http://www.tutorialspoint.com/xerces/xerces_sax_parse_document.htm Copyright © tutorialspoint.com

Demo Example

Here is the input xml file we need to parse:

```
<?xml version="1.0"?>
<class>
   <student rollno="393">
      <firstname>Dinkar</firstname>
      <lastname>Kad</lastname>
      <nickname>Dinkar</nickname>
      <marks>85</marks>
   </student>
   <student rollno="493">
      <firstname>Vineet</firstname>
      <lastname>Gupta</lastname>
      <nickname>Vinni</nickname>
      <marks>95</marks>
   </student>
   <student rollno="593">
      <firstname>Jasvir</firstname>
      <lastname>Singh</lastname>
      <nickname>Jazz</nickname>
      <marks>90</marks>
   </student>
</class>
```

UserHandler.java

```
package com.tutorialspoint.xml;

import org.xml.sax.Attributes;
import org.xml.sax.SAXException;
import org.xml.sax.helpers.DefaultHandler;

public class UserHandler extends DefaultHandler {

   boolean bFirstName = false;
   boolean bLastName = false;
   boolean bNickName = false;
   boolean bMarks = false;

   @Override
   public void startElement(String uri,
   String localName, String qName, Attributes attributes)
      throws SAXException {
      if (qName.equalsIgnoreCase("student")) {
         String rollNo = attributes.getValue("rollno");
         System.out.println("Roll No : " + rollNo);
      } else if (qName.equalsIgnoreCase("firstname")) {
         bFirstName = true;
      } else if (qName.equalsIgnoreCase("lastname")) {
         bLastName = true;
      } else if (qName.equalsIgnoreCase("nickname")) {
         bNickName = true;
      }
      else if (qName.equalsIgnoreCase("marks")) {
         bMarks = true;
      }
   }

   @Override
   public void endElement(String uri,
```

```
   String localName, String qName) throws SAXException {
      if (qName.equalsIgnoreCase("student")) {
         System.out.println("End Element :" + qName);
      }
   }

   @Override
   public void characters(char ch[],
      int start, int length) throws SAXException {
      if (bFirstName) {
         System.out.println("First Name: "
            + new String(ch, start, length));
         bFirstName = false;
      } else if (bLastName) {
         System.out.println("Last Name: "
            + new String(ch, start, length));
         bLastName = false;
      } else if (bNickName) {
         System.out.println("Nick Name: "
            + new String(ch, start, length));
         bNickName = false;
      } else if (bMarks) {
         System.out.println("Marks: "
            + new String(ch, start, length));
         bMarks = false;
      }
   }
}
```

SAXParserDemo.java

```
package com.tutorialspoint.xml;

import java.io.File;
import javax.xml.parsers.SAXParser;
import javax.xml.parsers.SAXParserFactory;

import org.xml.sax.Attributes;
import org.xml.sax.SAXException;
import org.xml.sax.helpers.DefaultHandler;

public class SAXParserDemo {
   public static void main(String[] args){

      try {
         File inputFile = new File("input.txt");
         SAXParserFactory factory = SAXParserFactory.newInstance();
         SAXParser saxParser = factory.newSAXParser();
         UserHandler userhandler = new UserHandler();
         saxParser.parse(inputFile, userhandler);
      } catch (Exception e) {
         e.printStackTrace();
      }
   }
}

class UserHandler extends DefaultHandler {

   boolean bFirstName = false;
   boolean bLastName = false;
   boolean bNickName = false;
   boolean bMarks = false;

   @Override
   public void startElement(String uri,
      String localName, String qName, Attributes attributes)
         throws SAXException {
      if (qName.equalsIgnoreCase("student")) {
         String rollNo = attributes.getValue("rollno");
```

```
            System.out.println("Roll No : " + rollNo);
         } else if (qName.equalsIgnoreCase("firstname")) {
            bFirstName = true;
         } else if (qName.equalsIgnoreCase("lastname")) {
            bLastName = true;
         } else if (qName.equalsIgnoreCase("nickname")) {
            bNickName = true;
         }
         else if (qName.equalsIgnoreCase("marks")) {
            bMarks = true;
         }
      }

      @Override
      public void endElement(String uri,
         String localName, String qName) throws SAXException {
         if (qName.equalsIgnoreCase("student")) {
            System.out.println("End Element :" + qName);
         }
      }

      @Override
      public void characters(char ch[],
         int start, int length) throws SAXException {
         if (bFirstName) {
            System.out.println("First Name: "
            + new String(ch, start, length));
            bFirstName = false;
         } else if (bLastName) {
            System.out.println("Last Name: "
            + new String(ch, start, length));
            bLastName = false;
         } else if (bNickName) {
            System.out.println("Nick Name: "
            + new String(ch, start, length));
            bNickName = false;
         } else if (bMarks) {
            System.out.println("Marks: "
            + new String(ch, start, length));
            bMarks = false;
         }
      }
}
```

This would produce the following result:

```
Roll No : 393
First Name: Dinkar
Last Name: Kad
Nick Name: Dinkar
Marks: 85
End Element :student
Roll No : 493
First Name: Vineet
Last Name: Gupta
Nick Name: Vinni
Marks: 95
End Element :student
Roll No : 593
First Name: Jasvir
Last Name: Singh
Nick Name: Jazz
Marks: 90
End Element :student
```