

Development of HTML

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Have you ever wondered how your computer became what you know of it today? Read this article on HTML to find out how websites have changed over the years.

Introduction

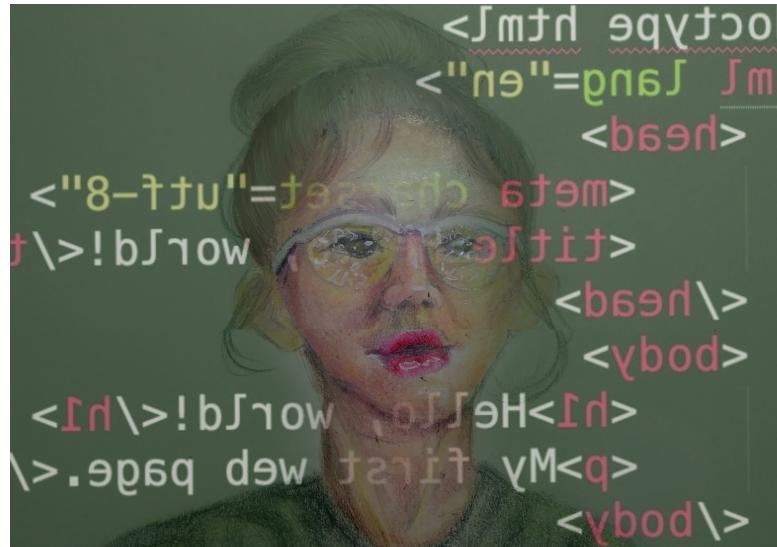


Image by Bina Jeong

HTML, short for HyperText Markup Language, is a programming language used in web designing, along with CSS, short for Cascading Style Sheets, that controls a website's appearance and JavaScript, which gives a website its functions. Created by Tim Berners-Lee in 1991, its original purpose was to link text in research papers so a global database could be created. HTML is a combination of Hypertext, which used tags to transition between sections, and the Markup language, which helps the computer understand the text inside a website(allowing the computer

to maintain the text structure through different devices and systems). With these two functions, it successfully allows a computer to know what each part of the website is and what it is used for. Before HTML existed, there was no standard code, and each computer was formatted differently. That means that you could not use certain websites on different computers as they had no common software-the website would be incorrectly formatted. However, HTML allowed the computer to ignore the difference in software as they were told what each part of the website was used for. This article will describe the development of HTML since its creation.

HTML 1.0

HTML 1.0 was the first version of HTML, created in 1991. However, it was never officially published as computer science was a new field and few were interested in it at this time. In addition, the languages were simple and underdeveloped. HTML 1.0 was basic and only had simple features like text and image controls. However, it did include features like styling, tables, and forms. HTML 1.0 was only supported by the browsers Lynx and Mosaic.

HTML 2.0

HTML 2.0, developed in 1995, was the first standard version of HTML, and the first usable version. HTML 2.0 was set as the standard for websites by the IETF (Internet Engineering Task Force) until the creation of HTML 3.2 in 1997. However, the IETF was disbanded and the W3C (World Wide Web Consortium) replaced it to set standards for the internet. It quickly became widespread due to it being recommended and also because of its large functionality. This version of HTML included all previous aspects of HTML 1.0, but with the addition of features for web design. It had several new elements like forms and tables, and there was an attempt to include browser specific tags and allowing trans-browser websites. HTML 2.0 refined and defined the core features of HTML.

A new tag was the table tag. It can be created with the `th`, `td`, and the `tr` tags. `th` defined the heading, `td` defined the column cells of the table, and `tr` defined the row cells of the table.

HTML 3.2 - WILBUR

HTML 3.2 was the third official version of HTML. HTML 3.0 was drafted, adding new features called Netscape Extension Tags. These tags were used for the browser called Netscape Navigator (the most popular at the time), as websites from Netscape Navigator would be incorrectly formatted in other browsers. The W3C was slow in adding new features, and the size of HTML 3.0 was too large for it to be implemented, causing HTML 3.0 to be ignored. However, this plan led to modular updates (updates implemented in stages and sections rather than all at once). HTML 3.2, originally called WILBUR, was created by the W3C. It reduced the changes from HTML 3.0 and most tags from Netscape Navigator were also discarded. HTML 3.2 had more features for form and supported CSS, it is the standard to define how your website looks). CSS styled tags and made them better looking. HTML 3.2 did not have frame tags but some browsers included support for frames (a frame splits a page into several sections, for instance a table). It became the new standard in January 1997 (it was recommended since early 1996), and almost all browsers today support it.

HTML 4.01 - COUGAR

HTML 4.01 was a slightly edited version of HTML 4.0. HTML 4.0 revised many of HTML's standards and was called COUGAR during its development. Most of its changes were from

HTML 3.0. Other changes include toning down tags, adapting them for worldwide usage, and better fitting the new style CSS. CSS was included as part of HTML code itself in HTML 3.2, but in HTML 4 an external styling sheet was added. This meant you could design an external CSS file and include this file into your HTML code. It made HTML more efficient as you did not have to include the same CSS on every page of your website. HTML 4.0 became the standard in the April of 1998 (it was recommended as of December in 1997), but soon after it passed, minor changes were made, eventually forming HTML 4.1. HTML 4.0 also had frame tags, which lets a single page to show multiple sites with sections. However, Netscape Navigator failed to adapt to the changes in HTML, and even today it does not recognize many tags and elements of HTML.

A frame tag was added in HTML 4.0. `<frame src = \URL">` is the code to define the source of a file, and is used with `frameset` to create a frame.

XHTML 1.0

XHTML 1.0 is an extended version of HTML with the addition of XML, which stands for Extensible Markup Language, with the abbreviation on the X of eXtension. This was a recommendation by the W3C, and it changed HTML so drastically that it branched off as a new form of HTML. Not many tags or new features were added but some tags had more functionality and accessibility. It represented a new set of rules rather than an addition to past versions. The purpose of XHTML was to fit other devices, like phones or wireless devices, which did not have the computing power a computer would have. It also tried to help those with physical disabilities (like the blind or visually worse than normal) to allow them to access the web. Therefore, XHTML could be used on a wider variety of browsers and platforms. It was set as a standard in the January of 2000, along with the previously set standard HTML 4.01. It was later updated in 2002, but there is no other version of XHTML currently available.

HTML5

HTML5 is the most recent version of HTML, as it was standardized in October of 2014. It came into existence when the Web Hypertext Application Technology Working Group (WHATWG), a group of technology fans and programmers, tried to revise HTML. It was different from the usual process, creating a new specification. At first, researchers tried to create a new version of XHTML. However, as time passed, it was clear that XHTML 2.0 was impractical and was abandoned. The W3C focused again on HTML5. Several features of HTML include new tags for inputting elements. HTML5 is still evolving, and its main purpose was to improve the language and to support new browsers or platforms. This is likely to be used for the next decade, and any further developments will be gradual and slow.

For instance, geolocation tags, which shows the user's location, was added. Its code is `var locat = navigator.geolocation;`. `navigator.geolocation` was used to get permission from the user to access their location, then provide the most functional way for the

browser to use located on the device. Then, with the location, you can use several other tags like **Geolocation coordinates** or **GeolocationPosition**.

Version	Year Standardized
HTML 1.0	-
HTML 2.0	1995
HTML 3.2	1997
HTML 4.01	1998
XHTML 1.0	2000
HTML5	2014

Conclusion

Throughout a span of over 25 years, HTML has transitioned from the original HTML 1.0 to the most recent HTML 5. It started from the beginning of web development, the most basic tags, to the various extensions and styles we have today. It is still continuing to develop, and we also have an entirely new style of web design, XHTML. However, the future is unknown and technology is rapidly developing. Perhaps in the near future, a new derivative will appear and our view of the internet will change dramatically again.

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