



Advanced Online Media

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CSS3

CSS3 is often mentioned hand in hand with HTML5, but it is a separate thing. It's not really the newest generation of CSS, but a way to understand where certain modules of elements are in their development.

CSS 1 was proposed in 1996 and CSS2 in 1998. The last specification was CSS 2.1 in 2004, and that's when widespread browser support for it started developing. When we think of modern CSS, we are mainly thinking of the CSS 2.1 specification.

Massive changes in the development environment, including mobile, online apps. The original specs didn't address them. It became too difficult to get one full specification approved, so CSS became approved in modules. So, CSS3 is based on and meant to extend CSS 2.1 specification. Some areas are further along in the process than others. You can go to the W3C Current Work page to assess the status of any feature within a module. <http://www.w3.org/Style/CSS/current-work.en.html>

CSS3 introduces some exciting new features including non-standard fonts, text effects, gradients, opacity, rounded corners, border images, table striping, multiple backgrounds and improvements in page layout.

How do you decide when to use CSS3?

Does it make sense

Do layout and design without CSS3 first

Can you figure out fallback strategies for browsers that don't support

Some tools for supporting CSS3

- CSS3 PIE css3pie.com - download library that handles IE features for you.
- modernizr.com - detection support - download library, gives you the ability to use alternate content if a feature is not supported.
- <http://ecsstender.org/> - eliminates need for browser specific declarations.
- <http://css3generator.com/> - make selections, it gives you code.

Prefixes - browser manufacturers can play with new specs, without having to worry about changes later. Use the prefixes to try things out now, then use the standard when it is approved. Old code with prefixes should still work, even if it is modified. Additional code; learning curve to understand any differences.

-webkit-

-moz-

Selectors

attribute selectors

```
a[alt="icon"] {  
padding-right: 50px;  
background:url(../_images/pdf_icon.gif) no-repeat right center;  
background-color: rgba(255,204,0,.5);  
}
```

ends with \$=

starts ^=

contains *=

wide support

Color

not in IE 8 or before, coming in 9 beta

different than opacity: 0.5 - makes whole div and contents transparent

hsl hue,saturation, lightness hsl(0,10%,95%)

hsla (0,10%,95%,0.5)

alpha

rgb(0,0,0); basically same as hexadecimal

rgba() alpha

kimili IE hsla generator - <http://kimili.com/journal/rgba-hsla-css-generator-for-internet-explorer/> - can help with strategies for dealing w IE.

Gradients

-webkit-gradient(linear, left top, right bottom, color-stop(0, yellow), color-stop(1,red));

-moz-linear-gradient(center top, yellow 0%, red 100%);

Shadows

Box Shadow

-webkit-box-shadow: 2px 2px 5px #000;

-moz-box-shadow: 2px 2px 5px #000;

box-shadow: 2px 2px 5px #000;

Text Shadow

text-shadow: 5 5 10px #333;

Can add multiple to get different effects.

text-shadow: 0 0 2px #fff, 0 0 5px #ddd, 0 0 10px #ccc;

Border-radius (rounded corners)

border: 2px solid black;

-webkit-border-radius: 0 0 0 20px;

-moz-border-radius: 0 0 0 20px;

border-radius: 0 0 0 20px;

Multi-column Text

Wrap everything you want in a div; precede with an <h3> -for this example.

```
<div >  
all paragraphs - don't include heading  
</div>
```

Could use classes or selectors (if set up right)

```
h3 + div {  
-moz-column-count: 2;  
-webkit-column-count: 2;  
column-count: 2;  
text-align: justify;  
font-size: 85%  
}
```

add a rule

```
-moz-column-rule-style: solid;  
-moz-column-rule-color: #999;  
-moz-column-rule-width: 1px;  
-webkit-column-rule-style: solid;  
-webkit-column-rule-color: #999;  
-webkit-column-rule-width: 1px;
```

Typography

As we know from the last class, unique typography doesn't work unless the user has the typeface or you embed it in an image. That hasn't worked so well if you wanted special typography for things like headings that needed to be regularly or dynamically changed. There have been other methods, in which font families are embedded on the Web, but most were clunky and licensing issues were a problem.

CSS3 offers ways to use font families online with the proper licensing.

@font-face

Use a site like Font Squirrel (fontsquirrel.com)

1. Select @font-face kits
2. Look for an awesome font
3. Choose View Font - you can even test drive a font with your specific text.
4. Click the @font-face kit link and download the kit.
5. It will include all the different formats used by the different browsers.
6. Download and unzip it on your computer.
7. Move the unzipped folder to where you can use it, maybe in the directory of your Web site.
8. You can look at the demo and CSS files to see how it works.
9. Include the font-face declaration in one of your headings:

```
h1.fontface {'JuneBugRegular', Arial, sans-serif;letter-spacing: 0;}
```

This also includes the alternates for older browsers.

10. Include the style in your stylesheet or link to the font's stylesheet.

```
@font-face {
    font-family: 'JuneBugRegular';
    src: url('JUNEBUG_-webfont.eot');
    src: local('Äö√≤,à'), url('JUNEBUG_-webfont.woff') format('woff'), url('JUNEBUG_-webfont.ttf') format('truetype'), url('JUNEBUG_-webfont.svg#webfontqx8vVbzv') format('svg');
    font-weight: normal;
    font-style: normal;
}
```

11. Make sure your path to these files makes sense.

12. And enjoy the new font.

Table Striping with CSS

Create a table on the page

Include this declaration to do each odd table row in a different color.

```
tr:nth-child(2n+1) {
    background-color: #99ff99;
```

Backgrounds

background-size: 20px; 25px;

auto
contain
cover

There's also a way to have multiple images in a background, but we'll hold off not that.

Transitions & Transforms

Change properties over a specified period of time.

Set up a disjointed rollover page with a large image and several thumbnails. Set up a rollover on the large image only

Give each thumbnail the class="thumb"

Add the transform function to the .thumb: hover class

```
.thumb:hover {
    -moz-transform:scale(1.5);
    -webkit-transform:scale(1.5);
    transform:scale(1.5);
}
```

There is scale, rotate, skew, translate (move), etc. You can combine effects.

Transforms are a little jumpy. They move from state to state. If you want things to change smoothly in and out, use a transition.

Transitions - smoothly transforms effect whenever transform happens, whatever event. You set this on the element, not the event. Place it on the element, and any change will be animated. For example:

```
.thumb {  
-moz-transition-property: transform;  
-webkit-transition-property: transform;  
transition-property: transform;  
-moz-transition-duration: 5s;  
-webkit-transition-duration: 5s;  
transition-duration: 5s;  
}
```

CSS3 will also have features that will allow for flexible layouts and detection of platform (screen, iPad, Mobile, etc).