Web Publishing - Code Standards

Code standards help ensure that everyone has access to the information you are providing, and make it easier for people with special needs to use the web. MIT recommends that all web developers adhere to coding standards. For more on web standards go to the [W3C](https://www.w3.org) or [Web Standards Project](https://www.w3.org/standards/TR) websites. Pages should be checked with the [W3C Markup Validation Service](https://validator.w3.org/).

**HTML (HyperText Markup Language)**

Document layout and hyperlink specification language. The mark-up tags tell the browser how to display the contents of a document including text, images and other supported media. While the W3C has defined the [standards of HTML](https://www.w3.org/html) browser manufacturers have taken some leeway in how their browsers display pages and have added nonstandard extensions to the language.

**XHTML (Extensible HyperText Markup Language)**

A reformulation of HTML to be compliant under XML (Extensible Markup Language). Using the more rigid rules of XML, XHTML follows every feature of HTML 4.01. It requires more discipline and attention to detail than an HTML document. XHTML demands careful attention to upper and lower case letters, quotation marks, closing tags, and other minutiae ignored by regular HTML. The majority of HTML is completely compatible with XHTML. One of the major differences is the nesting of elements; every tag that contains other tags or content must have a corresponding end tag present. Since empty elements (e.g. `<br>`, `<img>`) don't usually have an end tag present, they must include a space and a slash before the closing brace of the tag (e.g. `<br />`, `<img />`). XHTML also requires that tags and attributes must be lowercase, and that all attributes be quoted and have an associated value.

**XML (Extensible Markup Language)**

Based on the same patent technology as HTML, but designed to better handle the task of managing information. Rather than serving as a language for creating web pages, XML is a language for creating other languages. XML tags identify data so the data can become available for other tasks.

**JavaScript**

Programming language that you can use to add interactivity to web pages. JavaScript lets you create an active user interface, giving users feedback as they navigate your pages. Because some users turn off active scripting, we recommend that you use JavaScript as an enhancement to your page rather than a vital part of displaying or accessing your content. Also note that visitors coming to your site using adaptive technologies or text browsers cannot use JavaScript to move about the site.

**Cascading Style Sheets (CSS)**

HTML was never intended to deliver high-concept graphic content and multimedia. HTML was created to allow authors to define the structure of a document for distribution on the web. CSS or style sheets, allow you to control the display of a web document without compromising its structure (e.g. fonts, colors, leading, margins, typefaces, and other aspects of style). HTML tags can be redefined and custom style classes can be created to globally control the display of your web pages. Styles can be defined in an external CSS file, in an individual document, or even a specific tag. Unfortunately not all browsers offer the same level of support for CSS so you must check your work with all target browsers.

**DHTML**

Dynamic HTML is typically used to describe the combination of HTML, style sheets, and JavaScripts. DHTML gives authors creative control so they can manipulate any page element and change styles, positioning, and content at any time.

**Resources**

Tutorials: [www.w3schools.com](https://www.w3schools.com)

Reference websites:
• www.webreference.com
• wdvli.internet.com
• www.developer.com