

MyDomParser.java

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/*
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 * ICS4U1 CPT
 * June 13, 2016
 * This application reads and displays the XML file using
 * the Document Object Model (DOM) Parser
 * (Followed the video tutorial of reading an XML file with DOM Parser)
 */
package java_dom_parser;

import java.io.IOException;

import javax.xml.parsers.DocumentBuilder;
import javax.xml.parsers.DocumentBuilderFactory;
import javax.xml.parsers.ParserConfigurationException;

import org.w3c.dom.Document;
import org.w3c.dom.Element;
import org.w3c.dom.Node;
import org.w3c.dom.NodeList;
import org.xml.sax.SAXException;

public class MyDomParser {

    public static void main(String[] args) {

        // Creating document builder object //
        DocumentBuilderFactory factory = DocumentBuilderFactory.newInstance();

        try {
            // Builder object //
            DocumentBuilder builder = factory.newDocumentBuilder();
            // Creating an object for file to be parsed //
            Document doc = builder.parse("shopping.xml");
            // Creating an object that grabs the tags of 'product' //
            NodeList productsList = doc.getElementsByTagName("product");

            // Displaying the number of products in the file //
            System.out.println("There are " + productsList.getLength() + "
products.\n");

            // Searches for the 'product' tag until there are no more 'product' tags //
            for (int i = 0; i < productsList.getLength(); i++)
            {
                Node p = productsList.item(i);

                if (p.getNodeType() == Node.ELEMENT_NODE)
                {
                    // Retrieving the products for the list //
                    Element products = (Element) p;
                    // Grabbing the attribute id
                    String id = products.getAttribute("id");
                    // Grabbing the
                    NodeList itemList = products.getChildNodes();

                    // Retrieves information of the tag //
                    for (int j = 0; j < itemList.getLength(); j++)
                    {
                        Node item = itemList.item(j);

                        if (item.getNodeType() == Node.ELEMENT_NODE)
                        {
                            Element object = (Element) item;
                            // Display the information of the file //

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        System.out.println("Product " + id + ": " +
object.getTagName() +
                                " = " + object.getTextContent());
    }
    } System.out.println();
}
}
} catch (ParserConfigurationException e) {
    // TODO Auto-generated catch block
    e.printStackTrace();
} catch (SAXException e) {
    // TODO Auto-generated catch block
    e.printStackTrace();
} catch (IOException e) {
    // TODO Auto-generated catch block
    e.printStackTrace();
}
}
}
}

```