

# What can we do with XML?

- To display XML data we need to transform it into some mark-up that devices like web browsers understand
- To transform XML we *parse* the XML through an **XSLT** document which matches the data and turns it into something else
- **XSL** means Extensible Style Language and **XSLT** is how the transforming part of the format is labelled

Here is the XML file books.xml

```
<?xml version="1.0" standalone="no"?>
<?xml-stylesheet type="text/xsl" href="books.xsl"?>
<!DOCTYPE Books SYSTEM "booklist.dtd">
<!-- Here begins the actual XML data -->
<books>
  <book>
    <title>Extra News about XML</title>
    <author>Fred Bloggs</author>
    <isbn>123456</isbn>
  </book>
  <book>
    <title>XML for beginners</title>
    <author>Ray Tommhos</author>
    <isbn>066585</isbn>
  </book>
  <book>
    <title>What is XML?</title>
    <author>Lizzie Smith</author>
    <isbn>155454</isbn>
  </book>
  <book>
    <title>Beyond XML</title>
    <author>Richard Havering</author>
    <isbn>78484</isbn>
  </book>
  <book>
    <title>XML for Monkeys</title>
    <author>Linda Crew</author>
    <isbn>8665783456</isbn>
  </book>
  <book>
    <title>Overhead with Tags</title>
    <author>Mandy Bluecoat</author>
    <isbn>345345</isbn>
  </book>
</books>
```

Here is the DTD file booklist.dtd

```
<?xml version="1.0" encoding="UTF-8"?>
<!ELEMENT books (book)>
<!ELEMENT book (title,author,isbn)>
<!ELEMENT title (#PCDATA)>
<!ELEMENT author (#PCDATA)>
<!ELEMENT isbn (#PCDATA)>
```

Here is web page:

Title	Author	ISBN
Extra News about XML	Fred Bloggs	123456
XML for beginners	Ray Tommhos	066585
What is XML?	Lizzie Smith	155454
Beyond XML	Richard Havering	78484
XML for Monkeys	Linda Crew	8665783456
Overhead with Tags	Mandy Bluecoat	345345

Chris Jennings

Here is the XSL file books.xsl

```
<?xml version='1.0'?>
<xsl:stylesheet version="1.0" xmlns:xsl="http://
www.w3.org/1999/XSL/Transform">
  <xsl:template match="/books">
    <html>
      <body>
        <table border="2">
          <tr>
            <td><strong>Title</strong></td>
            <td><strong>Author</strong></td>
            <td><strong>ISBN</strong></td>
          </tr>
          <xsl:for-each select="book">
            <tr>
              <td><xsl:value-of select="title"/></td>
              <td><xsl:value-of select="author"/></td>
              <td><xsl:value-of select="isbn"/></td>
            </tr>
          </xsl:for-each>
        </table>
      </body>
    </html>
  </xsl:template>
</xsl:stylesheet>
```