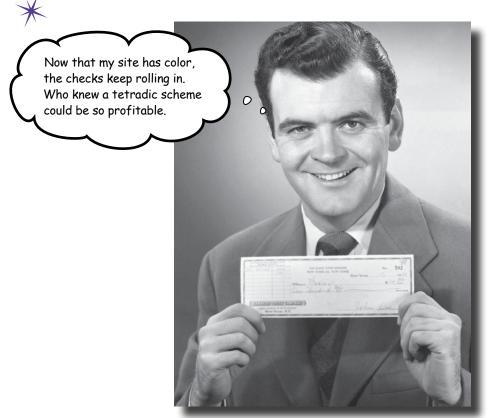
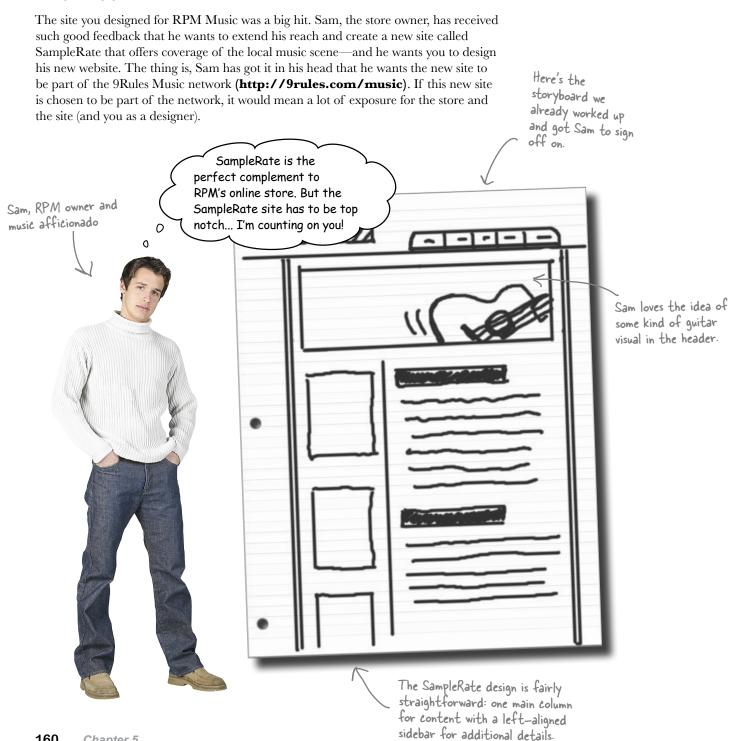
5 designing with color

Moving Beyond Monochrome *



Color is the unsung hero of web design. A good color palette can draw your audience into your site, give them a powerful feeling of immersion, and keep them coming back for more. And when it comes to color and web design, it's not just about picking a **good color palette**, it's also about how you **apply** those colors. You can have a great color palette, but if you don't use those colors **thoughtfully**, people might avoid your site like the plague. By the end of this chapter, you'll not only be intimately familiar with the **impact** that color has on the web user, but you'll also be able to choose a great looking color palette that fits in—and even complements—your user-centered websites.

Help support your local music scene



9Rules: The blog network gold standard

In today's web, blogs are everywhere. The problem is that there are so many that it's hard to know where to find the good ones. That's where 9Rules comes into the picture. 9Rules (**http://9rules.com**) is a cross between a blog aggregator and a blog network. It syndicates the posts of its members (which are conveniently organized by topic categories, such as music, photography, science, design, and games) and provides a one stop shopping spot for those wanting to find top quality blogs.



So how do we get SampleRate onto the site? Periodically through the year, 9Rules has a 24 hour submission process. During this time, site owners can submit their blogs to be reviewed for membership. On average, 9Rules only accepts about 30 or 40 sites per submission round (out of thousands). The bottom line is that getting accepted into 9Rules is a huge deal and the goal of many designers, content producers, and bloggers.



It takes more than just a great design to get on 9Rules. What are three really effective way to get a site noticed online?

Sometimes your choices are a bit... limited

Sam loves your storyboards, but there's a catch: he's already got a logo for SampleRate that he loves. No matter what else you come up with, you've got to make the new SampleRate site mesh with the existing logo Sam's picked out.

That means we've got some choices taken care of for us, like colors. Take a look at the SampleRate logo... what will this dictate about our design?

0

This is the logo that Sam's set on using for the SampleRate site.

This is a take on a graphical EQ. For us, though, it sets the colors we've got to work with on the rest of the site. Sam personally chose this typeface, so we may want to use that font within the site, too.

Uh, I hate to bring up the obvious, but how can we learn anything about color when this is all in black and white?

SampleRate

You've got a good point.

We didn't need to do this whole book in color (that just means we'd have to charge you more, and who wants that?), but obviously this becomes a problem when we do have to talk about color. And now's the time to talk about color. So we're providing this chapter in color for free online. Head on over to www.headfirstlabs.com/books/hfwd, where you'll be able to download the color version of this chapter.

Color has an emotional impact

Now that you've got this chapter in color, how did you *feel* when you first looked at the SampleRate logo? No matter whether you liked it or hated it, you probably felt something. That's because **color creates emotion**. For example, red is associated with excitement, purple is dignified and stately, yellow is cheerful, and blue is associated with comfort and security.

When we're designing a site that involves strong colors, we've got to think about the emotions those colors generate. Pages that use color well have a feeling that you don't get from sites that don't consciously use color as a design element or that use color poorly. You should treat color as an element, one that's just as important as navigation, images, or content.

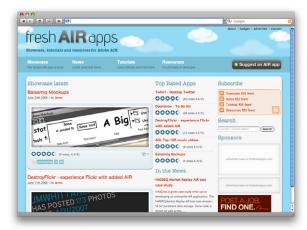
Take a look at these bold colors and the sites that use them. You can't help but have a reaction... and that's what we want with SampleRate: a strong, **positive** reaction!





Take a look at these four screenshots and write down what you feel when you look at them. Use any kind of descriptive words you want. Excited, playful, happy, sad, curious—whatever you *feel*.

• freshairapps.com



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Bigbluedev.com



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G caxtonstreetfestival.com.au

(a) le-moulin-desauvage.com





0

0

"This site does a really good job of reinforcing its visual metaphor with color. The light blue color and clouds play off the fact that the site's called Fresh Air Apps, and the whole page has a very light and airy feel."

> Color is probably the single most important design element on this page. Without the light blue (representing the sky), the page loses its "airy" feel and the entire visual metaphor breaks down.

> > 0

0 0

*l*k

fresh **AIR** apps

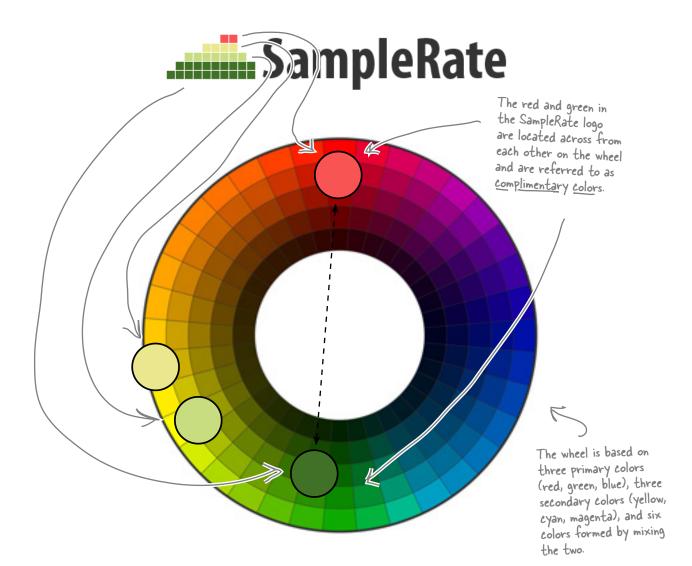
"The whole color scheme is based off the lobster. The deep red really grabs my attention. I also like the wood grain as the background for the content—kind of like a cutting board. This site makes me hungry!"

The red in this site takes the color of the lobster and uses it as the foundation color for the whole page. The page is bright, fun, and represents the content perfectly.

The color wheel (where it all begins)

Before we can even think about what colors we're going to use for SampleRate, let's get acquainted with the mother of all color tools in the design world: **the color wheel**. The color wheel (or *color circle* as it's sometimes called) is a circular diagram that displays different colors and shows the relationship between those colors.

Those relationships are key... and the color wheel lets us choose colors that go well together. Let's start by finding some of the colors in the SampleRate logo on the color wheel:







Use the color wheel to choose colors that "go together"

You might already be thinking, "Yeah, the color wheel is cool and all, but how do I use it to actually pick colors that work together and don't look like a dog barfed on my web page?" This is where **color schemes** come into the picture. Color schemes are more than just collections of colors. A color scheme is a certain grouping of colors that goes well together.

And here's the kicker: all good color schemes start with a single color and your handy-dandy color wheel.

Sometimes you'll hear an individual color in a scheme called a "swatch" of color.



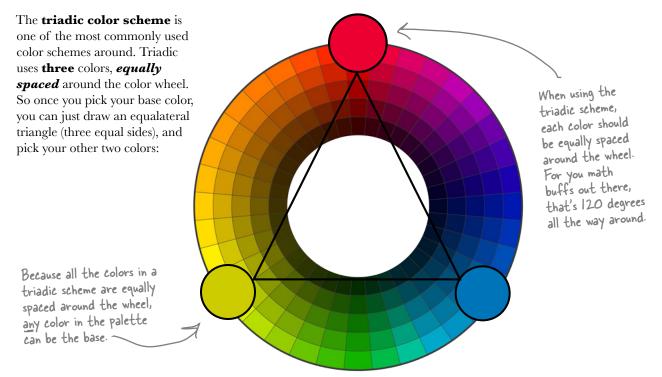
First, choose your <u>BASE</u> color

The site above has a fairly deep green all over the place. That's the **base color** of the site: the color that most represents the visual metaphor and that all other colors are based on. For SampleRate, we'll need to begin by choosing a base color. Then, we base everything else—other colors, their depth, their hue—off of that base color.

But don't get too stressed out! There's no right or wrong base color... and you can always abandon a scheme that you end up not liking and start over.

Use the triadic scheme to create usable color patterns

Color schemes come in all shapes and sizes—and they all have fancy-sounding names (monochromatic, analogous, complementary, triadic, tetradic, etc.). Don't worry, once you get past their names, they're really just pretty simple ways to pick different kinds of color palettes that you can use for your site. Think of color schemes as just another helpful tool in your web design toolbox.

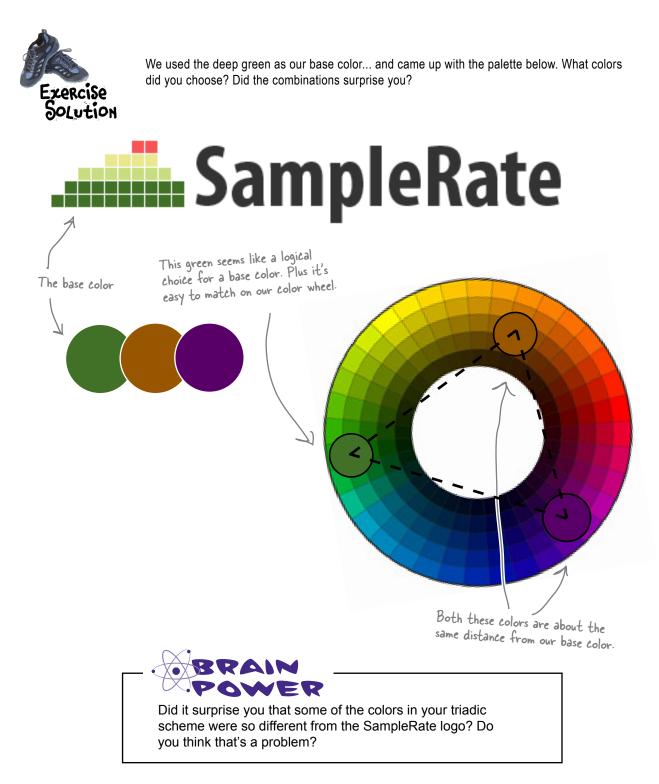




Create a three-color palette based on the SampleRate logo that Sam provided. Make sure you start with a base color and build your palette from there.







Our standard XHTML

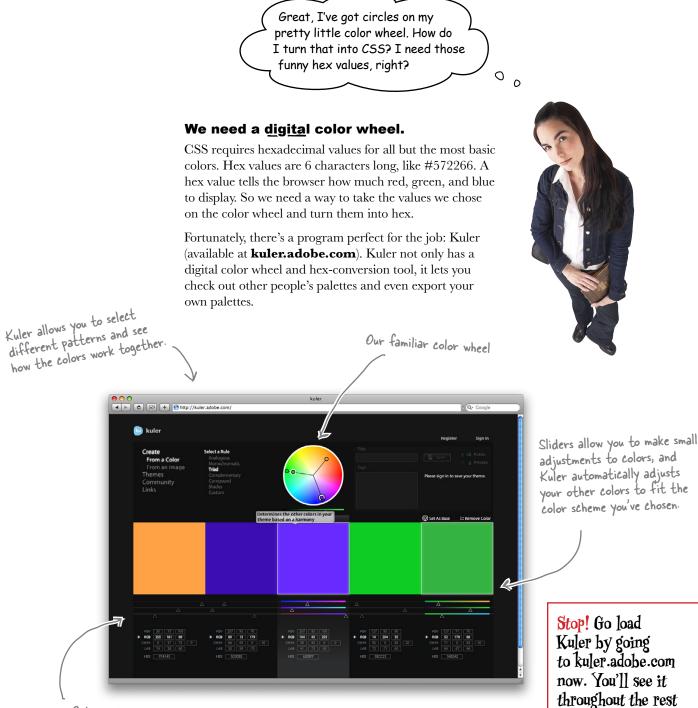
Get started on the SampleRate markup

```
Strict header
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
       "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">
<head>
  <title>Sample Rate</title>
  <meta http-equiv="Content-Type" content="text/html; charset=utf-8"/>
  <link rel="stylesheet" href="stylesheets/screen.css" type="text/css"</pre>
        media="screen" />
                                    Make sure to include your stylesheet, which should be located in a directory called /stylesheets.
</head>
<body>
  <div id="header">
    <div id="logo"><img alt="sample rate logo" src="images/samplerate2.gif" /></div>
  </div>
  <div id="nav">
    <a class="active" title="title" href="#">Home</a>
      <a title="title" href="#">Archive</a>
      <a title="title" href="#">Music</a>
      <a title="title" href="#">About</a>
      <a title="title" href="#">Contact</a>
    This is the guitar image that the owner
  </div>
                                                wanted to see on the site.
  <div id="wrap">
    <img id="masthead" alt="header image" src="images/gitfiddle.jpg" width="740px" />
    <div id="content">
      <h1>Heading One</h1>
     Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Fusce
        consequat arcu in mauris.
     <h1>Heading Two</h1>
                                                                                 You may want to
     Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Fusce
                                                                                 add some more
        consequat arcu in mauris.
                                                                                dummy text to fill
    </div>
                                                                                out the page as we
    <div id="sidebar">
                                                                                add color and style.
      Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Fusce
         consequat arcu in mauris.
    </div>
    <div id="footer">
      Copyright & copy; SampleRate and RPM Music, all rights reserved.
    </div>
  </div>
</body>
                                                Typing-challenged? Go online!
</html>
                                                If you don't want to type all this in, you can download
                                                 the SampleRate files from the Head First Labs website.
                                                You may want to work through these examples on your
                                  own, though... who knows what you might learn in the process?
          index.html
```

Create the basic page layout with CSS

```
body {
                                                   #content {
       margin: 0;
                                                          float: right;
       padding: 0;
                                                          margin: 10px 0 0 0;
       font-family: Verdana, sans-serif;
                                                          padding: 0 20px 0 20px;
}
                                                          width: 540px;
h1 {
       margin: 0 0 5px 0;
                                                   #sidebar {
                                                                                        screen.css
}
                                                          float: left;
р {
                                                          margin: 20px 0 0 0;
       margin: 0 0 20px 0;
                                                          padding: 0 20px 0 20px;
       line-height: 1.4em;
                                                          width: 180px;
}
                                                   #footer {
#header {
                                                          clear: both;
       margin: 0;
       padding: 20px 0 10px 0;
                                                          text-align: center;
}
                            This CSS will serve
                                                                  Content chunks below floated
#header #logo {
                                                   #footer p {
                            as the frame for our
                                                                  <div>'s must be cleared so they
       margin: 0 auto;
                                                  }
                            layout. Later, we'll add
       width: 800px;
                                                                  appear below those elements.
                            more color and some
                            detail to let Sam really
#nav {
                             get a feel for our design.
       background: #ccc;
                                                         TITT
}
#nav ul {
                                                                           2 -1
       margin: 0 auto;
       width: 800px;
       list-style-type: none;
}
#nav ul li {
       display: inline;
}
#nav ul li a {
       text-decoration: none;
                           Like we've done before,
#nav ul li a.active {
                           use margin: O auto to
                           center the layout in the
#wrap {
                           browser.
       margin: 0 auto;
       width: 800px;
}
#masthead {
       margin: 20px 20px 0 20px;
}
```

```
Remember, this it the board Sam
liked... here's what we're going for.
```



Color output is given in multiple formats, including HEX and RGB.

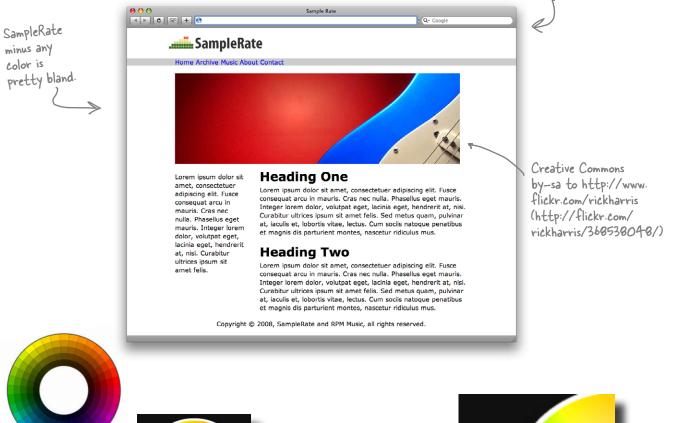
of the chapter.

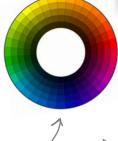




Use Kuler to take the base color you selected in the previous exercise and build a digital color palette based on the triadic scheme. Once you have your palette, add the hex color values to your SampleRate CSS file and see how they work together. Use your colors for the background colors of the various <div>s in the SampleRate site.

> There are more <div>s than colors in a threecolor triadic scheme. Try picking some extra colors that are a little lighter or darker than your main three colors to fill out SampleRate.



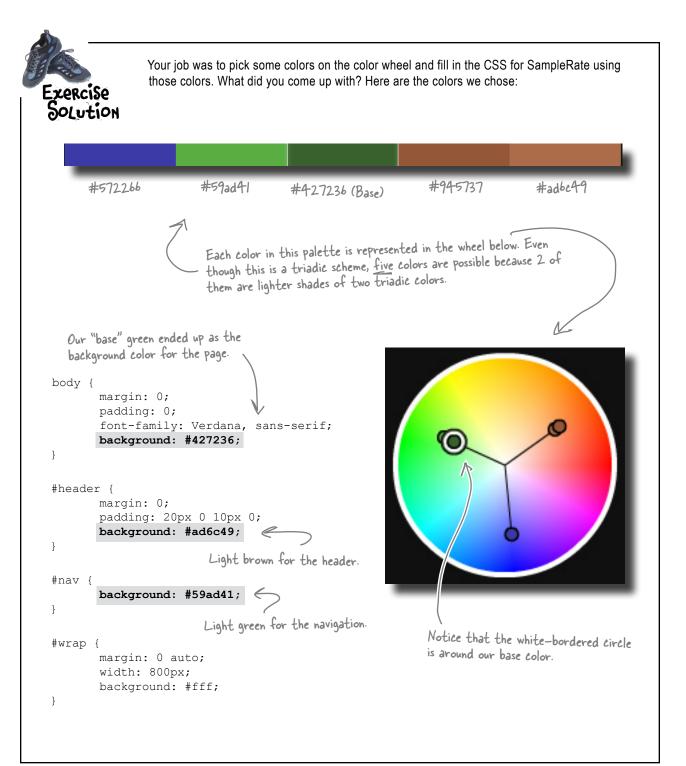


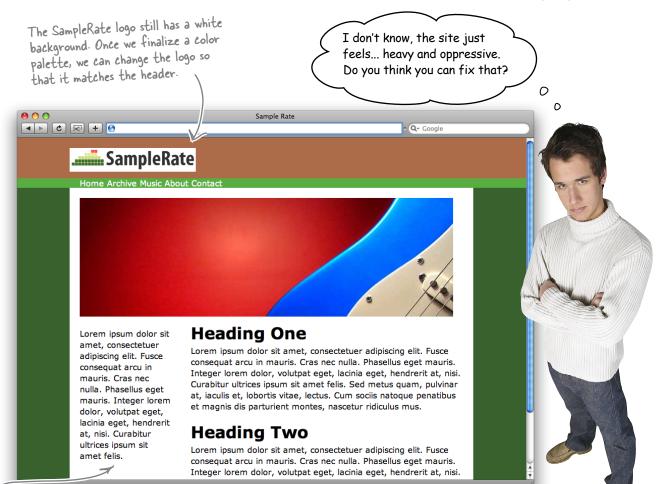
Kuler's a lot more accurate than choosing colors by hand. You might get different colors than we did back on page 172 when we chose colors by hand.



The handle with the white ring represents your base color in Kuler.







We made the wrap <div> background white so the content of the page stands out a bit better... that makes it more readable.

Q: What happened to our blue color?

A: Good question. We just couldn't find a natural place to use that color, although it might work well for the link color for text. Just because your scheme results in three colors, you're not bound to use them. Always trust your judgment over a color wheel or best practice. Ultimately, you're the designer!

bumb Questions

Q: Where did that light green come from?

A: Kuler gives you lots of varying colors when you're choosing a scheme, including lighter and darker versions of colors you've already chosen. Those additional colors will go well with your scheme, and that's where our light green came from.

Q: My version of SampleRate looks totally different!

A: Good! Your sites should reflect your choices and your client's tastes.

The opposite of heavy is... light

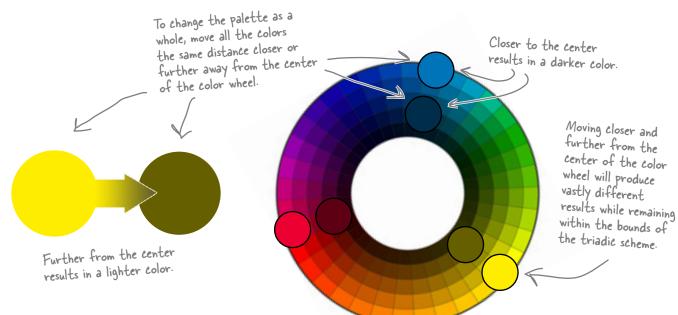
Sam thinks SampleRate looks heavy. That's not surprising... remember, color causes people to feel things more than any other type of web element. So what do we do about a site feeling heavy? Well, we try and make the site feel *lighter*.

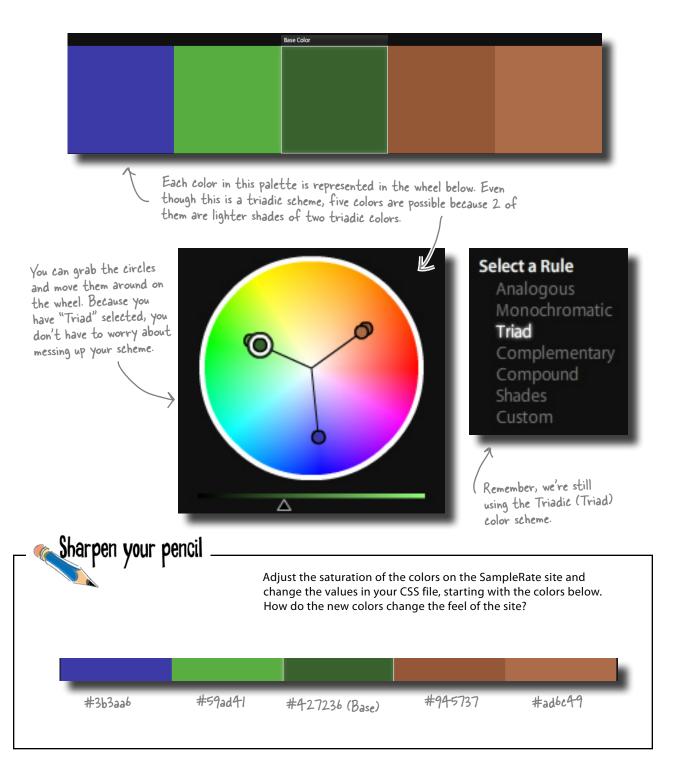
The great thing about the triadic color scheme (or any other type of color scheme) is that as long as you stick to the general location of a color on the color wheel, you can change its saturation. **Saturation** is just a fancy design term for the darkness or lightness of a color. So we can lighten the saturation of our color scheme... it's the same colors, but a lighter feeling result.

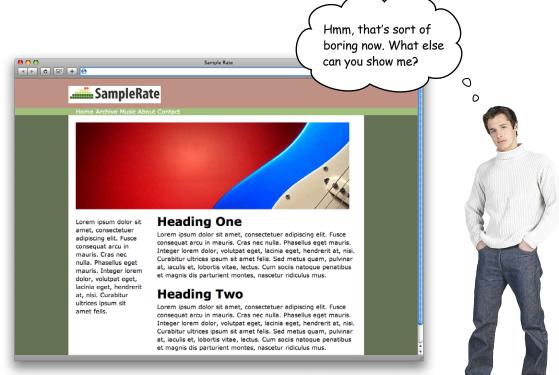




The feel of this site really changes as the color saturation is adjusted.





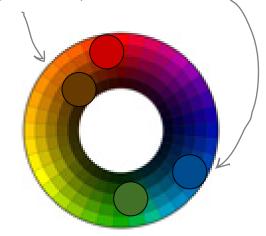


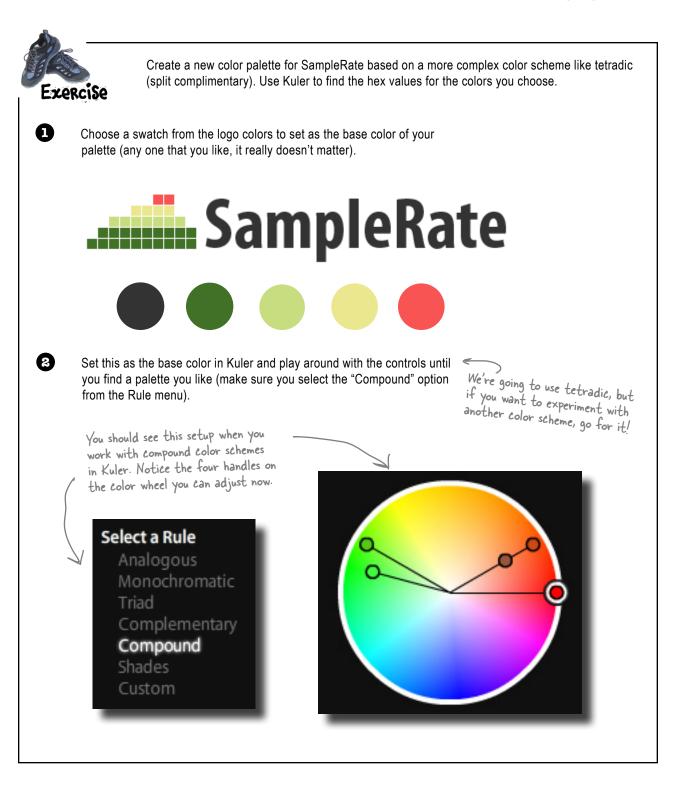
Create a richer color palette with the tetradic color scheme

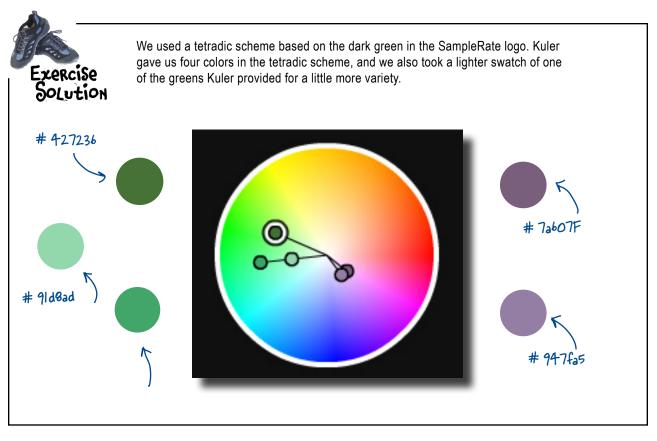
When people find a site boring, that may mean the colors are too light... but we already know that Sam doesn't like a darker triadic color scheme for SampleRate. So if you can't go darker, consider adding colors. In other words, go from a three-color scheme to a four-color scheme.

One of the most common four-color schemes is the **tetradic color scheme**. The tetradic color scheme (which is sometimes also called the **double complementary scheme**) is the richest of all the schemes because it uses four colors arranged into two complementary color pairs.

Be careful, though. Four different colors is a lot to deal with, and you can't use all four colors equally or your site will look like a mess. But for adding some extra complexity and energy to a site, a fourth color can really make a difference. Colors in a <u>tetradic</u> scheme are in pairs across from one another and about 20 degrees to the left or right of the other pair.







bumb Questions

Q: Are there only two color schemes? Triadic and tetradic?

A: No, there are a bunch of others. Most of the them are simpler schemes: monochromatic, analogous, complementary, and split complementary. All of the schemes follow the same general principles as triadic and tetradic. They find colors related to each other by certain angles that go well together. For more information on these and other color schemes, check out http://www.color-wheel-pro.com/colorschemes.html **Q**: Do I really need to use a color scheme to create a good color palette? Seems like a lot of work to go through when I can just pick some colors off the color wheel.

A: Sure, you could randomly choose some colors off of the color wheel for your color palette. However, most of the time you are going to get at least two colors that clash. Color schemes are based on solid color theory that has been around for ages. They are designed specifically to help you create harmonious color combinations. Q: What if I want lighter colors than the ones available on the color wheel?

A: Color wheels can either get progressively lighter or darker as you get closer to the center. If lighter colors are what you're after, just drag your colors toward the center of the wheel. Or you can adjust the hue or opacity of a darker color until you've got the lighter swatch you're looking for.

designing with color

So once we've chosen our colors, aren't there some rules we can apply to make sure we use them correctly on the page?

There's no golden rule for color placement.

There really isn't a set of rules that will always work for all sites. What looks great for one site's structure could look awful for another site's layout and design. On top of that, you've got to match your site's theme and visual metaphor.

But there are definitely some *principles* you can apply:

Create contrast

Although there's

definitely a

Golden Ratio!

If you want to separate different areas of your layout (say a main column and sidebar), use **contrasting** colors. This contrast creates a border between two areas. That border lets users know that the two areas are different and probably have different functions or uses within the context of the site.

> adipiscing elit. Fusce consequat arcu in mauris. Cras nec

The background of the page and the text area use highlycontrasting colors. This makes the content of the page clearly separate from the overall site background.

Emphasis-o-matic

If you want to emphasize certain areas of your layout, use the most dominant color in your color palette. If you surround an important area of content (like a header or page title) with the palette's dominant color, that area will be emphasized.





Let's update the SampleRate CSS

Here is the completed CSS for the SampleRate site. The colors for the design are blank (and represented by the grey bars). Get the CSS linked up with your XHTML and double check the layout. We'll add the color in the next few pages.

```
need colors ... we'll add those in
                                                                   over the next few pages.
                                              #nav ul li a.active {
body {
      margin: 0;
                                                     background: #eee;
      padding: 0;
                                                     color: #333;
       font-family: Verdana, sans-serif;
       color: #333;
                                              #wrap {
      background:
                                                     margin: 0 auto;
}
                                                     width: 800px;
h1 {
                                                     background: #eee;
      margin: 0 0 5px 0;
                                                     border-left: 10px solid .....
                                                     border-right: 10px solid
}
р {
      margin: 0 0 20px 0;
                                              #masthead {
                                                     margin: 20px 20px 0 20px;
      line-height: 1.4em;
}
                                                     border: 10px solid #ddd;
                                                                               Borders around the
#header {
                                                                               main <div> provide
      margin: 0;
                                              #content {
                                                                                some contrast.
      padding: 20px 0 10px 0;
                                                     float: right;
      background:
                                                    margin: 10px 0 0 0;
}
                                                     padding: 0 20px 0 20px;
#header #logo {
                                                     width: 540px;
      margin: 0 auto;
      width: 800px;
                                              #sidebar {
}
                                                     float: left;
#nav {
                                                     margin: 20px 0 0 0;
                                                     padding: 0 20px 0 20px;
      background:
                                                     width: 180px;
#nav ul {
                                              }
      margin: 0 auto;
                                              #footer {
      padding: 20px 10px 20px 10px;
                                                     margin: 20px 20px 0 20px;
      width: 800px;
                                                     padding: 10px 20px 10px 20px;
      list-style-type: none;
                                                     clear: both;
                                                     background:
}
#nav ul li {
                                                     text-align: center;
      display: inline;
                                                     color: #fff;
}
#nav ul li a {
                                              #footer p {
      padding: 10px 20px 20px;
                                                     margin: 10px 0 0 0;
      text-decoration: none;
                                                     font-size: small;
      color: #fff;
                                              }
      font-weight: bold;
}
```

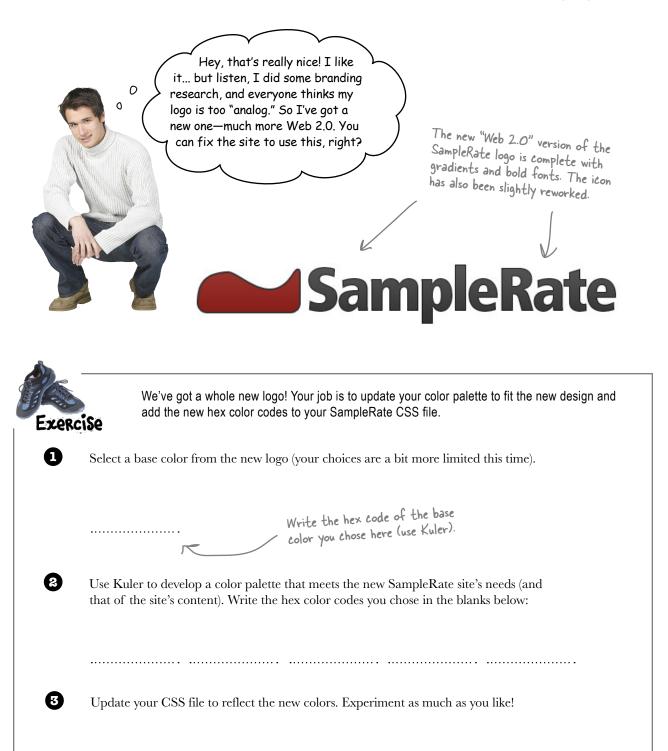
All the blanks are places we



Write the hex values for your colors in the spaces where you think the color fits best. Think about contrast and the best way to make the content stand out. We'll build these colors into our actual design in just a few pages. Remember, white space is your friend! Use #ffffff for white.









CHAPTER 5

Your Web Pesign Toolbox

Color, tetradic, triadic, split complementary... lots of new terms, and you've handled them all. Go back to the other sites you've worked on and update them with color, too.

- Color has a powerful impact on your site's visitors.
- Use the color wheel to choose colors for your site's design.
- Color schemes are tools to help you choose a harmonious color palette.
- The triadic color scheme has three colors spaced equally from around the color wheel.
- The triadic color scheme is popular because it provides strong visual contrast while retaining balance, color richness, and harmony.

- The triadic scheme is not as contrasting as some other schemes.
- The tetradic color scheme has 4 colors arranged into two complementary color pairs.
- The tetradic color scheme is the richest of all the schemes.
- The drawback to the tetradic scheme is that it's sometimes hard to harmonize.
- Use a tool like Kuler to crate a color palette (and get the hex values of the colors in the palette.)