A Study the basic Programming Language of Hypertext Markup Language

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Abstract - HTML is the foundation of every website, no matter how complicated or how many technologies are employed. It's a necessity for anyone working in the web industry. Anyone who wants to learn how to write for the internet should start here. HTML's earlier versions didn't allow for any level of sophistication in text or visual formatting because it was designed to be used for scientific data sharing. New HTML versions & browser software must be at least somewhat backwards compatible in order to ensure that everyone continues to have access to web content, even though some graphic & limited text formatting capabilities have been introduced over time. For web page development, this paper focuses on the essentials of HTML.

Keywords - HTML, Markup Languages, Semantic HTML, Dynamic HTML

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INTRODUCTION

Markup language for the World Wide Web that is used to format and markup documents. Using tags, HTML (Hypertext Markup Language) formats ASCII (American Standard Code for Information Interchange) text documents by defining which parts of the text should be boldface, italic, bulleted, hyperlinked, centered, and etc. In addition to being able to nest these tags, they can also be used to 'mark up' the text. Use the MANMOHAN to mark up text such as "MANMOHAN" so that it appears bold on browsers. Files with the.htm or.html extension are used to store HTML documents on a Web server like Microsoft Internet Information Services (IIS) (IIS). After downloading an HTML page from a server, a browser like Microsoft Internet Explorer parses the tags and displays the document as intended. Since its inception in the early 1990s, HTML has seen numerous iterations. In the time since this article was written, HTML 4 has been the most recent version released. Objects such as text & pictures could not be arranged in a page's layout with great precision in the original HTML. There were only a few tags in the beginning, and they were only meant to be used for tying documents together via hyperlinks to create hypertext. Web browsers like Netscape & Microsoft created their own proprietary HTML elements to give Web developers more control over document layout, which accelerated the W3C's progress on establishing a common HTML standard for documents. For accurate positioning of elements on a Web page, HTML 4 incorporates standards that allow for the creation of cascading style sheets.

HISTORY OF HTML

In late 1991, a document called HTML Tags was initially cited on the Internet by Berners-Lee, and it was the first publicly available description of Hypertext Markup Language. It outlines the early, rather rudimentary design of HTML, which has 20 elements. In order for web browsers to dynamically format a web page, they require HTML. Berners-Lee regarded HTML as an extension of SGML when it was first developed in 1988. With the publication of "Hypertext Markup Language (HTML)" by the Internet Engineering Task Force (IETF) in mid-1993, HTML was precisely defined as such. The IETF was unable to move on with further development because of competing interests. The World Wide Web Consortium (W3C) has been maintaining the HTML specifications since 1996, with the help of commercial software developers (W3C). The HTML specification was formalized into ISO/IEC 15445:2000 in the year 2000.

VERSION OF HTML

There have been five major developments in HTML's history over the last few decades. These are their names:

As early as the HTML 2.0 standard, the language has many of the key elements that are still present in today's version of the language. Originally released in 1995.

Popular elements such as superscript & subscript were included in the initial W3C recommendation for

HTML (1997), which was the first version to include these features. In addition, HTML 2.0 was backwards compatible with it.

This was the first version of HTML that most early HTML programmers used, and it is the one that most modern browsers still use today. Since then, however, HTML 4.01 has taken its place. In December 1997, HTML 4.0 was released, followed by HTML 4.1 in 1999.

Work on HTML 5 began in January 2008, when the W3C issued a working draft of the next standard. There are a lot of things that make up a web page (also known as a document). A single URL can be used to access a variety of different types of objects, including HTML files, images, Java applets, videos, and more. There are a lot of HTML files out there, but they are rarely the only components of a web page. HTTP is the protocol that specifies how web browsers request pages from servers and how servers deliver those pages to clients, i.e. how the web client & web server interact. An HTTP request message is sent to the server by the browser for each object on the requested web page when the user requests it (for example, by clicking on a hyperlink). The server receives the requests & answers to them with HTTP response messages that include the objects in the URLs.

MARKUP LANGUAGES

The most common method of creating a web documents is through the use of Markup Languages. Most of these are created by adding a set of formatting code to ASCII text to show fonts, justifications, links, etc. on the web. A markup language is a language that uses tags to indicate a change in presentation style or a change in content type.

A markup language describes explicitly. In sum, HTML describes explicitly the parts of the hypertext multimedia document, and the web client uses this information to construct the document on the user's screen. There are several types of markup elements used in HTML.

- Structural Markup: Structural Markup describes the purpose of text. For example,<h2>Golf</h2>is found Golf asa second-level heading that would be presented by a browser in the same way as that of the "HTML markup" title at the beginning of this section. There is no standard way to format elements in structural markup, although the majority of web browsers have their own built-in styles for this. Cascading Style Sheets can be used to further style text.
- Presentational Markup: Describes the appearance of the text, regardless of its purpose. For example **boldface** indicates that visual output devices should render "boldface" in bold text, but gives little indication what devices which are unable to do

this (such as aural devices that read the text aloud) should do. Each casebold&<i>*italic*</i>, In addition to the visual renderings, there are semantically more significant features, like: **strong emphasis** and *emphasis* respectively. It is easier to see how an aural user agent should interpret the latter two elements. Italicizing a book's name on the screen might be unseemly for a screen-reader, but it would be appropriate on the page. However, they are not interchangeable. HTML 4.0 specifies that presentational markup elements are deprecated in favor of CSS-based styling.

- Hypertext Markup: Its makes parts of a document into links to other documents. An anchor element creates a hyperlink in the document with the href attribute set to the link URL. For example, the HTML markup, Wikipedia<a/,>, will render the word "Wikipedia" as a hyperlink. To render an image as a hyperlink, an 'img' element is inserted as content into the 'a' element. Like br', 'img' is an unoccupied element with attributes but no content or closing tag. <imgsrc="image.gif" alt="descriptive text" width="50" height="50">.

HYPERTEXT MARKUP LANGUAGE

HTML is the most common markup language used to create web documents. This standard for inserting tags that identify elements in a text such as headings, subheadings, chapters, paragraphs, & appendices is developed from HTML, which is based on the Standardized Markup Language (SGML). An HTML document's structure can be described in a similar way to that of SGML documents. To help the web client understand what is being written, a variety of HTML tags have been included into the document's text to do just that. A heading code, such as the one found in this is a title, tells the web client to display the text on its own in a large, bold face font. Another sort of information provided by HTML code includes: if a picture or graphic should be put and where, whether text should be bolded or italicized and where the line break and paragraph break arethe existence of an internal link in the text of a given paragraph.

Standard Generalized Markup Language, the foundation of HTML, is based on a much larger document-processing system called SGML. HTML can be seen as a subset of SGML, which is what HTML is. HTML is primarily concerned with the substance of the document, not with how it appears on the page. Document structure is described in this language. For example, titles, paragraphs, and lists are all frequent features in most texts. Before you begin writing, it is possible to give the various

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sections of the document descriptive names by defining the items that will be included. HTML tags are used to identify these components. Because different browsers (Netscape, Mosaic, etc.) will read HTML information differently, HTML does not specify the appearance or layout of the document. The appearance of the same document may vary depending on the browser. Don't design your documents solely on how they seem in one browser. Content that is easy to read and understand should be the primary focus.

DYNAMIC HTML

There are several new HTML features and options that allow you to construct more animated and flexible websites than ever before. HTML 4.0 specifies a significant portion of dynamic HTML. Dynamic HTML pages can be as simple as allowing users to 'drag and drop' an image to another location on the page, or as complex as allowing a user to change the color of a paragraph heading when the mouse is passed over it. It's possible to create web documents that seem and function like desktop apps or multimedia projects thanks to dynamic HTML. Netscape Communications' Navigator 4.0 (part of Netscape's Communicator suite) and Microsoft's Internet Explorer 4.0 both have the features that compose dynamic HTML. Netscape & Microsoft browsers both support HTML 4.0, although only one of the two supports certain of HTML 4.0's extra features. A major drawback of dynamic HTML is that, due to the prevalence of older browsers, websites must develop two distinct versions of themselves in order to accommodate the needs of all of their visitors.

SEMANTIC HTML

Semantic HTML is a style of HTML writing that places more emphasis on the content's meaning than its visual appearance. However, HTML has always incorporated presentational markup such as and elements since its beginnings. The span and div tags, which are semantically neutral, are also available. It has been advised for web authors since the late 1990s when CSS became widely supported in most browsers to avoid using presentational HTML markup. For instance, Tim Berners-Lee and others discussed the Semantic Web back in 2001, and presented examples of how intelligent software 'agents' could one day crawl over the Web to find information that had never before been linked together for the benefit of human users. Web 2.0, mashups, or price comparison websites may be on the verge of creating these types of agents, but they are still a long way off from becoming ubiquitous. Semantic agents by Berners-Lee, on the other hand, are online application hybrids developed by web developers who already know the web locations and API semantics of the precise data they intend to mash, compare, & combine. This is the key distinction. The Online crawler, sometimes known as a search engine spider, is an important sort of web agent that automatically trawls and reads web pages without knowing what it might find. For the WWW to be as helpful as it is today, software agents rely on the semantic clarity of the web pages they read and index. These software agents utilize various approaches and algorithms to read & index millions of web pages every day. Search engine spiders, individuals who create mashups, and other automated agents would all benefit if semantic structures in HTML are extensively and uniformly applied to bring out the meaning of published material. In recent HTML & XHTML guidelines, presentational markup tags are obsolete and are banned in HTML 5.

CONCLUSION

A library's OPAC can be made accessible to the general public through its own Web page, which can be hosted on the Internet by the library or other information center. HTML, DHTML, & XML are just a few of the tools available to web designers and developers. Techniques for determining the location of files and other resources on the Internet are known as Uniform Resource Locators (URLs). A thorough knowledge of URLs and their right application is vital for excellent Web design.. To post material on the Internet, one must know at least the most fundamental HTML tags. Because of its shortcomings, such as its inability to perform an efficient search, HTML is nevertheless frequently employed in web page design. The context and meaning of a phrase are both preserved in the XML. Like HTML, an XML file is a plain ASCII file in which tags can be defined by the author.

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