Colors!

Colors are an important part of visual communication

- Humans have lots of color associations
 - Emotions, moods, intent, etc
- Colors should augment, not replace, text

Colors can be HARD!

- Easy to say if we like/hate it
- Hard to create the desired result

Color Guidelines

There are entire courses taught about color theory

• And I'm not qualified to dive deep into any of it

Instead these are practical guidelines

• Starting points

As with anything

- Designers will break these rules
- Ideally when that's better
- Exceptions that prove the rule

60-30-10 rule

A good starting concept:

- 60% of your content is "one color"
 - "primary" (names will vary)
- 30% is a second color
 - "secondary" (names will vary)
- 10% is a third color
 - "accent" (names will vary)

True in most visual arts

What is a color?

The world is not 3 colors

- Trivial colors ignored by this rule
 - Could be text color!
- "Color" could be several colors
 - often hues or shades
 - but not always

The goal is to categorize

• not precision

Examples

Presidential Priorities

Globalization of Higher Education

Under President Aoun's leadership, Northeastern has redefined the global university, expanding coop and other experiential learning opportunities to more than 128 countries and creating new educational and research partnerships that align with the increasingly global nature of higher education.



Use-Inspired Research

President Aoun has strategically aligned the University's research enterprise with three global imperatives—health, security, and sustainability. Northeastern focuses on transforming research into commercial solutions that address the world's most pressing problems.





Experiential Learning

Building on Northeastern's leadership in cooperative education, President Aoun has made experiential learning the centerpiece for



President Aoun is a leading voice for innovation in higher education, particularly as Artificial

Color Palette

A "color palette" is the selection of color a site uses

- Not used randomly!
- Use the 60-30-10 guideline

Palettes can be 3-8 or so colors

• break them out into the 60/30/10 groupings

Choosing a focus color

Color has a lot of psychological associations

https://zevendesign.com/color-association/

Palette Selection

Picking colors for your palette

- Not random
- Not "gut instincts"
 - Unless your gut finds good matches

We have rules and tools

Rules - So Many!

Some colors "go well together" and some do not.

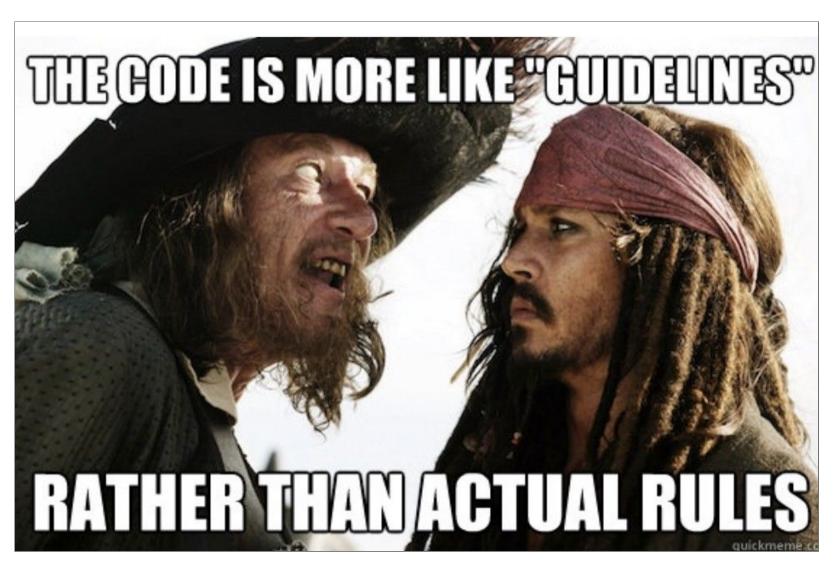
- Color Harmony
- Want enough contrast (but not a lot)
- Want enough harmony (but not too much)

There are some different rules that can identify these

• Except when wrong

Rules

Like all design rules, these are guidelines



Color Wheel

Colors discussed in terms of the "color wheel"

- spectrum in a circle
- green between yellow and blue
- orange between red and yellow

Usually pigment-based colors

- Not light-based
- Though light-based is a separate study
 - Ask a lighting major

Analagous Colors

Analagous colors are "adjacent"

- simple: 3 colors on a 12-part wheel
 - primary colors (3)
 - secondary colors (+3)
 - tertiary colors (+6)

Analagous colors can "pop" a lot

- Good for "energetic, cheerful" sites
- Garish on more serious or analytical sites

Complementary Colors

Complementary Colors are "opposite" on the color wheel

- use shades to fill in the rest of the palette
- Great for getting a contrast without getting too "busy"

Monochromatic Colors

Here everything is just a variation on one primary color

- shades and hues
- watch out for contrast!

Neutral Colors

Designers aren't consistent about considering your text color as part of the palette

- Often they include "neutral" colors that don't violate the palette
- White/Black often omitted from the palette then used a lot
 - But not always omitted
 - I did say that designers love exceptions

Tools

There are many tools to help select/find a palette

- https://coolors.co/
- https://mycolor.space/
- https://paletton.com/
- https://color.adobe.com/create/color-wheel

Demo Sheet

It can be hard to predict how all your colors work together

A demo sheet (my term) helps by giving you a preview of the color interactions

• Without requiring that you've written the entire site

You can try different palettes

• and different roles (accent/cta, etc) for the colors

Demo Sheet Creation

- Can be done in visual tools (Figma, Photoshop, etc)
- Can be done in simple HTML and CSS

I will cover the HTML/CSS approach

Demo Sheet Goal

You want to see the color interactions

- header/footer
- menus
- buttons
 - including hover
 - CTA and non-CTA
- cards (commonly)

Images and the Colors

Real Designers will insist you can't design a palette

- without considering the images
- Particular any Hero images

They are correct

- And yet, we often have to
- A web *site* is often built first
 - and pages with images come later
 - and not just at once

Skeleton Page

A Page with:

- Header/Footer
- Headings/titles
- Text w/Links
- Menu
- Card
- CTA button
- non-CTA button
- Controls
 - optional; if you plan for carousel or similar

Changing Colors

Just swapping out colors in the CSS can be tedious

• lots of duplicates in many positions

Try defining "roles" for the colors

- using CSS custom properties
- Then define colors to those roles
 - in one place

Color Guidelines

Finding colors for roles that aren't garish is HARD

- Expect a lot of tweaking
- Here are some vague tips
- But they are VAGUE
- Lots of exceptions

Rough Guidelines

- Move towards neutral on rollover/hover effects
 - darker or lighter of same color
 - "minimal value shift"
- Soften explicit white/black when helpful
- Balance big color blocks left/right top/bottom