

# Fundamental Web Design

Hunter Jorgensen

# Thinking About Some Websites We Use

A very well designed web page is [airbnb.com](https://www.airbnb.com).

What works well for this website? How does it compare to websites that offer similar services? Can you think of any websites that contrast against this?

# 8 Golden Rules of Design

Ben Shneiderman has a series of books called *Designing the User Interface* (currently on the 6th edition!)

Very popular, and contains 8 Golden Rules of Design that are still well regarded today!

If you enjoy design, also check out Don Norman, Whitney Hess and Jakob Nielsen.

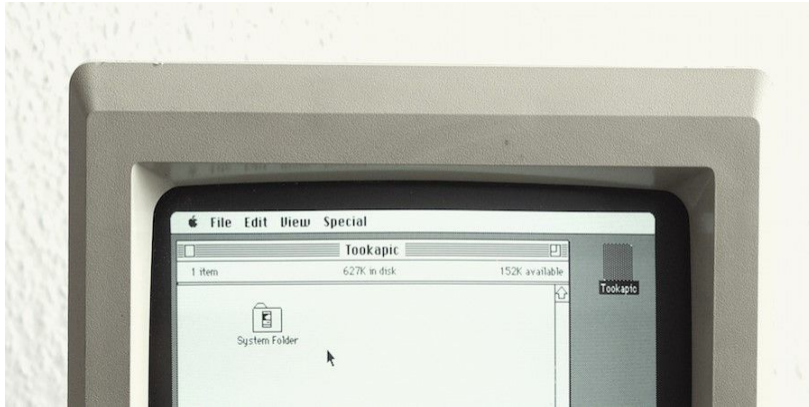
Pictures from:

<https://www.interaction-design.org/literature/article/shneiderman-s-eight-golden-rules-will-help-you-design-better-interfaces>

# Rule 1: Strive For Consistency

- Common icons, colors, menu hierarchy, CTA's (call-to-actions), and user flows standardize the ways information is conveyed and allow users to interact with an interface easily
- Consistency allows users to become familiar with your website (or any other tool) to get what they want and to get you want you want

# Rule 1: Strive for Consistency



Here Apple users similar menus, styling, sounds, etc. for the last 30+ years

What other tools or websites offer a consistent experience across pages or features?

# Rule 2: Seek For Universal Usability

All users should be able to use your app to get what their need

- New users should be able to get to do what they want easily
- Advanced users should have access to shortcuts to save time and give mastery

What are some examples of this? Can you think of any products that have tools to make it easier to use over time?

# Rule 3: Offer Informative Feedback

Users should know where there are and what is going on. Good examples of this:

- Showing location in a multi-part questionnaire
- Offering tactile feedback when clicking a button

A bad example would be the error to the right!



## Rule 4: Design Dialog To Yield Closure

Every flow/process should have a beginning, middle and end. A common example of this is having a modal popup with 'Complete'/'Done'/etc. when a step is complete. Think about going from selecting an item, putting it into your cart, checking out and then getting a confirmation.

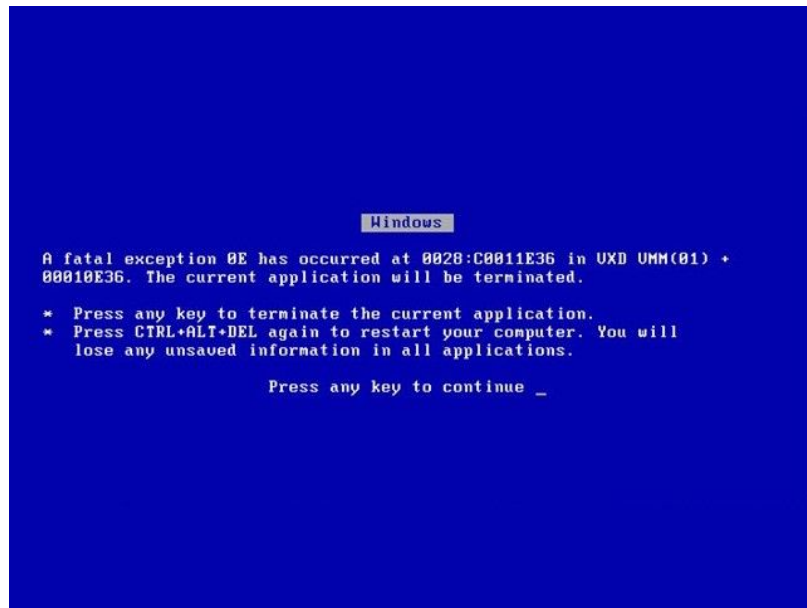
When a user adds, updates or removes, think about what that flow would look like so that it's clear that their action has been received.



# Rule 5: Offer Simple Error Handling/Prevent Errors

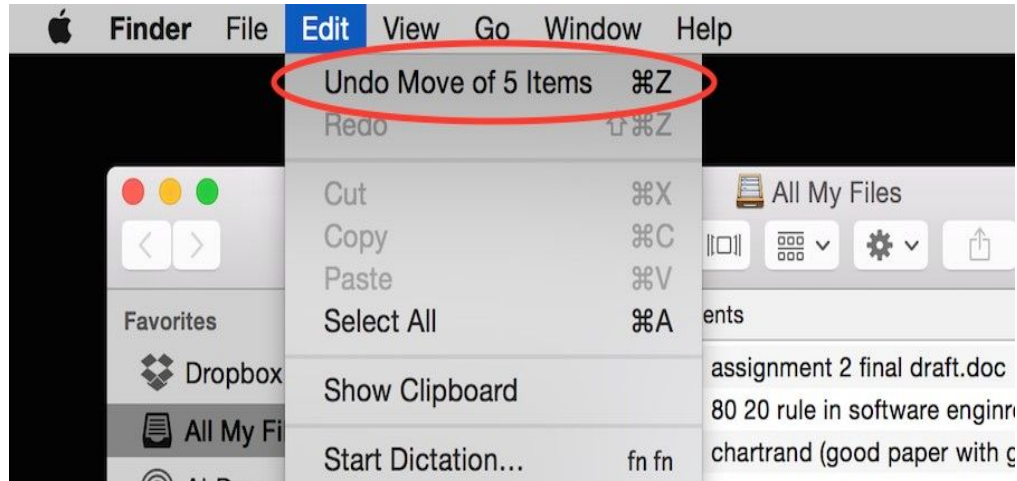
It is often helpful to minimize any areas of friction when guiding a user through a page. On form inputs, for instance, it's easier to select a date from a calendar than input a particular date.

Same for error handling. Why is the blue screen of death so bad?



# Rule 6: Permit Easy Reversal of Actions

If a user can easily leave an action before committing to it, they're more likely to feel comfortable and experiment. When entering a new form page, think about how easy helpful it would be to easily go back/cancel where they're at.



# Rule 7: Keep Users In Control

Users want to feel powerful when using an app or website, whether that means more control or the ability to avoid tedious steps. Users shouldn't have unexpected changes to their data, manually do tedious steps or take too long to get where they want.

# Rule 8: Reduce Short Term Memory Load



People can only track 4 or 5 items in their mind at once (this is why iPhones only allow 4 apps at the bottom of their screen and Androids allow 5.)

Data and the process through each step should be complete in itself (people don't want to recall data from another screen, for instance) and each 'step' should feel like a complete process.

# Fonts

Choosing the right font

*I'll always find you*

**I'LL ALWAYS  
FIND YOU**

# Fonts

**Serif vs. Sans-Serif:**

Serif

Sans-Serif

**Spacing - Monospaced vs Proportional:**

Courier

Times New Roman

**And more: *cursive*, etc.**

**You can use the font-family property in CSS to change a font!**

# Pairing Fonts

Font Pairing (the practice of use one font for the body of text and another for headers/quotes/etc.) creates a nice contrast that supports hierarchy.

Common patterns are to use opposite pairings (sans-serif + serif, for instance).

Examples:

- <https://fontpair.co/>
- <https://www.typography.com/blog/typographic-doubletakes>

# Color Models

It is *very* hard to represent colors in a computer. Here are 3 popular approaches:

**RGB** (Red, Green, Blue) - This is an 'additive' model, where all the primary colors are used to make white. These 3 colors are swapped around to make 16 million different unique colors. Mainly used on computer screens.

**CMYK** (Cyan, Magenta, Yellow, black) - This is used more in printing, and is the subtractive model (all colors combined make black). Can produce about 10 million colors, but sometimes appears more faded.

**HSB/HSV** (Hue, Saturation, Lightness/Value) - Hue is a pure color (not tone/shade), saturation is the intensity of that color, lightness is how 'white' a color is/value is brightness.

[Try it!](#)

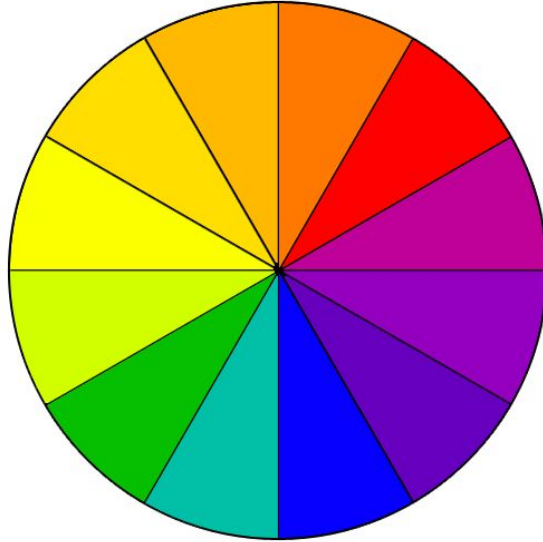
Ref: [https://en.wikipedia.org/wiki/Color\\_model](https://en.wikipedia.org/wiki/Color_model) (representing these colors with numbers)

Ref: [https://en.wikipedia.org/wiki/Color\\_space](https://en.wikipedia.org/wiki/Color_space) (representing these colors in space)



# Color Palettes

When choosing color scheme, there are 5 common practices. I'll leave the color wheel here for reference!



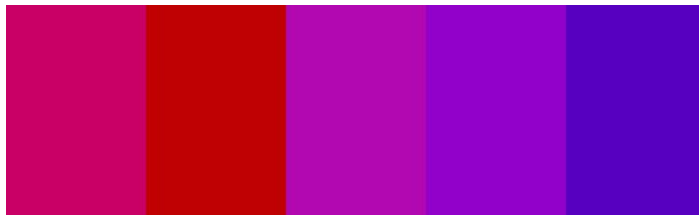
# Color Palettes: Monochromatic

Easiest to use! Pick a hue (color) and then use different tones/shades/tints.



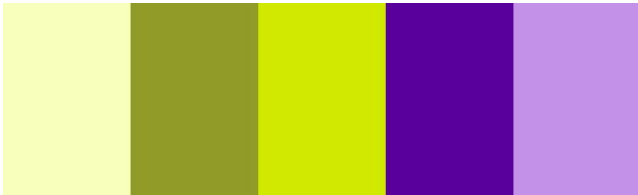
# Color Palettes: Analagous

This uses different, but adjacent, colors. You can play around with tone/shade/tint to improve contrast (compare top to bottom):



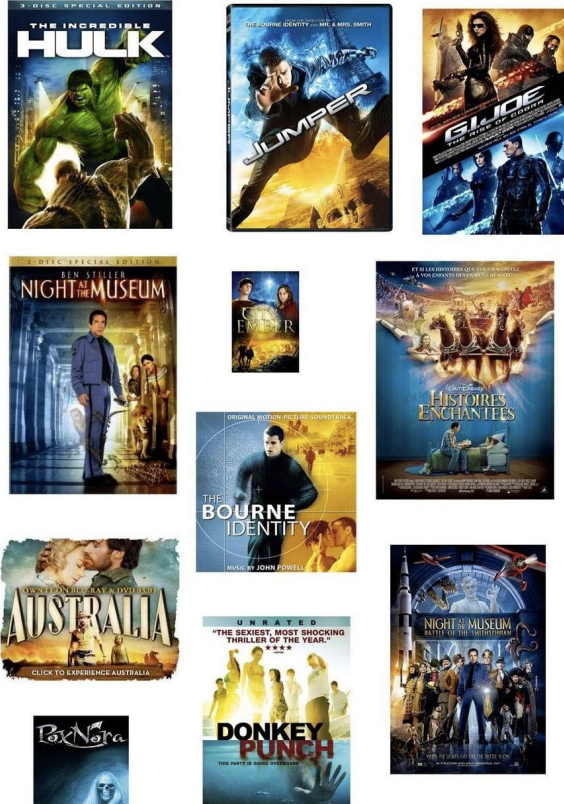
# Color Palettes: Complementary

This is very popular and uses colors at the opposite end of the spectrum. Note that these can be jarring when next to each other, so good to have transition/white space between the colors. Note the 'jarring' on the right color scheme between the bright green/red.



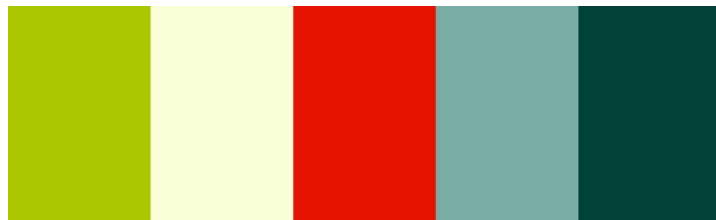
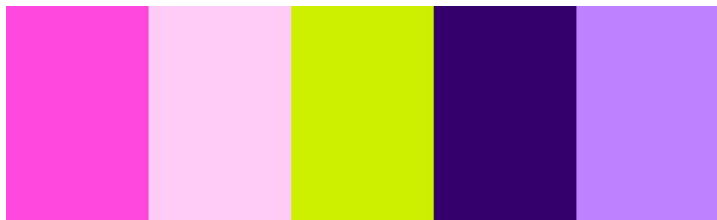
# Color Palettes: Complementary

See, very popular!



# Color Palettes: Split Complementary

A bit more sophisticated than straight complementary, this uses a base hue and the colors adjacent to the opposite hue.



# Color Palettes: Triadic

This uses hues equally spaced around the color wheel to give a lot of color diversity. Always good to play around with tint/shade/tone to make certain colors stand out more.



# Color Palettes: Custom and Others

There are other color palettes and schemes that you can explore on your own, or you can even try to create your own!

[Try it here!](#)

For ideas on schemes, [check it out here.](#)



# Precedence and Placement

- Users often start looking at a website in the top left, then move to the right
- As developers (or potentially designers) you have the tools to control how a user sees and interacts with a website
- Ask yourself:
  - What do users see first?
  - What are you trying to accomplish? What are your users trying to accomplish?

# Examples Again

- Airbnb.com
- Twitter.com
- Others?

What are these sites trying to do? What are we as users trying to do?

What does this site do with color? How about the 8 golden rules of design?

Anything about the following:

- Hierarchy
- Grid
- Spacing
- Alignment and Distribution

# Ideas to Think About

- Create contrast to focus user attention (dark background vs bright font, etc.)
- Be consistent throughout your websites
- Use nature as inspiration

Ref:

<https://webdesign.tutsplus.com/articles/an-introduction-to-color-theory-for-web-designers--webdesign-1437>

# Overview

- Tell me one important component of web design
- What is typography matching
- What is consistency in web design?

# Lab: Improving Terrible Websites

Find an absolutely terrible ugly or terrible website ([this is a good start!](#)) and list 3 ways that you can suggest to improve it (think about accessibility, white space, color, etc.).

Send the link and the 3 examples to Nandish for 1 extra credit point.