CSS3:
A Look At What’s To Come
BORDERS

- Border-Color
- Border-Image
- Border-Radius
- Box-Shadow
In CSS3 you can apply multiple color values to get a gradient effect on your borders. So far only Firefox has adopted this feature. Example code can be seen below.

```
border: 8px solid #000;
-moz-border-bottom-colors: #555 #666 #777 #888 #999 #aaa #bbb #ccc;
-moz-border-top-colors: #555 #666 #777 #888 #999 #aaa #bbb #ccc;
-moz-border-left-colors: #555 #666 #777 #888 #999 #aaa #bbb #ccc;
-moz-border-right-colors: #555 #666 #777 #888 #999 #aaa #bbb #ccc;
padding: 5px 5px 5px 15px;
```

Mozilla/Firefox users should see a nice grey fading border on this box...

Another exciting piece of CSS3 feature is border-images. You can now specify an image to be used instead of the normal border. It is actually split into two properties: border-image and border-corner-image. Border-image currently works in Safari and Firefox 3.1 (Alpha)

border-width: 10px;
border-image: url(border.png) 27 27 27 27 round round;

With CSS3 you can now create nicely rounded corners with your borders. The rounded corners will even clip the background of the element. Works in Firefox and Safari 3

```html
<div style=" background-color: #ccc;
-moz-border-radius: 5px;
-webkit-border-radius: 5px;
border: 1px solid #000;
padding: 10px;" >

Mozilla/Firefox and Safari 3 users should see a nicely rounded box, with a nicely rounded border.

For more info check out http://www.css3.info/preview/rounded-border/
```
CSS3 has also introduced a nice new feature called box-shadow, which is implemented in Safari 3+ and Firefox 3.1 (Alpha).

The property takes 3 lengths and a color as its attributes, the lengths are:
1. the horizontal offset of the shadow, positive means the shadow will be on the right of the box, a negative offset will put the shadow on the left of the box;
2. the vertical offset, a negative one means the box-shadow will be on top of the box, a positive one means the shadow will be below the box;
3. the blur radius, if set to 0 the shadow will be sharp, the higher the number, the more blurred it will be.

```css
box-shadow: 10px 10px 5px #888;
padding: 5px 5px 5px 15px;
```

There should be a nice grey fading shadow under this box...

For more info check out http://www.css3.info/preview/box-shadow/
BACKGROUNDs

- Background Origin
- Background Clip
- Background Size
- Multiple Backgrounds
The background-origin property is used to determine how the background-position of a background in a certain box is calculated.

It takes three different values: border, padding and content. When you supply a value of padding, the position is relative to the upper left corner of the padding edge. With border it’s relative to the upper left corner of the border, and content means the background is started from the upper left corner of the content.

For more info check out [http://www.css3.info/preview/background-origin-and-background-clip/](http://www.css3.info/preview/background-origin-and-background-clip/)
BACKGROUND CLIP

The background-clip property is used to determine whether the backgrounds extends into the border or not. The default is border, which means it DOES extend into it, but if you set it to padding, it doesn’t.

```css
border:10px dotted #0000FF;
-moz-background-clip:padding;
-moz-background-origin:border;
background-color:#FF0000;
background-repeat:no-repeat;
background:url(block.gif);
```

```css
border:10px dotted #0000FF;
-moz-background-clip:padding;
-moz-background-origin:padding;
background-color:#FF0000;
background-repeat:no-repeat;
background:url(block.gif);
```

For more info check out http://www.css3.info/preview/background-origin-and-background-clip/
BACKGROUND SIZE

In CSS3 you can actually specify the size of your background. If you use a percentage value, then the image will adjust in size to the window size.

So far this feature has only been implements in Opera 9.5, Safari 3, and Konqueror. Syntax for each is `-o-background-size`, `-webkit-background-size`, and `-khtml-background-size`.

- `o-background-size: 200px 50px;`
- `webkit-background-size: 200px 50px;`
- `khtml-background-size: 200px 50px;`

For more info check out [http://www.css3.info/preview/background-size/](http://www.css3.info/preview/background-size/)
MULTIPLE BACKGROUNDS

With CSS3 you can specify multiple background images but placing a comma between each background you specify. So far only Konqueror and Webkit have implemented this, so it will show up in Safari 3 and OmniWeb 5.5.

```css
background: url(body-top.gif) top left no-repeat, url(banner_fresco.jpg) top 11px no-repeat, url(body-bottom.gif) bottom left no-repeat, url(body-middle.gif) left repeat-y;
```

For more info check out http://www.css3.info/preview/background-size/
COLOR

- RGBA Color
- Opacity
RGBA

In addition to Hexadecimal & RGB color values, you can now use RGBA. The “A” stands for “Alpha”.

```
<div style="background: rgba(255, 0, 0, 0.2);"></div>
<div style="background: rgba(255, 0, 0, 0.4);"></div>
<div style="background: rgba(255, 0, 0, 0.6);"></div>
<div style="background: rgba(255, 0, 0, 0.8);"></div>
<div style="background: rgba(255, 0, 0, 1);"></div>
```

For more info check out http://www.css3.info/preview/rgba/
Probably the most widely implemented CSS3 feature so far has been Opacity. It allows you to set the opacity of the background color or image for an element.

```
<div style="background: rgb(255, 0, 0); opacity: 0.2;"></div>
<div style="background: rgb(255, 0, 0); opacity: 0.4;"></div>
<div style="background: rgb(255, 0, 0); opacity: 0.6;"></div>
<div style="background: rgb(255, 0, 0); opacity: 0.8;"></div>
<div style="background: rgb(255, 0, 0); opacity: 1;"></div>
```

For more info check out http://www.css3.info/preview/
USER INTERFACE

- Box Sizing
- Resize
- Outline
Box Size

If you have ever been frustrated by the CSS 2.1 Box Model, then you are going to love this feature. Normally, the width or height of an element is calculated like this:

\[
\text{declared value + border + padding = total}
\]

So, if you had a width of 100px, a border of 2px, and padding of 10px, then your final width would be 124px. But with box sizing you can force the browser to calculate the width or height by the dimensions you set, and then it will contain the border and padding within those dimensions.

```css
width: 100px;
height: 200px;
border: 1px solid #fff;
padding: 10px;
-moz-box-sizing: border-box;
-webkit-box-sizing: border-box;
box-sizing: border-box; <!-- for Opera -->
```

For more info check out [http://www.css3.info/preview/box-sizing/](http://www.css3.info/preview/box-sizing/)
RESIZE

Ever wanted your users to be able to resize an element, say a textarea, on the fly? Well your dreams have come true! With CSS3 you will be able to tell the browser that an element can be resized by the user. So far only Safari supports it.

```
div.resize {
    width: 100px;
    height: 100px;
    border: 1px solid;
    resize: both;
    overflow: auto;
}
```

It also works with max-width and max-height!

For more info check out http://www.css3.info/preview/resize/
Outlines have been expanded in CSS3 to include an offset option. Very handy for highlighting things like errors. The offset is rendered away from the edge of the element and does not affect the position of other elements around it. This currently works in Opera, Safari and Firefox.

```css
div.example {
    border:1px solid black;
    height:150px;
    outline-color:blue;
    outline-offset:12px;
    outline-style:solid;
    outline-width:1px;
    width:150px;
}
```

For more info check out http://www.css3.info/preview/outline/
IN CLOSING

There is quite a bit more that I haven’t covered here, including webfonts, text-effects, multi-column layouts, and advanced selectors. For more information please check out the following links

http://www.css3.info/

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