Introduction to Web Design & Computer Principles
CSCI-UA 4

HTML
HyperText Markup Language
HTML

HyperText Markup Language

A language for describing Web pages

HTML is not a programming language, it is a markup language

A markup language is a set of markup tags

HTML uses markup tags to describe Web pages
HTML

Early history key dates

- 1990: Original HTML specification written by physicist, Tim Berners-Lee for cross-referencing documents
- 1993: First text-based browser, Lynx, released
- 1993: Mosaic browser released, adding images, nested lists, forms
- 1994: Netscape is formed
- 1994: The World Wide Web Consortium is formed, w3.org
HTML Tag
Opening/Closing

Keywords surrounded by angle brackets, for example: `<html>

HTML tags normally come in pairs, like `<h1>` and `</h1>`

The first tag in a pair is the “start tag,” the second tag is the “end tag”

Start and end tags are also called “opening” and “closing” tags
HTML Element
Everything from the start tag to the end tag

Example:
<p>This is a paragraph.</p>

Start tag:
<p>

Element content:
This is a paragraph.

End tag:
</p>
Web Pages

HTML Documents

HTML documents describe Web pages
Contain HTML tags in plain text
HTML documents are Web pages
Recommended plain text editors: Sublime Text, Brackets, and Atom
Web Browsers

Render HTML Documents

Reads HTML documents and displays them as Web pages

Web browsers do not display HTML tags, but use them to interpret the content of the page

Recommended browsers: Firefox, Chrome, Safari, Edge
Example

Bare minimum

<!DOCTYPE html>
<html>
<head>
<meta charset="utf-8">
<title>Page Title</title>
</head>
<body>

</body>
</html>
Example Explained

<!DOCTYPE html> tells browsers that they are interpreting an HTML document

Text between <html> and </html> describes the Web page

Text between <title> and </title> is displayed as the page title

Text between <body> and </body> is the visible page content
Web pages are usually created “locally” on a personal computer, then uploaded to a web server.

A web page is not publicly accessible until it’s published to a web server.

An FTP client is used to transfer files from a personal computer to a server.

Cyberduck, Fetch, WinSCP, Transmit, and FileZilla are good SFTP clients.

“Local” files are those on a personal computer, “remote” files are those on a web server—“live”
HTML5
New standard for HTML

First version published in 2008
An official W3C recommendation as of October 2014

• New Elements
• New Attributes
• Full CSS3 Support
• Video and Audio
• 2D/3D Graphics
• Web Applications
• Smartphone Apps