Crash Course in XSLT

Beginning XSLT
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Last Time...

- XML syntax
- XML namespaces
- XPath

A Trivial Stylesheet

```
<xsl:stylesheet version="1.0"
 xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
  <xsl:output method="xml"/>
  <xsl:template match="/">
    <xsl:copy-of select="/"/>
  </xsl:template>
</xsl:stylesheet>
```

Making It Go

- Command-line processor, like `xsltproc`
- `xsltproc stylesheet.xsl input.xml`
- Java `javax.xml` infrastructure
- `xml-stylesheet` PI plus Web browser
- `<?xml-stylesheet type="text/xml" href="foo.xsl"?>`

What Do You Get Out?

- `<xsl:output method="xml" indent="no"/>`
- Possible output methods: `xml`, `html`, `text`
- XHTML is "xml"; default is either "xml" or "html" depending on name of root element
- Some other options, but probably bad form to depend on them

Templates

- `<xsl:template match="foo:bar" mode="baz">`
- Think "subroutine"
- Can take parameters, have local variables, contains XSLT "statements"
- Optional *mode* controls when the template is invoked
- `match` attribute is restricted XPath expression with child or attribute axes, `//` and | operators, and arbitrary predicates

Easy Ways To Get Output

- `<number>42</number>` (*literal result element*): non-XSLT XML (or text) is copied to output
- `<xsl:text>foo</xsl:text>`
- `<xsl:copy-of select="..."/>` copies entire selected subtree(s) (if any)
- `<xsl:value-of select="..."/>` evaluates expression, takes string value (discarding XML tags), and outputs that

Counting Things

```
<xsl:stylesheet version="1.0"
 xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
  <xsl:output method="xml"/>
  <xsl:template match="/">
    <counts>
      <count item="slides">
```