

JAVA JDOM PARSER - PARSE XML DOCUMENT

http://www.tutorialspoint.com/java_xml/java_jdom_parse_document.htm

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Steps to Using JDOM

Following are the steps used while parsing a document using JDOM Parser.

- Import XML-related packages.
- Create a SAXBuilder
- Create a Document from a file or stream
- Extract the root element
- Examine attributes
- Examine sub-elements

Import XML-related packages

```
import java.io.*;  
import java.util.*;  
import org.jdom2.*;
```

Create a DocumentBuilder

```
SAXBuilder saxBuilder = new SAXBuilder();
```

Create a Document from a file or stream

```
File inputFile = new File("input.txt");  
SAXBuilder saxBuilder = new SAXBuilder();  
Document document = saxBuilder.build(inputFile);
```

Extract the root element

```
Element classElement = document.getRootElement();
```

Examine attributes

```
//returns specific attribute  
getAttribute("attributeName");
```

Examine sub-elements

```
//returns a list of subelements of specified name  
getChildren("subelementName");  
//returns a list of all child nodes  
getChildren();  
//returns first child node  
getChild("subelementName");
```

Demo Example

Here is the input xml file we need to parse:

```
<?xml version="1.0"?>  
<class>  
  <student rollno="393">  
    <firstname>dinkar</firstname>
```

```

        &lt;lastname>kad</lastname>
        &lt;nickname>dinkar</nickname>
        &lt;marks>85</marks>
    </student>
    &lt;student rollno="493">
        &lt;firstname>Vaneet</firstname>
        &lt;lastname>Gupta</lastname>
        &lt;nickname>vinni</nickname>
        &lt;marks>95</marks>
    </student>
    &lt;student rollno="593">
        &lt;firstname>jasvir</firstname>
        &lt;lastname>singn</lastname>
        &lt;nickname>jazz</nickname>
        &lt;marks>90</marks>
    </student>
</class>

```

Demo Example:

DomParserDemo.java

```

import java.io.File;
import java.io.IOException;
import java.util.List;

import org.jdom2.Attribute;
import org.jdom2.Document;
import org.jdom2.Element;
import org.jdom2.JDOMException;
import org.jdom2.input.SAXBuilder;

public class JDomParserDemo {
    public static void main(String[] args) {
        try {
            File inputFile = new File("input.txt");

            SAXBuilder saxBuilder = new SAXBuilder();

            Document document = saxBuilder.build(inputFile);

            System.out.println("Root element :"
                + document.getRootElement().getName());

            Element classElement = document.getRootElement();

            List<Element> studentList = classElement.getChildren();
            System.out.println("-----");

            for (int temp = 0; temp < studentList.size(); temp++) {
                Element student = studentList.get(temp);
                System.out.println("\nCurrent Element :"
                    + student.getName());
                Attribute attribute = student.getAttribute("rollno");
                System.out.println("Student roll no : "
                    + attribute.getValue());
                System.out.println("First Name : " + student.getChild("firstname").getText());
                System.out.println("Last Name : " + student.getChild("lastname").getText());
                System.out.println("Nick Name : " + student.getChild("nickname").getText());
                System.out.println("Marks : " + student.getChild("marks").getText());
            }
        } catch (JDOMException e) {
            e.printStackTrace();
        } catch (IOException ioe) {
            ioe.printStackTrace();
        }
    }
}

```



This would produce the following result:

```
Root element :class
```

```
-----
```

```
Current Element :student
```

```
Student roll no : 393
```

```
First Name : dinkar
```

```
Last Name : kad
```

```
Nick Name : dinkar
```

```
Marks : 85
```

```
Current Element :student
```

```
Student roll no : 493
```

```
First Name : Vaneet
```

```
Last Name : Gupta
```

```
Nick Name : vinni
```

```
Marks : 95
```

```
Current Element :student
```

```
Student roll no : 593
```

```
First Name : jasvir
```

```
Last Name : singn
```

```
Nick Name : jazz
```

```
Marks : 90
```