Java JDOM Parser - Overview

JDOM is an open source, Java-based library to parse XML documents. It is typically a Java developer friendly API. It is Java optimized and it uses Java collections like List and Arrays.

JDOM works with DOM and SAX APIs and combines the best of the two. It is of low memory footprint and is nearly as fast as SAX.

Environment Setup

In order to use JDOM parser, you should have jdom.jar in your application's classpath. Download jdom-2.0.5.zip.

When to Use JDOM parser?

You should use a JDOM parser when −

- You need to know a lot about the structure of an XML document.
- You need to move parts of an XMl document around (you might want to sort certain elements, for example).
- You need to use the information in an XML document more than once.
- You are a Java developer and want to leverage Java optimized parsing of XML.

What is the result of Parsing?

When you parse an XML document with a JDOM parser, you get the flexibility to get back a tree structure that contains all of the elements of your document without impacting the memory footprint of the application.

JDOM provides a variety of utility functions that you can use to examine the contents and structure of an XML document in case the document is well structured and its structure is known.

Advantages

Following are the advantages of JDOM parser −

- Developer friendly API.

- Flexible and easily maintainable.
- Lightweight and quick API
- Well integrates with DOM and SAX standards.

JDOM classes

JDOM defines several Java classes. Here are the most common classes −

Class	Description
Document	Represents an entire XML document. A Document object is often referred to as a DOM tree.
Element	Represents an XML element. Element object has methods to manipulate its child elements, its text, attributes, and namespaces.
Attribute	Represents an attribute of an element. Attribute has method to get and set the value of attribute. It has parent and attribute type.
Text	Represents the text of XML tag.
Comment	Represents the comments in a XML document.

JDOM Methods

When you are working with JDOM, there are several methods you'll use often −

Class	Description
SAXBuilder.build(xmlSource)	Build the JDOM document from the xml source.
Document.getRootElement()	Get the root element of the XML.
Element.getName()	Get the name of the XML node.
Element.getChildren()	Get all the direct child nodes of an element.
Node.getChildren(Name)	Get all the direct child nodes with a given name.
Node.getChild(Name)	Get the first child node with the given name.