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Presentation

The concept of hypertext

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Hypertext is text displayed on a computer screen or other electronic device with references (hyperlinks) to other text which the reader can immediately access, or where text can be revealed progressively at multiple levels of detail. The hypertext pages are interconnected by hyperlinks, typically activated by a mouse click, key press sequence or by touching the screen. Apart from text, hypertext is sometimes used to describe tables, images and other presentational content forms with hyperlinks. Hypertext is the underlying concept defining the structure of the World Wide Web, with pages often written in the Hypertext Markup Language (HTML). It enables an easy-to-use and flexible connection and sharing of information over the Internet.

How hypertext is not just flat text with highlights or paragraphs omitted during display, but rather, the text is hyper-structured with hyperlinks or other structures embedded inside a page, including hidden search words, to control the display and connection with other pages or hypertext nodes.

Hypertext documents can either be static (prepared and stored in advance) or dynamic (continually changing in response to user input, such as dynamic web pages). Static hypertext can be used to cross-reference collections of data in documents, software applications, or books on CDs. A well-constructed system can also incorporate other user-interface conventions, such as menus and command lines. Links used in a hypertext document usually replace the current piece of hypertext with the destination document. A less known and used feature is StretchText, which expands or contracts the content in place giving more control to the reader in determining the level of detail of the displayed document.

Hypertext can develop very complex and dynamic systems of linking and cross-referencing. The most famous implementation of hypertext is the World Wide Web, first deployed in 1992. Besides Project Xanadu, Hypertext Editing System, NLS, HyperCard, and World Wide Web, there are other noteworthy early implementations of hypertext, with different feature sets:

FRESS; ZOG; Electronic Document System; Information Presentation Facility; Intermedia; KMS; Storyspace; Texinfo; XML with the Xlink extension; Wikis; Adobe's Portable Document Format; Windows Help; PaperKiller; Amigaguide.

HyperText Markup Language (HTML) is the main markup language for creating web pages and other information that can be displayed in a web browser. HTML is written in the form of HTML elements consisting of *tags* enclosed in angle brackets , within the web page content.

The purpose of a web browser is to read HTML documents and compose them into visible or audible web pages. The browser does not display the HTML tags, but uses the tags to interpret the content of the page.

HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. It can embed scripts written in languages such as JavaScript which affect the behavior of HTML web pages. Web browsers can also refer to Cascading Style Sheets (CSS) to define the appearance and layout of text and other material. The W3C, maintainer of both the HTML and the CSS standards, encourages the use of CSS over explicit presentational HTML.

Short development history:

November 24, 1995 - HTML 2.0 was published(form-based file upload; tables; client-side image maps; internationalization)
January 1997 - HTML 3.2 was published as a W3C Recommendation. It was the first version developed and standardized exclusively by the W3C, as the IETF had closed its HTML Working Group in September 1996.
December 1997 - HTML 4.0 was published as a W3C Recommendation . It offers three variations:

- Strict, in which deprecated elements are forbidden,
- Transitional, in which deprecated elements are allowed,
- Frameset, in which mostly only frame related elements are allowed ;

April 1998 HTML 4.0 was reissued with minor edits without incrementing the version number.
December 1999 - HTML 4.01 was published as a W3C Recommendation. It offers the same three variations as HTML 4.0 and its last errata were published May 12, 2001.
May 2000 ISO/IEC 15445:2000 ("ISO HTML", based on HTML 4.01 Strict) was published as an ISO/IEC international standard. In the ISO this standard falls in the domain of the ISO/IEC JTC1/SC34 (ISO/IEC Joint Technical Committee 1, Subcommittee 34 – Document description and processing languages).
As of mid-2008, HTML 4.01 and ISO/IEC 15445:2000 was the most recent versions of HTML. Development

of the parallel, XML-based language XHTML occupied the W3C's HTML Working Group through the early and mid-2000s.

HTML draft version timeline

October 1991 - *HTML Tags*, an informal CERN document listing 18 HTML tags, was first mentioned in public.

June 1992 - First informal draft of the HTML DTD, with seven subsequent revisions.

November 1992 - HTML DTD 1.1 (the first with a version number, based on RCS revisions, which start with 1.1 rather than 1.0), an informal draft

June 1993 - Hypertext Markup Language was published by the IETF IIIR Working Group as an Internet-Draft.

November 1993 - HTML+ was published by the IETF as an Internet-Draft and was a competing proposal to the Hypertext Markup Language draft. It expired in May 1994.

April 1995 (authored March 1995) - HTML 3.0 was proposed as a standard to the IETF, but the proposal expired five months later without further action. It included many of the capabilities that were in Raggett's HTML+ proposal, such as support for tables, text flow around figures and the display of complex mathematical formulas.

January 2008 – HTML5 was published as a Working Draft (link) by the W3C. Although its syntax closely resembles that of SGML, HTML5 has abandoned any attempt to be an SGML application and has explicitly defined its own "html" serialization, in addition to an alternative XML-based XHTML5 serialization.

May 2011 - On 14 February 2011, the W3C extended the charter of its HTML Working Group with clear milestones for HTML5. In May 2011, the working group advanced HTML5 to "Last Call", an invitation to communities inside and outside W3C to confirm the technical soundness of the specification. The W3C is developing a comprehensive test suite to achieve broad interoperability for the full specification by 2014, which is now the target date for Recommendation.

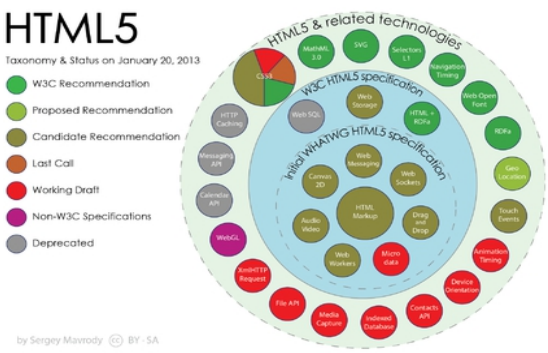
HTML5: **Features and APIs**

In September 2012, the W3C proposed a plan to release a stable HTML5 Recommendation by the end of 2014 and an HTML 5.1 specification Recommendation by the end of 2016.

The combined timelines for HTML 5.0, HTML 5.1 and HTML 5.2:

	2012	**2013**	**2014**	**2015**	**2016**
HTML 5.0	Candidate Rec	Call for Review	Recommendation		
HTML 5.1	1st Working Draft		Last Call	Candidate Rec	Recommendation
HTML 5.2				1st Working Draft	

The W3C proposed a greater reliance on modularity as a key part of the plan to make faster progress, meaning identifying specific features, either proposed or already existing in the spec, and advancing them as separate specifications. Some technologies that were originally defined in HTML5 itself are now defined in separate specifications:



•HTML Working Group – Microdata, HTML Canvas 2D Context
•Web Apps WG – Web Messaging, Web Workers, Web Storage, WebSocket API, Server-Sent Events
•IETF HyBi WG – WebSocket Protocol
•WebRTC WG – WebRTC
•W3C Web Media Text Tracks CG – WebVTT

Some specifications that were initially developed standalone have been adapted as HTML5 extensions or features by reference: SVG, MathML, WAI-ARIA.