

Beyond HTML

Styling XML with CSS and XSLT

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Current State of Practice

- Use XHTML 1.0 Transitional or greater
- Use CSS for presentation



What is wrong with XHTML?

- XHTML is a compromise between a standardized markup platform and pure semantic representation of content
- XHTML has a lot of legacy baggage
- XHTML 2 vs. X/HTML 5 debate makes me think I'll be using XHTML 1.0 for many years to come...



Extending XHTML

- Leveraging the X in XHTML
- Create your own tags within a basic XHTML construct for added semantic meaning and functionality
- Create microformats within the XHTML space



Styling XML with CSS

- Use an XML processing instruction, as so:
`<?xml-stylesheet href="gorgeous.css" type="text/css"?>`
- Accepts most of the same properties you are used to, such as title and media:
`<?xml-stylesheet href="textish.css" alternate="yes" title="Text Only" media="print, handheld" type="text/css"?>`



XML/CSS Example



Browser Support for CSS/XML

- All modern browsers supported
- Minor problem with legacy namespace formatting for IE
- Bonus: You are not constrained by the pre-conceived ideas about what a tag should look like



XSL Acronyms

- XSL: Extensible Stylesheet Language
- XSLT: Extensible Stylesheet Language Transformations
- XPath: Way to identify and target XML nodes



What does XSLT do?

- Transform an XML document into another format.
- Destination format could be:
 - XML, MathML, SVG, and other XML applications
 - XHTML, HTML
 - Word, Excel, RTF, PDF, or any other text-based format.



Uses of XSLT

- Transform an XML data source into a common HTML 4.01 format
- Translate from XML format to another (I.E. MusicML to Lilypond)



XSLT Example



Considerations

- Styling an RSS/Atom feed is one example of existing XML that can be modified for more attractive output
- Existing XML can be huge - XSLT will be a better choice over CSS in these cases, or perhaps a server-side transformation
- XSLT can be done on the server via Java, PHP, etc., for more control over output
- Pure XML pages will probably not work in older browsers
- So far my iPhone doesn't seem to like XML pages.



Conclusions

- XML is an option for web markup
- XML can be styled effectively
- Styling can be done to existing XML sources
- XML enjoys wide modern browser support
- XML can be transformed via languages such as Java or PHP using the same XSLT techniques that work on the client.