



Design  
*for*  
Developers

GitHub repo: [github.com/sdras/design-for-developers](https://github.com/sdras/design-for-developers)

twitter: @sarah\_edo



# Section 2: Color

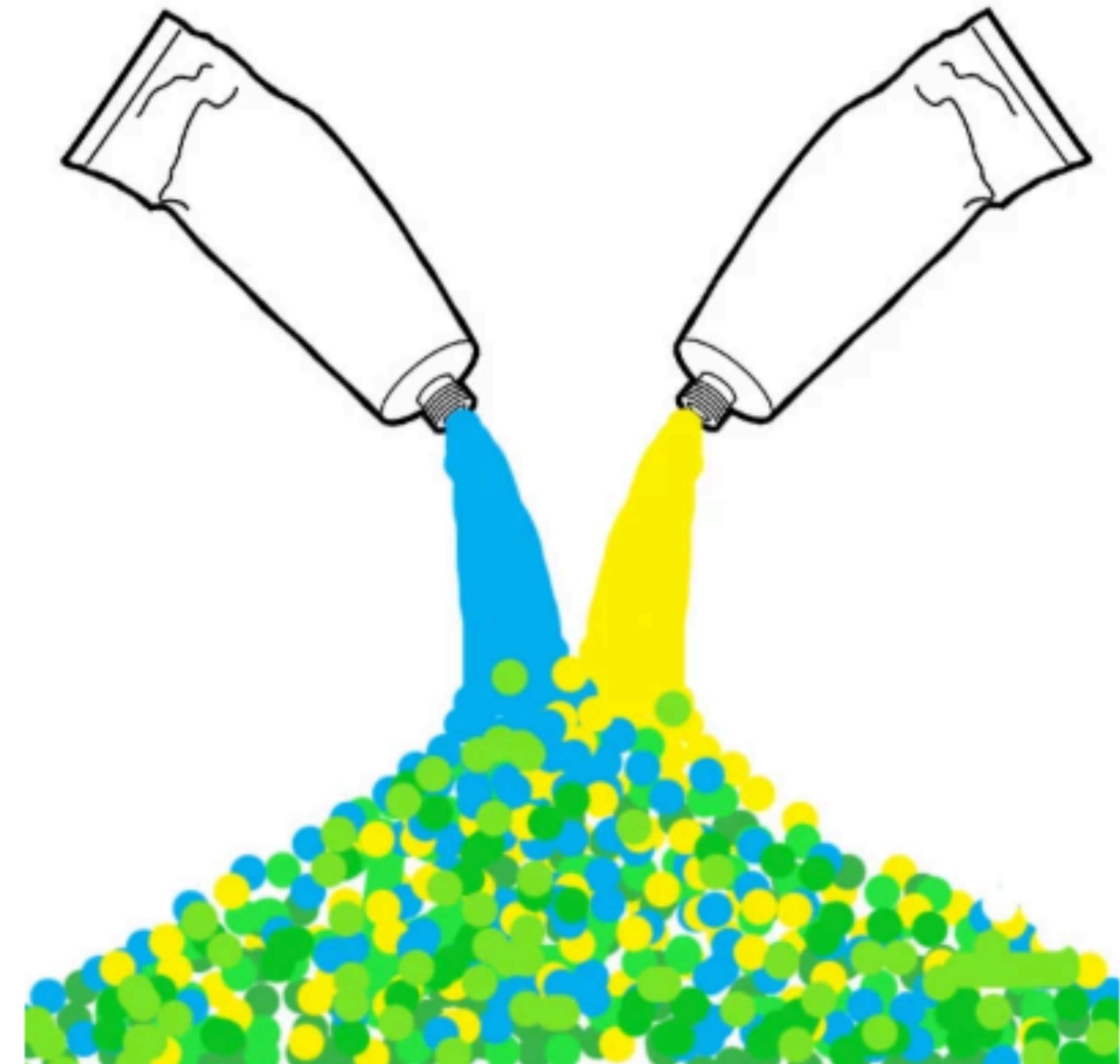
Github repo: [github.com/sdras/design-for-developers](https://github.com/sdras/design-for-developers)



Color Modes

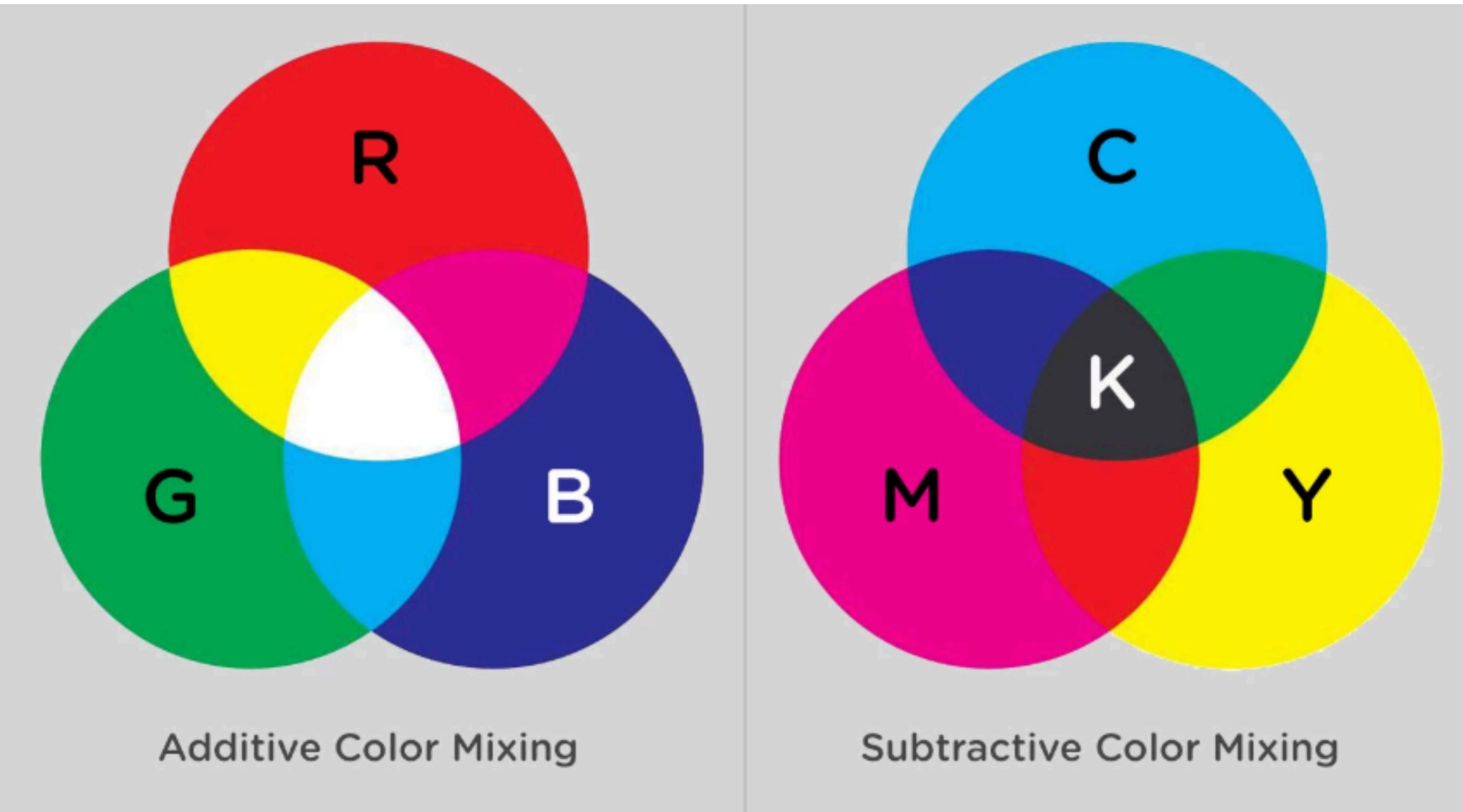
COLOR

# Color Mixing



COLOR

# Color Modes



COLOR

# Color Mixing



## COLOR

# Types of Combinations



### Monochromatic

The monochromatic or monotone color scheme uses variations of shades of a single color, such as red, dark red, and pink. Clean, elegant, balanced.



### Complementary

The complementary color scheme uses colors that are opposite each other, such as blue and orange. Contrasts cool against warm colors.



### Analogous

The analogous or related color scheme uses colors and their shades that are next to each other, such as red and violet. Richer, more variety than monotone scheme.

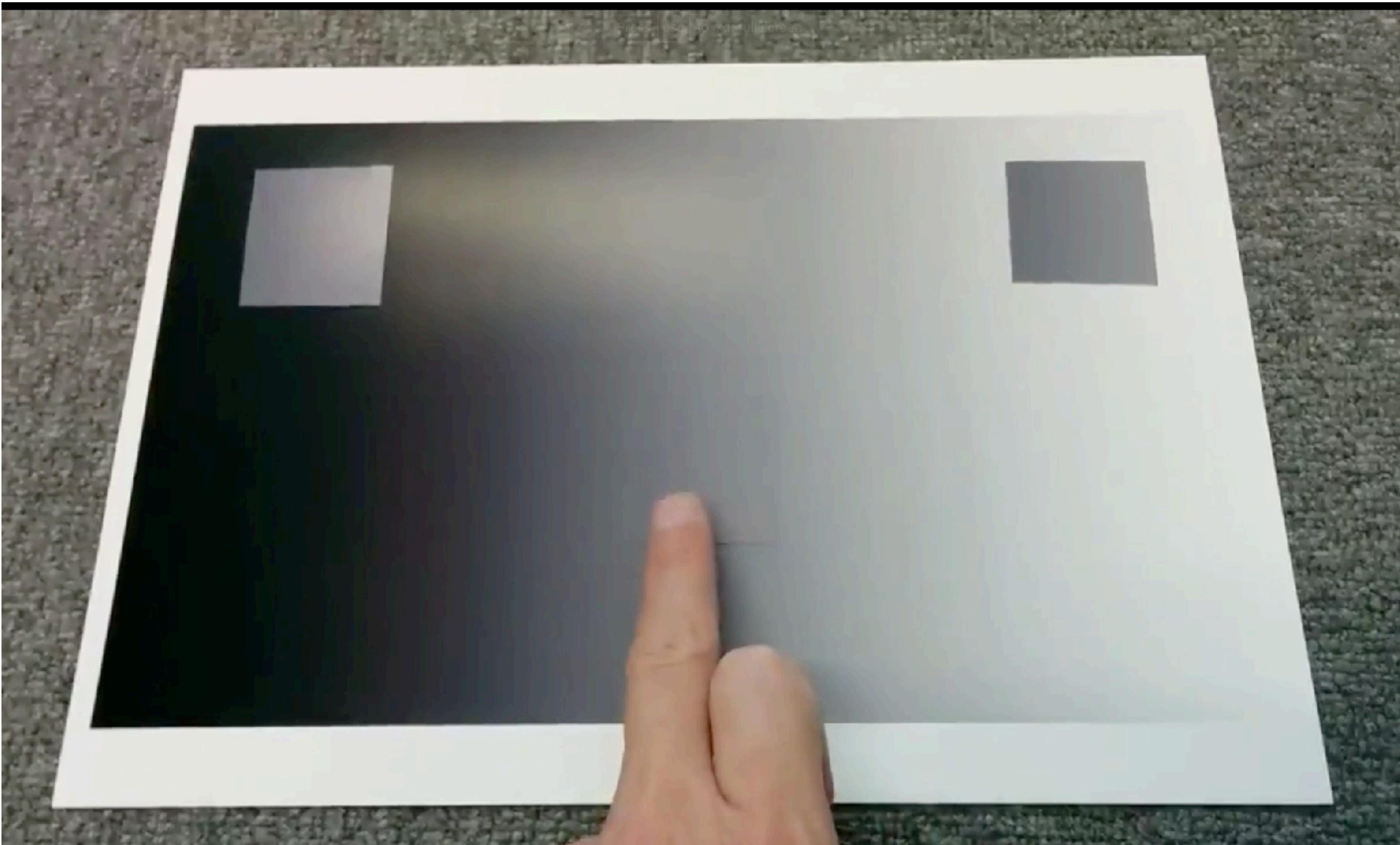


### Triadic

The triadic color scheme uses three colors that are equally spaced around the wheel, such as red, blue, and yellow. Vibrant, rich, harmonious.

COLOR

**A color is only a color in relation to another color**



# AAA

9.51

## Contrast

Contrast is the difference in luminance or color that makes an object (or its representation in an image or display) distinguishable. In visual perception of the real world, contrast is determined by the difference in the color and brightness of the object and other objects within the same field of view. Because the human visual system is more sensitive to contrast than absolute luminance, we can perceive the world similarly regardless of the huge changes in illumination over the day or from place to place. The maximum contrast of an image is the contrast ratio or dynamic range.

Foreground  
#AACCCF  
Hue 216° Saturation 100% Lightness 83%

Background  
#222233  
Hue 240° Saturation 20% Lightness 17%



See how your visitors are really using your website. ads via Carbon

Text on a background image a11y check

Colorable

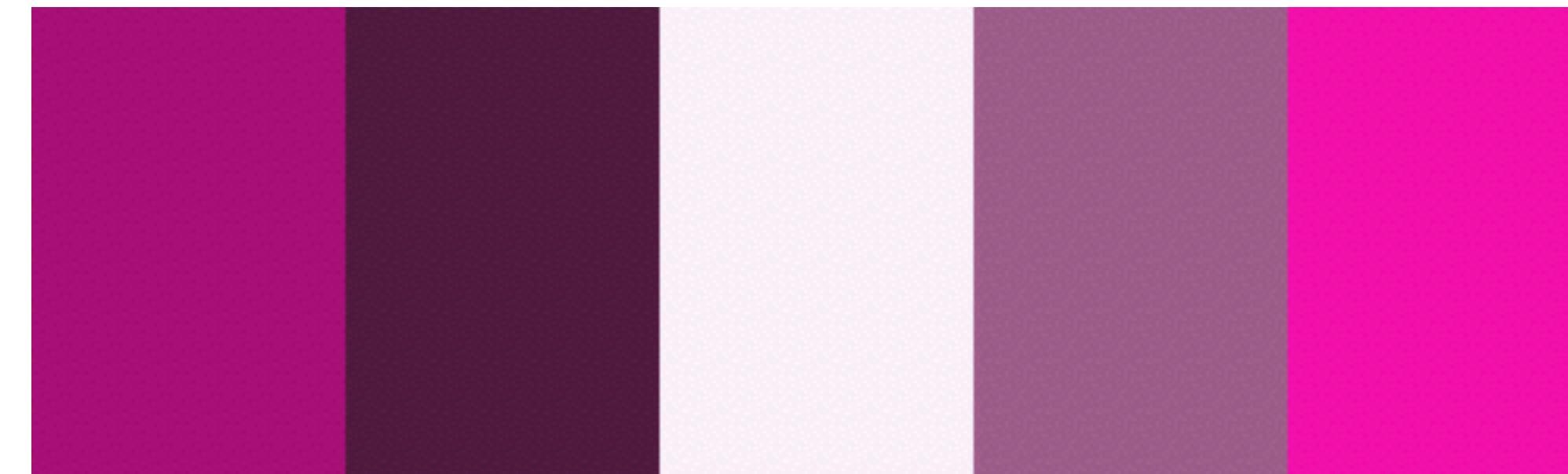
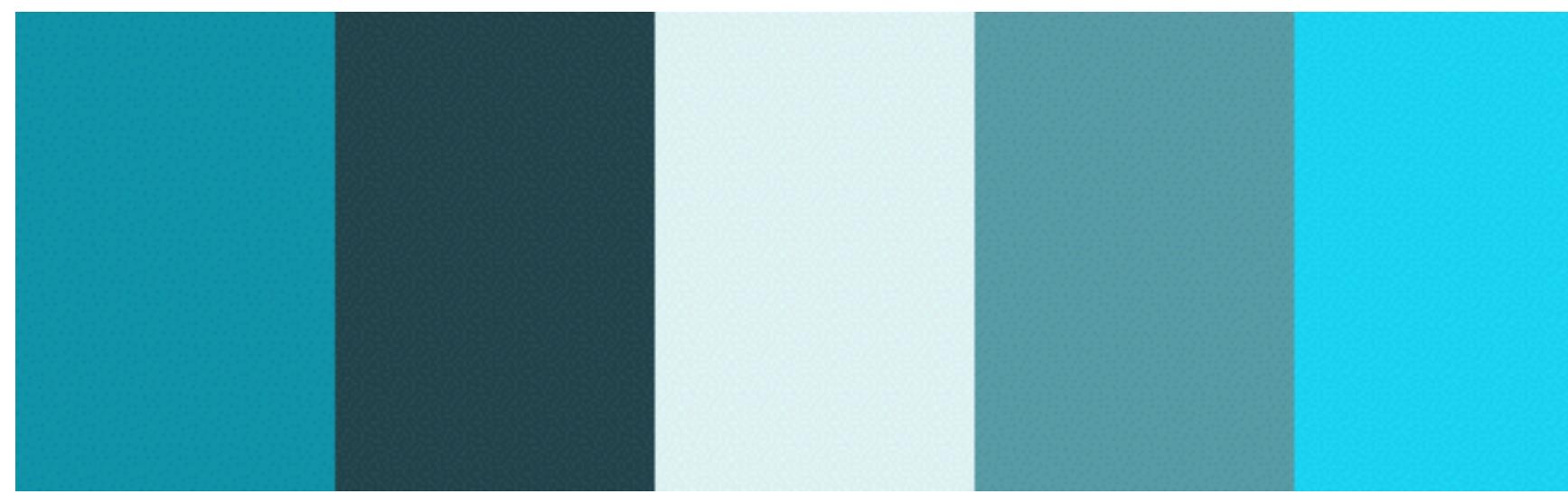
Contrast-A

Accessible Colors

COLOR

# Types of Combinations

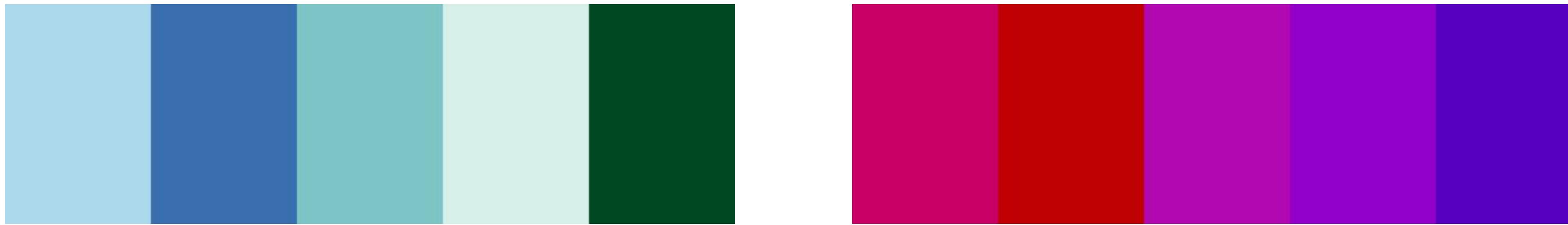
MONOCHROMATIC



COLOR

# Types of Combinations

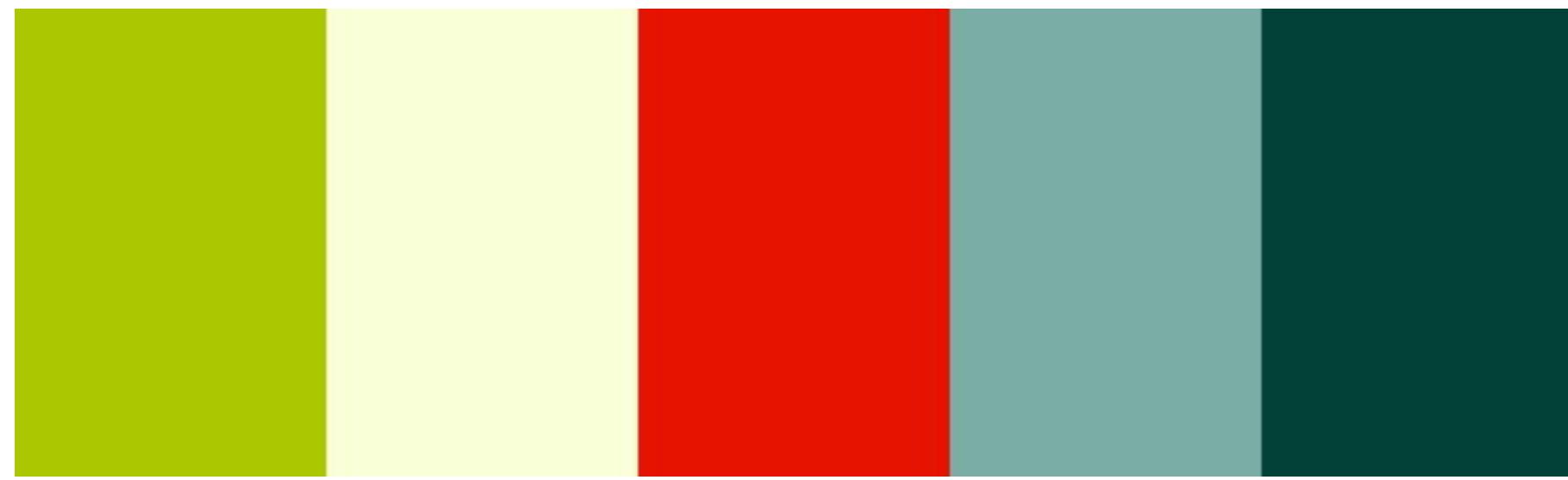
ANALOGOUS



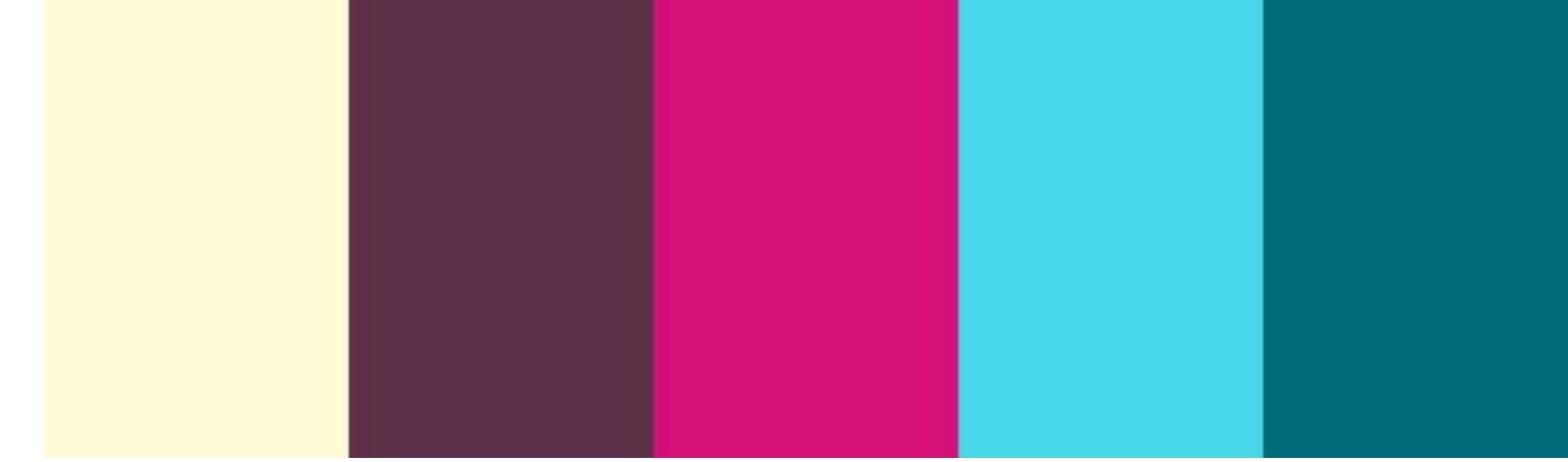
COLOR

# Types of Combinations

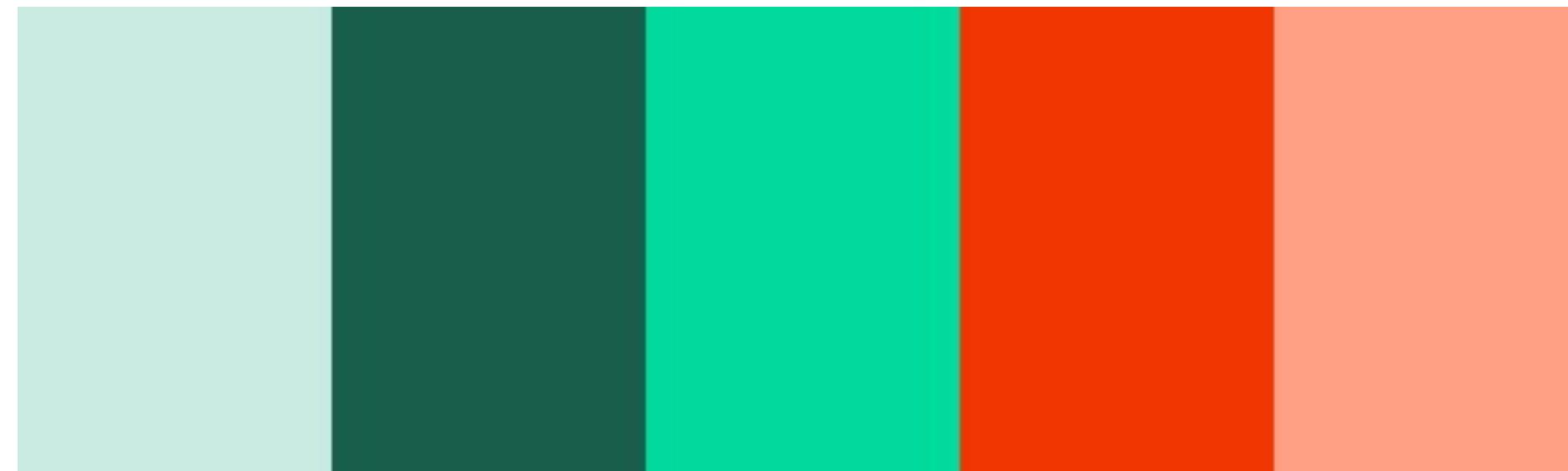
SPLIT



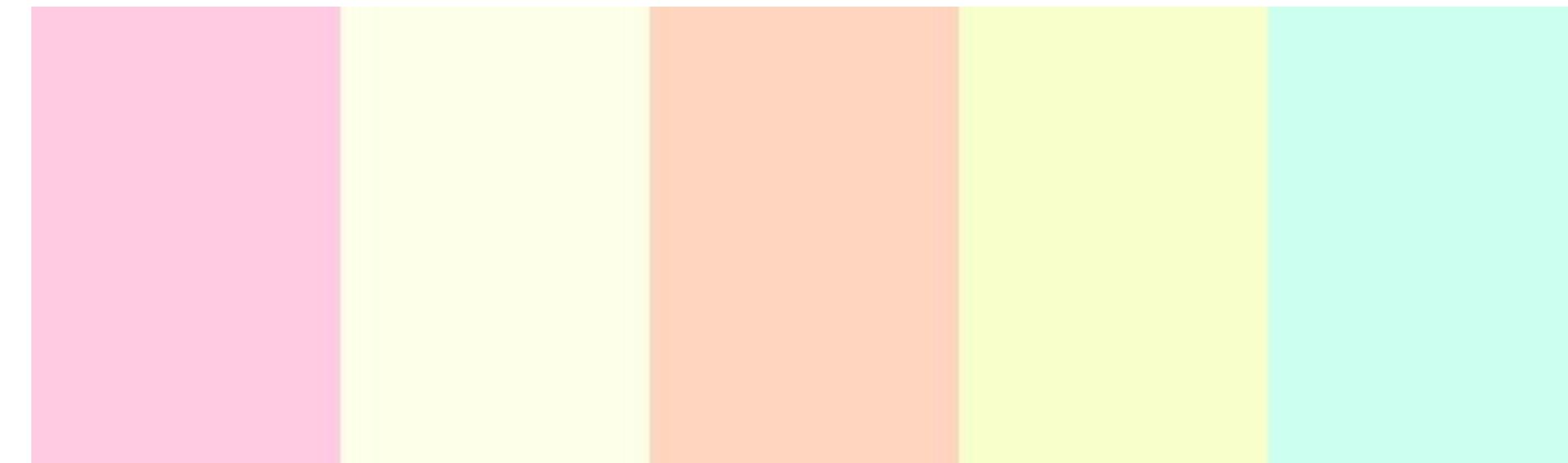
TRIAD



COMPLEMENTARY



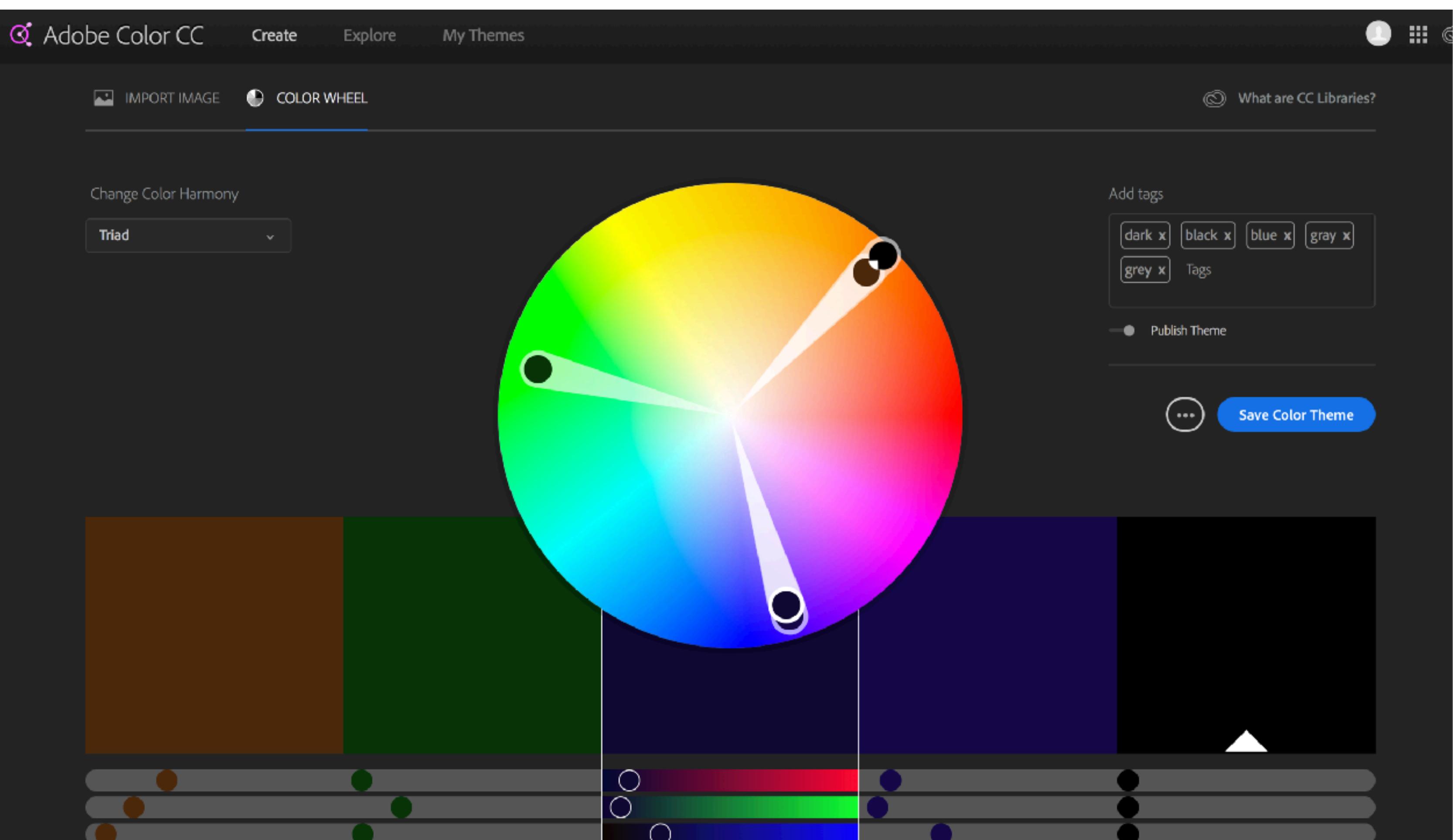
TETRIADIC



## *Color: Tools*

# Kuler/Color CC

[color.adobe.com](http://color.adobe.com)



*Color*

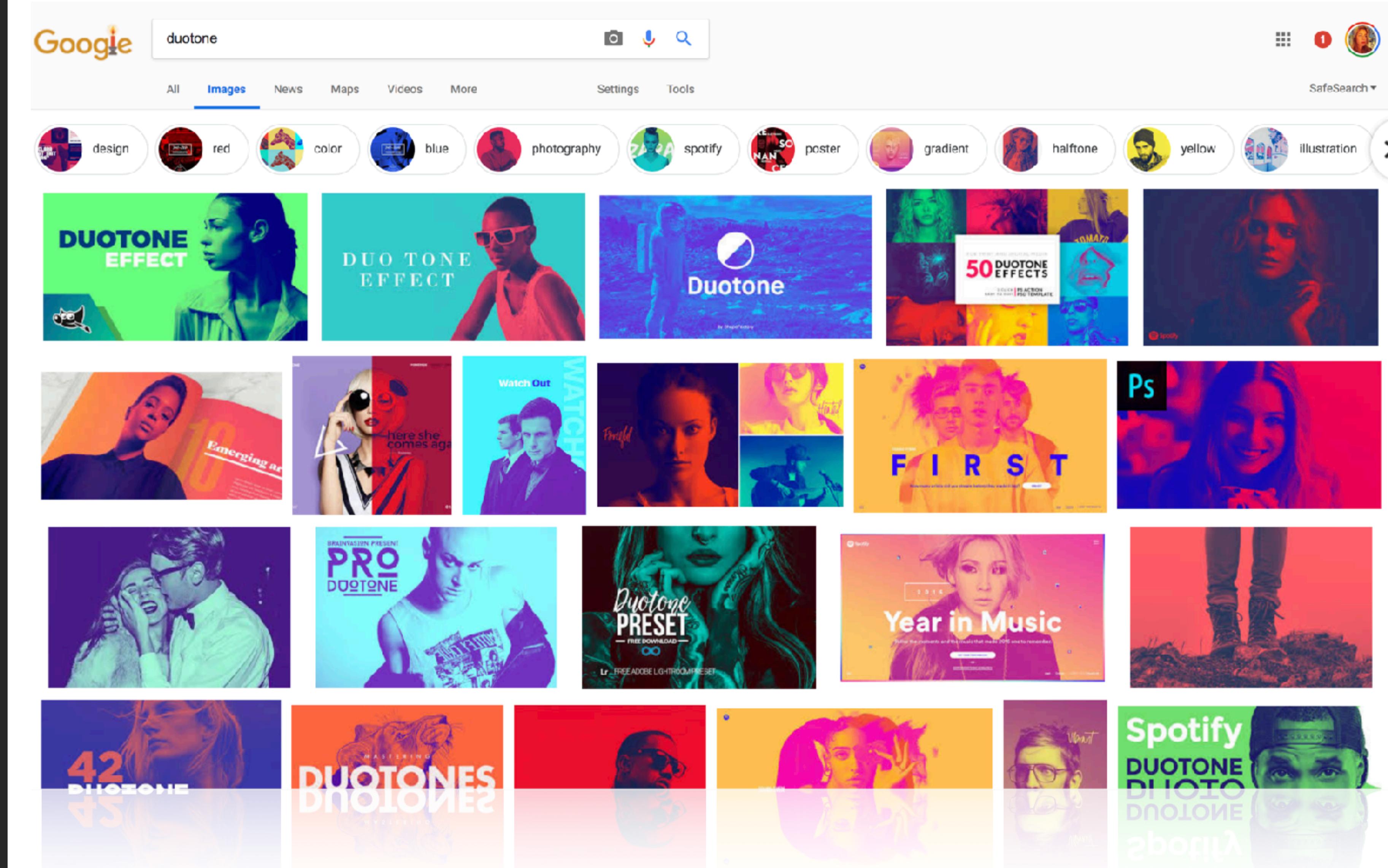
---

**Monotone**

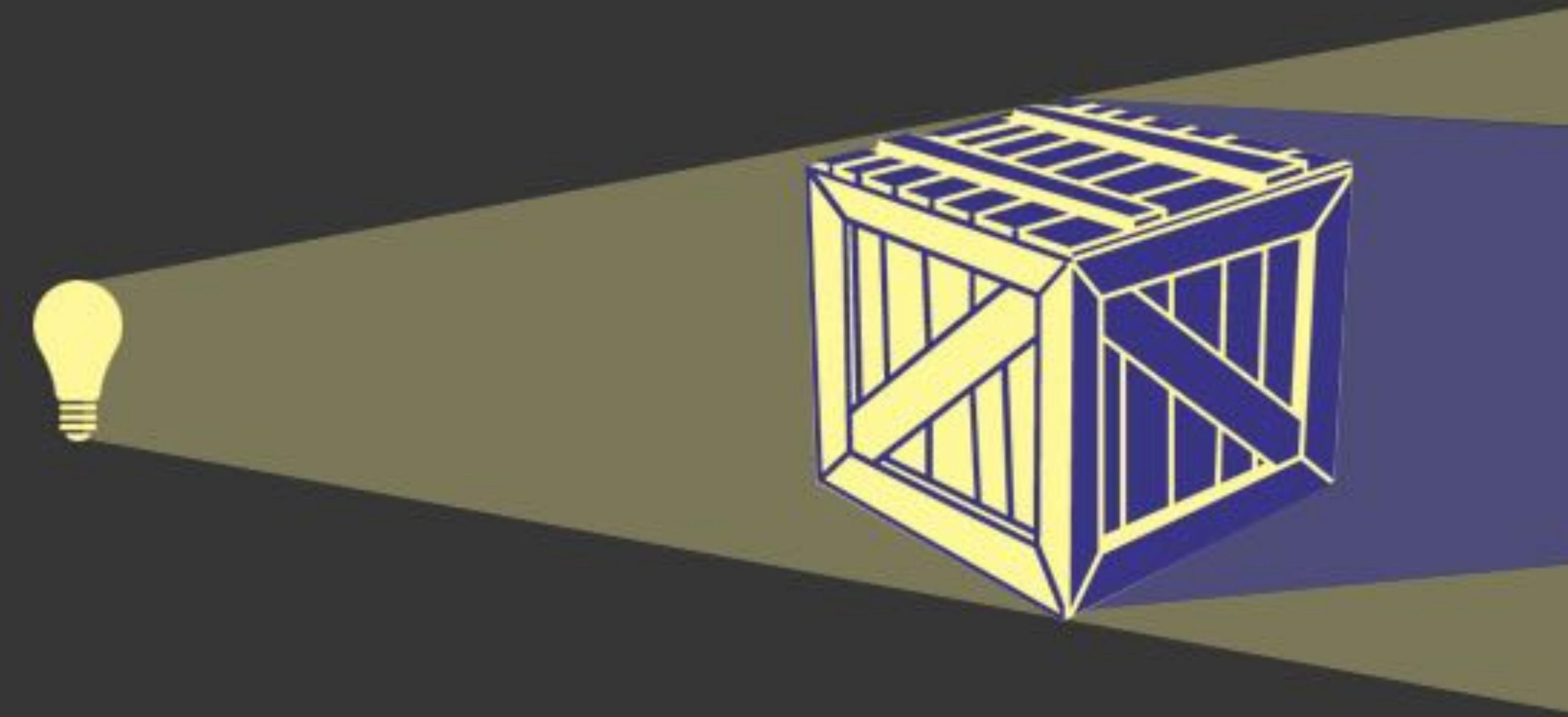


Color

# Duotone











Color in Code

*Color: Values*

---

## RGB(A)

x is a number from 0–255  
y is a number from 0.0 to 1.0  
rgb(x, x, x); or rgba(x, x, x, y);

Example: rbga(150, 150, 150, 0.5);

## *Color: Values*

---

### Hex

The values use ranges from 0–9 and A–F  
0 being the lowest value and F being the highest  
Or #000000 being black and #FFFFFF being white.

This is most common but *least* human-readable.  
It's great for copy-pasting but not great for  
generative color

*Color: Values*

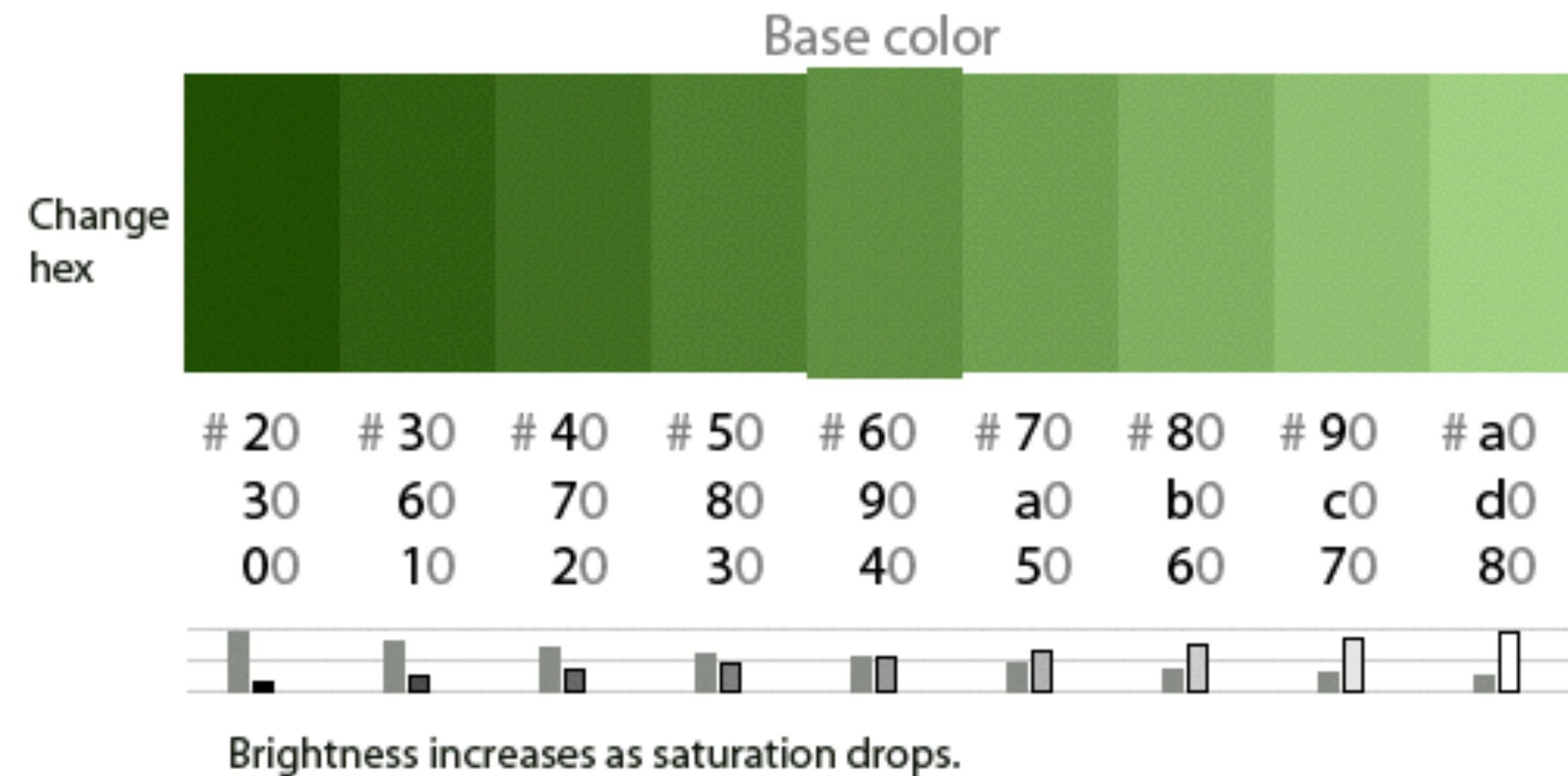
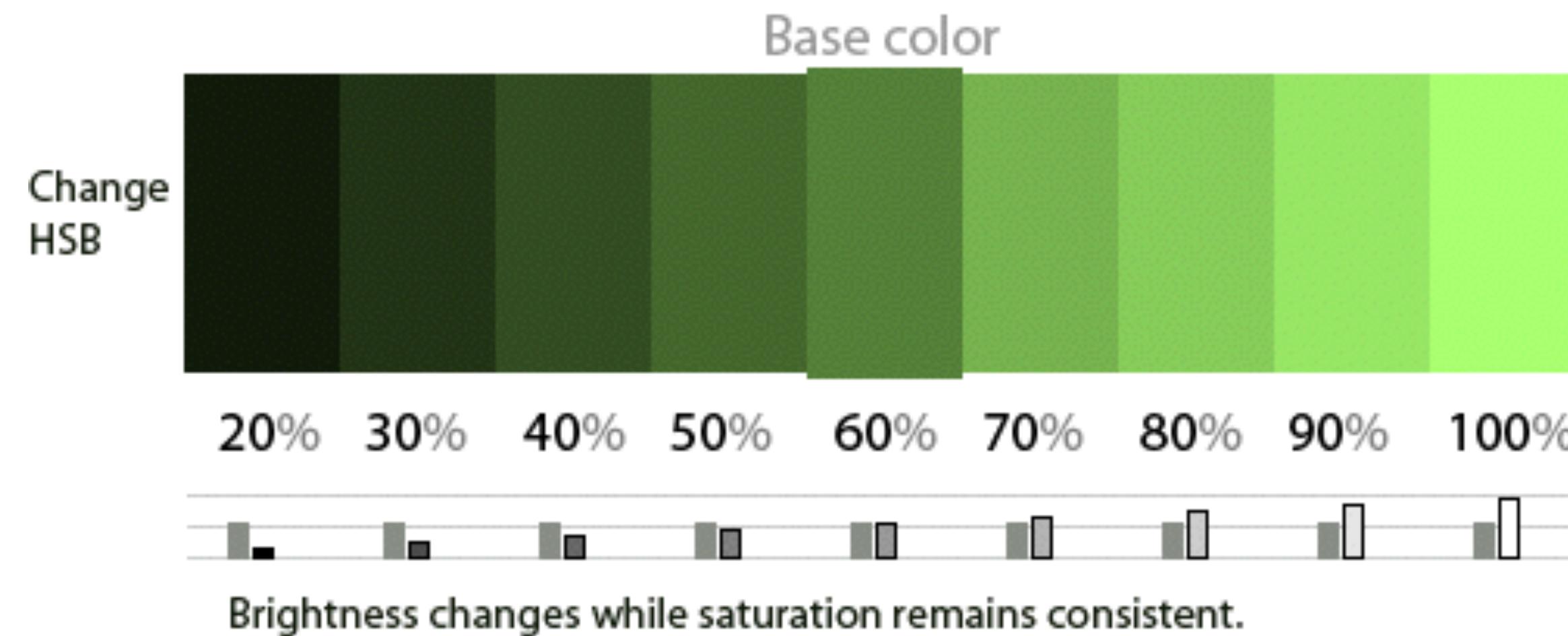
## Hex

#970515

Red      Green      Blue

*Color: Values*

**Hex**



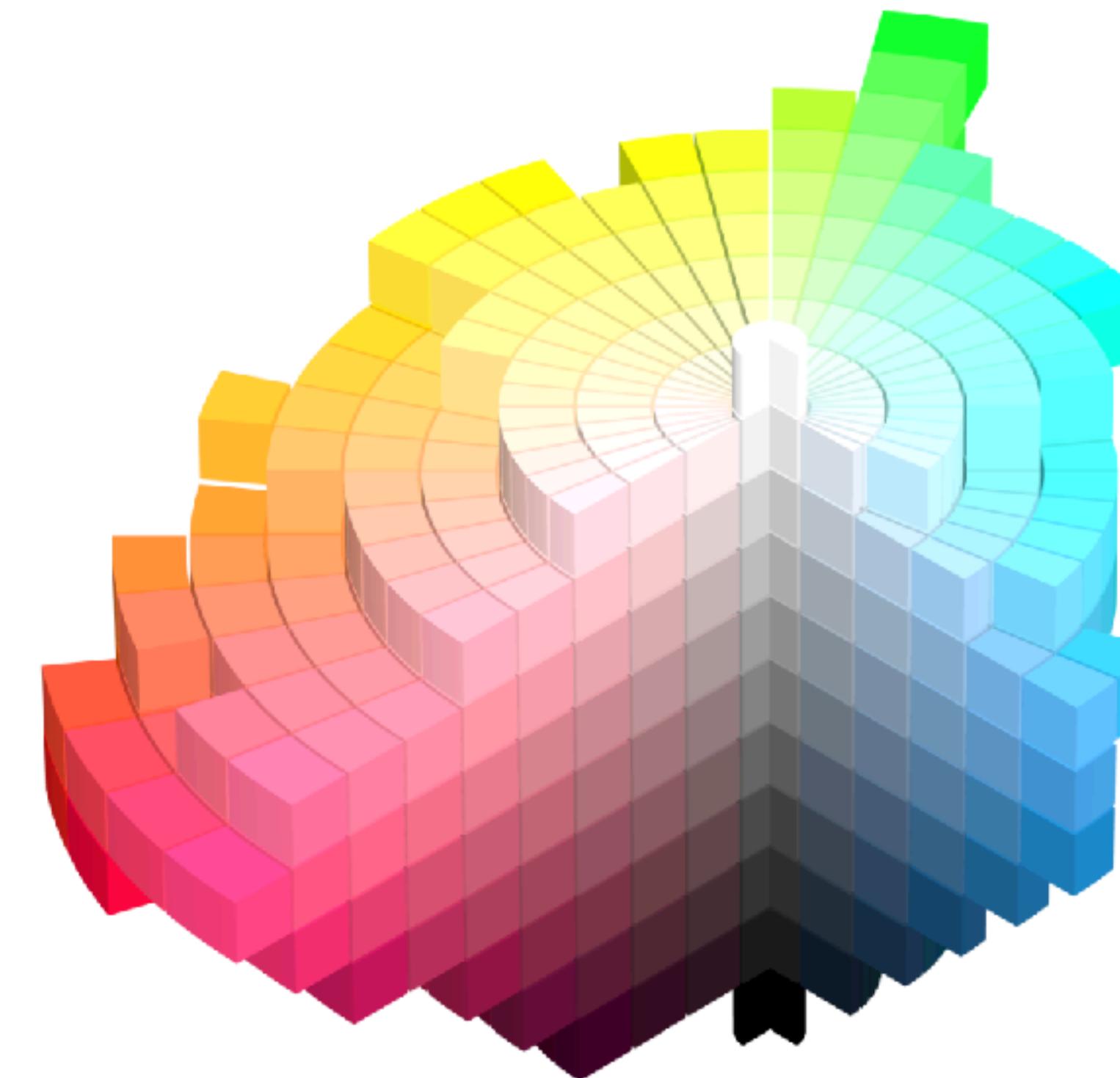
*Color: Values*

—

## HSL(A)

x is a number from 0 – 360  
y is a percentage from 0% to 100%  
z is a number from 0.0 to 1.0  
`hsl(x, y, y); or hsla(x, y, y, z);`

Example: `hsla(150, 50%, 50%, 0.5);`





HTML

 CSS (SCSS)

```
1  @mixin colors($max-count, $color-frequency){  
2    $color: 360/$max-count;  
3  
4    @for $i from 1 through $max-count {  
5      &:nth-child(#{$max-count}n + #{$i}) {  
6        background: hsl((($i - 1)*($color / $color-frequency), 80%, 60%);  
7        color: hsl((($i - 1)*($color / $color-frequency), 80%, 50%);  
8      }  
9    }  
10 }
```

Scroll the List Below

One

Two

Three

Four

Five

Six

*Color: Values*

## Named colors

<http://codepo8.github.io/css-colour-names/>

Grey is darker than darkgrey 🙃

CLICK THE COLOUR OLIVE. 0/0



RESET SCORE

Colours:

40 80 120 ALL

...hi, I am [@codepo8](#) and this is on [GitHub](#)

*Color: Reuse*

## Color Variables

### Native CSS Variables

```
:root {  
  --brandColor: red;  
}  
  
body {  
  background: var(--brandColor);  
}
```

### Sass/SCSS

```
$brandColor: red;  
  
body {  
  background: $brandColor;  
}
```

*Color: Reuse*

---

## Color Variables

Sass/SCSS

```
mix($color1, $color2, [$weight])
adjust-hue($color, $degrees)
lighten($color, $amount)
darken($color, $amount)
saturate($color, $amount)
```

*Color: Reuse*

## Limited Color

## LIMITED COLOR

Figure out what works



3 Colors



5 Colors



6 Colors

Justin Mezzell



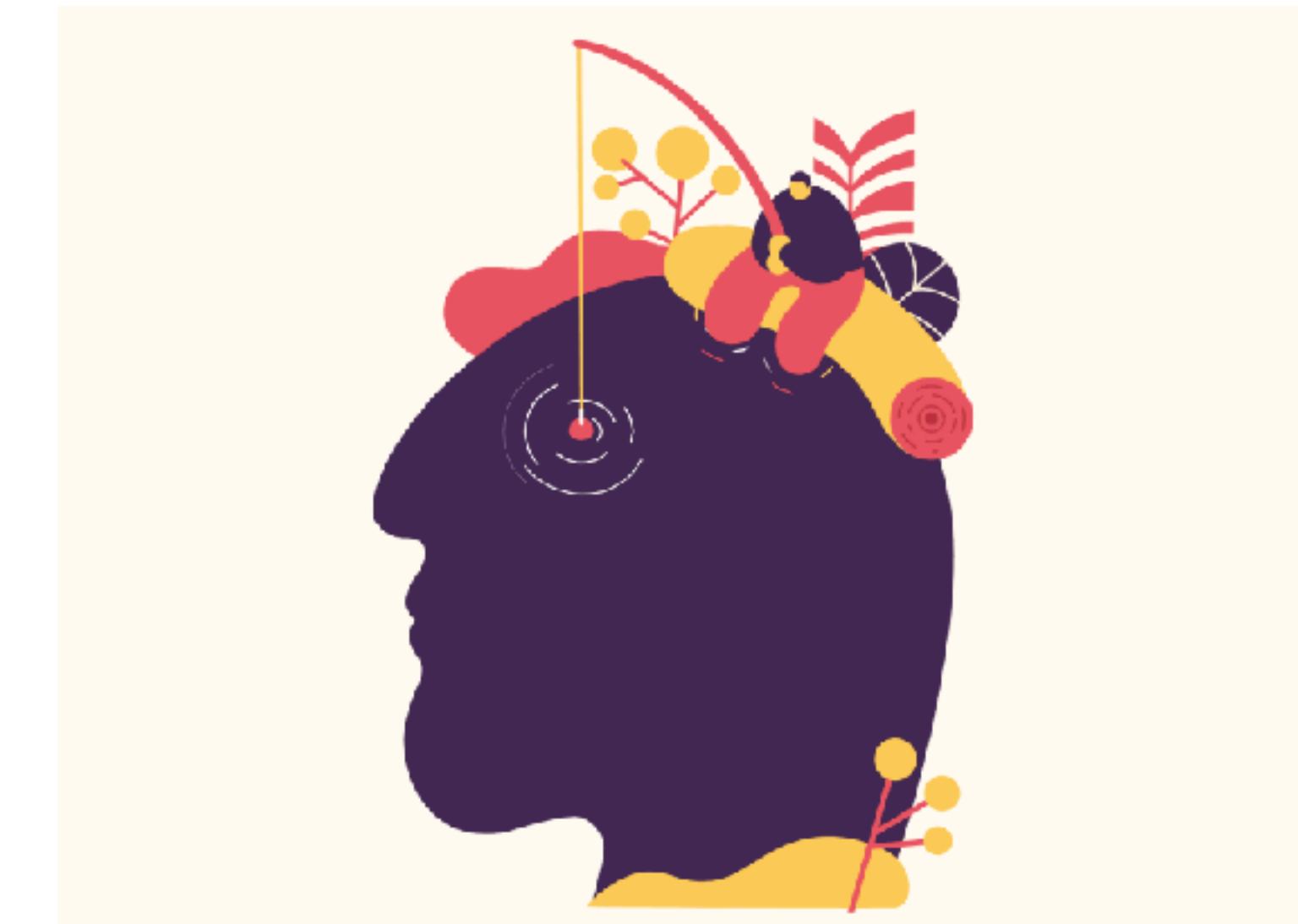
Tools

*Color: Tools*

# Dribbble

Steal Palettes

**Mental space**  
by Nikolay Ivanov for Lobster Studio on Jun 6, 2018



Finding your secret inner place.

Illustrated by: [@FM ILLUSTRATION](#)

6 Responses      oldest newest liked

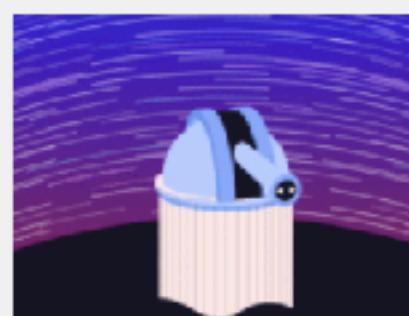
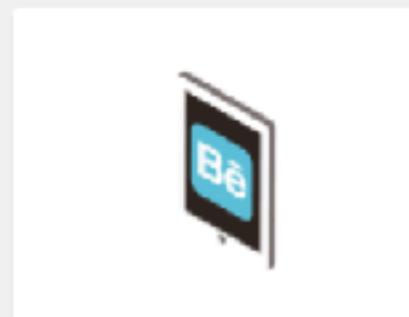
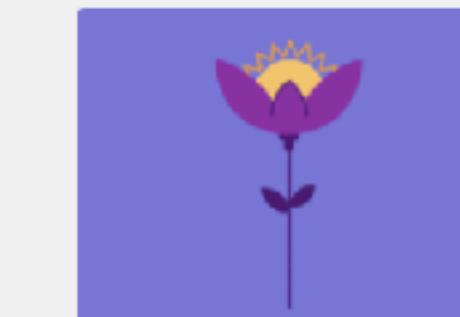
Like? 120 likes

Bucket

Views 1,117 views

Share [Twitter](#) [Facebook](#) [Pinterest](#) [Email](#)

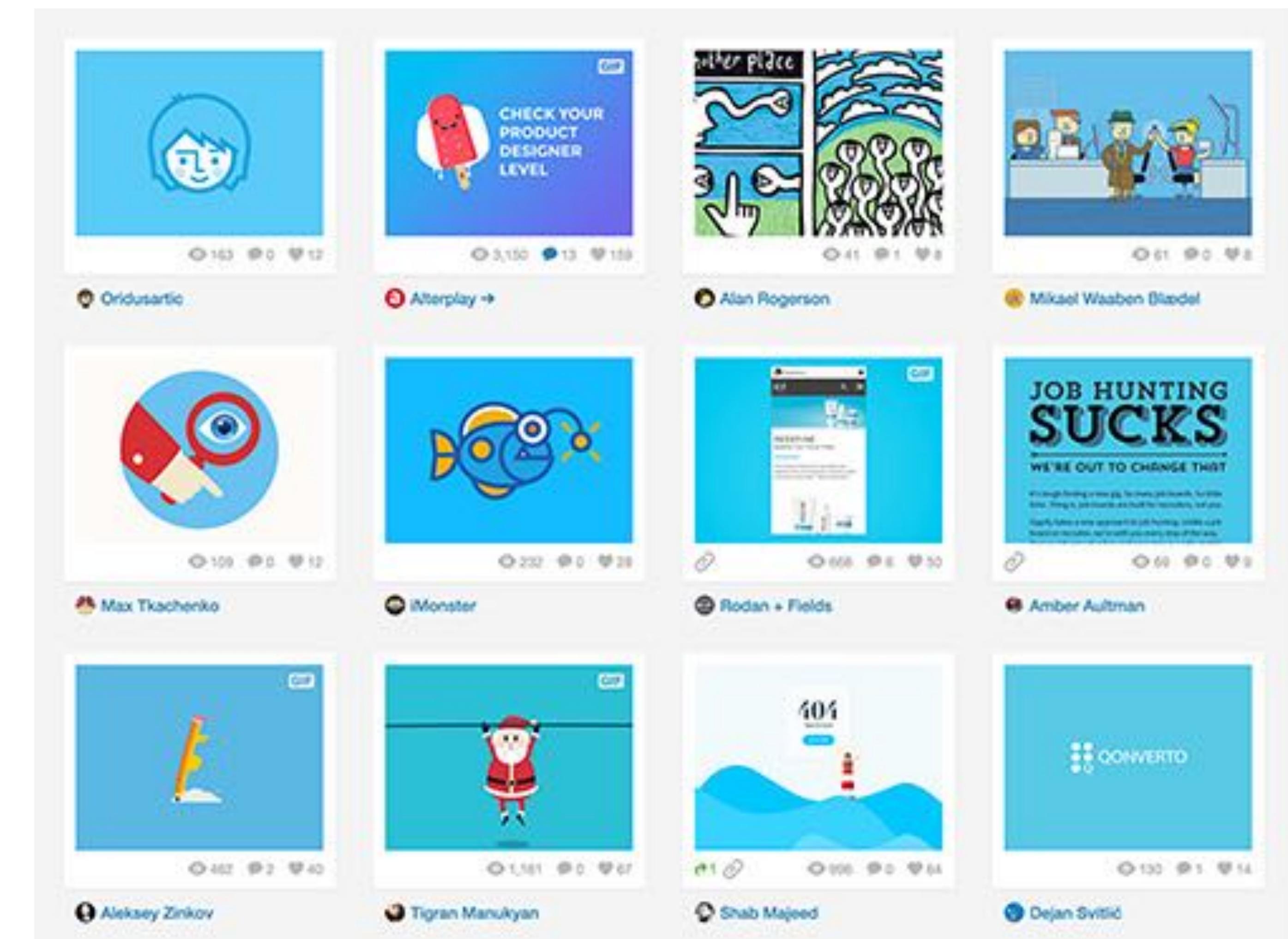
More from Nikolay Ivanov +



*Color: Tools*

# Dribbble

Search by a color



## Color: Tools

# Coolors

coolors.co

COOLORS + SKILLSHARE 2 months free classes →

Generate Explore iOS App Add-on Chrome Extension More ▾ Login Sign Up

Press the spacebar to generate color schemes!

The screenshot shows a color palette interface. At the top, there's a navigation bar with the COOLORS logo, a Skillshare partnership notice, and links for Generate, Explore, iOS App, Add-on, Chrome Extension, More, Login, and Sign Up. Below the navigation is a message: "Press the spacebar to generate color schemes!". The main area displays a grid of color swatches. The first two swatches are purple (#631D76 and #9E4770), labeled "MIDNIGHT" and "MAGENTA HAZE" respectively. The third swatch is white (#FBFBFB) labeled "SNOW". The fourth and fifth swatches are dark purple (#2E2532 and #201A23), labeled "DARK PURPLE" and "RAISIN BLACK". Above each swatch is its corresponding hex code. To the right of the palette are several icons for export and sharing.

Color Name	Hex Code
MIDNIGHT	#631D76
MAGENTA HAZE	#9E4770
SNOW	#FBFBFB
DARK PURPLE	#2E2532
RAISIN BLACK	#201A23

## *Color: Tools*

# Paletton

Build a palette



## *Color: Tools*

# Paletton

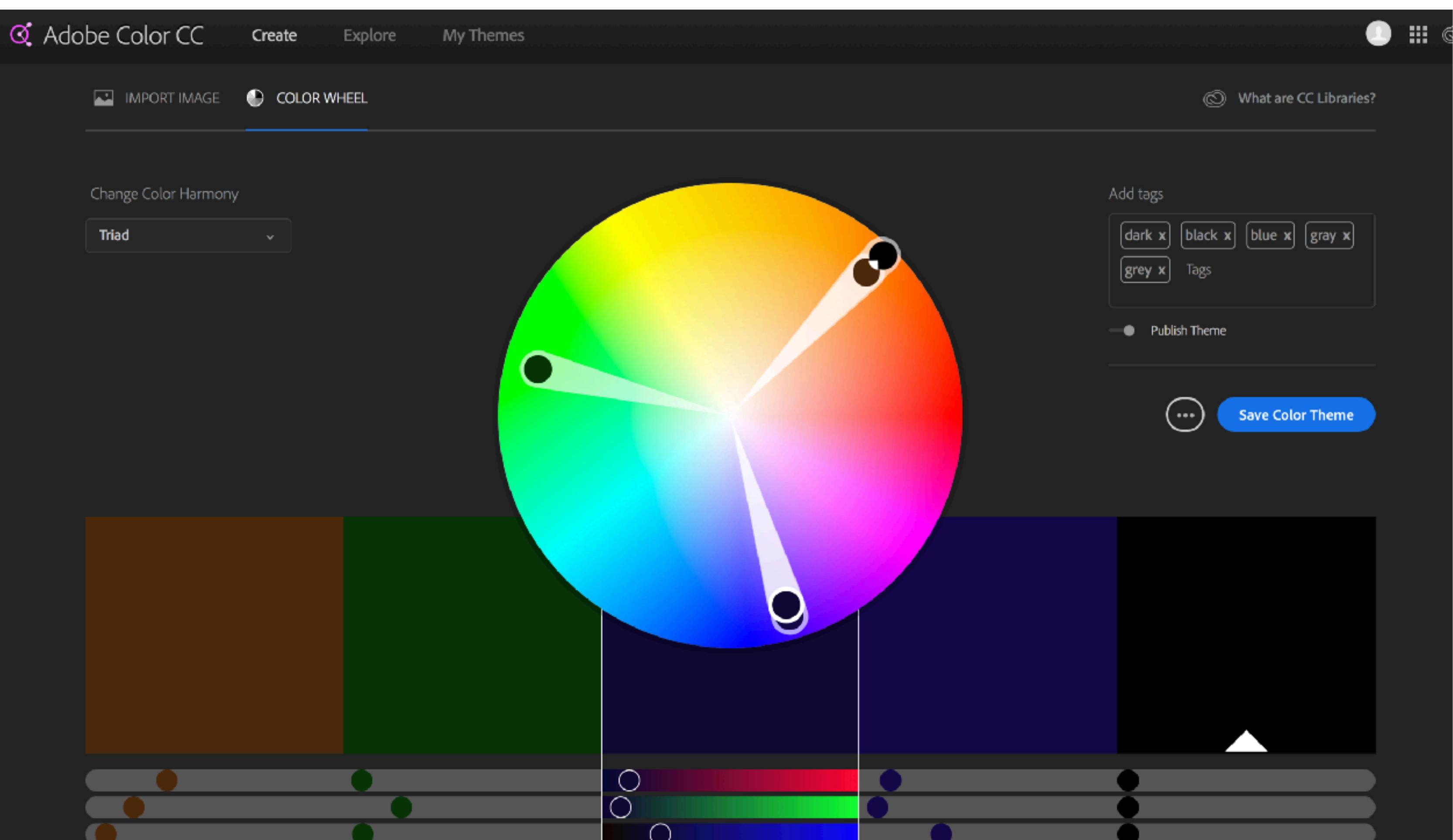
Build a palette



## *Color: Tools*

# Kuler/Color CC

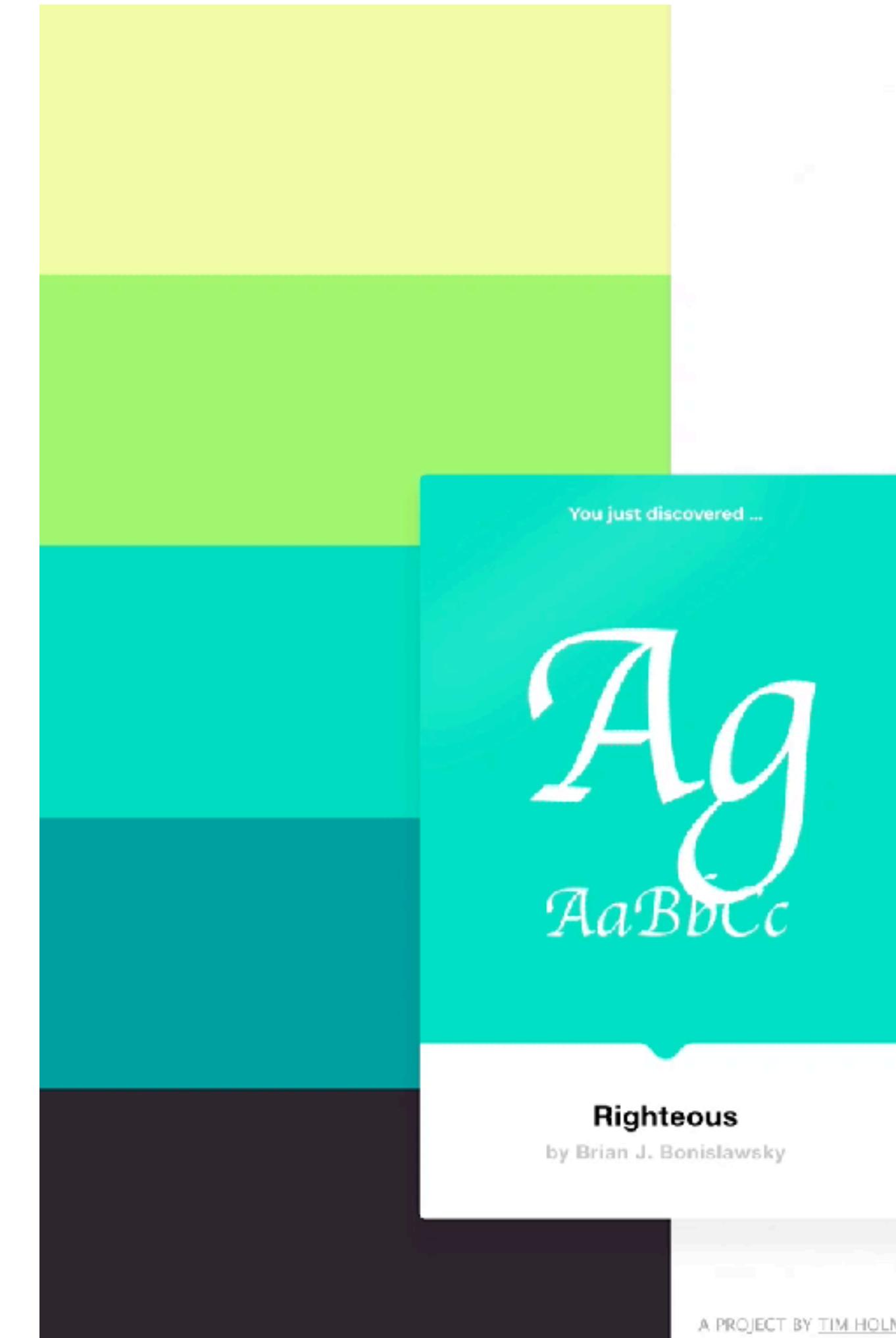
[color.adobe.com](http://color.adobe.com)



*Color: Tools*

## Palettab

[palettab.com/](http://palettab.com/)



**Discover new fonts and colors with every  tab**

Palettab is a browser extension which uses Google fonts and amazing ColourLovers palettes to inspire you with fresh and clean inspiration every time you hit that new tab button!

For Chrome

For Firefox

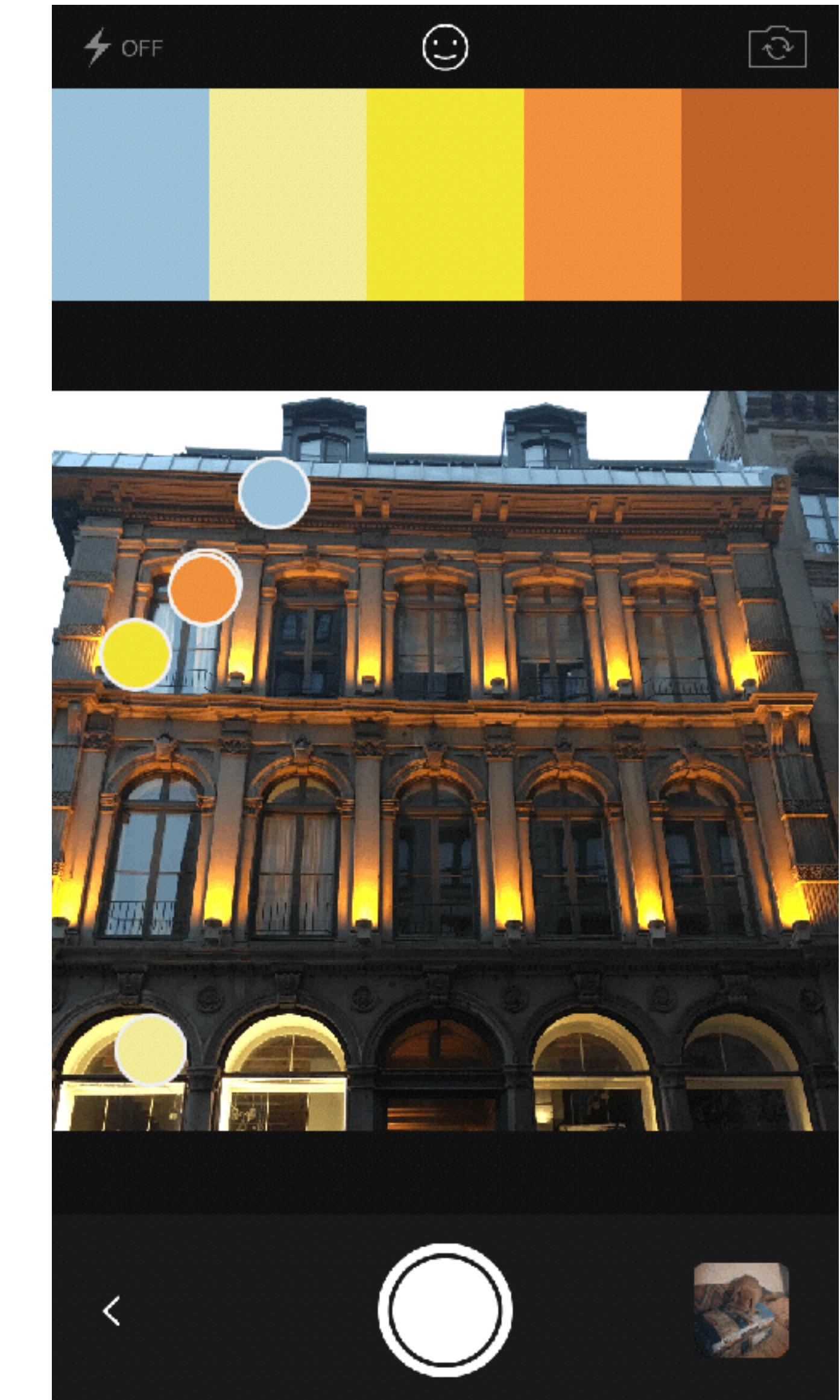
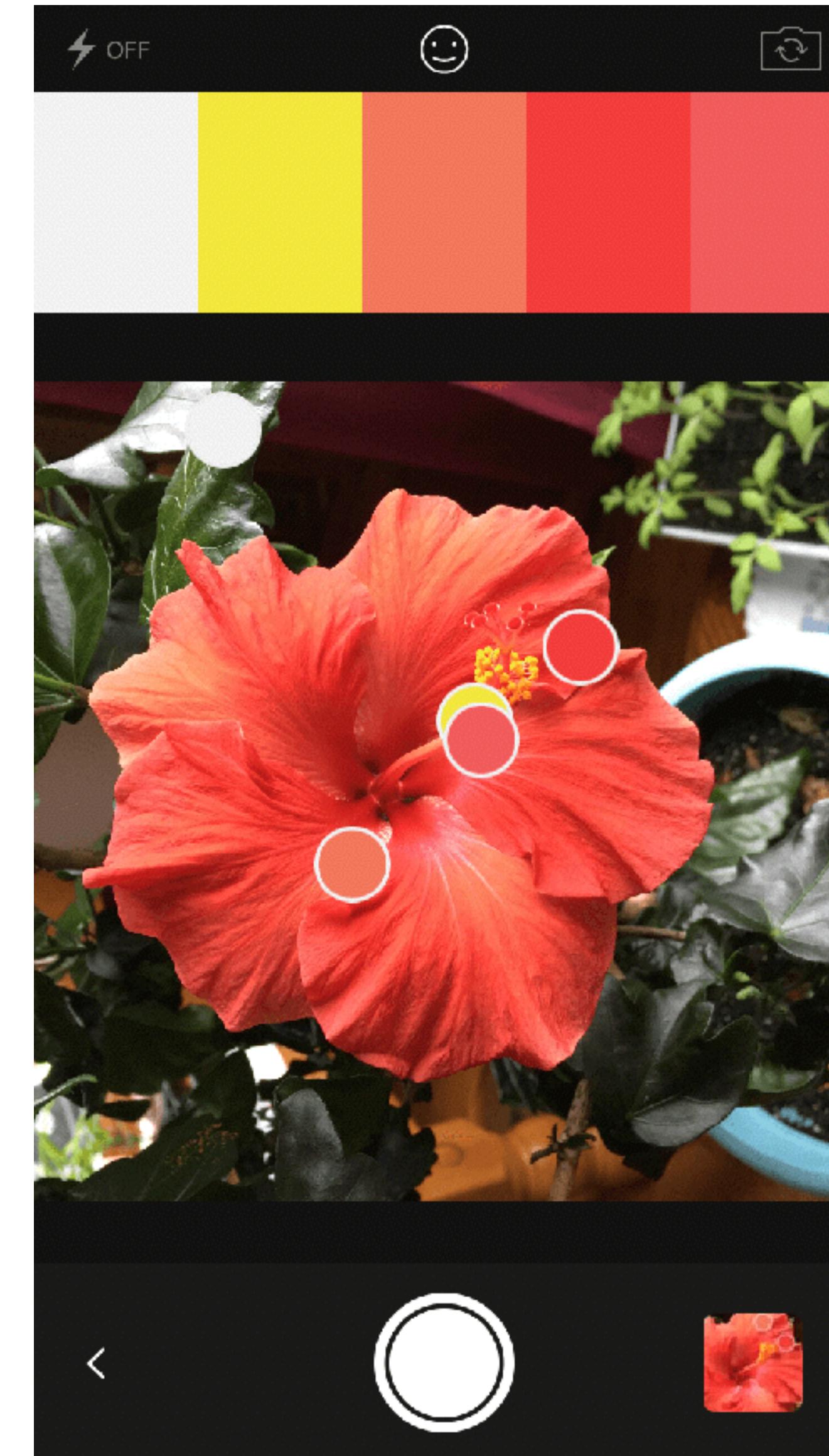
A PROJECT BY [TIM HOLMAN](#) & [CLAUDIO GUGLIERI](#) [Follow @twholman](#) [Follow @claudioguglieri](#)

[Tweet](#) [Like 5](#)

*Color: Tools*

## Adobe Capture

Pick based on “mood”, ML



## Color: Tools

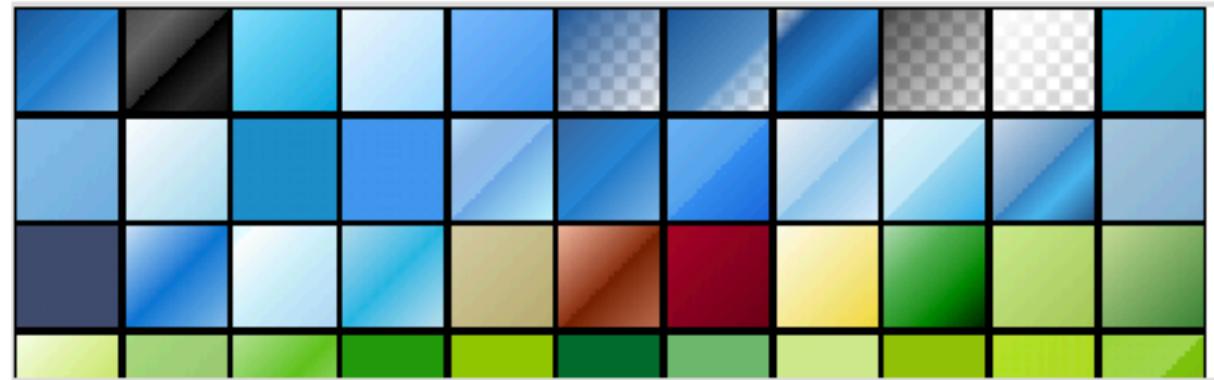
# CSS Gradient

## Ultimate CSS Gradient Generator

A powerful Photoshop-like CSS gradient editor from [ColorZilla](#).

[For Firefox](#) [For Chrome](#) [Gradient Generator](#)

### Presets



Name:  [save](#)



### Stops

Opacity:  Location:  % [delete](#)

Color:  Location:  % [delete](#)

### Sponsor

All the tools your team needs in one place.  
Slack: Where work happens.



### Preview



Orientation: [vertical](#) [horizontal](#) Size:  x   IE

### — CSS —

/\* Permalink - use to edit and share this gradient:  
<http://colorzilla.com/gradient-editor/#1e5799+0,2989d8+50,207cca+51,7db9e8+100;Blue+>  
\*/  
background: #1e5799; /\* Old browsers \*/  
background: -moz-linear-gradient(top, #1e5799 0%,  
#2989d8 50%, #207cca 51%, #7db9e8 100%); /\* FF3.6-  
15 \*/  
background: -webkit-linear-gradient(top, #1e5799  
0%,#2989d8 50%,#207cca 51%,#7db9e8 100%); /\*  
Chrome10-25,Safari5.1-6 \*/  
background: linear-gradient(to bottom, #1e5799  
0%,#2989d8 50%,#207cca 51%,#7db9e8 100%); /\* W3C,  
IE10+, FF16+, Chrome26+, Opera12+, Safari7+ \*/  
filter: progid:DXImageTransform.Microsoft.gradient(  
startColorstr='#1e5799',  
endColorstr='#7db9e8',GradientType=0 ); /\* IE6-9 \*/

Color format: [hex](#) [rgb](#)  Comments

[Link to, save or share the current gradient using its permalink.](#)

[Tweet](#)

[Like 13K](#)

[Mix It!](#)

[Follow @colorzilla](#)

## Color: Tools

# Gradient

UI Gradients

uiGradients + SKILLSHARE [Get 2 months free ▾](#)

X Show all gradients #bdc3c7 → #2c3e50

[Share on Twitter](#) [Share on Facebook](#)

The image displays a grid of 12 UI gradient swatches, each labeled with a name. The gradients are arranged in four rows of three. The top row contains 'Grade Grey' (grey to dark blue), 'Piggy Pink' (pink to light pink), and 'Cool Blues' (teal to light blue). The second row contains 'MegaTron' (green to orange-red), 'Moonlit Asteroid' (dark navy to teal), and 'JShine' (blue to red). The third row contains 'Evening Sunshine' (red to blue), 'Dark Ocean' (dark grey to blue), and 'Cool Sky' (light blue to white). The bottom row contains 'Yoda' (pink to dark purple), 'Memariani' (red to teal), and 'Amin' (purple to blue).

Grade Grey	Piggy Pink	Cool Blues
MegaTron	Moonlit Asteroid	JShine
Evening Sunshine	Dark Ocean	Cool Sky
Yoda	Memariani	Amin



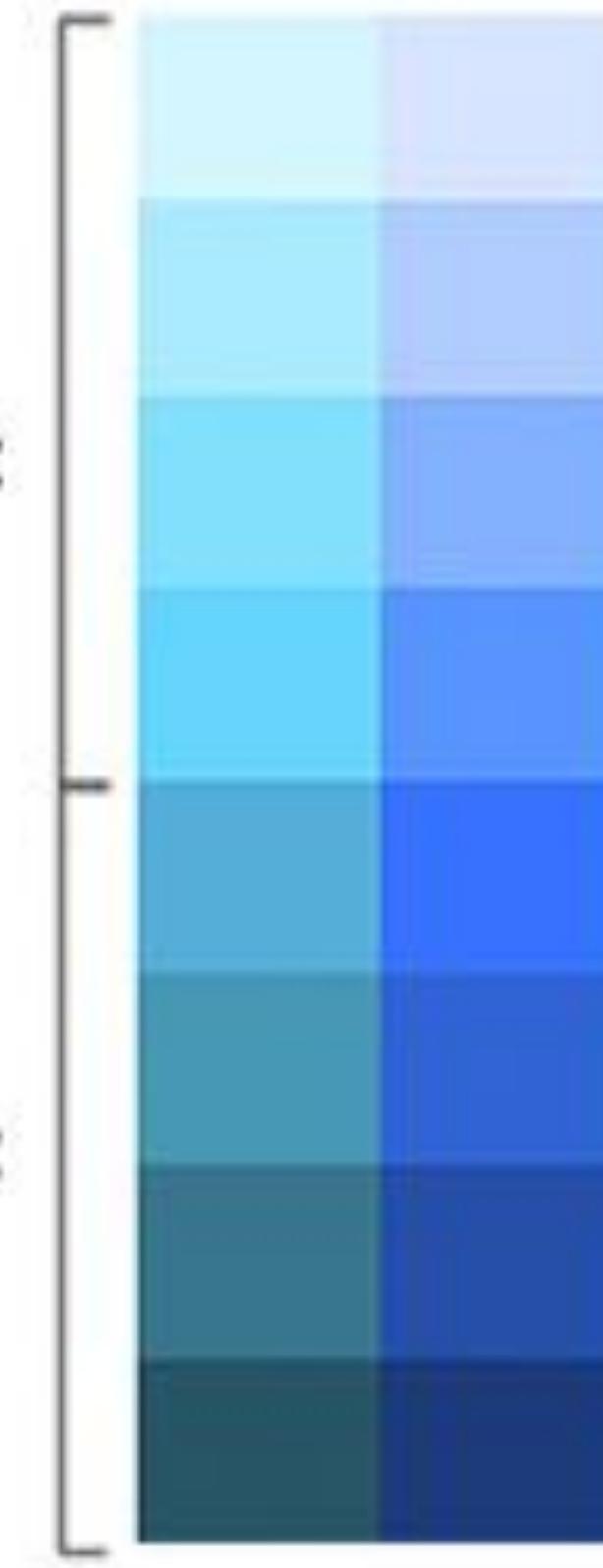
How?

## Color

---

Anchoring

Fresh, Energetic:



Corporate, Serious:

## Color

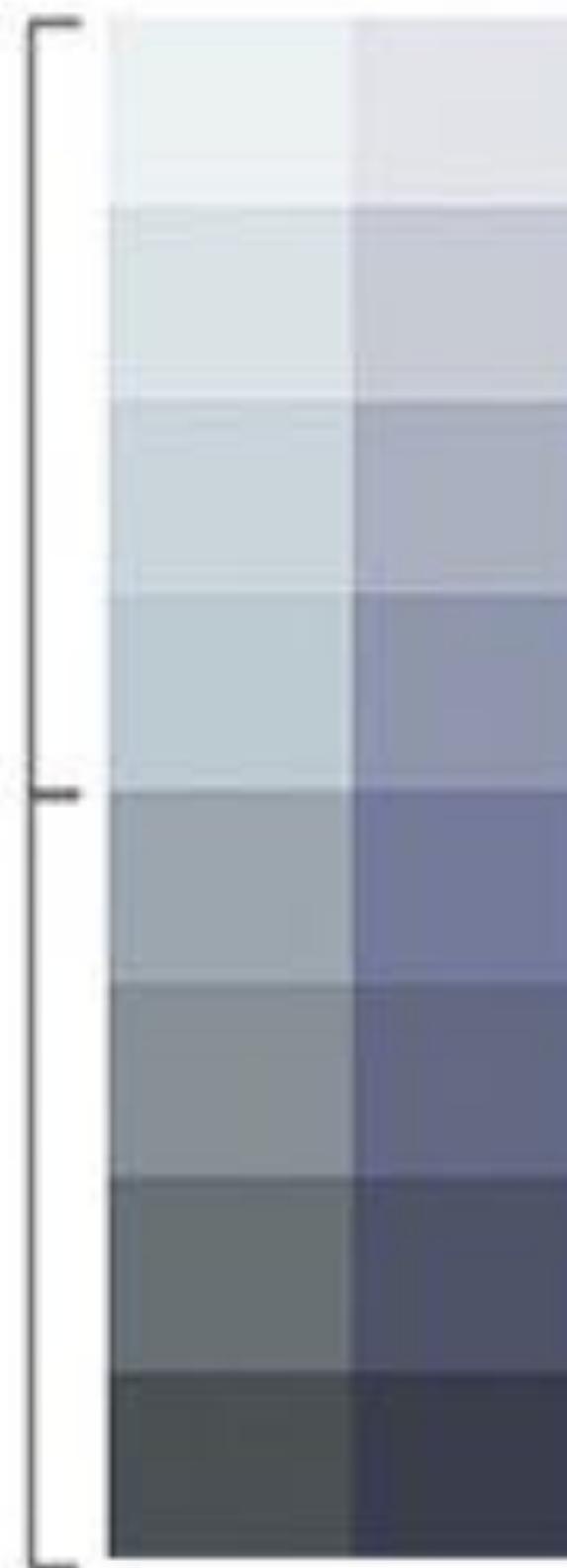
---

Get your greys

REDUCE SATURATION

Fresh, Energetic:

Corporate, Serious:

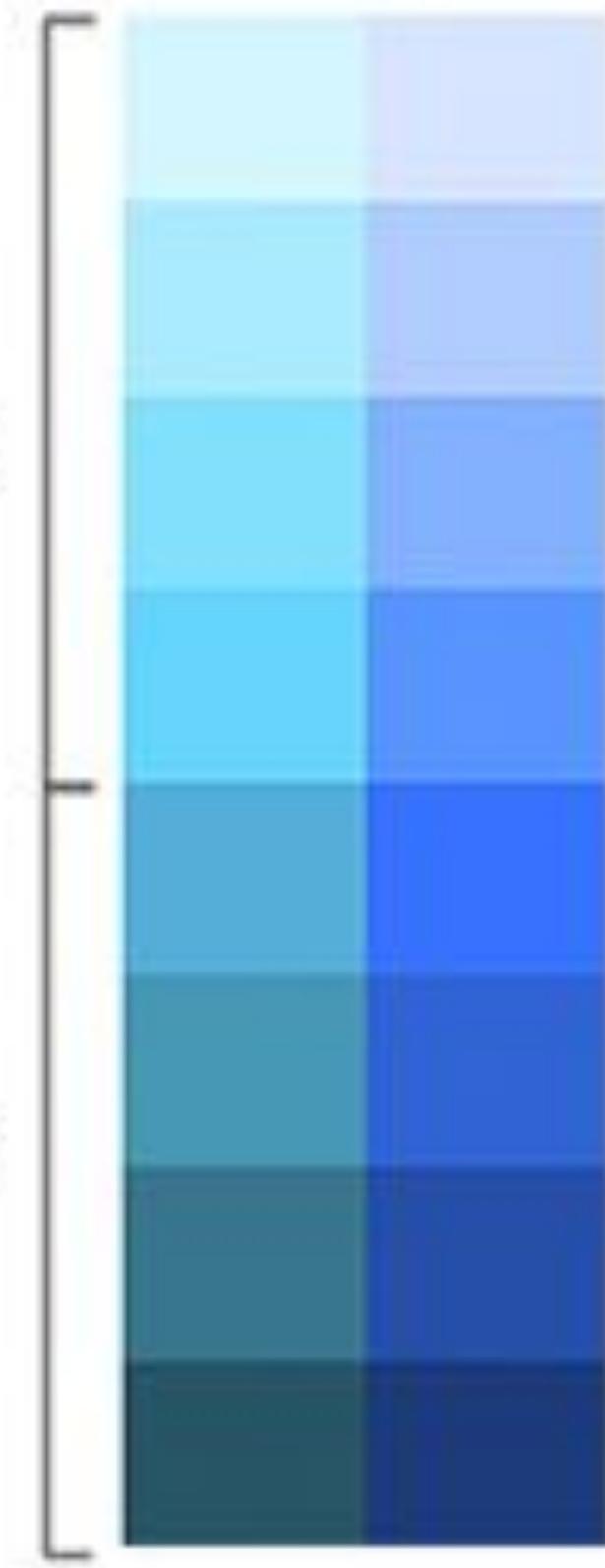


## Color

---

### Gather Accents

Fresh, Energetic:



Corporate, Serious:



**DEMO  
TIME!**

# Exercise

*Add some color to your cheeks*

Use any of the tools/techniques you just learned,  
Create a palette of 5 colors. Then create 5 greys/blacks.  
Then apply that to your last composition.