JSTL AND XPATH

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Java and SQL are two of the primary languages we have used alongside HTML and CSS. These languages comprise the building blocks of website construction when in context of Java based site building. In the assignments so far, we have used these languages in combination to build test sites with the use of JSP files and servlets. These pieces combined with our server, provided by tomcat, come together to build our sites. There is more to this pie than just combining languages to work together. Today we will discuss JSTL and XPath, tools that expand upon the conventional standards of building our websites.

We will start with JSTL as it contains many layers designed to assist in streamlining the integration of languages such as Java and SQL. JSTL, or JSP Standard Tag Library, is a library of standard tags designed to be used for JSP page manipulation and iteration. The power of these tags lies in the functionality they provide. In previous libraries such as JSP EL and JSP Actions Tags you could only utilize the tags for basic work among HTML code and not anything complex. JSTL allows support so that processes like looping can occur with these tags. Being a part of the Java EE API, JSTL is mostly included within servlets and must have their JARs downloading within the servlet containers. In Tomcat, your build path would more than likely include jstl.jar and standard.jar otherwise you will run into errors that define lack of library descriptor. It is good to be aware of the usage of JSTL in platforms such as Maven projects, you should refer to additional dependencies such as pom.xml.

For this next section, we will discuss a brief overview of some of the main types of JSTL tags and what functions they allow to occur. Core is the first tag and is named for its support of most primary code functions. These include iterations, conditional logic, catch exceptions, etc. The prefix of core is simply a “c”. The next type is the format tag. This type allows access to format integers and numbers. This can allow the use of date and time to assist with more complex integer usage. The SQL tag allows for modification and manipulation of SQL databases from within your JSP code. XML support allows for XPath support and syntax for XML which helps to set standards for the JSP and bring in external resources for usage within the JSP. Finally, the function type allows for string manipulation and concatenation when implementing methods such as split string within the JSP. Mentioned above, we will now shift our focus to XPath and how it builds off JSTL.

XPath stands for XML Path Language and simply allows for queries and transforming. Examples of these transformations could be XML documents, testing nodes within a doc, and querying through text documents to find specific resources. XPath’s symbology reflects usage for root nodes and attribute names of those nodes. These nodes act as a tree of your web elements and help as access is needed across the web pages and elements they withhold.

SOURCES

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