

XML Java examples

CSE219, Computer Science III

Stony Brook University

<http://www.cs.stonybrook.edu/~cse219>

cities.xml

```
<routes>
  <city>
    <name>CORK</name>
    <land>
      <city>DUBLIN</city>
      <city>CARLOW</city>
    </land>
    <sea>
    </sea>
  </city>
  <city>
    <name>FAROER</name>
    <land></land>
    <sea>
      <city>REYKJAVIK</city>
      <city>SHETLAND_ISLANDS</city>
      <city>MALMO</city>
    </sea>
  </city>
  <city>
    <name>MAGDEBURG</name>
    <land>
      <city>BERLIN</city>
      <city>HANNOVER</city>
    </land>
    <sea></sea>
  </city>
</routes>
```

```

import javax.xml.parsers.DocumentBuilderFactory;
import javax.xml.parsers.DocumentBuilder;
import org.w3c.dom.Document;
import org.w3c.dom.Node;
import org.w3c.dom.NodeList;
import org.xml.sax.SAXException;
import java.io.File;
import java.io.IOException;
import javax.xml.parsers.ParserConfigurationException;
public class XMLParser {
    public static void main(String[] args) {
        try {
            DocumentBuilderFactory dbf = DocumentBuilderFactory.newInstance();
            DocumentBuilder db = dbf.newDocumentBuilder();
            Document doc = db.parse(new File("cities.xml"));
            Node root = doc.getElementsByTagName("routes").item(0);
            NodeList cardlist = root.getChildNodes();
            for (int i = 0; i < cardlist.getLength(); i++) {
                Node cardNode = cardlist.item(i);
                if (cardNode.getNodeType() == Node.ELEMENT_NODE) {
                    NodeList cardAttrs = cardNode.getChildNodes();
                    // one card
                    for (int j = 0; j < cardAttrs.getLength(); j++) {
                        if (cardAttrs.item(j).getNodeType() == Node.ELEMENT_NODE) {
                            Node theNode = cardAttrs.item(j);
                            switch (theNode.getNodeName()) {
                                case "name":
                                    System.out.println("City name: " + theNode.getTextContent());
                                    break;

```

```

        case "land":
            NodeList landList = theNode.getChildNodes();
            for (int k = 0; k < landList.getLength(); k++) {
                if (landList.item(k).getNodeType() == Node.ELEMENT_NODE) {
                    System.out.println("Land neighbour: "
                        + landList.item(k).getTextContent());
                }
            }
            break;
        case "sea":
            NodeList seaList = theNode.getChildNodes();
            for (int k = 0; k < seaList.getLength(); k++) {
                if (seaList.item(k).getNodeType() == Node.ELEMENT_NODE) {
                    System.out.println("Sea neighbour: "
                        + seaList.item(k).getTextContent());
                }
            }
            break;
    }
}
}
}
}
} catch (ParserConfigurationException | SAXException | IOException e) {
    e.printStackTrace();
}
}
}

```