**Basic Things you should know before parsing XML in java**

Parsing is nothing but converting from XML to JAVA, and JAVA to XML.  
There are many ways to perform parsing,

**JDOM Parser**

**Dom Parser**

**SAXParser  
StAX Parser**

**XPath Parser**

**XStream** is a simple Java-based library to serialize Java objects to XML and vice versa.

but the two most commonly used are  
1)DOMParser  
2)SAX Parser

**1. DOM Parser:**

1. DOM XML Parser is easiest to understand, it loads the XML object into memory as Document, then you can easily traverse different elements and nodes in the object.

2. The traversing of elements and nodes are not required to be in order.  
3. **It is good for small files, as it loads the complete XML file into memory, which causes memory issue. For a large file, one must use SAX Parser.  
4. DOM is a part of JDK, hence we don’t need any external jar’s to start with DOM.**

**2. SAX Parser:**

1. It is different from DOM Parser, it doesn’t load complete XML document in memory, it loads XML document sequentially.  
2. It is good for large files.  
3. For SAX Parser one must use default handler.

**Step 1:**

**Create Simple Project On Eclipes**

**Step 2: Create employee.xml file as shown (save on same project folder)**

<?xml version="1.0"?>

-<employees>

-<employee id="111">

<firstName>Lokesh</firstName>

<lastName>Gupta</lastName>

<location>India</location>

</employee>

-<employee id="222">

<firstName>Alex</firstName>

<lastName>Gussin</lastName>

<location>Russia</location>

</employee>

-<employee id="333">

<firstName>David</firstName>

<lastName>Feezor</lastName>

<location>USA</location>

</employee>

</employees>

**Step 3:**

**Create package (we create HandleXML)**

**Step 4:**

**Copy and Paste below code**

**package** HandleXML;

**import** org.w3c.dom.\*;

**import** org.xml.sax.SAXException;

**import** javax.xml.parsers.\*;

**import** java.io.\*;

**public** **class** MyClass {

**public** **static** **void** main(String[] args) **throws** ParserConfigurationException, SAXException, IOException {

//Get Document Builder

DocumentBuilderFactory factory = DocumentBuilderFactory.*newInstance*();

DocumentBuilder builder = factory.newDocumentBuilder();

//Build Document

Document document = builder.parse(**new** File("employee.xml"));

//Normalize the XML Structure; It's just too important !!

document.getDocumentElement().normalize();

//Here comes the root node

Element root = document.getDocumentElement();

System.***out***.println(root.getNodeName());

//Get all employees

NodeList nList = document.getElementsByTagName("employee");

System.***out***.println("============================");

**for** (**int** temp = 0; temp < nList.getLength(); temp++)

{

Node node = nList.item(temp);

System.***out***.println(""); //Just a separator

**if** (node.getNodeType() == Node.***ELEMENT\_NODE***)

{

//Print each employee's detail

Element eElement = (Element) node;

System.***out***.println("Employee id : " + eElement.getAttribute("id"));

System.***out***.println("First Name : " + eElement.getElementsByTagName("firstName").item(0).getTextContent());

System.***out***.println("Last Name : " + eElement.getElementsByTagName("lastName").item(0).getTextContent());

System.***out***.println("Location : " + eElement.getElementsByTagName("location").item(0).getTextContent());

}

}

}

}