

Code Example

1. Given an XML file

```
<?xml version="1.0"?>
<states>
  <state name="California" code="CA">
    <capital>Sacramento</capital>
  </state>
  <state name="New York" code="NY">
    <capital>Albany</capital>
  </state>
</states>
```

2. The Parsing Code

```
package test;

import org.gnu.xml.ezparse.Context;
import org.gnu.xml.ezparse.DefaultContext;
import org.gnu.xml.ezparse.Element;
import org.gnu.xml.ezparse.ElementAdapter;
import org.gnu.xml.ezparse.SimpleParser;

import java.util.List;
import java.util.LinkedList;

public class SimpleParserTest
{
    public static void main(String[] args)
        throws Exception
    {
        SimpleParser simpleParser = new SimpleParser();
        Context ctx = new DefaultContext();
        ctx.set("stateList", new LinkedList());

        addListeners( simpleParser );

        simpleParser.parse(args[0], ctx);

        printStates( ctx );
    }

    /**
     * Add listeners to the parser.
     */
}
```

```

*
* @param simpleParser the parser to add listeners to
*/
private static void addListeners( SimpleParser simpleParser )
{
    //first listener
    simpleParser.addElementListener("/states/state",
        new ElementAdapter()
        {
            public void startElement( Element element, Context ctx )
            {
                StateEssence essence = new StateEssence( element );
                ctx.set("essence", essence);
            }

            public void endElement( Element element, Context ctx )
            {
                StateEssence essence =
                    (StateEssence) ctx.get("essence");
                essence.name = element.getAttribute("name");
                essence.code = element.getAttribute("code");

                List states = (List) ctx.get("stateList");
                states.add( new State( essence ) );
            }
        }
    );

    //second listener
    simpleParser.addElementListener("/states/state/capital",
        new ElementAdapter()
        {
            public void endElement( Element element, Context ctx )
            {
                StateEssence essence =
                    (StateEssence) ctx.get("essence");
                essence.capital = element.getValue();
            }
        }
    );
}

/**
 * Prints information about each state to standard out.
 */
private static void printStates( Context ctx )
{
    List list = (List) ctx.get("stateList");
    State[] states = (State[]) list.toArray( new State[ list.size() ] );

    for(int i=0; i<states.length; i++)
    {
        System.out.println( states[i].toString() );
    }
}

```

Code Example

```
}  
  }  
}
```

3. The Output

```
State[name=California, code=CA, captial=Sacramento]  
State[name=New York, code=NY, captial=Albany]
```