

THE WEB AND HTML

AN APPLICATION ON THE INTERNET

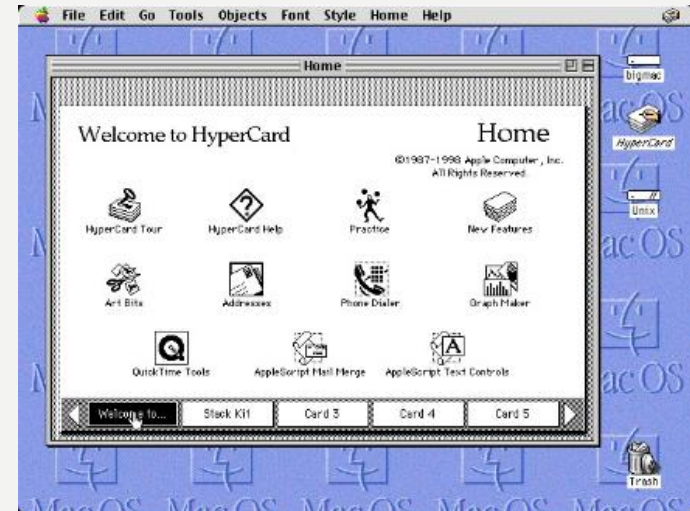
HISTORY OF THE WEB

- Tim Berners-Lee
 - Proposed "The Information Mesh" in 1989
- Web - introduced 1991
- “System of interlinked hypertext documents connected by the internet”
- Three technologies
 - Documents on the internet
 - Markup languages
 - hypertext



HYPertext

- Vannevar Bush, 1945
- Ted Nelson, 1965
- Apple's HyperCard, 1987



THE WEB ...AN APPLICATION ON THE INTERNET

Working titles: Information Mesh; the information Mine

“Web” turned into “World Wide Web”

First web page 1991

Hypertext – the killer app

.com domain names

MARC ANDREESSEN

- Created the first graphical web browser for common operating systems AND...
- It could display inline images!
- Proposed IMG tag
- Mosaic → Netscape → Mozilla → Firefox



A thick, wavy yellow line runs vertically along the left side of the image, starting from the top and extending to the bottom. It has a slightly irregular, hand-drawn appearance.

HYPertext MArkup LANGUAge

HTML

DOCUMENT TYPE DEFINITION (DTD)

The HTML5 template

- NEW requirement: lang="en"
- what is CHARSET?
 - Unicode Transformation Format.
 - The '8' means it uses 8-bit blocks to represent a character.

doctype statement: <!doctype html>

The W3C (World Wide Web Consortium)

DOCTYPE == the version of HTML
contained in your document.

Everything in the BODY tag shows up in
the browser's "viewport"

DOCTYPE

- `<!doctype html>` - this is version 5 of HTML
- Tells the web browser what type and what version of markup

Old: ``

Current: ``

- Other web related markup languages
 - xml – text based structured markup language; transmit data → internet
 - xhtml – merge between HTML and XML
 - HTML 5 – latest version (standardized in 2014)



HTML: The set of markup symbols or codes placed in a file intended for display on a Web browser page



Each markup code represents an HTML **element**

Element == Tag



Tags are enclosed in angle brackets, "<" and ">" symbols

Web browsers don't show anything inside < and >



Most elements are coded as a pair of tags: an opening tag and a closing tag.

HYPERTEXT MARKUP LANGUAGE (HTML)

HTML TAGS



Some are self-closing or stand-alone

``
`<doctype>`
`<meta ...>`
...more



Use tags based on their meaning

`<p>` means one paragraph - sentences!
`` means emphasis
`` means important



Catch-all (meaningless) tags

`<div>`
``

COMMON HTML ELEMENTS

- Hundreds of HTML elements but we only commonly use a few dozen
 - Most webpages just use about 10 or so over and over again
- Heading levels: H1 - H6...
 - Never skip levels!
 - Lower levels must be subordinate to the one above it
 - Document should have document outline
- Other common:
 - paragraph, lists (ordered, unordered, definition)
 - image tags
 - anchor tags (hypertext)
 - et cetera



THE W3C

WORLD WIDE WEB CONSORTIUM

THE W3C – WORLD WIDE WEB CONSORTIUM



took over from TBL



recommendations and prototypes for the
web browsers and web technologies



Web browser –
publishers (not
W3C)...

Apple Safari
Google Chrome
Firefox
Microsoft IE and Edge



"Bullet Proof Websites"

W3C HTML VALIDATOR

<http://validator.w3.org>

Does not check for
"logical" errors - only
syntactical

Fix TOP error first and
only, then recheck

In CSC 170: errors only
(don't bother with warnings)

Never skip errors

Never try to fix anything
but error #1