Assignment: Gradient Fills

Overview

In this assignment you will create various gradient fill effects. The gradient property was added to the specification in CSS3. Before CSS3, Web developers used images to produce gradients. In this assignment you will create the various gradient fills using pure CSS3.

Because the standard for this property has not been finalized we use browser specific prefixes to ensure that all major browsers understand how to correctly display the effect. Once the standard is finalized we will be able to simply use the gradient property. Examples of unique properties for all major browsers follows. Note that browser-specific properties always begin with a dash (-) character. This list ends with the generic gradient version to catch all CSS3 enabled browsers. Such browsers ignore the browser-specific definitions.

Linear gradient examples

```
-moz-linear-gradient /* For Firefox */
-webkit-gradient /* For newer versions of Safari and Chrome */
-webkit-linear-gradient /* For newer versions of Safari & Chrome */
-ms-linear-gradient /* For  IE 10 */
-o-linear-gradient /* For  Opera */
gradient /* For all future browsers */
```

Step 1: Create HTML file

1. In your samples directory, create a file named: gradient.html
2. Add the following HTML to your file.

HTML

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Gradient Sampler</title>
  </head>
  <body>
    <h1>Gradient Sampler</h1>
  </body>
</html>
```

Step 2: Add the top to bottom gradient

1. Add the following HTML and CSS to your file.

2. After adding a linear-gradient value, add arguments within the parenthesis for each property. The value top indicates that the first color will be displayed at the top of the element. In this example, the value #f9f sets the first color,and the value #000 sets the second color. Four of the five values follow this pattern, the values for older versions of Safari and Chrome are more complex, however this standard will be abandoned in the final version of CSS3.

HTML

```
1 <div id="linear-top"></div>
```

CSS

```
1  #linear-top{
2      width:500px;
3      height:100px;
4      margin: 10px auto;
5      padding:10px;
6      background: -moz-linear-gradient(top, #f9f, #000); /* Firefox 3.6+ */
7      background: -webkit-gradient(linear, 0% 0%, 0% 100%, from(#000), to(#f9f
         )); /* Safari 4-5, Chrome 1-9 */
8      background: -webkit-linear-gradient(top, #f9f, #000); /* Safari 5.1,
         Chrome 10+ */
9      background: -ms-linear-gradient(top, #f9f, #000); /* IE 10 */
10     background: -o-linear-gradient(top, #f9f, #000); } /* Opera 11.10+ */
11     linear-gradient(top, #f9f, #000); } /* All future browsers */
12 }
```

Step 3: Add a linear-left gradient

Add the following code to your file. Note the use of the left keyword.

HTML

```
1 <div id="linear-left"></div>
```

CSS

```
1  #linear-left{
2     width:500px;
3     height:100px;
4     margin: 10px auto;
5     padding:10px;
6     background: -moz-linear-gradient(left, #f9f, #000);
7     background: -webkit-gradient(linear ,left top, right top, from(#f9f), to
        (#000));
8     background: -webkit-linear-gradient(left, #f9f, #000);
9     background: -ms-linear-gradient(left, #f9f, #000);
10    background: -o-linear-gradient(left, #f9f, #000);
11    linear-gradient(left, #f9f, #000);
12 }
```

Step 4: Add a multi-color gradient

Add the following code to your file.

HTML

```
1  <div id="linear-pos"></div>
```

CSS

```
1  #linear-pos {
2     width:500px;
3     height:100px;
4     margin: 10px auto;
5     padding:10px;
6     background: -moz-linear-gradient(left, #f9f, #000, #f9f, #000, #f9f);
7     background: -webkit-gradient(linear, left top, right top, from(#f9f),
8        color-stop(0.25, #000), color-stop(0.5, #f9f),  color-stop(0.75,
         #000), to(#f9f));
9     background: -webkit-linear-gradient(left, #f9f, #000, #f9f, #000, #f9f);
10    background: -ms-linear-gradient (left, #f9f, #000, #f9f, #000, #f9f);
11    background: -o-linear-gradient (left, #f9f, #000, #f9f, #000, #f9f);
12    linear-gradient (left, #f9f, #000, #f9f, #000, #f9f);
13 }
```

Step 5: Add a radial gradient

HTML

```html
<div id="radial"></div>
```

CSS

```css
#radial {
  width:300px;
  height:300px;
  margin: 10px auto;
  padding:10px;
  background: -moz-radial-gradient(circle, #f9f, #000);
  background: -webkit-gradient(radial, center center, 0, center center,
   460, from(#9f9), to(#000));
  background: -webkit-radial-gradient(circle, #f9f, #000);
  background: -ms-radial-gradient(circle, #f9f, #000);
  background: -o-radial-gradient(circle, #f9f, #000);
  radial-gradient(circle, #f9f, #000);
}
```

Step 5: Add an offset radial gradient

The default origin for a radial gradient is the center of the element. We can adjust this by setting a unique position for the origin and end point. In this example we set the origin at 80% from the left edge, and 205px from the top edge of the element. We set the end point at the closest-corner.

HTML

```html
<div id="radial-pos"></div>
```

CSS

```css
#radial-pos {
  width:300px;
  height:300px;
  margin: 10px auto;
  padding:10px;
  background: -moz-radial-gradient(80% 20%, closest-corner, #f9f, #000);
  background: -webkit-gradient(radial, 80% 20%, 0, 80% 40%, 100, from(#f9f
    ), to(#000));
  background: -webkit-radial-gradient(80% 20%, closest-corner, #f9f, #000)
    ;
  background: -ms-radial-gradient(80% 20%, closest-corner, #f9f, #000);
  background: -o-radial-gradient(80% 20%, closest-corner, #f9f, #000);
  radial-gradient(80% 20%, closest-corner, #f9f, #000);
}
```

Step 6: Experiment and improve

Be creative. Seek originality. Use these examples as starting points. Modify each element in some way. Add new elements of your own creation. Combine these techniques with other CSS tricks.