**Topic: HTML (HyperText Markup Language)**

**What is HTML?**

HTML is used to create electronic documents (called pages) that are displayed on the [World Wide Web](https://www.computerhope.com/jargon/w/www.htm). Each page contains a series of connections to other pages called [hyperlinks](https://www.computerhope.com/jargon/h/hyperlin.htm). Every web page you see on the Internet is written using one version of HTML code or another.

HTML is a formal Recommendation by the World Wide Web Consortium ([W3C](http://searchsoa.techtarget.com/definition/W3C)) and is generally adhered to by the major browsers, Microsoft's Internet Explorer and Netscape's Navigator, which also provide some additional non-standard codes. HTML is a Language, as it has code-words and syntax like any other language.

**What is the meaning of HyperText and Markup?**

* **HyperText** is the method by which you move around on the web — by clicking on special text called hyperlinks which bring you to the next page. The fact that it is hyper just means it is not linear.
* **Markup** is what HTML tags do to the text inside them. They mark it as a certain type of text (italicised text, for example).

**How does it work?**

The HTML consists of a series of short codes typed into a text-file by the site author — these are the tags. The text is then saved as a html file, and viewed through a browser, like Internet Explorer or Netscape Navigator. The browser reads the file and translates the text into a visible form. Writing your own HTML entails using tags correctly to create your vision. You can use anything from a rudimentary text-editor to a powerful graphical editor to create HTML pages.

**Two types of markup:**

**1.** **Procedural markup**

handles physical treatment of text—embedded tags that give programs instructions for how to display text.

**2.** **Descriptive markup**

like HTML, labels parts of a document into logical, structural parts—the headline starts here and ends here.

**Three most popular markup languages:**

**1.** **HTML (HyperText Markup Language)**

* This descriptive markup language is the core markup for all webpages, or most anything displayed in a browser, which is why it remains such a core skill for all developers. HTML has evolved to its most recent version, HTML5, which adds more features than previous versions and can now define the way videos, images, and text look.

**2.** **XML (Extensible Markup Language)**

* another descriptive markup language that functions like a complement to HTML. Its core difference is that it describes elements of data (called “nodes”) while HTML displays that data.

-       **AJAX (Asynchronous JavaScript + XML)** groundbreaking technology that allows websites and applications like Gmail to load or update specific elements without refreshing an entire page.

-       **JavaScript Object Notation (JSON)** is a simpler alternative to XML. Like XML, it’s a text-only, data-interchange format that’s used in AJAX applications.

3.     **XHTML ( Extensible HyperText Markup Language**)

* essentially identical to HTML but is written in the same format as an XML application. Launched prior to HTML5, it combines the best of both languages and sought to address issues with more lenient HTML code (specifically with XHTML Mobile) that was proving problematic for mobile browser compatibility on small devices.

**A Simple HTML Document**

* The <!DOCTYPE html> declaration defines this document to be HTML5
* The <html> element is the root element of an HTML page
* The <head> element contains meta information about the document
* The <title> element specifies a title for the document
* The <body> element contains the visible page content
* The <h1> element defines a large heading
* The <p> element defines a paragraph

**HTML History timeline**

**1989** - Tim Berners-Lee began to come up with the concept of HTML as he was working with CERN. Soon the internet was invented by him.

**1990** - Internet was now invented in the early time of the year. For the start of it, hypertext was being introduced to the Web.

**1991** - Tim kept his ideas open to the public online, trying his best to spread his work. Along with this, late in the year the WWW-talk was created as a mailing system.

**1992** - Joseph Hardin and Dave Thompson caught wind of Tim's ideas of HTML. Later the IMG tag was introduced by the Mosaic Team.

**1993** - Version 1 of Mosaic Browser was released for the Sun Microsystems's Inc. This extended features, including images, forms, and lists. There was starting of another browser as well, the Arena Browser.

**1994** - HTML 2.0 is beginning to be formed and readying for release. HTML was to include everything 1.0 had with new added features.

**1995** - HTML 2.0 and soon 3.0 was created by T. Berners-Lee and D. Connolly. This lasted all the way up to January 1997.

**1997** - HTML 3.2 is completed and released to the public. Later in the year, HTML 4.0 is created.

**1998** - W3C membership stopped evolving HTML. Instead work began on an XML-based equal, named XHTML. This was a reformulation of HTML 4.0 into XML code, also known as XHTML 1.0.

**2000** - Parts of API for HTML was specified and published under names of DOM Level 1, DOM Level 2 CORE, and DOM Level 2 HTML. These efforts were soon stopped, due to DOM Level 3 specifications.

**2003** - Publication of XForm sparked a renewed interest in HTML itself, rather than finding replacements for it. This came to mind as realization that XML was limited to new technologies.

**2004** - HTML's evolution was reopened and began being tested on, starting on HTML5 as well as early draft proposals. Soon, Apple, Mozilla, and Opera jointly announced their intent to continue working on this effort.

**2007** - Working group chartered to work with WHATWG for development of HTML5. Apple, Mozilla, and Opera allowed W3C to publish specification under W3C copyright.

### **HTML vs CSS Differences**

**“HTML is a markup language for describing web documents (web pages).”** *– w3schools*

In 1989, Tim Berners-Lee invented the Web with HTML as its publishing language. HTML (**H**yper **T**ext **M**arkup **L**anguage) was created to help programmers describe the content on a website like <this is a heading>, <this is a paragraph>. HTML uses tags to help you add paragraphs, headers, pictures, bullets and other pieces of structure. Just like you would write something on a word document, HTML helps you write something on a website.

**“CSS describes how HTML elements are to be displayed on screen, paper, or in other media.”** –w3schools

CSS was first proposed by Hakom Lie and co-created by Bert Bos around 1996. Created to **compliment** HTML, CSS (**C**ascading **S**tyle **S**heets) is what makes a website look and feel amazing. Presentation and ease of use have been some of the qualities CSS has brought to web development. It is more involved with changing a websites style rather than its content. Kind of like changing the font size, font color and positioning on a word document. CSS is in charge of the way the content looks on a page and what else goes on it to compliment that content.

**HTML Development**

Tim Burners-Lee based the Hyper Text Markup Language (HTML) on the emerging standard for text mark-up called the Standard Generalized Mark-up Language or SGML which have been used at CERN.

SGML or Standard Generalized Mark-up Language is a standard for how to specify a document [markup](http://searchsoa.techtarget.com/definition/markup) language or tag set.

SGML is not in itself a document language, but a description of how to specify one. It is metadata.

An SGML document has two fundamental parts:

* the document containing the content and the mark-up tags
* A *document type declaration* (DTD) which defines the grammar and rules for the language in which the document is written. That is, it defines all the names of the various element uses in the mark-up, how they interact with each other and other syntax that might apply.

Some advantages of documents based on SGML are:

* They can be created by thinking in terms of document structure rather than appearance characteristics (which may change over time).
* They will be more portable because an SGML compiler can interpret any document by reference to its document type definition (DTD).
* Documents originally intended for the print medium can easily be re-adapted for other media, such as the computer display screen.

 Hypertext Markup Language ([HTML](http://searchsoa.techtarget.com/definition/HTML)), is an example of an SGML-based language.

<https://www.computerhope.com/jargon/h/html.htm>

<http://www.yourhtmlsource.com/starthere/whatishtml.html>

<https://www.upwork.com/hiring/development/the-basics-of-web-development/>

<https://www.w3schools.com/html/html_intro.asp>

<https://www.sutori.com/story/html-history-timeline>

<https://www.le.ac.uk/oerresources/bdra/html/page_04.htm>

<http://searchmicroservices.techtarget.com/definition/SGML-Standard-Generalized-Markup-Language>