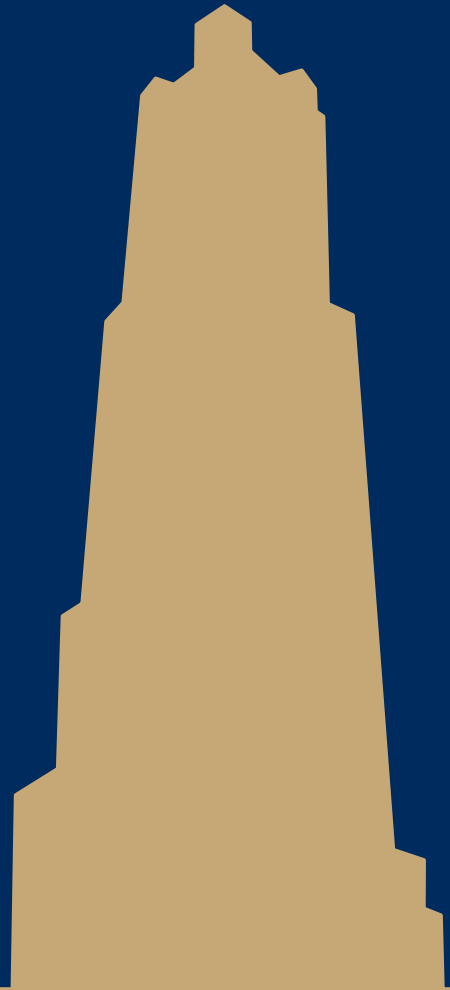# CS/COE 1520

WWW, HTML & CSS

The World Wide Web

"a part of the Internet accessed through a graphical user interface and containing documents often connected by hyperlinks —called also Web"
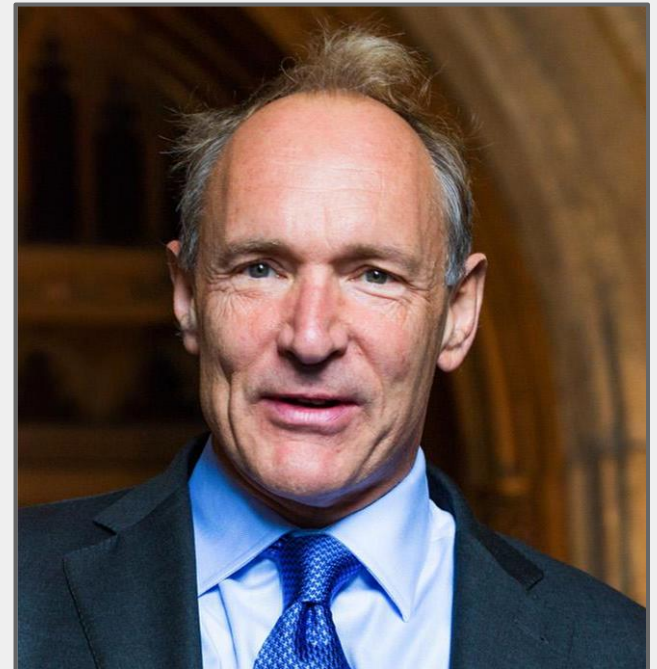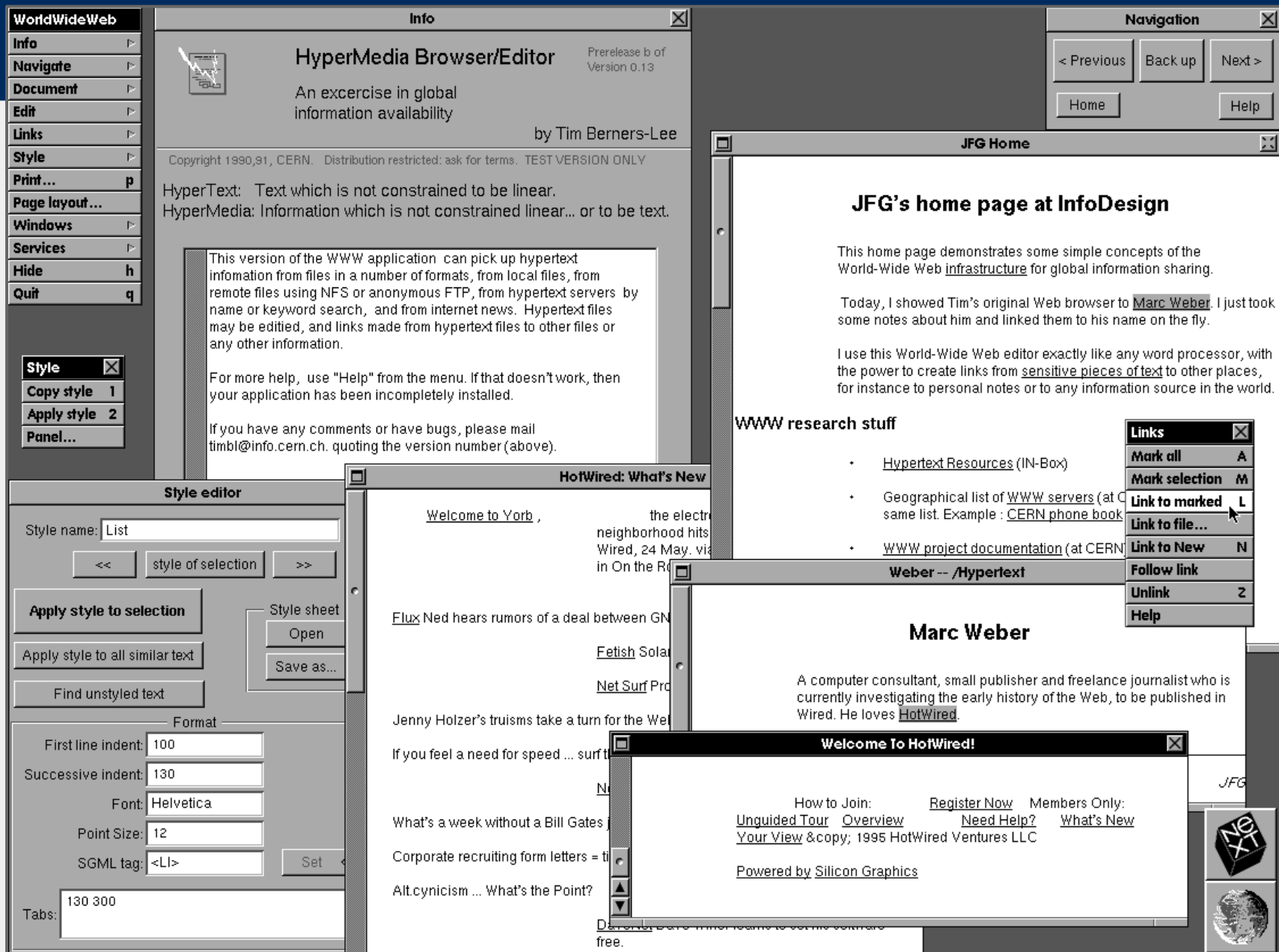
TERRIBLE DEFINITION

The World Wide Web

"The World Wide Web (WWW) is an information space where documents and other web resources are identified by URLs, interlinked by hypertext links, and can be accessed via the Internet"

History of the web

- 1945: Vannevar Bush proposed the "memex", a device for storing and linking information stored on mircofilm
- 1963: Ted Nelson coined the term "hypertext" as a text approach breaking away from traditional linear limitations
- Sir Tim Berners-Lee
  - 1980: proposed ENQUIRE as a hypertext documentation system for CERN in Switzerland
  - 1989: proposed implementing a hypermedia system on top of the Internet, inventing the Web
  - 1990: wrote the first web browser (called WorldWideWeb)

WorldWideWeb
- Info ▷
- Navigate ▷
- Document ▷
- Edit ▷
- Links ▷
- Style ▷
- Print… p
- Page layout…
- Windows ▷
- Services ▷
- Hide h
- Quit q

Info ✕

HyperMedia Browser/Editor   Prerelease b of Version 0.13

An excercise in global information availability

by Tim Berners-Lee

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HyperText: Text which is not constrained to be linear.
HyperMedia: Information which is not constrained linear… or to be text.

This version of the WWW application can pick up hypertext infomation from files in a number of formats, from local files, from remote files using NFS or anonymous FTP, from hypertext servers by name or keyword search, and from internet news. Hypertext files may be editied, and links made from hypertext files to other files or any other information.

For more help, use "Help" from the menu. If that doesn't work, then your application has been incompletely installed.

If you have any comments or have bugs, please mail timbl@info.cern.ch. quoting the version number (above).

Style ✕
- Copy style 1
- Apply style 2
- Panel…

Navigation ✕
- < Previous | Back up | Next >
- Home | Help

JFG Home ✕

JFG's home page at InfoDesign

This home page demonstrates some simple concepts of the World-Wide Web infrastructure for global information sharing.

Today, I showed Tim's original Web browser to Marc Weber. I just took some notes about him and linked them to his name on the fly.

I use this World-Wide Web editor exactly like any word processor, with the power to create links from sensitive pieces of text to other places, for instance to personal notes or to any information source in the world.

WWW research stuff

- Hypertext Resources (IN-Box)
- Geographical list of WWW servers (at ... same list. Example : CERN phone book
- WWW project documentation (at CERN

Links ✕
- Mark all A
- Mark selection M
- Link to marked L
- Link to file…
- Link to New N
- Follow link
- Unlink Z
- Help

Style editor

Style name: List

<< | style of selection | >>

Apply style to selection

Apply style to all similar text

Find unstyled text

Style sheet
- Open
- Save as…

Format
- First line indent: 100
- Successive indent: 130
- Font: Helvetica
- Point Size: 12
- SGML tag: <LI>   Set
- Tabs: 130 300

HotWired: What's New

Welcome to Yorb ,   the electr... neighborhood hits Wired, 24 May. vi... in On the R...

Flux Ned hears rumors of a deal between GN...

Fetish Sola...

Net Surf Pro...

Jenny Holzer's truisms take a turn for the We...

If you feel a need for speed … surf t...

N...

What's a week without a Bill Gates ...

Corporate recruiting form letters = ti...

Alt.cynicism … What's the Point?

...free.

Weber -- /Hypertext

Marc Weber

A computer consultant, small publisher and freelance journalist who is currently investigating the early history of the Web, to be published in Wired. He loves HotWired.

Welcome To HotWired! ✕

How to Join: Register Now   Members Only:
Unguided Tour   Overview   Need Help?   What's New
Your View © 1995 HotWired Ventures LLC

Powered by Silicon Graphics

JFG

NeXT

Hypertext

HTML

- Web documents are commonly formatted and annotated using the HyperText Markup Language

  - First references to HTML made by Sir Tim in 1991

  - First real standard proposed in 1995 with HTML 2.0

  - Current version is HTML5

- HTML documents are built out of HTML *elements*

  - Elements are delineated by *tags*

Intro to HTML

- HTML5 documents have the following basic shell:

```
<!DOCTYPE html>
<html>
    <head> </head>
    <body> </body>
</html>
```

HTML tag basics

- Most tags are pairs, start and end tags:
  - ○ `<p>`

    `This text would be considered a paragraph`

    `</p>`
  - ○ `<em> This text would be emphasized </em>`
- Comments have their own start and end tags:
  - ○ `<!-- This is an HTML comment -->`
  - ○ `<!--`

    `Multiline comment`

    `-->`
- There are also self closing tags
  - ○ `<br /> <!-- The br tag inputs a line break -->`
- Tags also have attributes
  - ○ `<a href="http://example.com">click here!</a>`

id and class attributes

- `id` allows you target a specific instance of an element
  - ```
    <!-- ids should be unique on a page -->
    <span id="A"></span>
    <span id="B"></span>
    <span id="B"></span>
    ```

- `class` allows you target a group of elements
  - ```
    <!-- classes can repeat -->
    <span id="A" class="custom"></span>
    <span id="B" class="custom"></span>
    <div class="custom"></div>
    ```

Modern use of HTML

- HTML is used to present the *structure* of a document
  - What/where text should be displayed
  - Where images should be placed
- It is often used in conjunction with Cascading Style Sheets (CSS), which describe the *presentation* of the document
  - Colors, fonts, etc.

- Italics example:
  - `<span class="italics">this will be italicized</span>`
  - `span.italics {font-style: italic;}`

- ... Emphasis tag (`<em></em>`) normally displays in italics
  - Difference?

Italicized emphasis isn't the only default style

- Browsers have default stylings for many elements that can be overridden

CSS Selectors

- CSS target examples:
  - HTML elements
    - ```
      span {
          color: red;
      }
      ```
  - Specific ids
    - ```
      #unique {
          color: blue;
      }
      ```
  - Specific classes
    - ```
      .custom {
          color: green;
      }
      ```
  - Combinations
    - ```
      span#unique {
          color: yellow;
      }
      ```

Codes Examples

- HTML + CCS code example