HTML5 AND CSS3

What you should be using now

COMPELLING EXAMPLES
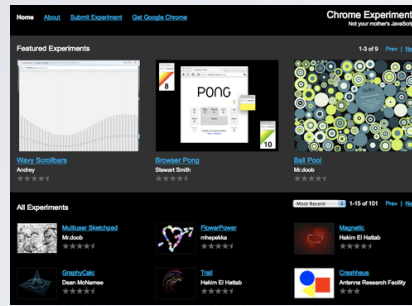

http://www.apple.com/html5

http://igrapher.com/

COMPELLING EXAMPLES

http://20thingsilearned.com/   http://agent8ball.com/
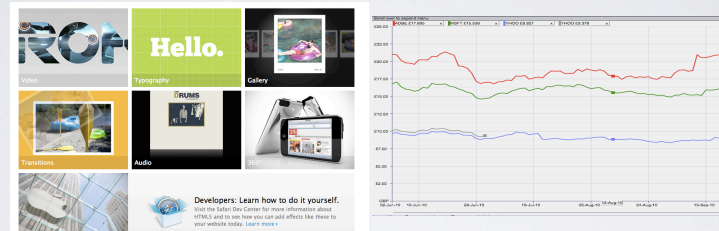
COMPELLING EXAMPLES

http://
www.chromeexperiments.com/

http://studio.html5rocks.com/

KEEP INFORMED

Sites that are commenting on the specs and tracking implementation of html5 and css3 features:

- http://caniuse.com
  shows tables of a variety of current and upcoming web technologies. For all major browsers (Internet Explorer, Firefox, Safari, Opera and Chrome), versions for four different eras (past, present, near and far future).
- http://en.wikipedia.org/wiki/Comparison_of_layout_engines_ (HTML5) not always up to date
- http://fmbip.com/litmus/#-selector
  browser support revealed
- http://samples.msdn.microsoft.com/ietestcenter/
  Internet Explorer Testing Center
- http://www.zeldman.com/superfriends/guide/

KEEP INFORMED

Sites that are tracking browser usage

- http://en.wikipedia.org/wiki/Usage_share_of_web_browsers

- http://marketshare.hitslink.com/browser-market-share.aspx?qprid=2

- http://www.w3schools.com/browsers/browsers_stats.asp

BROWSER FALLBACKS

MODERNIZR

With **Modernizr** you can detect the browser's support for a slew of modern CSS and html5 features and offer a fallback solution when not supported.

- Requires JavaScript
- Check in older browsers with JavaScript off to ensure your content is still usable.
- http://www.modernizr.com/

html5shim
HTML5 IE enabling script - IE to recognize and style the HTML5 elements

- http://code.google.com/p/html5shim/

BROWSER FALLBACKS

IE Conditional Comments

Conditional comments only work in Explorer on Windows, and are thus excellently suited to give special instructions meant only for Explorer on Windows. They are supported from Explorer 5 onwards, and it is even possible to distinguish between 5.0, 5.5 and 6.0.

Conditional comments work as follows:

```
<!--[if lt IE 7]>
<link href="_css/ie-fix.css" rel="stylesheet" type="text/css">
<![endif]-->

[if IE 8] [if gte IE 7] [if lt IE 9] [if lte IE 7]
```

How to:
http://www.quirksmode.org/css/condcom.html

BROWSER TESTING

Virtual Browser - Cloud
http://www.spoon.net/browsers/

PC only. Run popular browsers versions with no install. Microsoft IE now off, but may return.

Virtualbox

Free virtualization software to run on PC or Mac and have multiple versions of operating systems, browsers, etc. on your machine.
http://www.virtualbox.org/wiki/Downloads

Adobe Labs

Get screenshots of your page as seen in other browsers. Dreamweaver CS5 interface. Currently free with Adobe CS Live.

Microsoft Download Virtual Browsers

http://www.microsoft.com/downloads/en/details.aspx?FamilyID=21eabb90-958f-4b64-b5f1-73d0a413c8ef&displaylang=en

IMAGES - WHAT TO USE NOW

PNG & alpha transparency

Fireworks export options 8 bit and 32 bit PNG:

- png-8 alpha transparency, with levels of transparency. May show banding.
- png-8 index transparency is a 1 bit level of transparency, on or off, like a GIF, and 256 colors, like a GIF.
- Fireworks' png-32 option with levels of transparency (Photoshop calls the 32 bit "png-24").

  Millions of color and 254 levels of partial transparency.
  Truecolor and alpha is 8 bit x 3 color (rgb) channels + 8 bit apha.
- Fireworks' png-24 option has no levels of transparency, or alpha.

PNG color options[7]						
Bits per pixel		**Bits per channel**				
Color option	**Channels**	1	2	4	8	16
Indexed	1	1	2	4	8	
Grayscale	1	1	2	4	8	16
Grayscale & alpha	2				16	32
Truecolor	3				24	48
Truecolor & alpha	4				32	64

IMAGES - WHAT TO USE NOW

Browser Support for PNG & alpha transparency

• For Fireworks' png-32 or Photoshop "png-24" IE6 will show gray instead of transparency.

• png-8 alpha transparency, with levels of transparency. IE6 ignores the semi-transparent pixels as if they are not there. May show banding.

• Great explanation for getting transparency with png-8 (compatible in older IE browsers) from Fireworks:
 http://blogs.sitepoint.com/2007/09/18/png8-the-clear-winner/

• Use GIF with 1 bit level of transparency, on or off and 256 colors for IE6 and below.

• Use IE conditional to feed alternate image to older IE browsers

| 3.1+ | 3.2+ | 4.0+ | 2.2 | 9.6+ | 3.5+ | IE 7+ |

work arounds

IE6 and lower: fix for transparency in png-24 (Fireworks png-32)
 http://dillerdesign.com/experiment/DD_belatedPNG/

CSS2.1 - WHAT TO USE NOW
FINALLY!

- `@font-face`

- CSS 2.1 selectors, pseudo-class and pseudo-elements:

  `:first-child, :first-letter, :first-line,` attribute, sibling, child

CSS2.1 - @FONT-FACE

http://www.fontsquirrel.com/fontface
to download the @ font-face kit, including css and multiple types

http://webfonts.info/
website dedicated to webfonts & @font-face embedding

http://www.useragentman.com/blog/2009/09/20/font-face-in-depth/
great tutorial

work arounds

4+   4.2+   4+   3.5   5.5+   10.0+   IE8 and lower: only supporting EOT fonts. Use kits from
fontsquirrel.com with multiple font formats.

CSS2.1 - @FONT-FACE

@font-face {

font-family: 'MidoMedium';
  /*for IE, goes first*/
src: url('../_assets/Mido-webfont.eot');
  /*check if exact font on users system, smiley is the hack*/
src: local('☺'),
  /*deliver other formats for browsers from server*/
    url('../_assets/Mido-webfont.woff') format('woff'),
    url('../_assets/Mido-webfont.ttf') format('truetype'),
    url('../_assets/Mido-webfont.svg#webfontdeSVIj0D') format
('svg');
  /*specify style and weight -optional*/
font-weight: normal;
font-style: normal;
}

CSS2.1 - @FONT-FACE

- Always provide a font-family declaration to include browser safe fonts along with your @font-face font

```
#masthead h2 {
font-family: ChunkFiveRegular,"Arial Black",
Arial, serif;}
```

- Check for overall design consistency in selecting the fall back fonts at http://www.typetester.org/

    - Remember that the font-size, font-style, font-weight, font-variant, letter-spacing, word-spacing, line-height and text-transform will remain the same regardless of the fall back font presented in the browser, so set these first on your chosen font and copy to 2 and 3. Get css code under tools.

CSS 2.1 SELECTORS

Child selector	`h1 > strong` {font-style: italic; color: #000;}	Only children, not grandchildren
Adjacent sibling selector	`h1 + p`	Only siblings, not children
Attribute selectors	`input [type = "radio"]` {float: none;}	Only radio type input elements will not float left next to the label.
The :first-child pseudo-class	`li:first-child` {border-left: none;}	Only first li will not have a left border.

The link pseudo-classes	`a:link`
	`a:visited`
	`a:hover`
	`a:active`
	`a:focus`
		LoVeHAte order rule.
		Always have a link focus state to indicate location to keyboard users. Be careful of "Resets" which turn outline off.
		Do not rely on color alone to indicate link.

The :language pseudo-class	`p:lang(es)`	

CSS 2.1 SELECTORS

The **:first-line** pseudo-element	`p:first-line { font-weight: bold; font-size: 1.2em;}`	The first line of paragraph of the feature is different.
The **:first-letter** pseudo-element	`p:first-letter { font: bold 3em Georgia, "Times New Roman", Times, serif; color: #990000; float:left; text-shadow: 3px 3px 5px #999; margin:0; margin-right: 5px; vertical-align: text-top; position: relative; top: -5px;}`	The first letter is a drop cap.

The **:before** and **:after** pseudo-elements. Used to insert generated content before or after an element's content.	`.email-address:before {`
	
	`    content: "Email address: ";`
	`}`
		The text "Email address" will be inserted before each link with class of email-address.

CSS 2.1 SELECTORS

Internet Explorer 6 and below do not support:

- Child selectors
- Adjacent sibling selectors
- Attribute selectors
- Multiple class selectors
- The :first-child pseudo-class
- The language pseudo-class
- The :before and :after pseudo-elements
- The :hover pseudo-class only works on a elements
- The :focus pseudo-class isn't supported. For a elements that have focus, the :active pseudo-class is applied.

Use these selectors for styling when you don't mind in older IE6 and below not having the styling.

work arounds

3.1+   3.2+   4+   2.2+   2+   7+   9.6+   IE6 and lower: use additional classes, IE Conditional statements, graceful degradation. Go to http://www.quirksmode.org/css/contents.html for details on each selector compatibility.

CSS3 -WHAT IS IT?

CSS level 3 has been under development since December 15, 2005

- lots of improvements that will make it easier to design without resorting to images for typographic control, drop shadows, etc.

- implementing as modules rather than one full spec

- much is still in working draft status, so subject to change

- http://www.w3.org/Style/CSS/

- Webkit (Safari), Gecko (Mozilla, Firefox) and Opera have already released proprietary styles to advance the new properties use, but provide stable implementation of properties that may change

  - -webkit

  - -moz

  - -o

CSS3 - WHAT TO USE NOW

- Background Gradients

- Border radius (rounded corners and borders)

- Text Shadow

- Box shadow

- Opacity

- Color with alpha, including HSL color mode

- Multiple columns

- Media queries

- Selectors

CSS3 - BACKGROUND GRADIENTS

Set a gradient with multiple stops, vertical or horizontal.

```
background: -moz-linear-gradient(0% 75%
90deg,#70010C, #C90007);
background: -webkit-gradient(linear, 0% 0%, 0% 100%,
from(#c90007), to(#70010C))
```
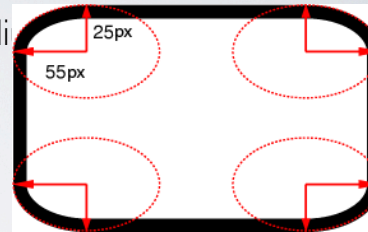
work arounds

4.0+   3.2+   6.0+   2.2   **11**   3.6+   **IE 9?**   treat as progressive enhancement

CSS3 - BORDER RADIUS

Specifies one or more corner radi...


```
.box1 {
    padding: 20px;
    border: 3px solid #000;
    background-color: #fff;

    border-radius: 55px 25px;
   -moz-border-radius: 55px 25px;
   -webkit-border-radius: 55px 25px;
   -o-border-radius: 55px 25px;
    }
```

http://css3generator.com/

| 3.2+ | 5.0 | 3.2+ | 6.0+ | 2.2 | 10.5 | 3.0+ | 4.0 | IE 9 |

work arounds

treat as progressive enhancement

CSS3 - TEXT SHADOW

Specifies one or more shadow on text, indicate horizontal and vertical length, blur radius and color of shadow.

```
.title {
  text-shadow: 2px 2px 2px #666;
}
```

http://westciv.com/tools/text-properties/

work arounds

3.2+   3.2+   5+   2.2+   3.5+   9?   9.6+   treat as progressive enhancement

CSS3 - BOX SHADOW

Specifies a shadow on an element, value can be positive for
a right shadow or negative for an effect to the left. Designate horizontal
and vertical length, blur radius and shadow color. Reflects border-radius
if in use.

```
div {
   box-shadow:10px 10px 20px #000000;
   box-shadow:-10px 10px 20px #000000;
   }
```

http://css3generator.com/

| 3.1+ | 3.2+ | 5.0+ | 2.2 | 10.5+ | 3.5+ | 4.0 | IE 9 |

work arounds

treat as progressive enhancement or IE Drop
shadow filter: http://msdn.microsoft.com/en-us/
library/ms532985%28VS.85%29.aspx

CSS3 - OPACITY

Applies an alpha transparency value of 0 to 1 (no transparency) to the element and its descendants (so contained text becomes transparent also).

```
img { opacity: 0.6; }
img:hover { opacity: 1; }
```

http://css3please.com/

work arounds

3.1+   3.2+   5+   2.2+   2+   **9**   9.6+   use IE property: `filter:alpha(opacity=x);`

CSS3 - COLOR WITH ALPHA

Set color as rgb, hsl with alpha transparency (rgba, hsla).

```
background-color:
 rgba(180, 180, 144, 0.6);}
```

http://css3please.com/

work arounds

3.1+ 3.2+ 5+ 2.2+ 3.0+ **9** 10.1+   use IE property: `filter:`
`    progid:DXImageTransform.Microsoft.gradient`
`  (startColorStr='`**#99B4B490**`#99B4B490',`
`   EndColorStr='`**#99B4B490**`#99B4B490');`

CSS3 - MULTIPLE COLUMNS

Method of flowing information in multiple columns

```
div#multicolumn1 {

    -moz-column-count: 3;
    -moz-column-gap: 20px;
    -webkit-column-count: 3;
    -webkit-column-gap: 20px;
    column-count: 3;
    column-gap: 20px;
}
```
http://css3generator.com
http://www.westciv.com/tools/box-properties/

3.1+   3.2+   5.0+   2.2   11   2.0+   IE 9?

work arounds

treat as progressive enhancement

CSS3 - MEDIA QUERIES

Method of applying styles based on media information. Includes things like page and device dimensions

```
@media (min-width:950px) {
.photo {
    width:100%;
    text-align:center;
}
}
```

http://ie.microsoft.com/testdrive/HTML5/CSS3MediaQueries/

| | | | | | | | | work arounds |
| 4.0+ | 3.2+ | 5+ | 2.2+ | 3.5+ | **9** | 9.6+ | | Treat as progressive enhancement |

CSS3 - SELECTORS

```
:nth-child()
:nth-last-child()
:nth-of-type()
:nth-last-of-type()
:first-child
:last-child
:first-of-type
:last-of-type
:only-child
:only-of-type
:not
```

```
:target
::selection
Advanced [attr]
selectors
```

implementation is mixed on browsers: see details

http://www.quirksmode.org/css/contents.html

CSS3 - SELECTORS

:nth-child(), first-of-type, etc. support allowing you to style odd or even rows or even every 3rd, 4th, 5th or user defined number of	`tr:nth-child(odd) td` `{ color: #86B486;}`	Very simple to select odd rows

Advanced [attr] selectors
CS2.1 [attr] elector selects an attrubute that equals something. CSS3 [attr] elects an element with an attribute whose value starts with, ends with, or contains a certain string
 	
= is
*= Contains in part
$= Matches
^= Starts with
	`input[type="radio"] {`
	`  float: none;}`
	`img[src*=".png"] {`
	`  box-shadow:  2px 2px 2px`
	`#333333; }`
	
	`a [title$="new window"] {`
	`  background-image: url`
	`(images/window.gif);}`
	
	`a [href^="http"] {`
	`  background-image: url`
	`(images/external.gif);}`
		Much easier to select and stlye specific parts of your html elements without resorting to extra ids and classes.

CSS3 - SELECTORS

:target	p:target {color: red;}	Anything targeted

Selects an element that is a target; i.e. that has an ID with the same value as the URL's hash.	`<p id="item3">`
	
	`<a href="#item3">Go to item 3</a>`
		with a hash link, will turn red when jumped to.

::selection	```*::-moz-selection {```	**Anything selected will become red with white text.**

Styles text selected by the user (as in highlights)	``` background:#cc0000;```
	``` color:#fff;```
	```}```
	```*::-webkitz-selection{```
	``` background:#cc0000;```
	``` color:#fff;```
	```}```
	```*::selection{```
	``` background:#cc0000;```
	``` color:#fff;```
	```}```
		Limited implementation and with proprietary properties. Browsers not getting it, will default to normal selection.

CSS3 - TOOLS

- http://www.colorzilla.com/gradient-editor/

- http://westciv.com/tools/text-properties/ many properties here

- http://css3generator.com/ many properties here

- http://css3please.com/ change code values to see effects for several properties

- http://border-radius.com/ More flexible since it allows percentage and pixel length. (Note: change output code to add the standard without prefix as last in list of properties.)

- http://www.css3maker.com/

- http://border-image.com/

- http://css-tricks.com/examples/ButtonMaker/#

- http://dryicons.com/blog/2010/07/15/css3-gradient-button-generator/

CSS3 - FAR FUTURE

- Reflections (Unofficial/Note)

4.0+	3.2+	5.0+	2.2	11?	4.0	9?

- Animation (Working Draft)

4.0+	3.2+	5.0+	2.2	11?	4.0?	9?

- CSS Mask (Unofficial/Note)

4.0+	3.2+	5.0+	2.2	11?	4.0?	9?

CSS3 - FAR FUTURE

- Multiple backgrounds (Candidate Recommendation)

 work arounds

| 3.1+ | 3.2+ | 5.0+ | 2.2 | 10.5+ | 3.6+ | 9 |

- Transition (i.e. timed change - Working Draft)

 work arounds

| 3.2+ | 3.2+ | 5.0+ | 2.2 | 10.5+ | 4.0 | IE 9? |

- Transform (i.e. scaling or rotating - Working Draft)

 work arounds

| 3.2+ | 3.2+ | 6.0+ | 2.2 | 10.5+ | 3.5+ | 9 |

CSS3 - FAR FUTURE

- 3D Transformations

5.0+   3.2+   10   2.2   11?   4.0?   9?

CSS3 - TRANSITION

transition-property
Which CSS property to animate, e.g. background-color.

- **transition-duration**
The duration of the transition, specified in seconds, e.g. 2s
- **transition-delay**
Delay before the transition should start, specified in seconds, e.g. 1s
- **transition-timing-function**
The function you want to use for the appearance/easing of the transition. Five predefined values are offered:
  - ease (the default value),
  - linear,
  - ease-in,
  - ease-out and
  - ease-in-out

http://www.webdesignerdepot.com/2010/01/css-transitions-101/
http://robertnyman.com/2010/04/27/using-css3-transitions-to-create-rich-effects/

CSS3 - TRANSITION

```
  div:hover {
   -moz-box-shadow: 10px 20px 10px rgba(0,0,75,0.4);
   -webkit-box-shadow: 10px 20px 10px rgba
(0,0,75,0.4);}

div {
   width: 300px;
   height: 300px;
   background-color: #F96;
   -webkit-transition: -webkit-box-shadow 1s linear;
   -moz-transition:   -moz-box-shadow 1s linear;
}
```

CSS3 - TRANSFORM

Allows for transformation to be applied to elements, such as scaling or rotating.
It is possible to apply one or many transforms to a single element.

• effects such as rotating text or images at an angle, and

• can be combined with transitions to apply interactive effects such as scaling up elements when the users interacts with them.

• Opera showcase
http://devfiles.myopera.com/articles/1041/image-gallery.html

• Technique
http://dev.opera.com/articles/view/css3-transitions-and-2d-transforms/#transforms

CSS3 - TRANSFORM

```
@-webkit-keyframes pulse {
        0% {
            opacity: .8;}
        50% {
            -webkit-transform: rotate(-180deg) scale(5);
            opacity: .5;
            background: red;}
        100% {
            -webkit-transform: rotate(-360deg) scale(2.5);
            opacity: 1;}
}

.pulse_div {
-webkit-animation: pulse 4s alternate 2;

 width: 300px;
 height: 100px;
 background: green;
 position: relative;
 margin: 400px auto 0;
 line-height: 100px;
 text-align: center;
 font-family: arial;
}
```

CSS3 - TRANSFORM

Move:
Set point of origin on the element, X and Y coordinates

```
-o-transform-origin: 3em bottom;
```

Move the element from its original position in the document to the new location specified by the X and Y
co-ordinates supplied

```
-o-transform: translate(50px, 100px);
```

Scale

```
-o-transform: scale(2.5);
-o-transform-origin: left top;
```

Skew

```
-o-transform: skew(10deg, 20deg);
```

Rotate

```
-o-transform: rotate(30deg);
```

Excellent tool to play with transformations (you must add the proprietary
prefixes)
http://westciv.com/tools/transforms/

HTML5

What is html5?

- Next evolution of HTML, replacing html 4.1

- W3C Working Document still subject to change (Candidate Recommendation in 2012, long timeline to final, but that doesn't mean wait)

- Expand html language to satisfy the needs of Web development in a Web 2.0 world when web pages are now applications

- WHATWG (Web Hypertext Application Technology Working Group

HTML5

Who is using it?

- YouTube for mobile video

- http://www.facebook.com/note.php?note_id=438532093919

- WordPress

- iPad ready sites - from CNN to the White House and Flickr

- http://www.beautyoftheweb.com/

- http://html5gallery.com/

HTML5 AND MOBILE

In the last year alone, mobile internet consumption grew by 110 percent in the U.S.

80 - 97 million mobile Internet users today

mobile web usage is the highest in Apple iOS and Android handsets

- no finalized HTML5 standard, but a lot of web browsers, and even mobile web browsers, have now some HTML5 capabilities.

- HTML5 will take us miles forward and diminish the difference between the desktop and the mobile environment.

- developing native apps for an ever-growing list of mobile devices and OS is nearing impossible. There needs to be a simpler way, and HTML5 is it.

HTML5

Adobe / Dreamweaver Support

- Install Dreamweaver updater or extension to add html5 elements to code hints

- CS3 and CS4 HTML5 extension for Dreamweaver
  http://www.adobe.com/cfusion/exchange/index.cfm?event=extensionDetail&loc=en_us&extid=2188522

- CS5 Updater:
  http://www.adobe.com/support/dreamweaver/downloads_updaters.html

HTML5

Adobe / Dreamweaver Support

- Code hinting
- New page - html5 - with proper DOCTYPE and charset
- New page template - html5 structure

HTML5

Adobe / Dreamweaver Support

- Many video tutorials, help info, tools

- HTML5 and CSS3 in Dreamweaver CS5
  http://www.adobe.com/devnet/dreamweaver/articles/dw_html5_pt1.html
  http://www.adobe.com/devnet/dreamweaver/articles/dw_html5_pt2.html
  http://www.adobe.com/devnet/dreamweaver/articles/dw_html5_pt3.html
  & Exercise files

HTML5 - CONTENT MODEL
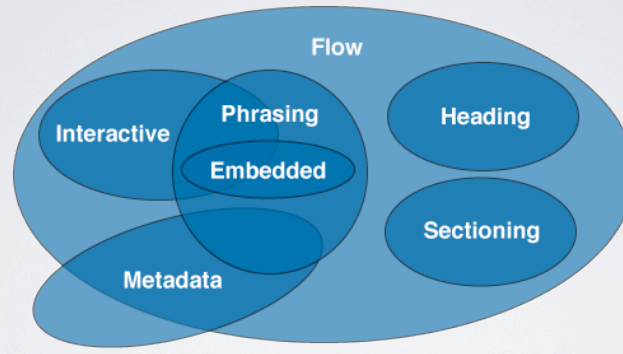
HTML5 - CONTENT MODEL

Metadata: `head` tag elements

Embedded: `video, audio, iframe, etc.`

Interactive: `a, video, button, input, etc.`
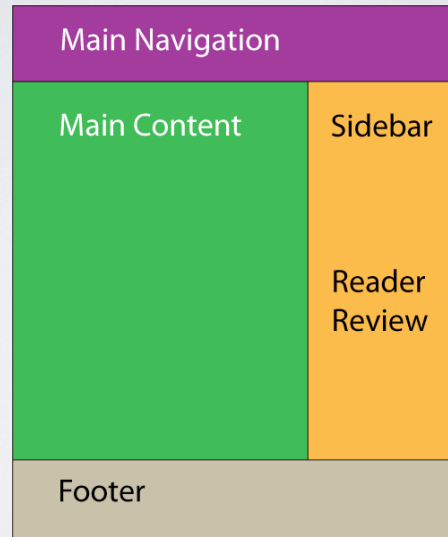
Heading: `h1-h6, hgroup`

Phrasing: the text and markup used for text
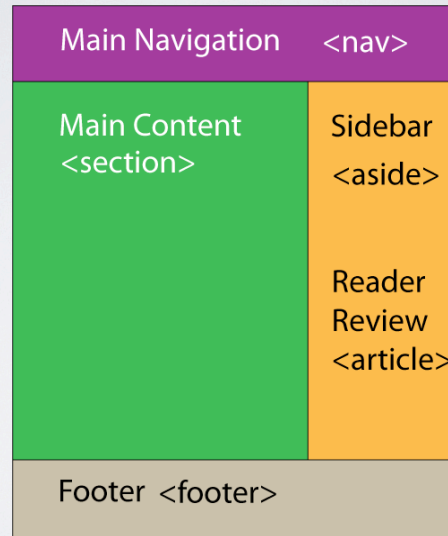
Flow: pretty much everything in the body tag

Sectioning: `article, aside, section, nav, etc.`

HTML5 - COMPARE

Main Navigation	
Main Content	Sidebar
	Reader Review
Footer	

HTML5 - COMPARE

Main Navigation	<nav>
Main Content **<section>**	**Sidebar** **<aside>** **Reader** **Review** **<article>**
Footer <footer>	

HTML5 - WHAT TO USE NOW

Check Structure elements to Outline Algorithm

test for outline structure:

http://gsnedders.html5.org/outliner/ (pages on the Web, local version broken always)
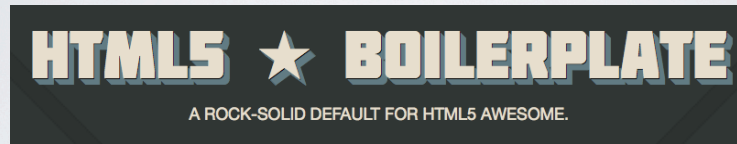
http://code.google.com/p/h5o/

• Chrome extension (pages on the Web),

• bookmarklet (for Firefox, etc. works with local files)

Web version of our exercise file (slightly different):
http://www.explorecalifornia.org/html5/trails.htm

HTML5 - STARTERS

Starting boilerplate full of detailed tips for using html5 safely across browsers

http://html5boilerplate.com/

HTML5 - WHAT TO USE NOW

Structure elements

- `<section>` — a chunk of related content

- `<header>` — a container element for a sectioning element's introductory and navigational content. This "typically contains the section's heading (an <h1>-<h6>element or an <hgroup> element)"

- `<article>` — an independent, self-contained chunk of related content, that still *makes sense on it's own* (e.g. in an RSS feed)

- `<aside>` — a chunk of content that is tangentially related to the content that surrounds it, but isn't essential for understanding that content

- `<nav>` — a major navigation block (generally site or page navigation)

- `<div>` — a chunk of content *with no additional semantics*, e.g. for CSS styling hooks

- `<figure>` — for content that is essential to understanding, but can be moved to a different place without affecting the document's meaning.

- `<footer>` — a container element for additional information about a section, such as"who wrote it, links to related documents, copyright data", a link to the top of the page etc, that usually appears at the end of a section.

http://oli.jp/2009/html5-structure1/

HTML5 - WHAT TO USE NOW

mapping of HTML5 structural elements to id and class names for use with <div>s"

http://jontangerine.com/log/2008/03/preparing-for-html5-with-semantic-class-names

Validate at http://validator.w3.org/ or use Firefox Tool

Define new elements display: block for browsers that are not recognizing:

```
article,aside,details,figcaption,figure,
footer,header,hgroup,menu,nav,section {
    display:block;
}
```

Use JavaScript to add styling ability to elements for IE.

workarounds

4+   4.1+   5+   10.1+   4   IE 9

```
<!--[if lt IE 9]>
<script src="http://html5shim.googlecode.com/svn/trunk/html5.js"></
script>
<![endif]-->
```

HTML5 - WHAT TO USE NOW

Form input type

- good for mobile devices

- keyboard is contextual - based on type

- no issues where not supported

```
search, tel, url, email, datetime, date,
month, week, time, date, time-local,
number, range, color
```

<input type="url">

http://www.456bereastreet.com/archive/201004/html5_input_types/

4+   4.1+   5+   10.1+   4

.com and / available in iPhone keypad

HTML5 - WHAT TO USE NOW

- **\<video\>** for iPhone, iPad, iPod, Android
- Safari, Firefox, Opera
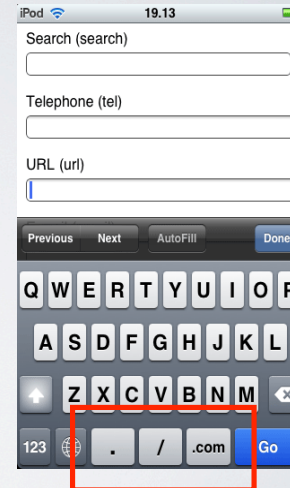
```
<video width="420" height="236" controls preload="none">

    <source src="_video/explore_promo.mp4" type="video/mp4" />

    <source src="_video/explore_promo.ogv" type="video/ogg" />

</video>
```

- Fallback to embed object for IE and other browsers
- http://diveintohtml5.org/video.html for many details on video & html5

HTML5 - WHAT TO USE NOW

Video support

To make your video watchable across all of these devices and platforms, you're going to need to encode your video more than once.

- Google supporting webM (On2) open source format
- Safari supports H.264 format
- Firefox supports Ogg Theora format
- Opera supporting Ogg, VP8 (On2) open source and possibly H.264
- Microsoft stated that IE 9 will support H.264

| 4+ | 3.2+ | 5+ | 2.2 | 10.5+ | 3.5+ | 9 |

workarounds

deliver to mobile devices in web apps
deliver multiple codec versions
http://camendesign.co.uk/code/video_for_everybody

HTML5 - WHERE TO GO NEXT

- http://diveintohtml5.org/

- http://net.tutsplus.com/tutorials/html-css-techniques/html-5-and-css-3-the-techniques-youll-soon-be-using/

- books
  - Introducing HTML5 (Voices That Matter) by Bruce Lawson
  - HTML5 Now: A Step-by-Step Video Tutorial for Getting Started Today (Voices That Matter) by Tantek Çelik

LINKS - WHERE TO GO NEXT

- http://www.patriciarees.com/html5/resources.html

- http://www.delicious.com/parees

  - look up my bookmarks tagged:

    - @font-face

    - html5

    - css3