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: First World Wide Web conference held in Geneva

1994: Netscape is formed

1994: The World Wide Web Consortium is formed, w3.org
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, Atom, and Brackets.
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

```html
<!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.
SFTP
SSH (Secure) File Transfer Protocol

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
<table>
<thead>
<tr>
<th>Introduction to Web Design &amp; Computer Principles</th>
<th>HTML</th>
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<tbody>
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<td>CSCI-UA 4</td>
<td>HyperText Markup Language</td>
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