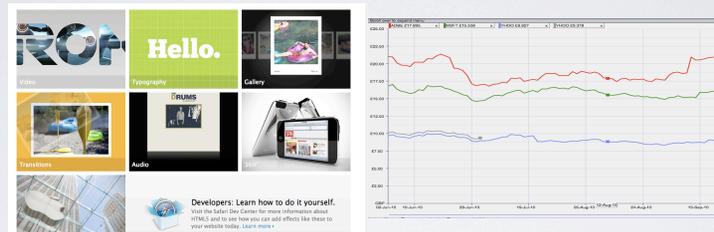




# HTML5 AND CSS3

What you should be using now

# COMPELLING EXAMPLES



<http://www.apple.com/html5/>

<http://igrapher.com/>

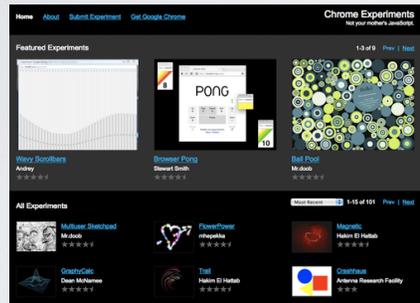
# COMPELLING EXAMPLES



<http://20thingsilearned.com/>

<http://agent8ball.com/>

# COMPELLING EXAMPLES



HTML5STUDIO

[http://  
www.chromeexperiments.com/](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\\_\(HTML5\)](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://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](http://www.w3schools.com/browsers/browsers_stats.asp)

# BROWSER FALLBACKS



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

[FamilyID=21eabb90-958f-4b64-b5f1-73d0a413c8ef&displaylang=en](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 alpha.
- Fireworks' png-24 option has no levels of transparency, or alpha.

Bits per pixel		Bits per channel				
Color option	Channels	1	2	4	8	16
<b>Indexed</b>	<b>1</b>	1	2	4	8	
<b>Grayscale</b>	<b>1</b>	1	2	4	8	16
<b>Grayscale &amp; alpha</b>	<b>2</b>				16	32
<b>Truecolor</b>	<b>3</b>				24	48
<b>Truecolor &amp; alpha</b>	<b>4</b>				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



work arounds

IE6 and lower: fix for transparency in png-24 (Fireworks png-32)  
[http://dillerdesign.com/experiment/DD\\_belatedPNG/](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



4+ 4.2+ 4+ 3.5 5.5+ 10.0+

work arounds

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#webfontdeSVlj0D') 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	<b>h1 &gt; strong</b> {font-style: italic; color: #000;}	Only children, not grandchildren
Adjacent sibling selector	<b>h1 + p</b>	Only siblings, not children
Attribute selectors	<b>input [type = "radio"]</b> {float: none;}	Only radio type input elements will not float left next to the label.
The <b>:first-child</b> pseudo-class	<b>li:first-child</b> {border-left: none;}	Only first li will not have a left border.
The <b>link pseudo-classes</b>	<b>a:link</b> <b>a:visited</b> <b>a:hover</b> <b>a:active</b> <b>a:focus</b>	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 <b>:language</b> pseudo-class	<b>p:lang(es)</b>	

# CSS 2.1 SELECTORS

The <b>:first-line</b> pseudo-element	<pre>p:first-line { font-weight: bold; font-size: 1.2em; }</pre>	The first line of paragraph of the feature is different.
The <b>:first-letter</b> pseudo-element	<pre>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; }</pre>	The first letter is a drop cap.
The <b>:before</b> and <b>:after</b> pseudo-elements. Used to insert generated content before or after an element's content.	<pre>.email-address:before { content: "Email address: "; }</pre>	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.



3.1+ 3.2+ 4+ 2.2+ 2+ 7+ 9.6+

work arounds

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))
```



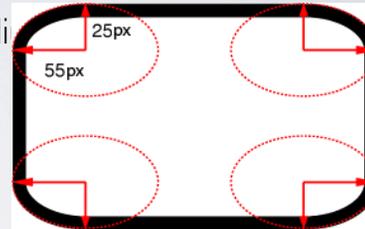
work arounds

treat as progressive enhancement

# CSS3 - BORDER RADIUS

Specifies one or more corner radii

```
.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/>



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/>



3.2+ 3.2+ 5+ 2.2+ 3.5+ 9? 9.6+

work arounds

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/>



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/>



3.1+ 3.2+ 5+ 2.2+ 2+ 9 9.6+

work arounds

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/>



3.1+ 3.2+ 5+ 2.2+ 3.0+ 9 10.1+

work arounds

```
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/>



4.0+ 3.2+ 5+ 2.2+ 3.5+ 9 9.6+

work arounds

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](http://www.quirksmode.org/css/contents.html)

# CSS3 - SELECTORS

<p><code>:nth-child()</code>, <code>first-of-type</code>, etc.</p> <p>support allowing you to style odd or even rows or even every 3rd, 4th, 5th or user defined number of</p>	<pre>tr:nth-child(odd) td { color: #86B486;}</pre>	Very simple to select odd rows
<p><b>Advanced [attr] selectors</b></p> <p>CS2.1 [attr] selector selects an attribute that equals something. CSS3 [attr] selects an element with an attribute whose value starts with, ends with, or contains a certain string</p> <p>= is *= Contains in part \$= Matches ^= Starts with</p>	<pre>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);}</pre>	Much easier to select and style specific parts of your html elements without resorting to extra ids and classes.

# CSS3 - SELECTORS

<b>:target</b> Selects an element that is a target; i.e. that has an ID with the same value as the URL's hash.	<pre>p:target {color: red;}  &lt;p id="item3"&gt;  &lt;a href="#item3"&gt;Go to item 3&lt;/a&gt;</pre>	<b>Anything targeted with a hash link, will turn red when jumped to.</b>
<b>::selection</b> Styles text selected by the user (as in highlights)	<pre>*::-moz-selection {   background:#cc0000;   color:#fff; } *::-webkit-selection{   background:#cc0000;   color:#fff; } *::selection{   background:#cc0000;   color:#fff; }</pre>	<b>Anything selected will become red with white text.</b> 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)



- Animation (Working Draft)



- CSS Mask (Unofficial/Note)



# CSS3 - FAR FUTURE

- Multiple backgrounds (Candidate Recommendation)



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



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



# CSS3 - FAR FUTURE

- 3D Transformations



# 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](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

Read more: <http://www.sfgate.com/cgi-bin/article.cgi?f=/g/a/2010/11/18/prweb4805694.DTL#ixzz16GLcjsr6>

- 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](http://www.adobe.com/cfusion/exchange/index.cfm?event=extensionDetail&loc=en_us&extid=2188522)
- CS5 Update  
[http://www.adobe.com/support/dreamweaver/downloads\\_updaters.html#dwcs5](http://www.adobe.com/support/dreamweaver/downloads_updaters.html#dwcs5)

# HTML5

## Adobe / Dreamweaver Support

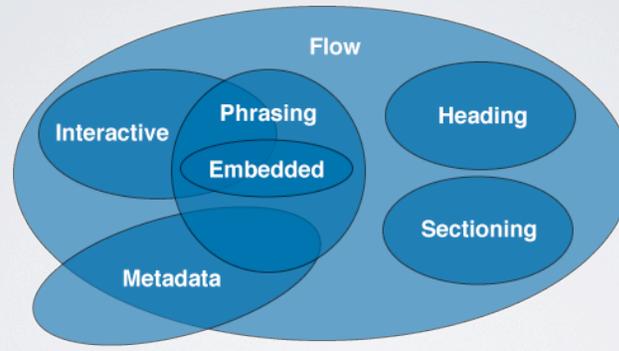
- Code hinting
- New page - html5 - with proper DOCTYPE and charset
- New page template - html5 structure

# 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_pt1.html)  
[http://www.adobe.com/devnet/dreamweaver/articles/dw\\_html5\\_pt2.html](http://www.adobe.com/devnet/dreamweaver/articles/dw_html5_pt2.html)  
[http://www.adobe.com/devnet/dreamweaver/articles/dw\\_html5\\_pt3.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.

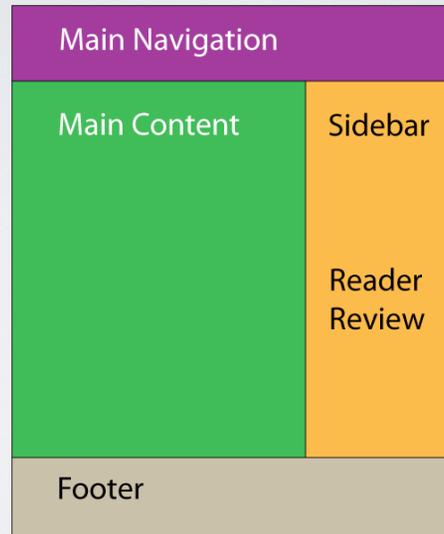
Heading: h1-h6, hgroup

Phrasing: the text and markup used for text

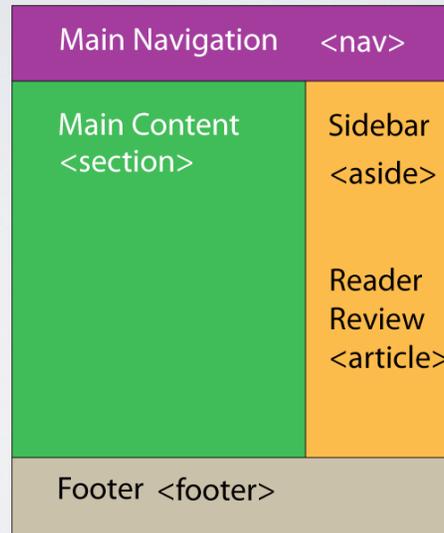
Flow: pretty much everything in the body tag

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

# HTML5 - COMPARE



# HTML5 - COMPARE



# HTML5 - WHAT TO USE NOW

## Check Structure elements to Outline Algorithm

test for outline structure:

<http://gsnedders.html5.org/outliner/> (pages on the Web)

<http://code.google.com/p/h5o/>

- Chrome extension (pages on the Web),
- bookmarklet (for Firefox, etc. works with local files)

Web example: <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.



4+



4.1+



5+



10.1+



4



IE 9

workarounds

```
<!--[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/](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](http://camendesign.co.uk/code/video_for_everybody)

# HTML5 -WHERE TO GO NEXT

- <http://diveintohtml5.org/table-of-contents.htm>
- <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