

Web Standards

The W3C and open standards...

Standards are good...

- Construction standards and codes keep us from living in death traps.
- Compact disc, VHS, and DVD are standards agreed upon by multiple companies.
- Dictionaries and style books are standards that journalists use. Basic grammar is a standard.

Who sets the standard?

- Most standards are created by “standards organizations” or industry governing bodies.
- Governments set some standards. Especially when human lives are at stake (airlines, construction, medicine)
- Some standards are set by companies, like Microsoft with Windows or Apple with iTunes, through product market share

What is the W3C?

- The W3C (world wide web consortium) was founded in 1994 by Tim Berners-Lee, original architect of the World Wide Web and often called the father of the internet.
- W3C's purpose is to develop open standards so that the Web evolves in a single direction rather than being splintered among competing factions, like Netscape and Microsoft in the late 1990s.

What are open standards?

- Open Standards are not owned by any company
- Specifications for formats, interfaces, graphics, networking, and so on, established by industry-wide bodies, to assure hardware and software compatibility.

What does the W3C do?

Universal Access: Makes the Web accessible to all by promoting technologies that take into account the vast differences in culture, languages, education, ability, material resources, access devices, and physical limitations of users on all continents.

What does the W3C do?

Semantic Web: Develops a software environment that permits each user to make the best use of the resources available on the Web. In other words, all browsers display html tags in a similar fashion.

What does the W3C do?

Mission: To lead the World Wide Web to its full potential by developing protocols and guidelines that ensure long-term growth for the Web.

Just who is w3c?

- The W3C director is Tim Berners-Lee
- Located at MIT, ERCIM headquarters in France, and Keio University in Japan
- Consists of a staff of 68 engineers from 10 countries
- Hundreds of members participate as advisors

How the w3c affects the web

- Sets standards that software developers use to develop clients, like Web browsers and cell phones. The w3c defines how clients should display information.
- Good web software uses the w3c guidelines to create valid XHTML pages and valid CSS

How does the w3c affect us?

- By following w3c guidelines, we can be sure that our web pages are accessible by the largest audience of people.
- Learning the standards puts you ahead of your peers. Anyone can make a web page, it takes more effort to do it the right way.
- You can future-proof your work by following the standards.

Layers of Standards

- Structural — XHTML/HTML are w3c standards that describe how pages are structured, not how they look
- Presentation — CSS standards define how things look, not how they're structured
- Behavioral — DOM (document object model) and scripting, like Javascript, define how pages act.

XHTML and CSS

- XHTML and CSS are the two main standards we will use in class.
- They are available for reference at <http://www.w3.org/> along with tools for checking standards compliance.
- Wordpress will help us be compliant as long as we don't add non-standard code.

XHTML

- The first major change to HTML since it was released in 1997.
- Combines XML with HTML
- Backward and future compatible
- Only minor changes were needed to upgrade from HTML 4 to XHTML 1

XHTML

Some Differences Between HTML and XHTML

- XHTML elements and attributes must be lower case to meet XML standards.
- XHTML elements must have opening and closing tags to meet XML standards.
- XHTML elements must be properly nested.
- All XHTML elements must be properly nested within the root element.

CSS

- Cascading Style Sheets
- Style sheets “mark up” XHTML to give it the appearance you want.
- CSS defines the typography of the web through fonts, style, etc. and page layout
- Supports non-screen media, like printers, cell phone browsers and screen readers for the visually impaired

w3c and this class...

- I want you to learn to design based on standards, not just some hacked together code like we did it for years before.
- It is a non-subjective way for me to analyze your work and your final project.
- I'm way more impressed with a simple design that "validates", than a complex design that doesn't.

What you should know about w3c and its role...

- w3c means World Wide Web Consortium
- w3c sets web standards
- XHTML is the structural layer standard
- CSS is the presentation layer standard
- Tim Berners-Lee founded w3c in 1994 and is also considered the father of the web

Alphabet Soup...

- HTML = **H**yper**T**ext **M**arkup **L**anguage
- CSS = **C**ascading **S**tyle **S**heets
- RSS = **R**eally **S**imple **S**yndication
- XML = e**X**tensible **M**arkup **L**anguage
- HTTP = **H**yper**T**ext **T**ransport **P**rotocol