

Outline for Standards-based web course

❖ Overview

- A very brief history of web design from 1995 until now
 - Version 4 browser incompatibilities
 - Hacks and workarounds for different browsers
 - Bloated Javascript and markup
 - Image slicing
 - Table elements used for layout
 - What's wrong with that?
 - Mixes presentational data in with content
 - Implementing redesigns (or even tweaks) are labor intensive
 - Bloated and inaccessible markup
- So, what is "standards-based" development?
 - Separating style from content
 - Adhering to published standards from W3C standard body (<http://www.w3.org/>)
 - ◆ CSS (<http://www.w3.org/Style/CSS/>)
 - ◆ XHTML (<http://www.w3.org/TR/xhtml1/>)
 - Try to build "semantically" correct markup
 - "Markup with meaning" (-Dan Cederholm). Add a coherent structure to the web document before applying any style
- Benefits of adopting web standards
 - *User Benefits*
 - Better Accessibility
 - ◆ Applying standards based design makes most sites accessible to multiple browser clients and assisted-browsing software like JAWS
 - *Developer Benefits*
 - Faster development time
 - ◆ You can write one set of markup for all devices using stylesheets to style information for individual browsers
 - "Forward Compatibility" (-Jeffery Zeldman)
 - ◆ Separation of style and content makes *redesign* easier
 - ◆ Sites "should" be easier to adapt to future standard implementations of HTML and XML as the internet continues to grow and mature
 - *Owner Benefits*
 - Smaller file sizes (less bandwidth used--\$\$ saved!)
 - Site accessible to multiple devices, easily updated to include more as new devices are invented or made available (PDA, Cell Phones, etc.)
 - Almost automatic Search Engine Optimization. This doesn't take the place of good copy writing with keyword rich content and titles, but it does make it more accessible to search engine spiders and robots.
- Why now?
 - Version 6 browsers are now available and prevalent
 - All have much better adherence to W3C standards
 - Proliferation of other Web-enabled devices and the wireless internet
 - PDA's, cell phones, future devices
- Backward Compatibility?

- Unfortunately this is not an easy option due to serious lack of support for CSS in Version 4 browsers.
 - Unless you cannot afford to alienate the NN4 audience, the easiest option is to remove styles completely from Version 4 browsers so pages are still accessible, but there is no using of the buggy and inconsistent CSS models
 - ◆ NN4 has lost much of the remaining market share it had last year. According to many different web statistics reports, NN4 carries less than 1% of the audience.

❖ XHTML

- Why XHTML
 - XML, the brave new world of markup
 - Extensible Markup Language is the next incarnation of SGML (father of HTML). Markup intended to provide structure to *documents*.
 - XHTML is HTML converted into an XML specification
 - ◆ Allows HTML to be processed by XML-enabled software
- Overview of differences between XHTML 1.0 and HTML 4.01
 - Lowercase *everything*
 - Quote all attributes
 - Close all elements
 - Closing standalone elements
- DOCTYPE Switching
 - Standards Mode vs. Quirks Mode
 - To allow for some sites to still render as expected with incorrect
 - How to make the switch
 - How to declare DOCTYPES to turn on Standards Mode
- Validating your markup
 - <http://validator.w3.org/>

❖ Semantic Markup

- Why valid XHTML is not enough
 - Meaning of “semantic”
 - “Of or relating to meaning, especially meaning in language.” (American Heritage® Dictionary)
 - Why even semantically correct mark-up isn’t always “correct”
 - HTML is a limited markup language, and sometimes you need to fit a square peg in a round hole
 - ◆ Example
 - How this helps the accessibility initiative
 - Just coding your site to XHTML and CSS is not enough to make your site “accessible”.
 - ◆ Semantic markup allow the document structure to make sense, no matter what device is interpreting it
 - XML to the rescue (again)
- Its all about Document Structure
 - Proper use of elements and attributes
 - Headings
 - Paragraphs
 - Lists
 - ◆ Unordered, ordered, and definition
 - Images

- ◆ Alt text
 - **em** and **strong** vs. **i** and **b**
 - **blockquote** and **cite**
 - Line Break
- Avoid using style-based elements or attributes
 - Elements
 - ◆ **font**
 - ◆ **b**
 - ◆ **i**
 - ◆ More...
 - Attributes
 - ◆ **align**
 - ◆ **color**
 - ◆ **background**
 - ◆ **bgcolor**
 - ◆ More...

❖ Cascading Style Sheets

- Welcome to the new language of web design
 - What is CSS?
 - W3C Specification
 - ◆ <http://www.w3.org/Style/CSS/>
 - Why was it created?
 - ◆ “Cascading Style Sheets (CSS) is a simple mechanism for adding style (e.g. fonts, colors, spacing) to Web documents” (-W3C)
 - Examples of CSS at work
 - Turn off styles
 - ◆ Use Web Developer Toolbar in Firefox (<http://texturizer.net/firefox/extensions.html>)
 - ◆ Use bookmarklet in IE (<http://www.squarefree.com/bookmarklets/webdevel.html>)
 - View in text only web browser
 - ◆ Lynx (<http://www.delorie.com/web/lynxview.html>)
 - ◆ Cell Phone
 - How it works (Selectors and Definitions)
 - Selectors
 - ◆ Element (Tag) Based
 - ◆ Attribute Based
 - id
 - class
 - ◆ Ancestor based
 - Rules (definitions)
 - ◆ Style rules are defined using name:value pairs
 - E.g. font-size:10pt
 - The Cascade
 - ◆ Between Style definitions
 - The style defined closest the element takes precedence
 - Inline definitions override styles defined in the **head**, **head** definitions override styles defined on a separate stylesheet
 - Within the definition

- The benefits of Web Standards to your visitors, your clients and you!
(<http://www.maxdesign.com.au/presentation/benefits/index.htm>)
- Books
 - Designing With Web Standards (www.amazon.com)
 - Eric Meyer on CSS: Mastering the Language of Web Design (www.amazon.com)
 - Web Standards Solutions: The Markup and Style Handbook
(<http://www.simplebits.com/publications/solutions/>)
- Examples of CSS use on the web
 - CSS Zen Garden (<http://www.csszengarden.com/>)
 - CSS Vault (<http://www.cssvault.com/>)
 - The Weekly Standards (<http://www.weeklystandards.com/>)
 - Web Standards Awards (<http://www.webstandardsawards.com/>)