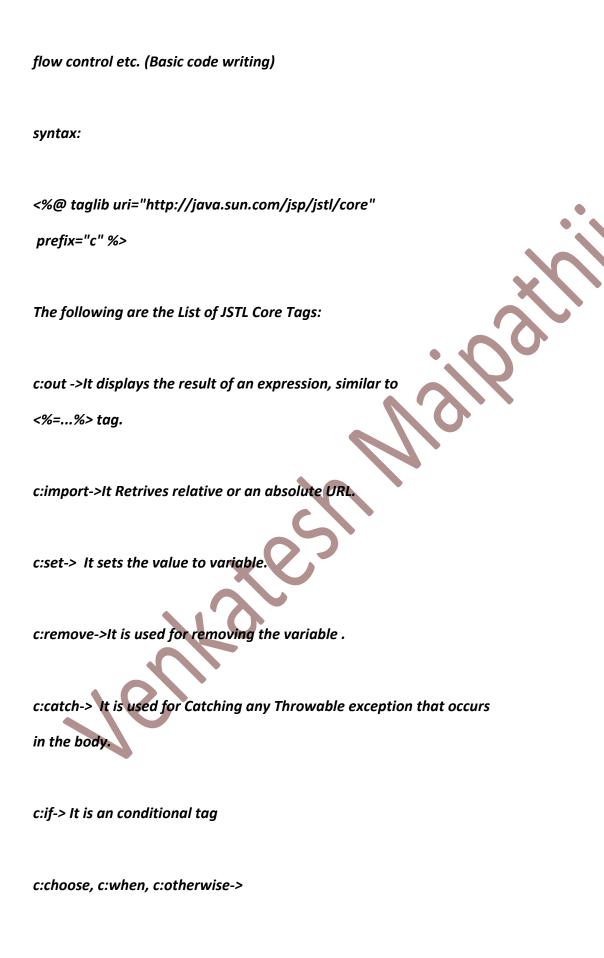
(i)Fast Development

(ii)Code Reusability

(iii)No need to use scriptlet tag

The following are the JSTL tags:





if the evaluated condition is true.
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c:forEach-> It is the basic iteration tag.
c:forTokens-> It iterates over tokens which is separated by the
supplied delimeters.
c:param-> It adds a parameter in a containing 'import' tag's URL.
c:redirect-> It redirects the browser to a new URL and supports the
context-relative URLs.
c:url-> It creates a URL with optional query parameters.
(2)Function Tags:
=>These JSTL function tags provides a number of standard
functions, most of these functions are common string manipulation
functions.
syntax:
<%@taglib uri= "http://java.sun.com/jsp/jstl/functions"

It is the simple conditional tag that includes its body content

**List of Some Function tags:** 

fn:contains(): It is used to test if an input string containing the specified substring or not.

fn:containsIgnoreCase(): It is used to test if an input string contains the specified substring as a case insensitive way.

fn:endsWith(): It is used to test if an input string ends with the specified suffix.

fn:indexOf(): It returns an index within a string of first occurrence of a specified substring.

fn:trim(): It removes the blank spaces from both the ends of a string.

fn:startsWith(): It is used for checking whether the given string is started with a particular string value or not.

fn:split(): It splits the string into an array of substrings.

fn:toLowerCase(): It converts all the characters of a string to lower case.

fn:toUpperCase(): It converts all the characters of a string to uppercase.

fn:substring(): It returns the subset of a string according to the given start and end position.

fn:length(): It returns the number of characters inside a string, or the number of items in a collection.

fn:replace(): It replaces all the occurrence of a string with another string sequence.

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## (3)Formatting Tags:

=>The formatting tags provide support for message formatting, number formating and date formatting etc.

=>These formatting tags are also used for internationalized web sites to display and format text, time, date and numbers.

syntax:

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

List of some Formatting tags:
fmt:parseNumber : It is used to Parse the string representation of a
currency, percentage or number.
fmt:formatNumber: It is used to format the numerical value with
specific format or precision.
fmt:parseDate : It parses the string representation of a time and
date.
fmt:setTimeZone : It stores the time zone inside a time zone
configuration variable. *imp
fmt:formatDate : It formats the time and date using the supplied
pattern and styles.
(4)XML Tags:
=>The JSTL XML tags are used for providing a JSP-centric way of
manipulating and creating XML documents.
syntax:

<%@ taglib uri="http://java.sun.com/jsp/jstl/xml" prefix="x" %>
(5)SQL Tags:
=>The SQL tag library allows the tags to Interact with RDBMS
(Relational Databases) such as Microsoft SQL Server, mySQL,
or Oracle.
syntax:
<%@ taglib uri="http://java.sun.com/jsp/jstl/sql" prefix="sql" %>
Note:
=>In realtime we must not have JSP Centric XML and DB Connections,
because of this reason XML tags and SQL Tags are less used when
compared to other tags