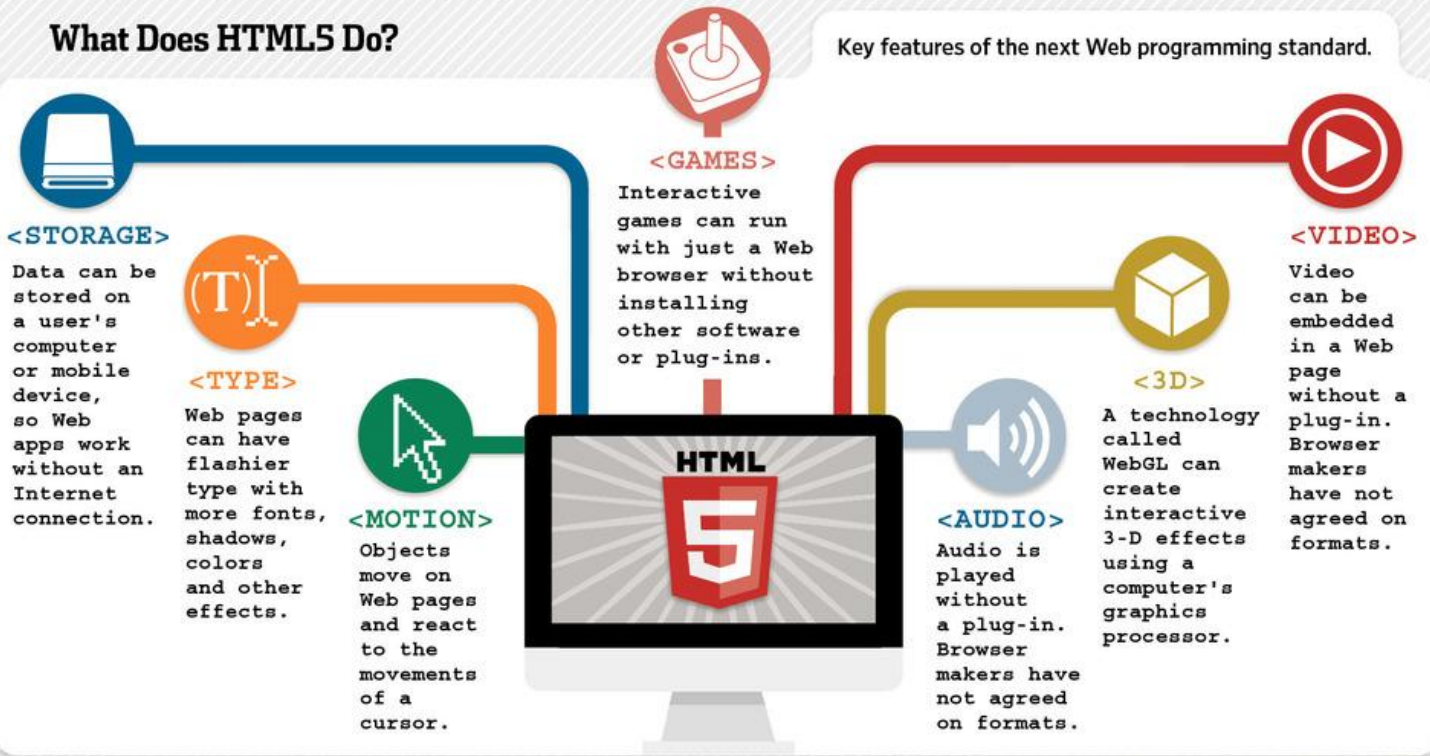


HTML/CSS Essentials

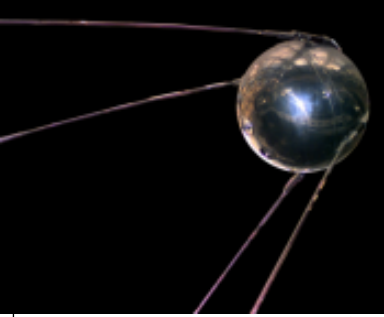
What Does HTML5 Do?



Day Three
Ed Crowley

Today's Topics

- Web History
- HTML Beginnings
- CSS Selectors Lab (Today's Work)
- Exam Prep (*Time Permitting*)



Sputnik 1957

- Led to the creation of Advanced Research Projects Agency(1958)
 - ARPA researched and developed advanced ideas and technology.
 - Later, name changed to DARPA. Still later, name changed back to ARPA.
 - And later still, name changed back to DARPA
- Man-Computer Symbiosis articulated idea of networked computers providing advanced information storage and retrieval. (1960)

<http://groups.csail.mit.edu/medg/people/psz/Licklider.html>

- Plan for ARPANET. (1967)
 - Four nodes up and running. (1969)
- Core problem “How to connect separate heterogeneous physical networks without tying up network resources for constant links.
- Solution: packet switching.



*Remember Vint from
your Reimagining the
Internet Assignment?*

TCP/IP

- Problem: Proliferation of separate, incompatible, packet switching network protocols.
- Solution : TCP/IP.
 - Bob Kahn and Vint Cerf
- TCP/IP reduced the role of the network and moved the responsibility of maintaining transmission integrity to the host computer. (decentralization)
- 1974, TCP/IP draft.
- 1977, successful TCP/IP demo.
 - TCP/IP demonstrates hardware independence.
- 1982, Internet arrives.

1. Does this gopher menu look correct?
2. Getting started with gopher, software, more/
3. Using web browsers in Gopherspace.
4. Search Gopherspace with Veronica-Z and VISHNU/
5. All the gopher servers (that we know of)/
6. New Gopher servers since 1999/
7. Weather forecasts via Floodgap Groundhog/
8. News and headline feeds via Flood Feeds/
9. The Bucktooth gopher server/
10. Fun and games (and the Figlet Gateway)/
11. "/usr/bin/tail" our gopher server log.
12. RIP, Master gopher at University of Minnesota.
13. (mail)

Gopher and Intellectual Prop

- Early '90s, Gopher, from University of Minnesota, provided an Internet navigation method.
 - 1993, U Minn announced that it was going to charge for Gopher.
- As one alternative, Tim Berners-Lee, at CERN, created the first World Wide Web Server utilizing Hypertext.
- 1993, CERN releases World Wide Web Server source code as public domain.
- National Center for Supercomputing Applications (NCSA), at U of I, released a combined web browser and Gopher client called Mosaic. (Unix based.)
- Later in 1993, NCSA released software with installers for Macintosh and Windows. (O/S independence)



Browser Wars – A Problem

- Jim Clark recruited Mark Andressen from NCSA to start Mosaic Communications.
 - Spyglass, commercial arm of NCSA, licensed Mosaic technology to Microsoft.
 - Became basis for IE 1.0
- Both Microsoft and Netscape focused on implementing new features rather than on fixing existing problems.
- Both added proprietary features and created features in direct competition with existing features in the other browser but implemented in an incompatible way.

HTML5

CSS3

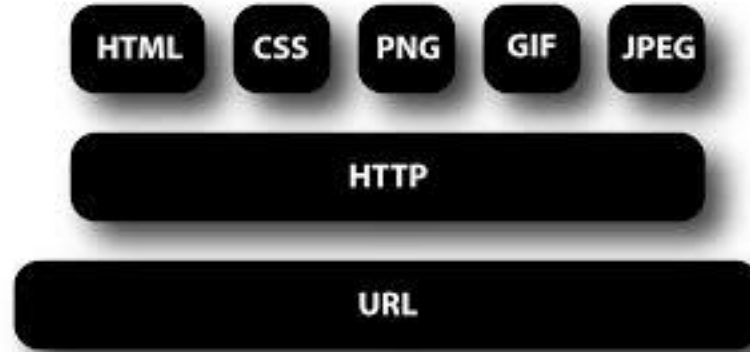
JavaScript

Web Standards – A Solution

- During browser wars, developers had to deal with ever increasing levels of confusion.
 - Sometimes, had to build the same website twice.
 - JavaScript code needed to identify browser.
- 1994, Tim Berners-Lee founded the World Wide Web Consortium (W3C) at MIT.
 - Support from CERN, DARPA, and the European Commission.
- Vision was to standardize protocols and technologies used to build the web such that content would be available to as wide a population as possible.

W3C Specifications (Recommendations)

- HTML
- CSS
- PNG



Other Standards and Standard Bodies

- JavaScript (ECMA)
- SQL (ANSI)
- PHP (PHP Group)



Web Standards Project

- W3C did not have power to enforce recommendations
- Web Standards Project (WaSP) (1998) a grassroots coalition fighting for standards which ensure simple affordable access to web technologies for all.

The Web Standards Project campaigned for standards that reduced the cost and complexity of development while increasing the accessibility and long-term viability of any document published on the Web.

<http://www.webstandards.org/>

Rise of Web Standards

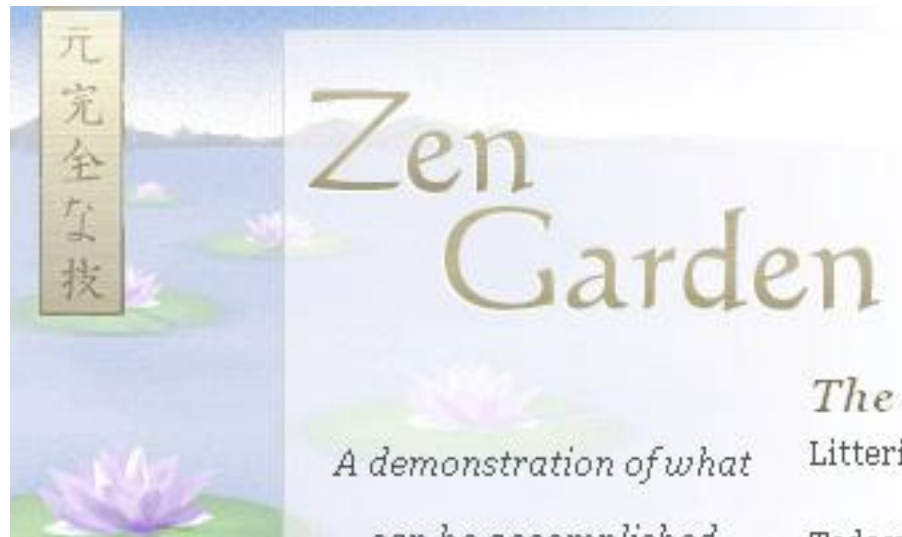
- 2000, IE 5 Mac Edition. Had reasonable level of W3Recommendation support.

Two Important Sites

- A List Apart
- CSS Zen Garden



<http://alistapart.com/>



<http://www.csszengarden.com/>

Web Standards New Breed

- Many web sites becoming more like desktop applications than static pages. (2003)
- HTML 4 and XML off into the weeds.
 - Elegant solution to wrong problem.
- The Web Hypertext Application Technology Working Group (WHATWG) wrote a breakaway spec with the aim of writing a better HTML markup spec that could handle authoring the new breed of web applications without breaking backwards compatibility. (2004)
- Produced Web Applications 1.0 Specification
 - Later became HTML 5

<https://whatwg.org/>



HTML 5

- Better suited to writing dynamic applications than previous HTML versions.
- Mostly backwards compatible
- Added new features that were previously only available using plugins like Flash...
- Clearly defined parsing algorithm so that all browsers implementing HTML5 will create the same DOM from the same markup...



*Work on CSS3 began in 2000.
Utilizes modular structure.
Currently, over 40 modules in
various stages of completion.*

HTML Basics

- Hypertext Markup Language is a language to describe the contents of web documents.
- It uses a special syntax containing markers, called elements, which are wrapped around the text within the document to indicate how user agents (eg. Web browsers) should interpret that portions of the document.
- A user agent is any software that is used to access web pages on behalf of users.

HTML Looks Like

- HTML is a plain text representation of content and its general meaning. For example:

```
<p> This is a paragraph. </p>
```

- `<p>` represents an opening tag
- In your browser's 'view source' command you can view the mark up of any website.

References

```
w3.org/community/webed/wiki/Main_Page
```

```
w3.org/community/webed/wiki/The_basics  
of_HTML
```

Assignment

CSS Selectors in Action

Selectutorial CSS selectors

Home

Listamatic

Listamatic2

Listutorial

Floatutorial

Selectutorial

Selectutorial - CSS selectors

Selectors are one of the most important aspects of CSS as they are used to "select" elements on an HTML page so that they can be styled.

Find out more about selectors including the structure of rules, the document tree, types of selectors and their uses. There is also a step-by-step tutorial showing how selectors are used in the process of building a 3-column layout.

Max Design

- » [Home](#)
- » [About](#)
- » [Articles](#)
- » [Book](#)
- » [Contact](#)
- » [Workshops](#)

Feeds

<http://css.maxdesign.com.au/selectutorial/>

CSS Selectors in Action

Before you begin, you should be familiar with the logical design of the page that this tutorial creates.

You should also have completed Codecademy and W3Schools tutorials for HTML and CSS.

You should expect to have to do some trial and error to get everything working right. It is not likely that everything you attempt to do will work the first time that you try.

It
may
seem
difficult
at
first,
but
everything
is
difficult
at
first

- Miyamoto Musashi



We will follow the tutorial in our own way. We will:

- Employ an external rather than an internal style sheet.
- Copy the Lorem Ipsum text manually.
- Keep the CSS and the graphic files in separate directories.
- Adjust the links to reflect the new file placement

Class Demonstration

In class, we will demonstrate as much as the *Selectors in Action* Tutorial as time permits...

Questions?

Selected Links

Mozilla: Learning the Web: CSS

<https://developer.mozilla.org/en-US/Learn/CSS>