

Seaborn Workshop

To remedy this, seaborn provides an interface to the `husl` system, which also makes it easy to select evenly spaced hues while keeping the apparent brightness and saturation much more uniform.

```
sns.palplot(sns.color_palette("husl", 8))
```



There is similarly a function called `husl_palette()` that provides a more flexible interface to this system.

Using categorical Color Brewer palettes

- ▶ Another source of visually pleasing categorical palettes comes from the Color Brewer tool (which also has sequential and diverging palettes, as well see below).
- ▶ These also exist as matplotlib colormaps, but they are not handled properly.
- ▶ In seaborn, when you ask for a qualitative Color Brewer palette, you'll always get the discrete colors, but this means that at a certain point they will begin to cycle.

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- ▶ A nice feature of the **Color Brewer** website is that it provides some guidance on which palettes are color blind safe.
- ▶ There are a variety of [kinds](http://en.wikipedia.org/wiki/Color_blindness) of color blindness, but the most common variant leads to difficulty distinguishing reds and greens.
- ▶ Its generally a good idea to avoid using red and green for plot elements that need to be discriminated based on color.

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```
sns.palplot(sns.color_palette("Paired"))
```



```
sns.palplot(sns.color_palette("Set2", 10))
```



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- ▶ To help you choose palettes from the Color Brewer library, there is the `choose_colorbrewer_palette()` function.
- ▶ This function, which must be used in an IPython notebook, will launch an interactive widget that lets you browse the various options and tweak their parameters.

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Of course, you might just want to use a set of colors you particularly like together. Because `color_palette()` accepts a list of colors, this is easy to do.

```
flatui = ["#9b59b6", "#3498db", "#95a5a6", "#e74c3c", "#2c3e50", "#2ecc71"]  
sns.palplot(sns.color_palette(flatui))
```



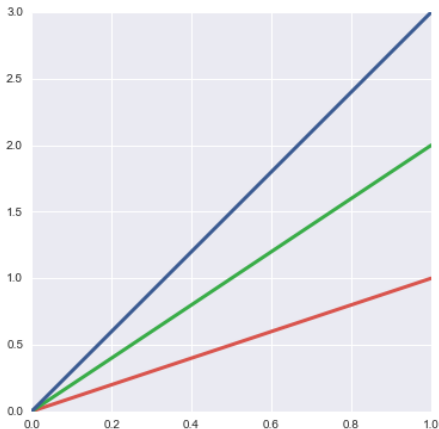
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xkcd

- ▶ A while back, xkcd ran a crowdsourced effort to name random RGB colors.
- ▶ This produced a set of 954 named colors, which you can now reference in seaborn using the `xkcd_rgb` dictionary:

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```
plt.plot([0, 1], [0, 1], sns.xkcd_rgb["pale red"], lw=3)  
plt.plot([0, 1], [0, 2], sns.xkcd_rgb["medium green"], lw=3)  
plt.plot([0, 1], [0, 3], sns.xkcd_rgb["denim blue"], lw=3)
```



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If you want to spend some time picking colors, this interactive visualization may be useful. In addition to pulling out single colors from the `xkcd_rgb` dictionary, you can also pass a list of names to the `xkcd_palette()` function.

```
colors = ["windows blue", "amber", "greyish", "faded green", "purple"]  
sns.palplot(sns.xkcd_palette(colors))
```

