DEPARTMENT OF COMMERCE (CA)
JAVA PROGRAMMING AND HTML (Semester-IV)
II M.COM (CA) Sub Code-18MCC42C
UNIT - IV

HTML -History of HTML-HTML generation-HTML documents-Anchor Tag-Hyperlinks-Sample HTML documents.

HTML

Hypertext Mark-up Language (HTML) is the standard mark-up language for documents designed to be displayed in a web browser. It can be assisted by technologies such as Cascading Style Sheets (CSS) and scripting languages such as JavaScript. Web browsers receive HTML documents from a web server or from local storage and render the documents into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

HISTORY OF HTML

HTML is an ever-changing language. With every new version, the standards revolving around it are constantly changing to allow for stricter, but cleaner and more efficient code that contains more features than before. HTML has gone through several changes since its inception.

Tim Berners-Lee, the inventor of HTML, used to work in the computer section of the CERN (European Laboratory for Particle Physics) at Geneva, Switzerland.
CERN is an institution for researching particle physics which requires the collaboration of physicists all over the world.
Tim has an idea of creating something which would enable physicists to share research information from anywhere in the world, and he came with HTML which can contain links of many documents from one document.
Tim's prototype Web browser on the NeXT computer came out in 1990.

- In 1991, an open discussion group HTML-talk was started across the internet for the development of HTML.
- In 1992, Dave Raggett from Hewlett-Packard's Labs in Bristol, England who was one of the enthusiasts of HTML, met Tim and upon returning to England, Dave wrote a richer version of HTML called HTML+.
- In 1992, NCSA showed interest in the web and contributed to take the development of the web a step further.
- In December 1992, Marc Andreessen of Mosaic team (an early web browser) introduced img tag in the HTML document.
- March 1993: Lou Montulli releases the Lynx browser version 2.0a.
- Early 1993: Dave Raggett begins to write his own browser.
- April 1993: The Mosaic browser is released.
- Late 1993: Large companies underestimate the importance of the Web.
- May 1994: NCSA assigns commercial rights for Mosaic browser to Spyglass Inc.
- September 1994: The Internet Engineering Task Force (IETF) sets up an HTML working group.
- July 1994: HTML specification for HTML 2 is released.
- November 1994: Netscape is formed.
- Late 1994: The World Wide Web Consortium forms.

- Through 1995: HTML is extended with many new tags.
- March 1995: HTML 3 is published as an Internet Draft.
- March 1995: A furor over the HTML Tables specification.
- August 1995: Microsoft's Internet Explorer browser comes out.
- September 1995: Netscape submits a proposal for frames.
- November 1995: The HTML working group runs into problems.
- November 1995: Vendors unite to form a new group dedicated to developing an HTML standard.
- November 1995: Style sheets for HTML documents begin to take shape.
- November 1995: Internationalization of HTML Internet Draft.
- December 1995: The HTML working group is dismantled.
- February 1996: The HTML ERB is formed.
- April 1996: The W3 Consortium working draft on Scripting comes out.
- July 1996: Microsoft seems more interested than first imagined in open standards.
- December 1996: Work on `Cougar' began.
- January 1997: HTML 3.2 is ready.
- In spring 1998, HTML 4.01 was materialized finally and became a w3c recommendation.
- In January 2008, a working draft of HTML 5 was prepared.

HTML GENERATION

HTML generation package provides a servlet with a set of classes that abstract away the details of HTML, in particular, the HTML tags. The level of abstraction depends on the package: some put only the thinnest veneer above the HTML tags, leaving the nitty-gritty details (such as opening and closing each HTML tag) to the programmer. Using packages such as these is similar to writing HTML by hand and is not discussed here. Other packages elegantly abstract away the HTML specification and treat HTML as just another set of Java objects. A web page is seen as an object that can contain other HTML objects (such as lists and tables) that can contain yet more HTML objects (such as list items and table cells). This object-oriented approach can greatly simplify the task of generating HTML and make a servlet easier to write, easier to maintain, and sometimes even more efficient.

Here are some example files to use for generating HTML from lists of files and other things. More information on conversion tools etc is available here.

RTF to HTML

Convert RTF (using specific styles) into HTML.

fix-html.pl

written by Dan Connolly, is a perl script to legitimize old HTML files into SGML-abiding HTML (as per the DTD that Dan created).

texi2html

Lionel Con's converter from Gnu TeXInfo format.

text2html.sed

A sed script to turn plain text into plain-looking valid HTML markup so that it will be rendered just as it was.

ls2html.awk

is an awk script which will just take a list of names and generate a menu.

dir2html

is a shell script which generates a menu of pointers to files with particular suffixes in a set of directories. It also includes a README file at the head of the hypertext list if one exists.

htn2html.c

See the Hytelnet gateway for the program to convert hytelnet data into HTML.

findrefs.pl

Written by Ari Lemmke, finds references http:... in plain text files and generates anchors out of them.

LaTeX to HTML

Latex to HTML converter program by Nikos Drakos - not only does it successfully show the more complex Latex formatting, for example for mathematics, but it also has a set of iconic images, which are included for navigation, and to mark footnotes and references.

HTML DOCUMENTS

The document's title will appear as the viewing windows name and the text will appear in the default font for your browser, which is usually a Times Roman typeface with font size 12point.

Adding headings and further character attributes to your HTML documents will be discussed in the following sections of this course.\

Creating HTML Document

Use one of the following two methods to create your new HTML document.

Method 1

- Start Microsoft Word.
- In the New Document task pane, click Blank Web Page under New.
- On the File menu, click Save.
- The Save as type box defaults to Web Page (*.htm; *.html).
- In the File name box, type the file name that you want for your document, and then click Save.

Method 2

- Start Microsoft Word.
- Create a new blank document.
- On the File menu, click Save as Web Page.
- In the File name box, type the file name that you want for your document, and then click Save.

ANCHOR TAG

The Anchor tag in HTML can be defined as a means to create a hyperlink that can link your current page on which the text is being converted to hypertext via <a> (anchor tag) to another page. This anchoring from one page to another is made possible by the attribute "href", which can be abbreviated (hypertext reference).

An Anchor tag is defined with and consists of three parts:

- the href attribute,
- the name attribute,
- and the target attribute.

HYPERLINKS

An element in an electronic document that links to another place in the same document or to an entirely different document is a hyperlink. The World Wide Web is a graphical, platform independent, distributed, decentralized, multi-formatted, interactive, dynamic, nonlinear, immediate, two-way communication medium. The basic mechanism that enables all this is the hypertext link and hyperlink.

Example: My sample page

SAMPLE HTML DOCUMENT

The following text should be typed in to a local file on a system which is equipped with a Web browser.

```
<html>
<head>
<title>
A Simple HTML Document
</title>
</head>
<body>
<p>This is a very simple HTML document</p>
<p>It only has two paragraphs</p>
</body>
</html>
```

When authoring a Web/HTML document there are several stages which will be repeated time and time again.

1.Using a local editor (or word processor) create the HTML file.
2.View the local file by using the Open file... option on the File menu.
3.If you see any errors, go back to (1) and repeat the exercise.

Note: most Web viewers will store previously viewed pages and sometimes gives the impression that corrections to the original HTML documents have not been made. Always Reload HTML documents after they have been edited.

REFERENCE

1. World Wide Web design with HTML - C.Xavier TMH Publications, 2000.
2. https://en.m.wikipedia.org/wiki/HTML#:~:text=Hypertext%20Markup%20Language%20(HTML)%20is,scripting%20languages%20such%20as%20JavaScript

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