

How to create a presentation in XML with XSL

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What you need to get started

- * **Saxon**, a xslt processor
- * FOP, a xml:fo processor
- * *Stylesheets*, for your xslt transformation
- * XML, XSL editor, you can also use VIM, Emacs

Saxon

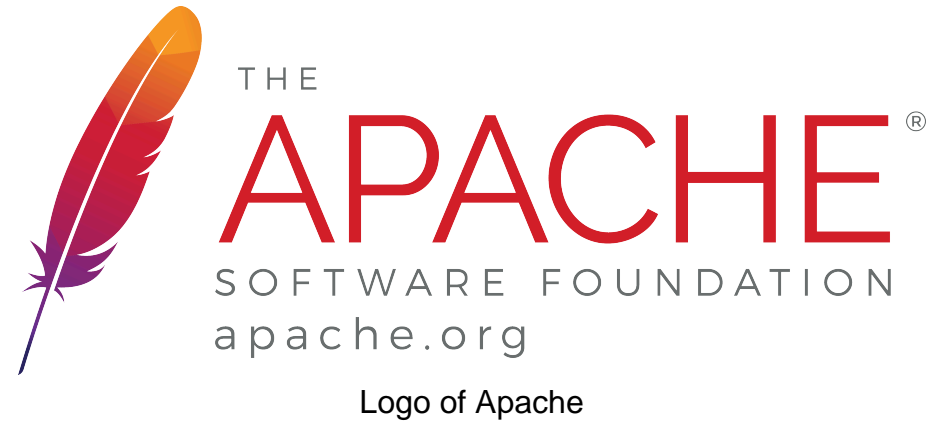
- * Input: xml file and xsl transformation
- * Output: another xml file(xml, xml:fo, xhtml, etc.)
- * Linting
- * Version 9.9
- * Java version, Windows, Linux



Logo of Saxonica

FOP

- * Input: xml:fo file
- * Output: pdf
- * Old



Logo of Apache

Used constructs

- * Title
- * Lists
- * Images
- * Mixture of Picture and Image

Lists

- * List-item construct in xml:fo
- * Unordered lists in xhtml

```
<fo:list-block font-family="{ $pdf-item-font-face}"  
  <xsl:for-each select="item">  
    <fo:list-item>  
      <fo:list-item-label>  
        <fo:block>  
          *  
        </fo:block>  
      </fo:list-item-label>  
      <fo:list-item-body start-indent="22pt">  
        <fo:block>  
          <xsl:value-of select="." />  
        </fo:block>  
      </fo:list-item-body>  
    </fo:list-item>  
  </xsl:for-each>  
</fo:list-block>
```

XML:FO List

Pictures

- * External-graphics in xml:fo
(png, gif, jpg)
- * XHTML - tag

```
<xsl:template match="picture">  
  <fo:block text-align="center" span="all">  
    <fo:external-graphic width="257mm" height="auto" content-width="scale-to-fit"/>  
  </fo:block>  
</xsl:template>
```

Using external images

Multicol

- * Document body has 2 columns by default fo:block
- * Span="all" can be used
- * For XHTML - <div> tags with floats

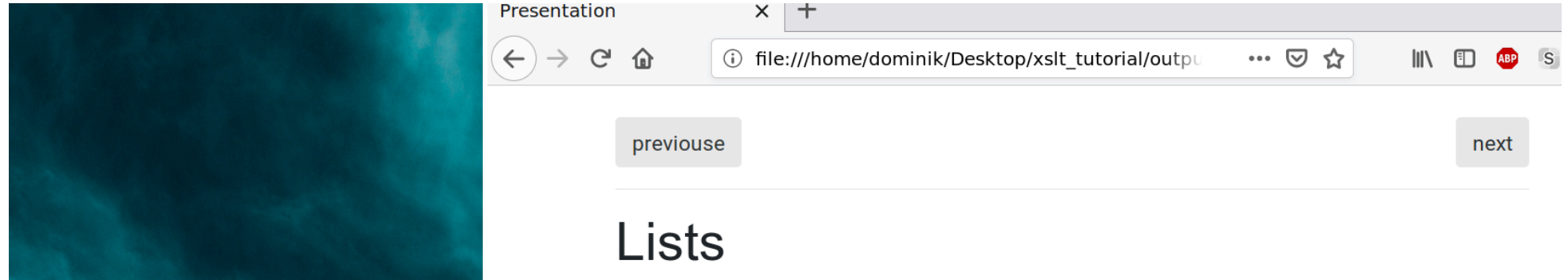
```
<xsl:template match="multicol/itemize">
  <fo:list-block font-family="Arial" font-size="22pt">
    <xsl:for-each select="item">
      <fo:list-item>
        <fo:list-item-label>
          <fo:block>
            *
          </fo:block>
        </fo:list-item-label>
        <fo:list-item-body start-indent="22pt">
          <fo:block>
            <xsl:value-of select="." />
          </fo:block>
        </fo:list-item-body>
      </fo:list-item>
    </xsl:for-each>
  </fo:list-block>
</xsl:template>
<xsl:template match="picture">
  <fo:block text-align="center" span="all">
    <fo:external-graphic width="257mm" height="auto" content-width="scale-to-fit" src="" />
  </fo:block>
</xsl:template>
<xsl:template match="multicol/picture">
  <fo:block text-align="center">
    <fo:external-graphic width="120mm" height="200mm" content-width="scale-to-fit" src="" />
  </fo:block>
</xsl:template>
</xsl:stylesheet>
```

Multiple columns

Files

- * xhtml for each slide
- * pdf
- * makefile for linux
- * bat for windows

The result



Lists

- * List-item construct in xml:fo
- * Unordered lists in xhtml

```
<fo:list-block font-family="{pdf-item-font-face}"  
<xsl:for-each select="item">  
  <fo:list-item>  
    <fo:list-item-label>  
      <fo:block>  
        *  
      </fo:block>  
    </fo:list-item-label>  
    <fo:list-item-body start-indent="22pt">  
      <fo:block>  
        <xsl:value-of select="." />  
      </fo:block>  
    </fo:list-item-body>  
  </fo:list-item>  
</xsl:for-each>  
</fo:list-block>
```

Construct in
construct in
in
d lists in

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        <fo:list-item-label>  
          <fo:block>  
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          </fo:block>  
        </fo:list-item-label>  
        <fo:list-item-body start-indent="22pt">  
          <fo:block>  
            <xsl:value-of select="." />  
          </fo:block>  
        </fo:list-item-body>  
      </fo:list-item>  
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  </fo:list-block>  
</xsl:template>  
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  </fo:block>  
</xsl:template>  
<xsl:template match="multicol/picture">  
  <fo:block text-align="center">  
    <fo:external-graphic width="120mm" height="200mm" content-width="scale-to-fit" s<br/>  
  </fo:block>  
</xsl:template>  
</xsl:stylesheet>
```

Same content in pdf and xhtml form