

INFO3180 - LECTURE 9

**Web Application UI
Design**

As software adapts and evolves, it seems design is becoming a first-class citizen in software companies. So it should. You can make the snappiest, most reliable software out there, but if nobody can work out how to use it, is it really that good? - Jake Peters

Source: <https://www.invisionapp.com/blog/design-for-software-engineers/>

Likewise if something is beautiful and well thought-out, but constantly errors and is unusably slow, will anyone care how great it looks? - Jake Peters

Source: <https://www.invisionapp.com/blog/design-for-software-engineers/>

With that said, it's good for us as web developers to have at least a basic understanding of design. This can help us to give designers better feedback during the design process or help/work with our designers to make minor tweaks along the way.

Colour Basics

Colour plays a vital role in design and everyday life. It can trigger emotional responses, draw your eye to a particular item or communicate something important without using words.

*So how do we know which colours look
good together?*

Ans: The Colour Wheel



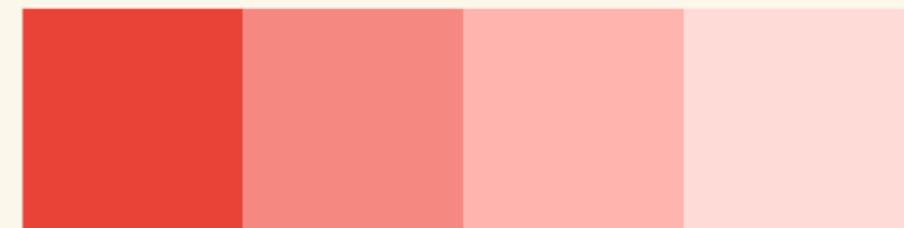
Source: <https://www.gcflearnfree.org/beginning-graphic-design/color/1/>

There are tried and true formulas that we can use to create our colour schemes.

Monochromatic



Formula:
Monochromatic



Analogous



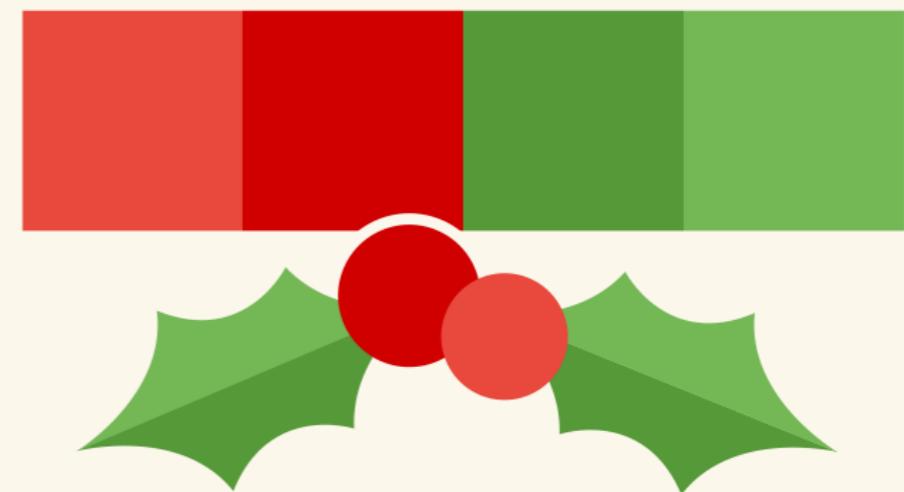
Formula:
Analogous



Complementary



Formula:
Complementary



Split Complementary



Formula: **Split
Complementary**



*And there are others such as Triadic and
Tetradic to name a few.*

Other Pointers

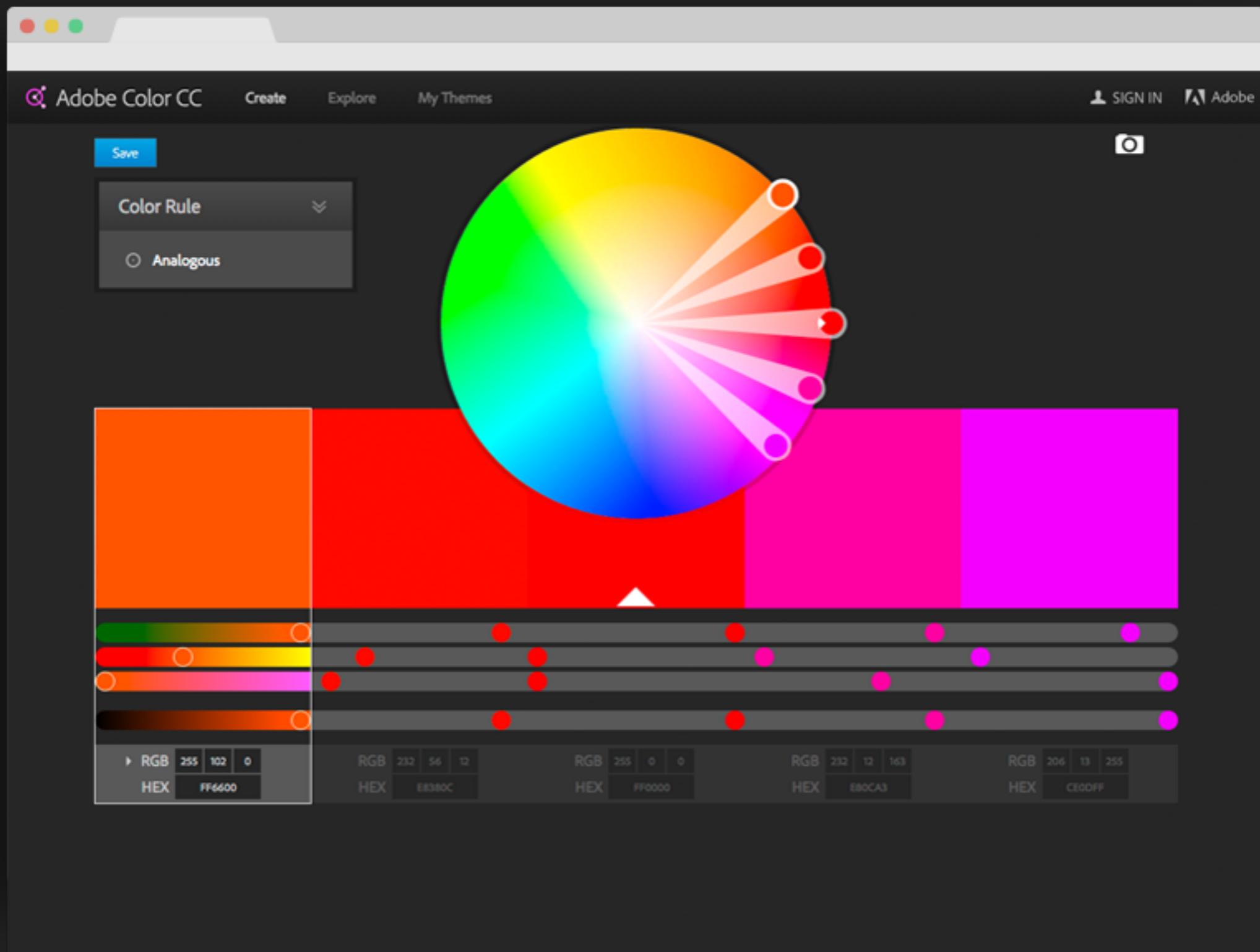
- ▶ Ensure sufficient contrast in your colour palettes. Start with one color, and try adjusting its **lightness**, **darkness**, or **saturation**.
- ▶ Readability is an important factor in any design. Your colors should be **legible** and **easy on the eyes**, especially when working with text.
- ▶ Neutral colors like black, white, and gray can help you **balance** your design, so when you **do** use color, it really stands out.

Other Pointers

- ▶ Colour sends a message, so consider the tone of your project. e.g. **bright colors** tend to have a *fun* or *modern vibe*, while **desaturated colors** often appear more *serious* or *businesslike*.

Adobe Color CC

<https://color.adobe.com/>



Coolors

<https://coolors.co/app>

The screenshot shows the Coolors web application interface. At the top, there's a navigation bar with the Coolors logo, a Skillshare promotion for 3 months free, and links for Generate, Explore, iOS App, Add-on, Chrome Extension, More, Login, and Sign Up. Below the navigation is a toolbar with icons for help, settings, camera, undo, redo, and various export options like CSV, JSON, and PDF. A message "Press the spacebar to generate color schemes!" is displayed. The main area features a horizontal color palette divided into five equal-width segments. From left to right, the colors are dark purple (#1E152A), teal (#4E6766), bright cyan (#5AB1BB), lime green (#A5C882), and yellow (#F7DD72). Each segment contains its corresponding hex code at the bottom. In the center of the palette, there are several small icons: a grid, a double-headed arrow, a horizontal line with dots, and a lock. At the very bottom of the page, a dark footer bar displays a cookie policy message: "By continuing to browse the site you are agreeing to our use of cookies. For more details about cookies see our cookie policy." with "See details" and "OK" buttons.

COOLORS + SKILLSHARE 3 months free ›

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

Press the spacebar to generate color schemes!

#1E152A #4E6766 #5AB1BB #A5C882 #F7DD72

By continuing to browse the site you are agreeing to our use of cookies. For more details about cookies see our cookie policy. See details OK

Typography Basics

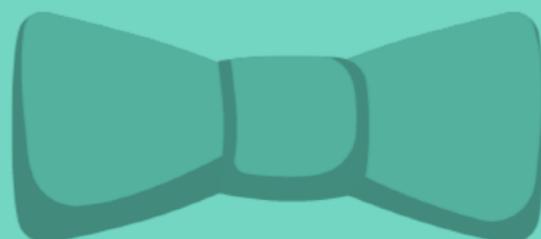
Simply put, typography is the style or appearance of text.

Types of Fonts

- ▶ Serif fonts
- ▶ Sans-serif fonts
- ▶ Display fonts
- ▶ Handwritten
- ▶ Monospaced

*Do you know the difference
between them?*

Serif



Source: <https://www.gcflearnfree.org/beginning-graphic-design/typography/1/>



A large, bold, dark gray sans-serif font word "Sans" is displayed on a yellow background. The letter "S" on the left has a red beret with a black bow on top. The letters have a dotted outline.

Sans

"Without serif"

Source: <https://www.gcflearnfree.org/beginning-graphic-design/typography/1/>

Script

Blackletter

ALL CAPS

Source: <https://www.gcflearnfree.org/beginning-graphic-design/typography/1/>

Combining Fonts

- ▶ Less is more
- ▶ Try to choose just one or two per project.
- ▶ If you need more contrast, try repeating one of your fonts in a different size, weight, or style
- ▶ Try combining sans serif with serif, short with tall, or decorative with simple

Combining Fonts

Droid Serif
Lato

Lato

Old-Fashioned Shortcake

Ingredients

2 cups flour
1/2 teaspoon salt
2 tablespoons sugar
4 teaspoons baking powder
3 tablespoons shortening
3/4 cup milk
1 quart berries

Sift dry ingredients; mix in shortening.
Add milk to make a soft dough, then
smooth out lightly. Bake in greased layer
cake tin for 20 to 25 minutes. Split,
butter, and spread sweetened crushed
berries or other fruit between layers.

Are there fonts to avoid?

Fonts To Avoid



Comic Sans

Jokerman Curlyz Brush Script

Kristen Papyrus Hobo
ITC

Other Important Terms

- ▶ **Leading** - the space between lines of text.
- ▶ **Tracking** - the overall space between characters, sometimes called character spacing.
- ▶ **Kerning** - the space between specific characters.

Leading

Leading

The space between lines of text
(also known as line spacing)

Tracking

Tracking



Kerning



Google Fonts

<https://fonts.google.com>

Google Fonts

DIRECTORY FEATURED ARTICLES ABOUT 🔍 > Search

Viewing 877 of 877 font families

Roboto Christian Robertson (12 styles) +	IBM Plex Sans Condensed Mike Abbink, Bold Monday (14 styles) +	Hi Melody YoonDesign Inc (1 style) +
All their equipment and instruments are alive.	A red flare silhouetted the jagged edge of a wing.	I watched the storm, so beautiful yet terrific.
Open Sans Steve Matteson (10 styles) +	Lato Łukasz Dziedzic (10 styles) +	Roboto Condensed Christian Robertson (6 styles) +
Almost before we knew it, we had left the ground.	A shining crescent far beneath the flying vessel.	It was going to be a lonely trip back.
Poor Story Yoon Design (1 style) +	Montserrat Julieta Ulanovsky, Sol Matas, Juan Pablo del Peral, Jacques Le Bailly (18 styles) +	Oswald Vernon Adams, Kalapi Gajjar, Cyreal (6 styles) +

Categories

- Serif
- Sans Serif
- Display
- Handwriting
- Monospace

Sorting

- Trending ▼

Languages

- All Languages ▼

Number of styles

Thickness

Slant

Width

Google Fonts

<https://fonts.google.com>

Google Fonts

DIRECTORY

FEATURED

ARTICLES

ABOUT



Merriweather

SELECT THIS FONT

Glyph

M
m

Characters

АВС҆Д҆ЕҒҲИ҆КЛМН҆О҆Р҆Қ҆С҆Ш҆ТУ҆В҆Х҆
Z҆z҆аbсcčdđefghijklmnopqrsštuvwxyzžA
БВГГДЂЕЁЖЗИИЙЈКЛМНЊОПРСТ
ЋУӮФХЦЧЏШЋЫЬЭЮЯабвгѓёёжз
sиiйјклмнњопрстћуӮфхцчџшћы
ьэюяÃÂÊÔԾUăâêôԾ1234567890‘?’“!”
(%)[#]{[@]}/&\<-+÷×=>®©\$€£¥¢:;,.*

Styles

Type here to preview text

40px



Light
Light Italic

Designer

Sorkin Type
Principal design

About

Merriweather was designed to be a text face that is pleasant to read on screens. It features a very large x height, slightly condensed letterforms, a mild diagonal stress, sturdy serifs and open forms.

There is also [Merriweather Sans](#), a sans-serif version which closely harmonizes with the weights and styles of this serif family.

The Merriweather project is led by Sorkin Type, a type design foundry based in Western Massachusetts, USA. To contribute, see github.com/EbenSorkin/Merriweather

Google Fonts

<https://fonts.google.com>

Google Fonts

DIRECTORY

FEATURED

ARTICLES

ABOUT



Bold Italic
Black
Black Italic



These are the countries where Merriweather is most popular.

Popular Pairings with Merriweather

Open Sans



Merriweather

Regular



Open Sans

Regular



Oswald



Montserrat



Lato



Roboto



The spectacle before us was indeed sublime.

Apparently we had reached a great height in the atmosphere, for the sky was a dead black, and the stars had ceased to twinkle. By the same illusion which lifts the horizon of the sea to the level of the spectator on a hillside, the sable cloud beneath was dished out, and the car seemed to float in the middle of an immense dark sphere, whose upper half was strewn with silver. Looking down into the dark gulf below, I could see a ruddy light streaming through a rift in the clouds.

1.54

B

Number of times Google Fonts API served Merriweather over the last week. Merriweather is featured in more than 3,000,000 websites.

Further Information

Feedback

Have feedback on Merriweather?
Please [let us know](#).

License

[Open Font License](#)

Layout & Composition

Layout & Composition can be considered to be the building blocks of design. It helps to give your work structure and make it easier to view and navigate.

Basic Principles

- ▶ **Proximity** - using visual space to show relationships in your content
- ▶ **White space (negative space)** - means the space between content and lines
- ▶ **Alignment**
- ▶ **Contrast** - making one item different from another by using colour, style of text or even making things different sizes. This can help to catch the readers eye and draw attention to something .
- ▶ **Repetition** - have a consistent look and feel. Have a specific color palette, use the same header style, etc. This helps viewers to know what to expect

Proximity

Kenya Reed

Web Designer

555.168.4982

kenya@reedweb.com

www.reedweb.com



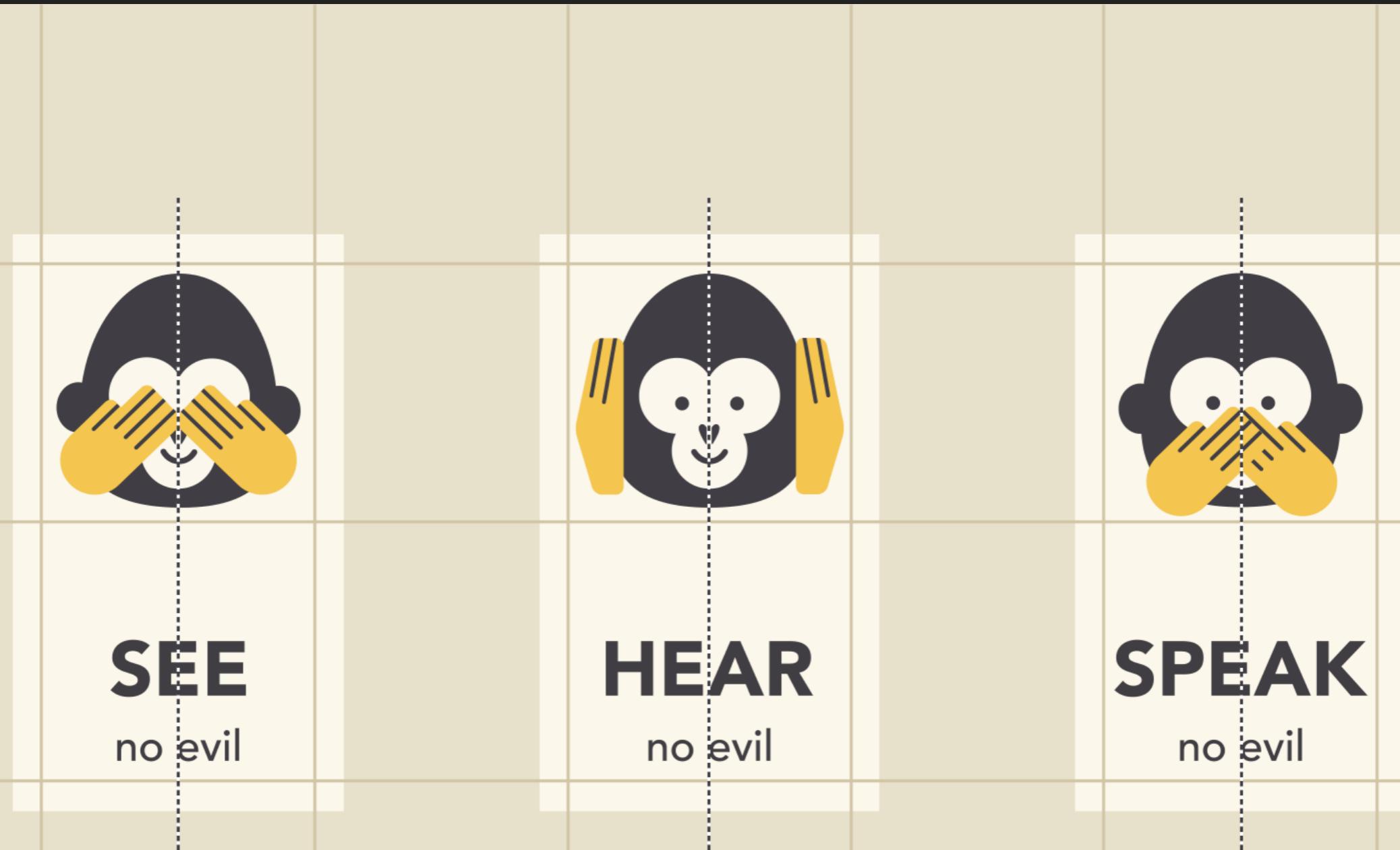
White Space



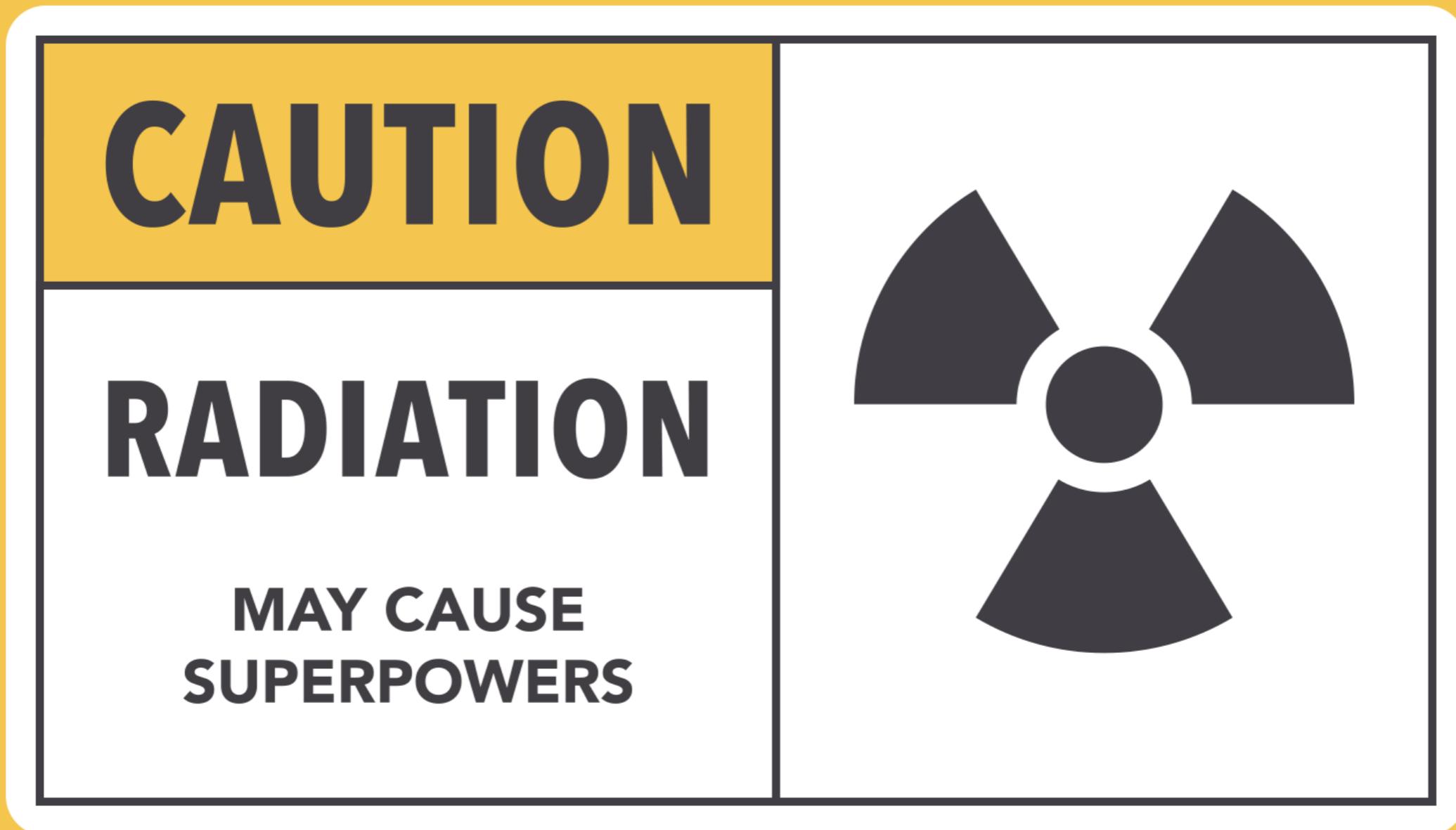
Serving the community since 1976

140 CASA GRANDE WAY
BEVERLY HILLS, CA 90210
321.555.9865

Alignment



Contrast



Hierarchy

Save the Date

For the marriage of

COREY & ANTHONY

Las Vegas, Nevada

January 1, 2018

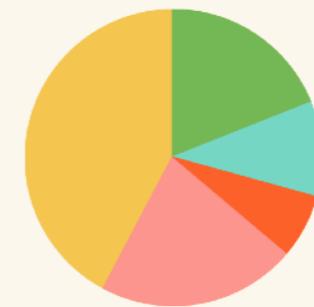
Repetition

Why We Shouldn't Have Homework

by Emily Cheng, age 10

Disadvantages of Homework

- I don't like it
- Takes too long
- Boring
- Unfair
- Reasons



These basic design concepts are just scratching the surface. There are other things to consider such as your Brand and Identity, Images, lines, shapes, texture and balance to name a few but we'll leave it at that for now.

Wireframes

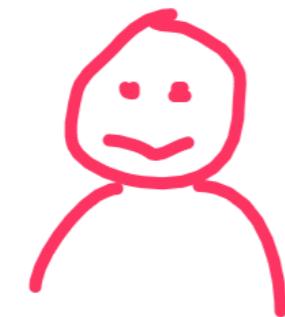
What is a wireframe?

Wireframes allow you to define the layout or hierarchy of the information on pages within your website before actually building it. It's like a blueprint for your site, similar to blueprints used when building houses.

Wireframes can be as simple as pencil drawing on a napkin/paper or they can be produced on a computer using software.

*Wireframes can have multiple levels of detail. We generally break them up into two categories. **Low-fidelity** and **High-fidelity wireframes.***

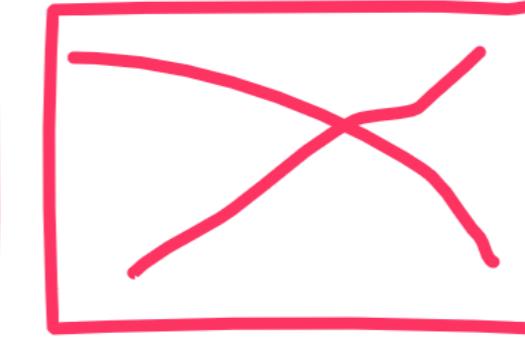
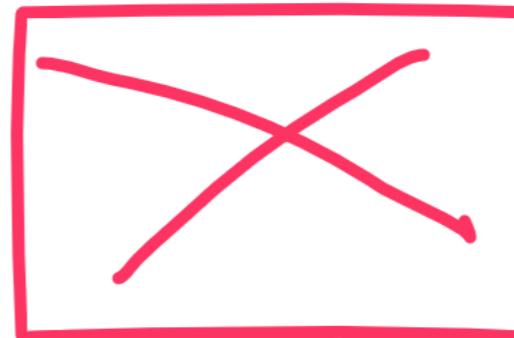
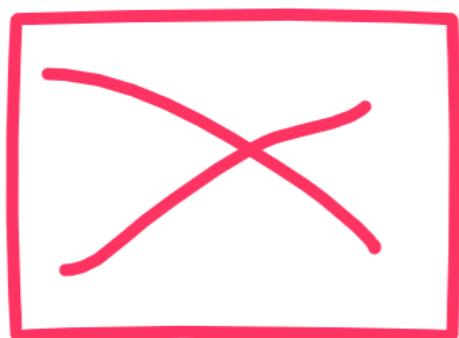
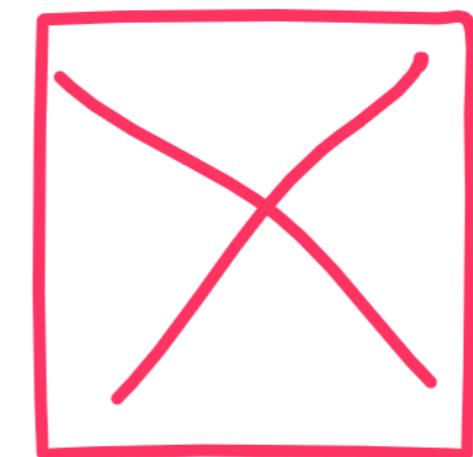
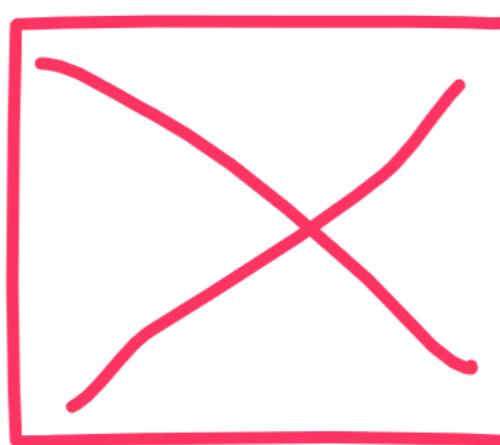
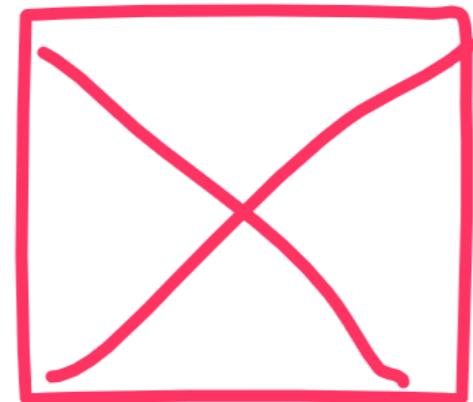
Low-fidelity wireframes tend to be rough sketches and often use place holders.

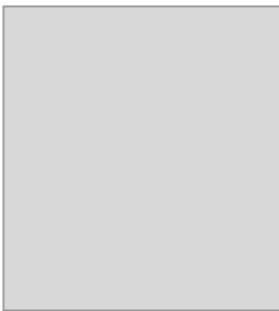


Rosa Diaz
Kingston, Jamaica

6
Posts

Follow





Mary Jane

Kingston, Jamaica
Member since January 2018

This is my short biography so you can learn more about me.

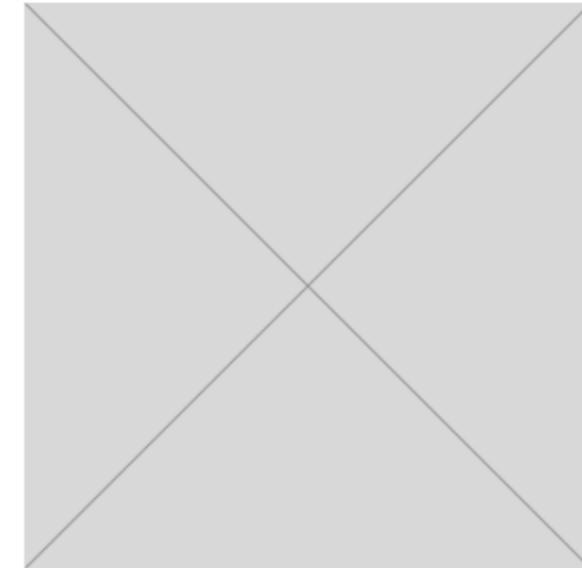
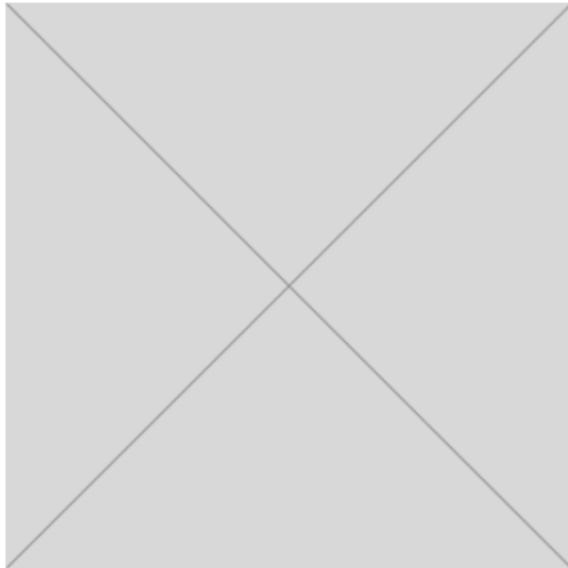
6

Posts

10

Followers

Follow



High-fidelity wireframes on the other hand provide a lot more detail and give a better idea of what the real user interface will look like.

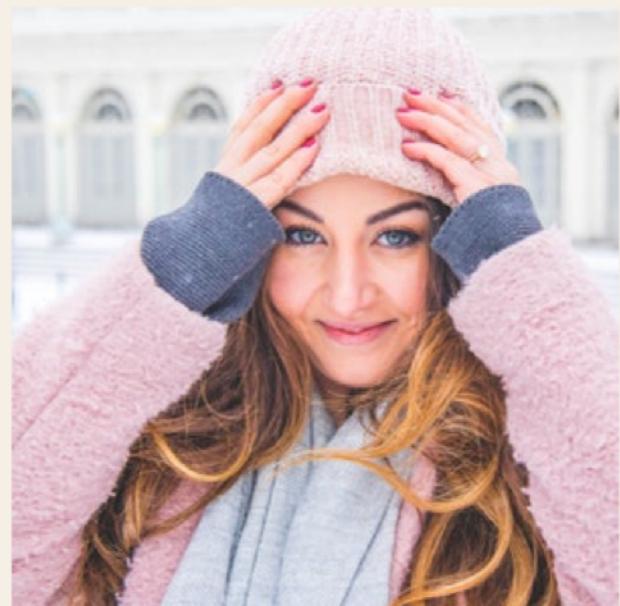
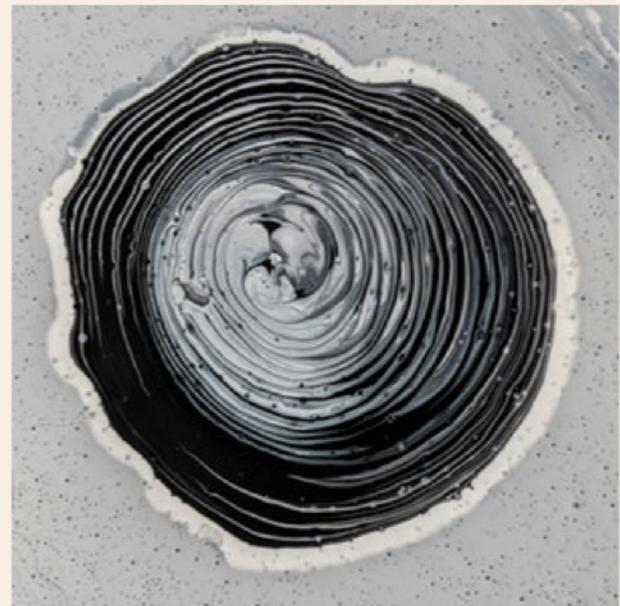
**Rosa Diaz**

Kingston, Jamaica
Member since January 2018

This is my short biography so you can learn more about me.

6
Posts

10
Followers

[Follow](#)

Prototypes

Sometimes seeing a wireframe or static mockup only isn't enough and clients may want to actually interact with it to get a better feel for how everything works together.

*In cases like that a **prototype** will be helpful.*

*Prototypes can save you time and money.
They enable misunderstandings to be
identified and addressed as early in the
design process as possible.*

You may want to have a 'clickable' prototype. By providing users and other stakeholders with a functioning prototype, it will allow them to click through a series of screens and help to drive design conversations and feedback.

*Some designers/developers actually
build prototypes with HTML and CSS.*

Wireframe and Prototyping Tools

- ▶ Pencil and Paper - from the Bookstore
- ▶ WireframeCC - <https://wireframe.cc/>
- ▶ Adobe Photoshop/Illustrator
- ▶ Sketch App - <https://sketchapp.com>
- ▶ WebFlow - <http://webflow.com>
- ▶ Adobe XD - <https://www.adobe.com/products/xd.html>
- ▶ Figma - <https://figma.com>
- ▶ Invision App - <https://www.invisionapp.com/>
- ▶ Invision Freehand - <https://www.invisionapp.com/feature/freehand>
- ▶ HTML and CSS for a prototype
- ▶ and of course there are many others...

Design Systems

A design system is a collection of reusable components, guided by clear standards, that can be assembled together to build any number of applications.

So this includes things such as brand guidelines, typography (fonts used and their sizes), color scheme, images (icons and illustrations), UI components (and their styles), standard page layouts, grids, etc...

Design systems enable teams to build better products faster by making design reusable—reusability makes scale possible. This is the heart and primary value of design systems.

Shopify Polaris Design System

<https://polaris.shopify.com/>



PRINCIPLES

CONTENT

VISUALS

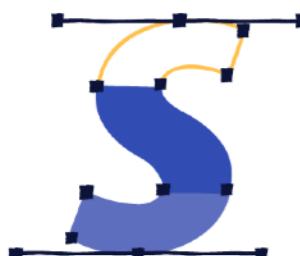
COMPONENTS

RESOURCES

Search

Shopify Polaris

Our design system helps us work together to build a great experience for all of Shopify's merchants.



Salesforce Lightning Design System

<https://www.lightningdesignsystem.com/>



Typography

Search

Getting Started

Platforms

Guidelines

Overview

Animation

Color

Data Entry

Displaying Data

Layout

Loading

Localization

Markup and Style

Messaging

Search

Navigation

Typography

Voice and Tone

Accessibility

Text is the primary way that users digest content and accomplish work, so it's important to use good typographic principles to establish a clear visual hierarchy and to maximize legibility.

Salesforce Sans

At the heart of good typography is a good typeface. We started from the ground up, partnering with Monotype, to design one that reflects our brand and personality, while also maintaining versatility to address diverse applications, from massive billboards to minuscule UI text.

Salesforce Sans is the result: a friendly, professional, and modern typeface with four weights. Salesforce Sans is available to partners and developers in our ecosystem to use in conjunction with the Design System.

SALESFORCE SANS

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
a b c d e f g h i j k l m n o p q r s t u v w x y z
0 1 2 3 4 5 6 7 8 9

Aa

Aa

Aa

Aa

Atlassian's Design System

<https://atlassian.design/>



P Product



Overview



What's new?

FOUNDATIONS

Accessibility

Color

Grid

Iconography

Typography

Writing style

COMPONENTS

Avatars

Badges

Banners

Breadcrumbs

Buttons

Checkboxes

Date/time picker

Drop-down menu

Flag messages

Inline dialog

Color

Where appropriate, we enable people to introduce their own color palettes. Our products adapt intelligently and flexibly to cater to people's preferences. We are also committed to complying with AA standard contrast ratios. To do this, choose primary, secondary, and extended colors that support usability by ensuring sufficient color contrast between elements so that people with low vision can see and use the interface.

Primary color palette

Our primary palette is comprised of neutrals, white, and blue. These colors are present across most touch points from marketing to product. If you're keen to use the color palette you can [download the palette here](#).

	A	A	A	A		A	A		A	A				
	FAIL	FAIL	PASS	PASS		FAIL	FAIL	PASS	PASS		PASS	PASS	FAIL	FAIL
NAME			NAME		NAME			NAME		NAME			NAME	
B400 - Pacific bridge			#0052CC		N800 - Squid ink			#172B4D		NO - Doctor			#FFFFFF	
RGB			0, 82, 204		RGB			23, 43, 77		RGB			255, 255, 255	

We use B400 for primary actions and buttons, links, for indicating progress, and representing

U.S. Federal Government Design System

<https://designsystem.digital.gov/>

 An official website of the United States government [Here's how you know](#) ▾

U.S. Web Design System

[Download code and design files](#)

[View on GitHub](#)

[UI components](#) [Page templates](#) [Getting started](#) [Design principles](#) [What's new](#)

UI COMPONENTS

Overview

Typography

Colors

Accessibility

Grids

Buttons

Labels

Tables

Alerts

Accordions

Form controls

Form templates

Search bar

Side navigation

Headers

Buttons

Use buttons to signal actions.

[View in Component Library](#) ↗

PRIMARY BUTTONS

Default

Hover

Active

Focus

Disabled

Disabled (deprecated)

SECONDARY BUTTONS

Default

Hover

Active

Focus

Disabled

Disabled (deprecated)

BUTTONS ON A DARK BACKGROUND

Default

Hover

Active

Focus

Disabled

Disabled (deprecated)

BIG BUTTON

Responsive Web Design (RWD)

When the web was first started, most persons were only accessing websites via a desktop computer and only a few different screen sizes.

Now people are accessing the web from their desktop, laptop, tablet, mobile phone, watches and a myriad of other devices. Each of which also have varying screen sizes.

How do we cater to these different devices and screen sizes, while giving the user a good user experience with our websites?

Responsive Web Design (RWD) is an approach to website design and development that ensures your website responds to changes in users' behavior and environment based on their device screen size and orientation.

<https://www.smashingmagazine.com/2011/01/guidelines-for-responsive-web-design/>

Things You Can Consider as Part of RWD

- ▶ Setting the Viewport meta tag
- ▶ Define Breakpoints and what happens to the layout at those breakpoints.
- ▶ using CSS Media Types
- ▶ using CSS Media Queries
- ▶ Show/Hide Content
- ▶ Flexible Everything (relative units, fluid grids, flexible Images, Videos)

Setting the Viewport Meta Tag

```
<!DOCTYPE html>

<html lang="en">

<head>

    ...

    <meta name="viewport"
        content="width=device-width, initial-scale=1">

    ...

</head>
```

...

× Without the viewport meta tag



✓ With the viewport meta tag



Etiam vel semper etiam vel semper. Nam liber tempor cum soluta nobis eleifend option congue nihil imperdiet domino.

CSS MEDIA TYPES

```
<link href="styles.css" rel="stylesheet"  
media="all" />  
<link href="screen.css" rel="stylesheet"  
media="screen" />  
<link href="print.css" rel="stylesheet"  
media="print" />
```

*A **media query** consists of an optional media type and zero or more expressions that limit the style sheets' scope by using media features, such as width, height, and color.*

Media queries, added in CSS3, let the presentation of content be tailored to a specific range of output devices without having to change the content itself.

```
<!-- CSS media query on a link element -->
<link rel="stylesheet" media="(max-width:
800px)" href="example.css" />

<!-- CSS media query within a stylesheet -->
<style>
@media (max-width: 600px) {
  .second_sidebar {
    display: none;
  }
}
</style>
```

```
.second_sidebar {  
    float: left;  
}  
  
@media (max-width: 480px) {  
    .second_sidebar {  
        float: none;  
    }  
}
```

@media (**max-width:** 1024px) {...}

@media tv and (**min-width:** 700px) and
(orientation: landscape) { ... }

@media screen and (**min-width:** 320px)
and (**max-width:** 1024px) {...}

Different Layouts at Various Breakpoints



Responsive Images

```

```

```
img {  
  max-width: 100%;  
  height: auto;  
}
```

Show Different Images Depending on Browser Width Using the Picture Element

```
<picture>
  <source srcset="img_smallflower.jpg" media="(max-width: 600px)">
  <source srcset="img_flowers.jpg" media="(max-width: 1500px)">
  <source srcset="flowers.jpg">
  
</picture>
```

Mobile first design is a popular technique to RWD whereby you target smaller viewports first and then use media queries to add styles as the viewport grows.

[HTTPS://WWW.VOX.COM](https://www.vox.com)

The image displays three side-by-side screenshots of the Vox website, illustrating its responsive design across different screen sizes. The left screenshot shows a desktop view with a yellow header bar, a sidebar on the left containing 'TOP STORIES' with five article cards, and a main content area with several stories. The middle screenshot shows a tablet or laptop view where the sidebar is removed, and the main content area features a large 'TOP STORIES' section with a prominent image of Joe Biden and a story about vaccine passports. The right screenshot shows a mobile phone view where both the sidebar and the top navigation bar are removed, and the main content area is simplified to focus on the 'TOP STORIES' section.

Vox

Contribute Newsletters

BIDEN ADMINISTRATION CORONAVIRUS MORE

TOP STORIES

Everything you need to know about vaccine passports By Rebecca Heilweil

The GOP's attack on trans kids' health care, explained By Katelyn Burns

Joe Biden's \$2 trillion infrastructure and jobs plan, explained By Ella Nilsen

What kind of person signs up to be infected with the coronavirus on purpose? By Kelsey Piper

Americans believe in work. WeWork preyed on that instinct. By Alissa Wilkinson

BIDEN ADMINISTRATION CORONAVIRUS OPEN SOURCED RECODE THE GOODS MORE

TOP STORIES

Joe Biden's \$2 trillion infrastructure and jobs plan, explained By Ella Nilsen

RECODE Everything you need to know about vaccine passports The Biden administration says it's leaving digital vaccination records up to states and the private sector. By Rebecca Heilweil

The GOP's attack on trans kids' health care, explained Arkansas just became the first state to pass a bill that would cut off trans kids from medical care. More are set to follow. By Katelyn Burns

BIDEN ADMINISTRATION CORONAVIRUS OPEN SOURCED RECODE THE GOODS FUTURE PERFECT MORE

TOP STORIES

Joe Biden's \$2 trillion infrastructure and jobs plan, explained By Ella Nilsen

RECODE Everything you need to know about vaccine passports The Biden administration says it's leaving digital vaccination records up to states and the private sector. By Rebecca Heilweil

The GOP's attack on trans kids' health care, explained

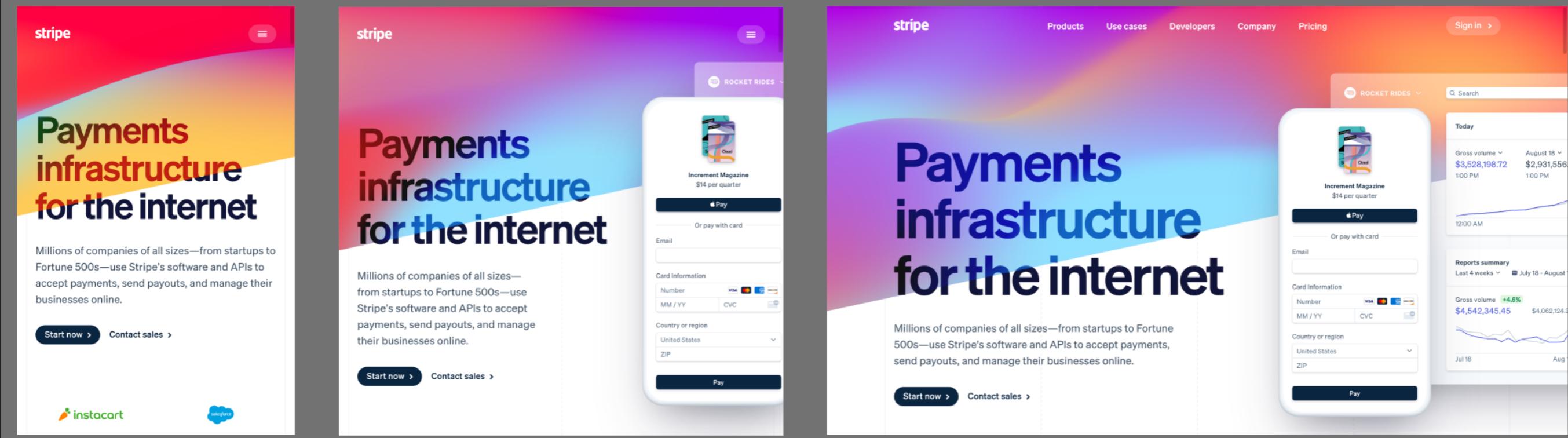
You can't go looking for ball lighting. It finds you. This is what happens when it does. By Brian Resnick and Byrd Pinkerton

Facebook is defending its algorithms. Critics aren't buying it. The company is on a mission to convince users that it's listening. By Rebecca Heilweil

Matt Gaetz's disastrous Tucker Carlson interview, explained Gaetz is under investigation for alleged sex trafficking. He went on

Open this website in your browser and resize the window as small as you can. Take notice of how the layout changes from three columns (desktop), to two columns and then to one (mobile).

HTTP://WWW.STRIPE.COM/



Open this website in your browser and resize the window as small as you can. Take notice of how the imagery in the header changes and also the menu goes from being laid out side-by-side to being a single icon. Also if you scroll down further on the page the layout also changes.

HTTPS://SHOPIFY.COM

The image shows two versions of the Shopify homepage side-by-side. On the left is the mobile version, which has a dark background and features a large green 'Start free trial' button at the top. Below it is a white input field for an email address. The main visual is a woman in a blue apron working on a laptop in a kitchen setting. On the right is the desktop version, which has a light background and a smaller green 'Start free trial' button positioned above the main headline. Below it is a white input field for an email address. The main visual is the same woman in the kitchen, but there is also a 'Play video' button with a play icon and the text 'Play video' next to the image. The desktop version also includes a navigation bar with links for Log in, Start, Sell, Market, Manage, Pricing, Learn, and a prominent green 'Start free trial' button.

shopify

Log in

Anyone, anywhere, can start a business

Enter your email address

Start free trial

Try Shopify free for 14 days, no credit card required. By entering your email, you agree to receive marketing emails from Shopify.



shopify

Start Sell Market Manage

Pricing Learn Log in Start free trial

Anyone, anywhere, can start a business

Enter your email address

Start free trial

Try Shopify free for 14 days, no credit card required. By entering your email, you agree to receive marketing emails from Shopify.



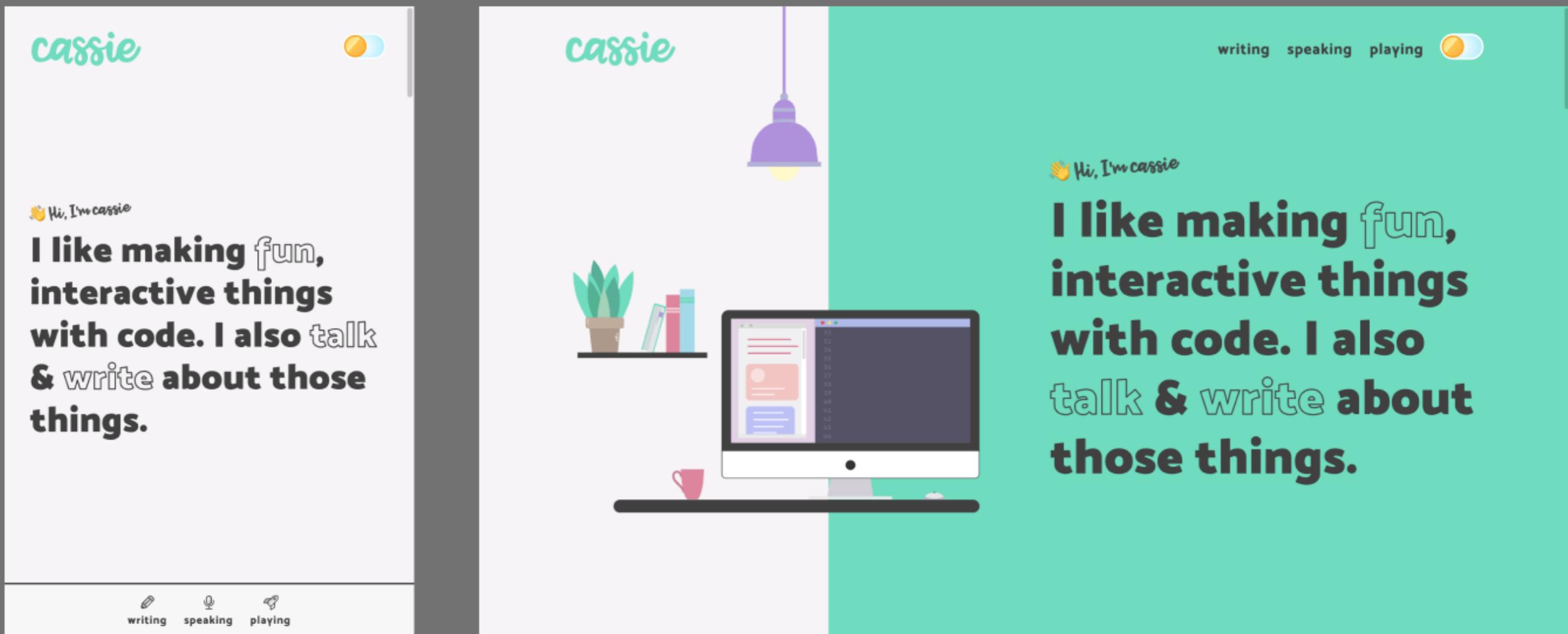
Play video

Bring your business online

Create an ecommerce website backed by powerful tools that help you find customers, drive sales, and manage your day-to-day.

Open this website in your browser and resize the window as small as you can. Take notice of how the layout changes from the image/video being side-by-side with the Start Free Trial information to a single column with one being above the other.

HTTPS://WWW.CASSIE.CODES/

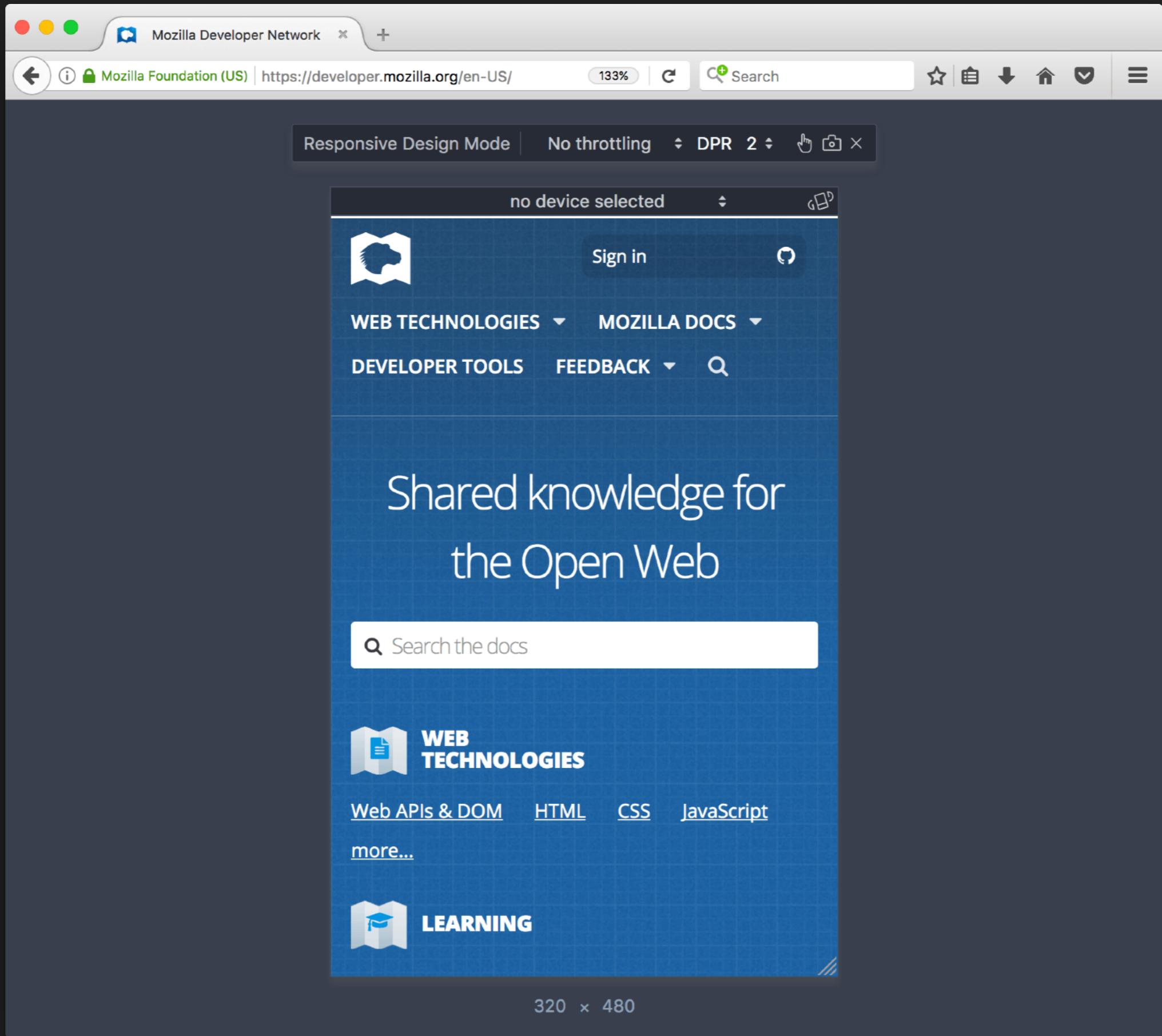


Open this website in your browser and resize the window as small as you can. Take notice of how the image of the computer is there on desktop but no longer necessary on mobile. Also notice that the menu is on top for the desktop view but at the bottom for mobile. Why do you think that was done?

Modern browsers now come with tools to help you test your site in a responsive or device specific viewport.

<https://developers.google.com/web/tools/chrome-devtools/device-mode/emulate-mobile-viewports>

https://developer.mozilla.org/en-US/docs/Tools/Responsive_Design_Mode





ARTICLES

EVENTS

TOPICS

WRITE FOR US



ALISTAPART

**MATT GRIFFIN** on HOW WE WORK

Start Coding with Wireframes

February 18, 2014

es Network Timeline Profiles Application Security Audits

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.js ie ie7 lt-ie10 lt-ie9 lt-ie8" lang="en"> <![endif]-->
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/header>
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Styles Comp
Filter
element.style
}
.entry-head
.entry-detail
.blog-header
font-weight
margin-bot
font-size:
line-height
}

Resources

- ▶ The increasing relevance of design for software engineers - <https://www.invisionapp.com/blog/design-for-software-engineers/>
- ▶ Fundamentals of Design - <https://www.gcflearnfree.org/beginning-graphic-design/fundamentals-of-design/1/>
- ▶ Colour Basics - <https://www.gcflearnfree.org/beginning-graphic-design/color/1/>
- ▶ Typography Basics - <https://www.gcflearnfree.org/beginning-graphic-design/typography/1/>
- ▶ Layout & Composition Basics - <https://www.gcflearnfree.org/beginning-graphic-design/layout-and-composition/1/>
- ▶ Images - <https://www.gcflearnfree.org/beginning-graphic-design/images/1/>

Resources

- ▶ Design Systems - <https://www.designbetter.co/design-systems-handbook>
- ▶ Design Better - <http://designbetter.co/>
- ▶ Responsive Web Design by Ethan Marcotte - <https://alistapart.com/article/responsive-web-design>
- ▶ Responsive Web Design - https://www.w3schools.com/html/html_responsive.asp
- ▶ Responsive Design Basics - <https://developers.google.com/web/fundamentals/design-and-ui/responsive/>
- ▶ 5 Stages in the Design Thinking Process - <https://www.interaction-design.org/literature/article/5-stages-in-the-design-thinking-process>