Visual Design

- Colour
- Typography
- Layout
- Design Systems

Colour Hierarchy and Semantics

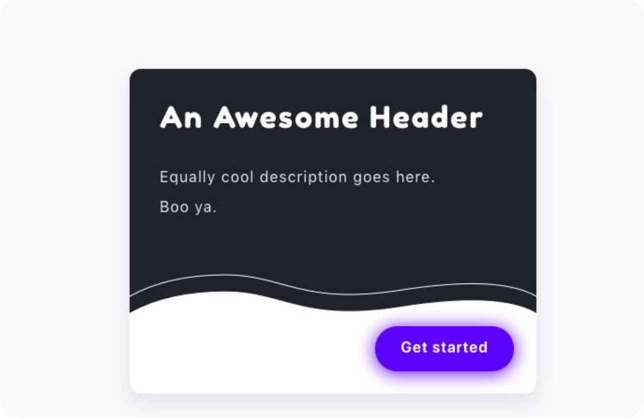
- A colour design system defines how colours are used, typically two sets:
- **Primary Colours**
  - used frequently in screen designs to create experience
  - includes tints, shades, and tones of primary brand colour(s) (e.g. black, grey, white or similar subtle low-saturation colours)
  - colours for interaction elements, layouts, text
- **Secondary Colours**
  - used occasionally in designs or in interactive elements
  - used for functions: task success, error, warning; selected element; etc.
  - colours are accents based on primary colours

These are not primary and secondary colours from colour theory

https://uxdesign.cc/how-to-use-color-in-ux-design-9ba6db4807d5

Primary

- 🟪 purple: #5E00FF
- ⬛ black: #21232C
- ⬜ white: #FFFFFF

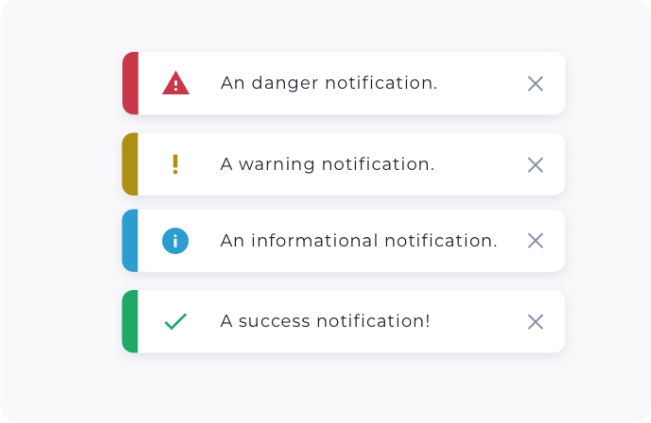


An Awesome Header

Equally cool description goes here.
Boo ya.

Secondary

- 🟥 red: #C6394A
- 🟨 gold: #E6BD19
- 🟦 blue: #2C9DCE
- 🟩 green: #1EA966



An danger notification.

A warning notification.

An informational notification.

A success notification!

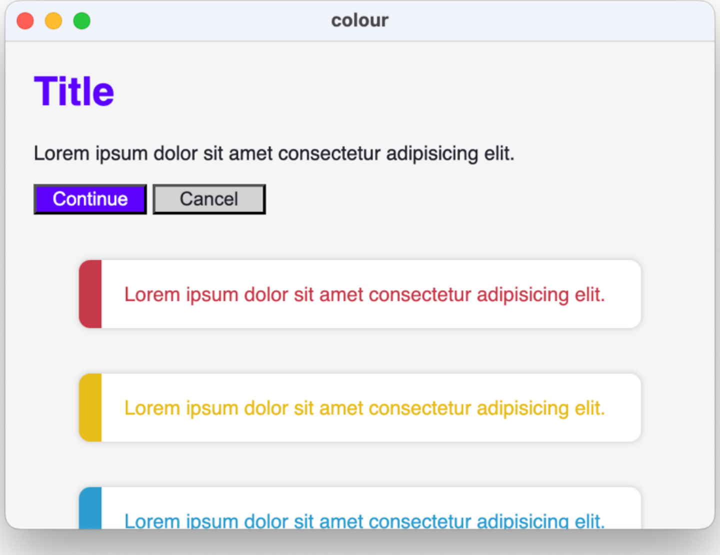
https://uxdesign.cc/how-to-use-color-in-ux-design-9ba6db4807d5

colour

- using `:root` pseudoclass
- css variables

```
--primary1
var(--primary1)
```

- Different ways to define colour in CSS
  - Same methods as HTML canvas: hex, name, rgb, hsl
- Also
  - Using CSS selectors and info panels
  - Rounding corners



Title

Lorem ipsum dolor sit amet consectetur adipisicing elit.

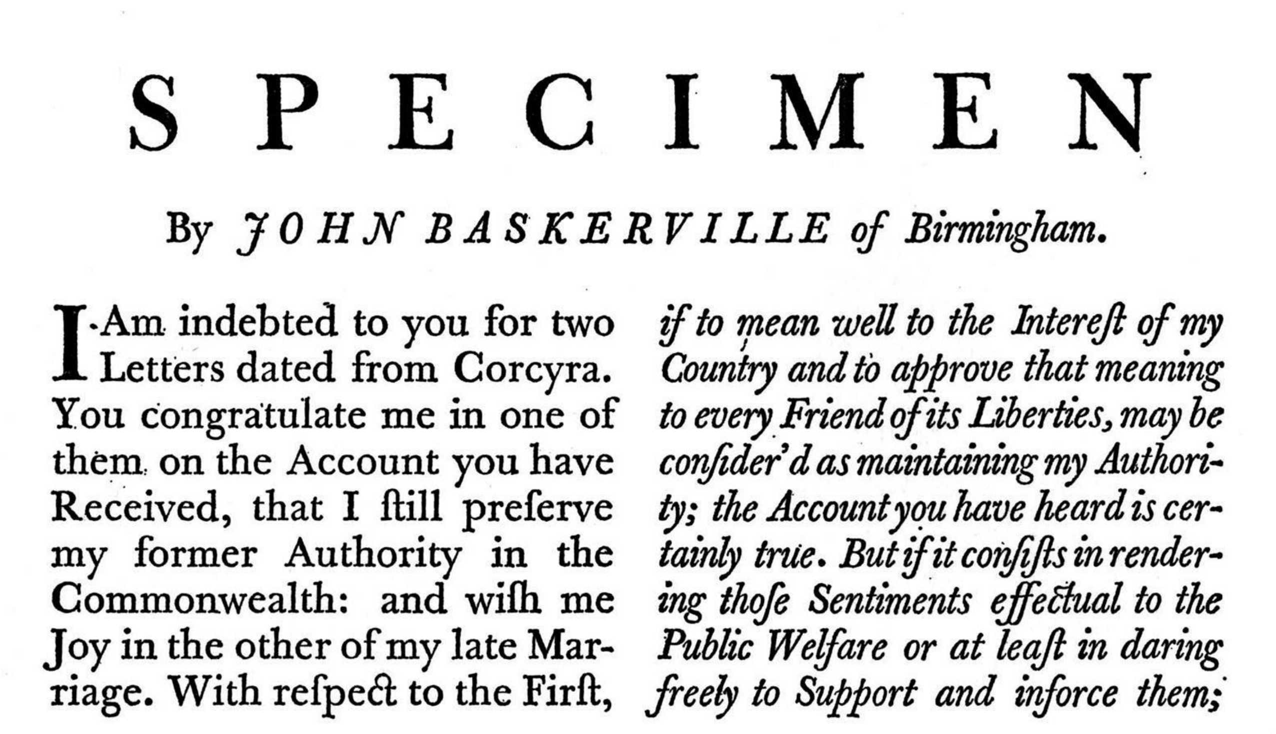
Lorem ipsum dolor sit amet consectetur adipisicing elit.

Lorem ipsum dolor sit amet consectetur adipisicing elit.

Lorem ipsum dolor sit amet consectetur adipisicing elit.

Typography

- Typography is the art of arranging letters and text in a way that makes the copy legible, clear, and visually appealing
- “Typeface” vs. “Font”



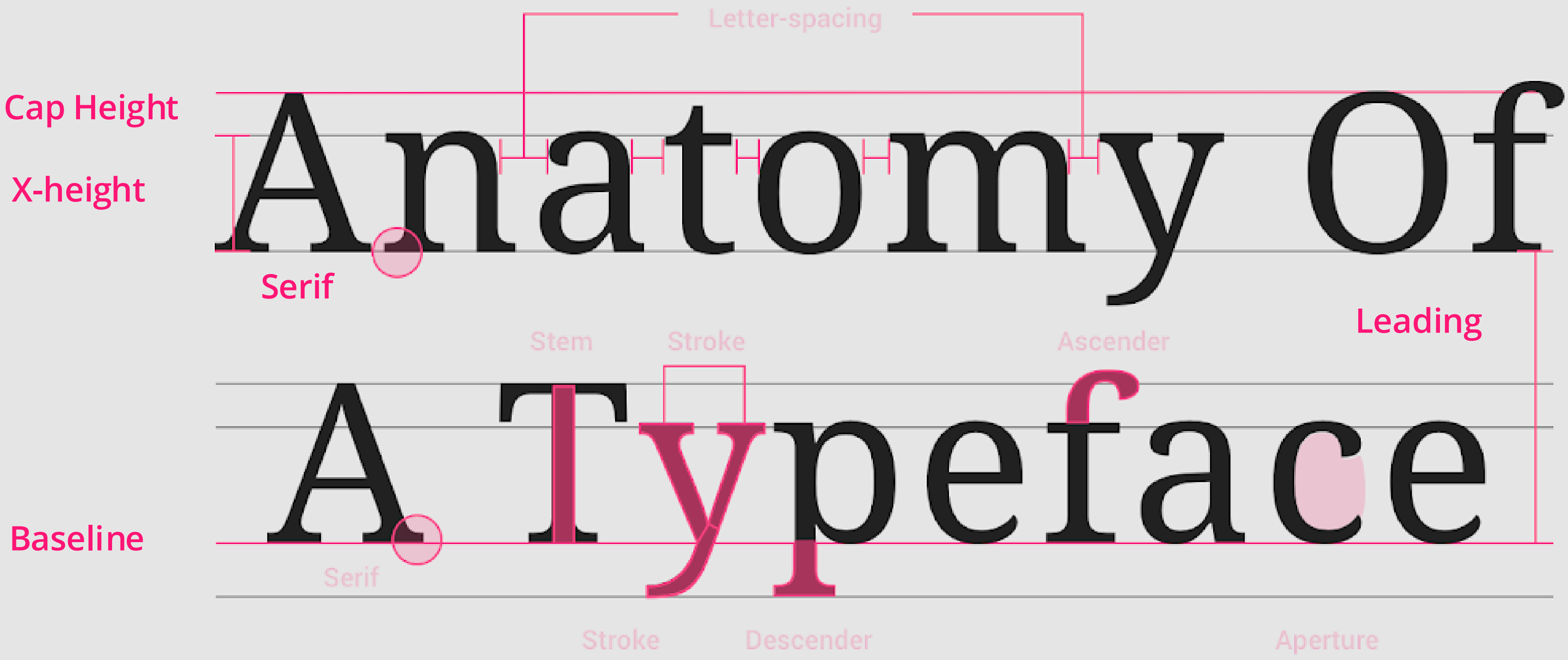
SPECIMEN

By *JOHN BASKERVILLE of Birmingham.*

I Am indebted to you for two Letters dated from Corcyra. You congratulate me in one of them on the Account you have Received, that I ſtill preſerve my former Authority in the Commonwealth: and wiſh me Joy in the other of my late Marriage. With reſpect to the Firſt, *if to mean well to the Intereſt of my Country and to approve that meaning to every Friend of its Liberties, may be conſider'd as maintaining my Authority; the Account you have heard is certainly true. But if it conſiſts in rendering thoſe Sentiments effectual to the Public Welfare or at leaſt in daring freely to Support and inforce them;*

https://uxmisfit.com/2020/02/03/ui-design-in-practice-typography/

Typography Terminology



Cap Height

X-height

Serif

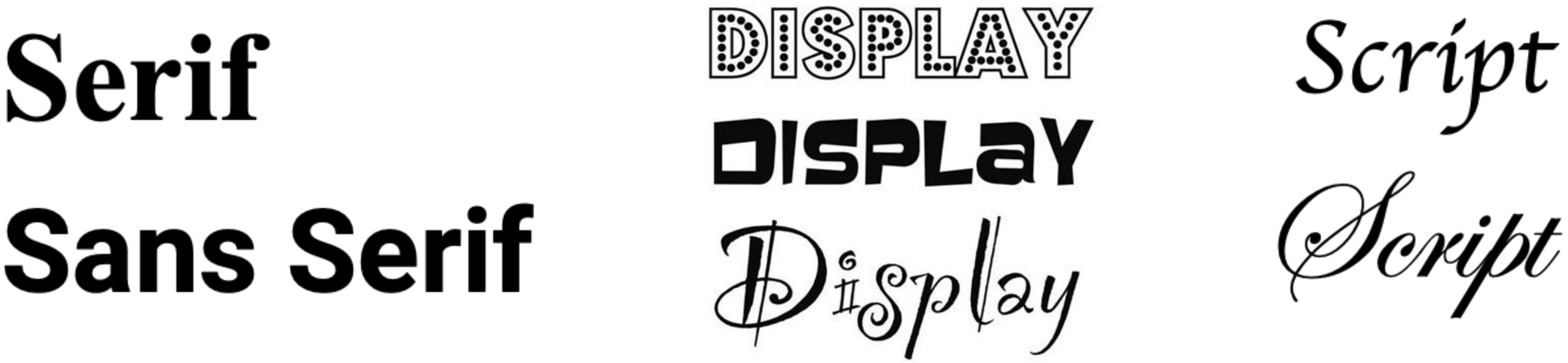
Leading

Baseline

https://www.fontsmith.com/blog/2016/06/29/the-a-z-of-typographic-terms

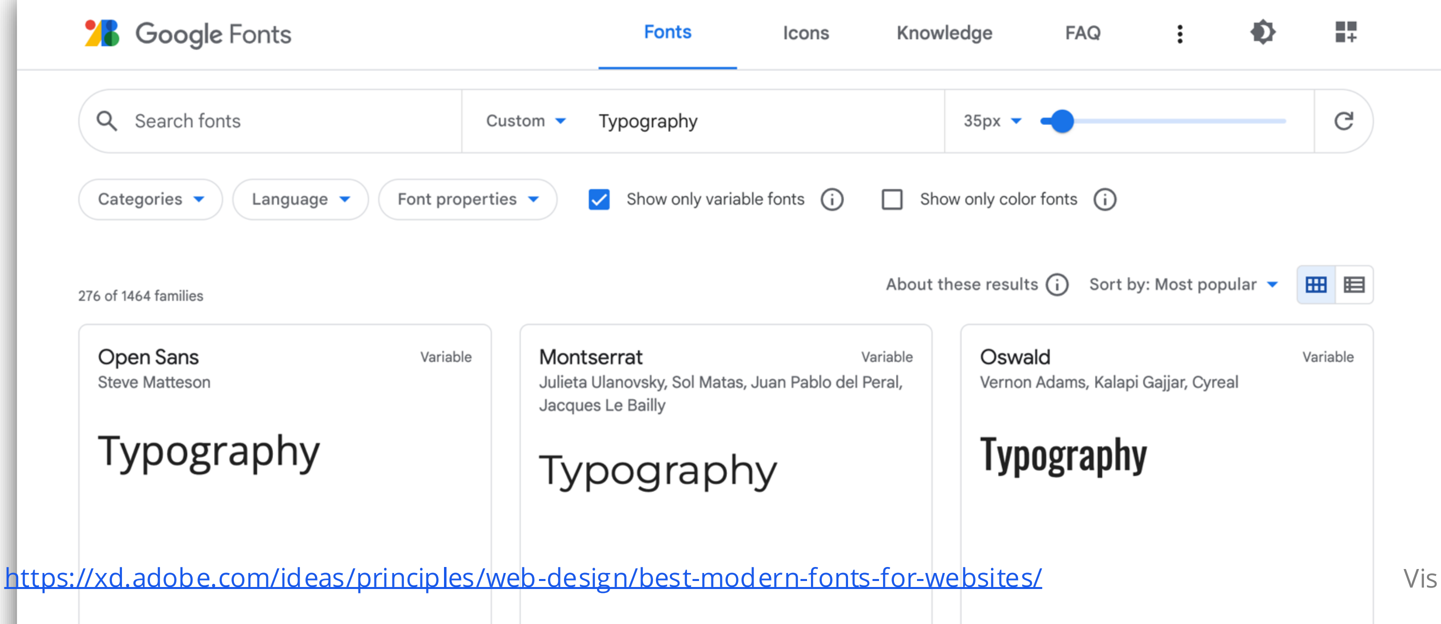
Typeface Styles

- Four main classes of typeface styles:
  - serif, sans-serif, display, script
- They suggest different moods and feeling
- Some are more readable than others



Choosing Typefaces

- Prefer standard, simple typefaces
  - Sans-serif are most readable and works best on digital platforms
  - Serif can be effective for headings and feels classic and stable
- Use typefaces designed for digital from reputable sources
  - e.g. Google Fonts, Adobe Fonts
- In general, avoid *display* and *script* typefaces



Custom Typography 35px

☑ Show only variable fonts ☐ Show only color fonts

276 of 1464 families

Sort by: Most popular

Open Sans — Variable
Steve Matteson
Typography

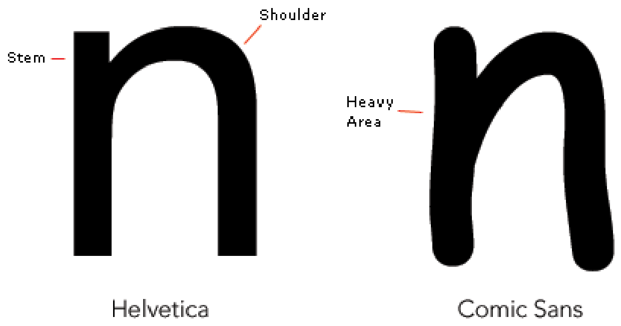
Montserrat — Variable
Julieta Ulanovsky, Sol Matas, Juan Pablo del Peral, Jacques Le Bailly
Typography

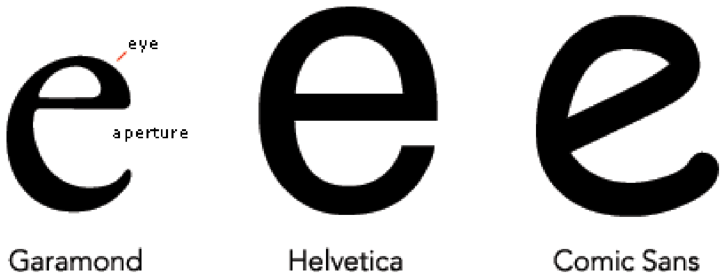
Oswald — Variable
Vernon Adams, Kalapi Gajjar, Cyreal
Typography

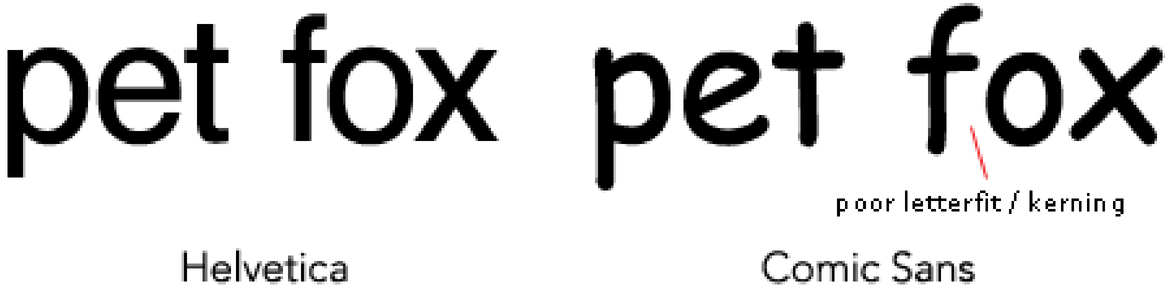
https://xd.adobe.com/ideas/principles/web-design/best-modern-fonts-for-websites/

Comic Sans

- Developed by Microsoft in the 1990s for informal display text (mimics speaking “bubbles” from comic strips)
- It’s universally hated. Why?





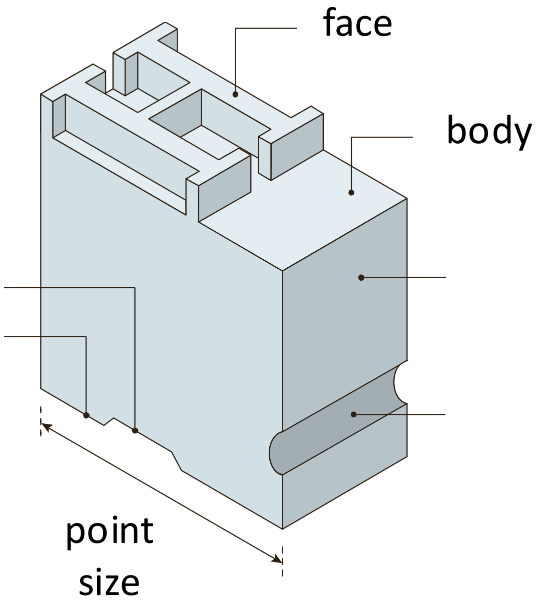


It looks dated and unprofessional: don't use it **or similar types of novelty typefaces.**

https://designforhackers.com/blog/comic-sans-hate/

Font Anatomy

- Weight (e.g. bold)
- Emphasis (e.g. italic)
- Point: 0.351mm = 1/72" (mostly)
  - original Mac was 72 DPI



Font Size

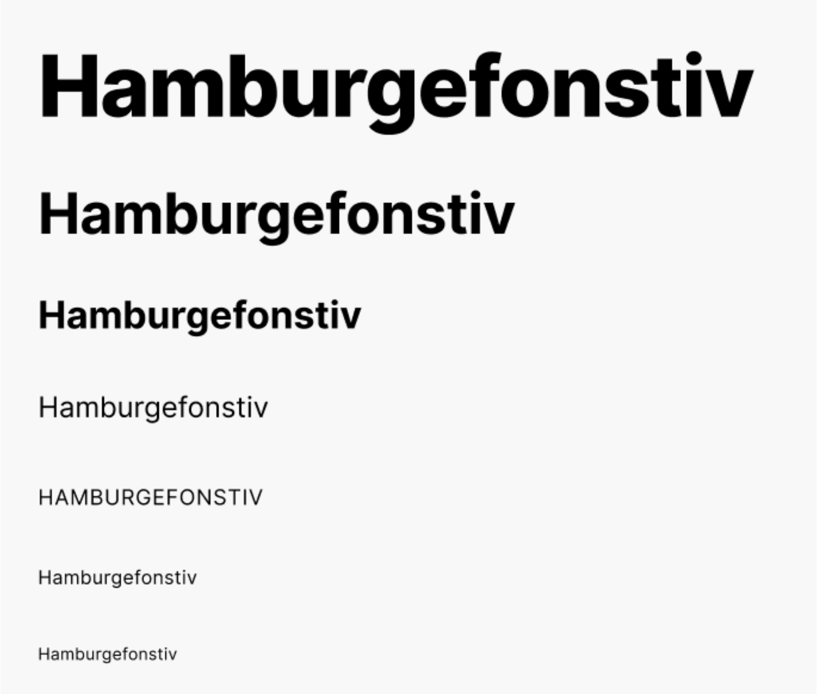
- In CSS, there are ***many*** ways to specify font size:
  - px for "pixels" (OS specific)
  - pt for point size
  - Also %, em, rem, larger, ...

In this course,
you can **just use px**

https://developer.mozilla.org/en-US/docs/Web/CSS/length

Typographic System

- Define hierarchical names
  - e.g. footer, body, caption, subheading, heading, title, hero
- Use size, **weight,** and *emphasis* to create visual hierarchy
  - 7 different scales is often enough: e.g. 14, 16, 18, 24, 32, 48, 72
- Use all caps sparingly for headings



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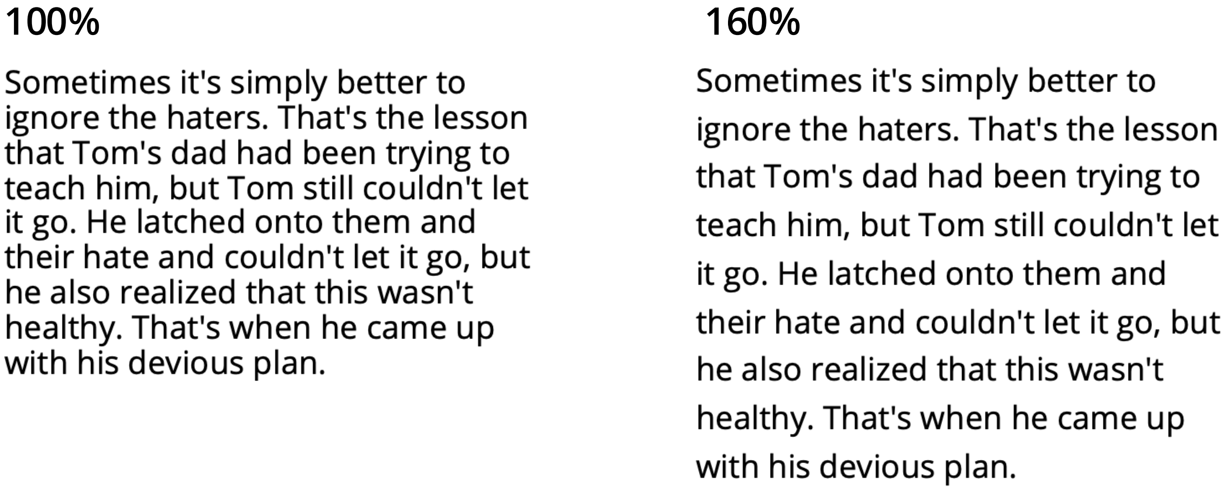
https://www.figma.com/best-practices/typography-systems-in-figma/naming-and-organizing-text-styles/

Leading and Paragraph Spacing

- Leading is space between lines
- Increase **leading** to emphasize lines in paragraphs
  - try 140% to 180%
- Add space between paragraphs rather than indent first line



100%

Sometimes it's simply better to
ignore the haters. That's the lesson
that Tom's dad had been trying to
teach him, but Tom still couldn't let
it go. He latched onto them and
their hate and couldn't let it go, but
he also realized that this wasn't
healthy. That's when he came up
with his devious plan.

160%

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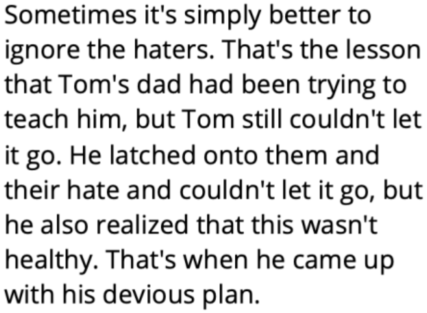
https://uxmisfit.com/2020/02/03/ui-design-in-practice-typography/

Alignment

- Use **left alignment** for text in paragraphs
- Use **left** or **centre alignment** for text in headings
- Use **centre alignment** for buttons and similar interface controls
- Never use **fully justified** text
  - harder to read, creates unintentional "rivers" which looks bad

left aligned



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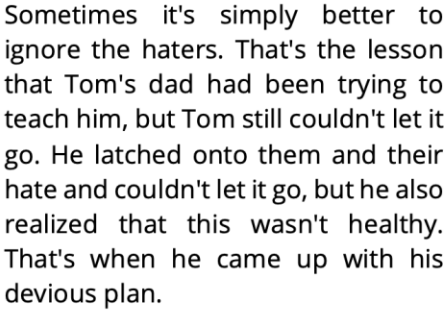
fully justified



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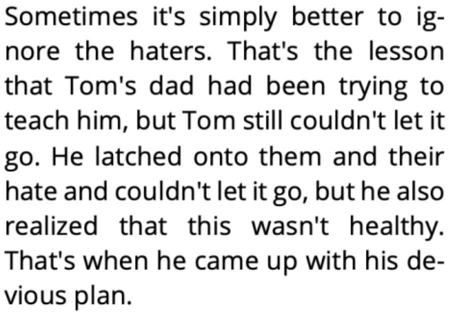
fully justified with hyphenation



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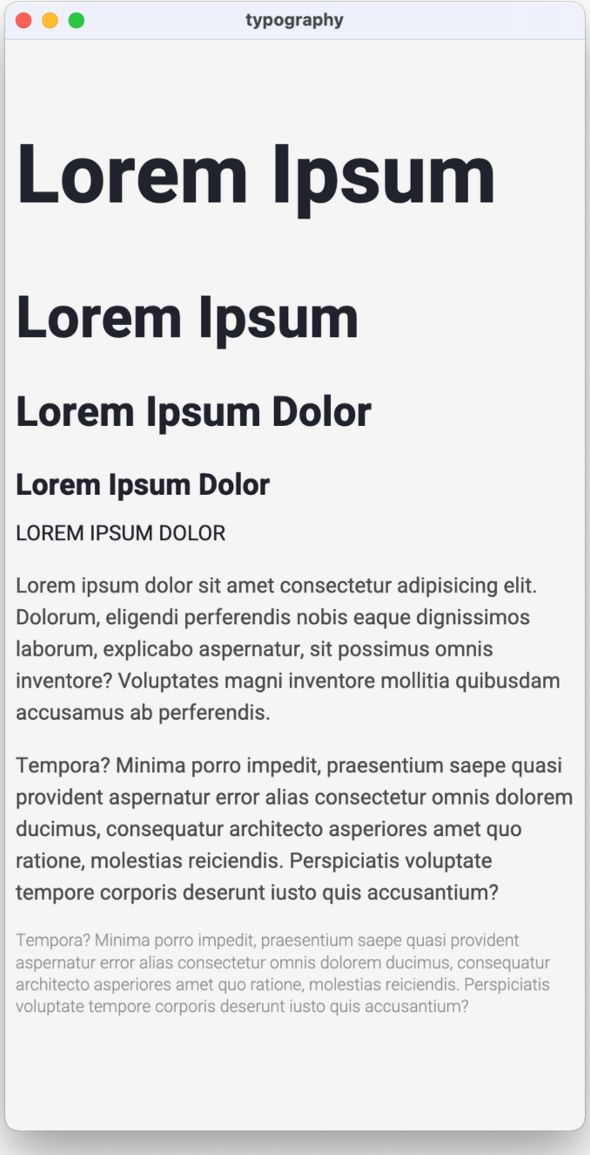
https://uxmisfit.com/2020/02/03/ui-design-in-practice-typography/

typography

- link to Google Web Font resource
- Defining a modular font system in CSS
  - using ems as font size
  - CSS `var` and `calc`
  - inheritance for heading styles
  - font-weight
  - line-height
  - "lorem ipsum" placeholder text



Lorem Ipsum

Lorem Ipsum

Lorem Ipsum Dolor

Lorem Ipsum Dolor

LOREM IPSUM DOLOR

Lorem ipsum dolor sit amet consectetur adipisicing elit. Dolorum, eligendi perferendis nobis eaque dignissimos laborum, explicabo aspernatur, sit possimus omnis inventore? Voluptates magni inventore mollitia quibusdam accusamus ab perferendis.

Tempora? Minima porro impedit, praesentium saepe quasi provident aspernatur error alias consectetur omnis dolorem ducimus, consequatur architecto asperiores amet quo ratione, molestias reiciendis. Perspiciatis voluptate tempore corporis deserunt iusto quis accusantium?

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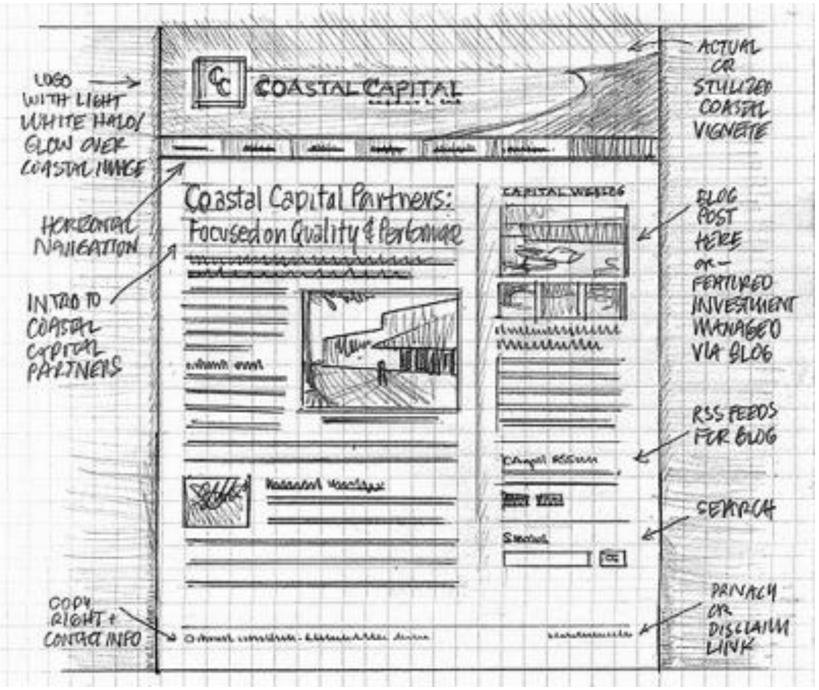
Layout

- *Layout is the structure that organizes visual elements in an interface.*
- It creates visual paths, connections, and gaps to group, rank, and make sense of information and interactive elements.
  - e.g. structure content to highlight what is most important, what order it to read, what can be done with interactive elements, etc.

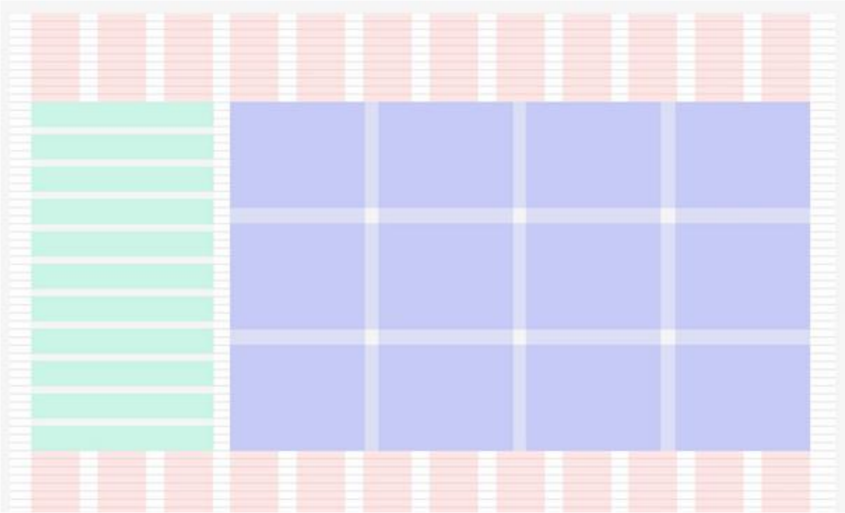

LOGO WITH LIGHT WHITE HALO/ GLOW OVER COASTAL IMAGE
HORIZONTAL NAVIGATION
INTRO TO COASTAL CAPITAL PARTNERS
COPY RIGHT + CONTACT INFO
COASTAL CAPITAL
Coastal Capital Partners: Focused on Quality & Performance
CAPITAL WEBLOG
ACTUAL OR STYLIZED COASTAL VIGNETTE
BLOG POST HERE OR — FEATURED INVESTMENT MANAGED VIA BLOG
RSS FEEDS FOR BLOG
SEARCH
PRIVACY OR DISCLAIM LINK

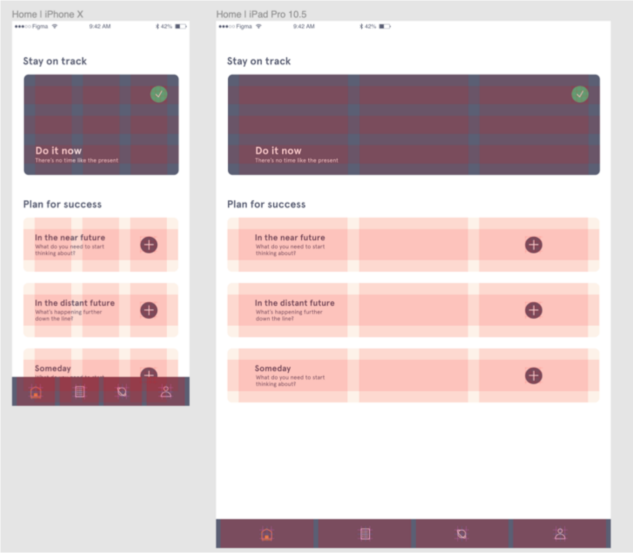
(Image credit: Mike Rohde)

https://uxdesign.cc/fundamentals-of-layout-in-interface-design-ui-3a9dba31f1

The Grid

- Underlying regularized structure to organize elements in a layout
- Most basic form is vertical columns and gaps (aka "gutters")
  - often 12 columns (because 12 can be divided by 2, 3, 4, …)
- Often includes a "baseline" grid to place text





https://www.smashingmagazine.com/2017/12/building-better-ui-designs-layout-grids/

8-Point "Pixel Grid"

- Use multiples of 8 to define dimensions, padding, and margins
  - column and gaps are multiples of 8
  - element sizes and spacing are multiples of 8
  - even type can be multiples of 8 (though often multiples of 4)

fig. 5: Hard Grid

Elements are sectioned off and positioned relative to a container element higher up in the hierarchy.

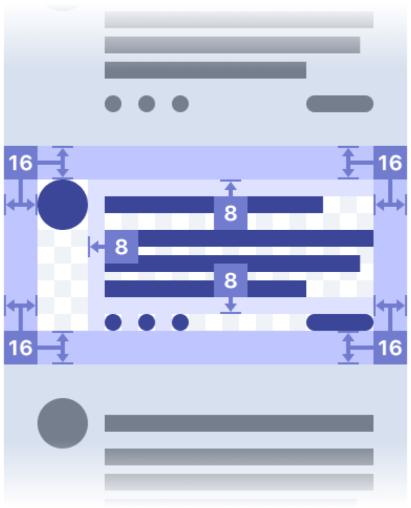
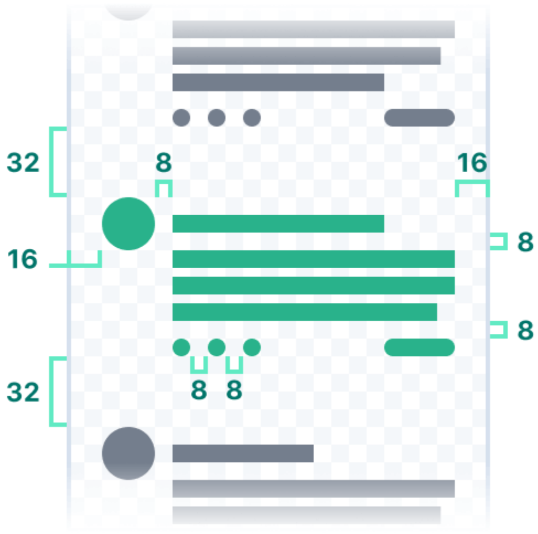


fig. 6: Soft Grid

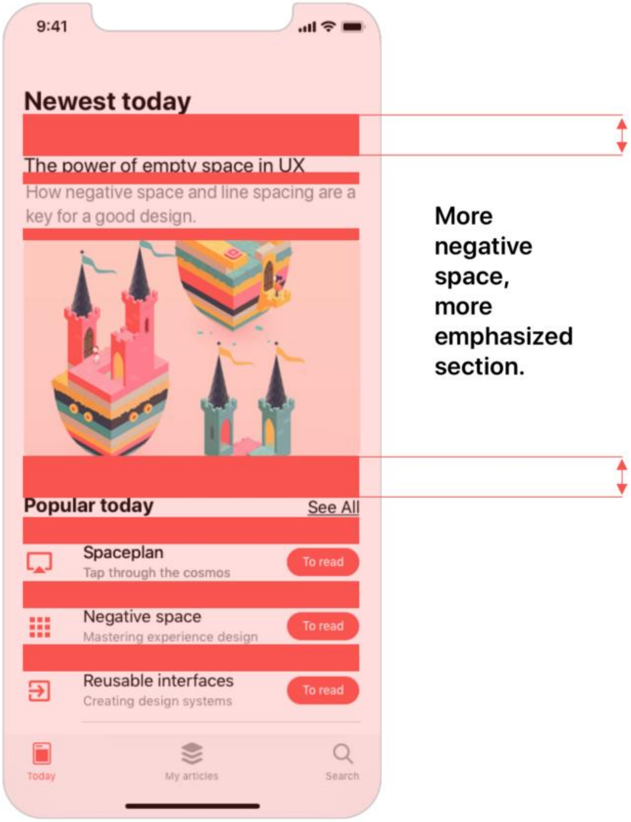
Individual elements are positioned relative to each other rather than to an actual grid.



https://spec.fm/specifics/8-pt-grid

Negative Space

- Negative space is space between content (often called "white space")
  - groups and divides content
  - let's the user's eye rest
  - doesn't need to "white", just must not contain content
- Use **margin** and **padding** to create negative space

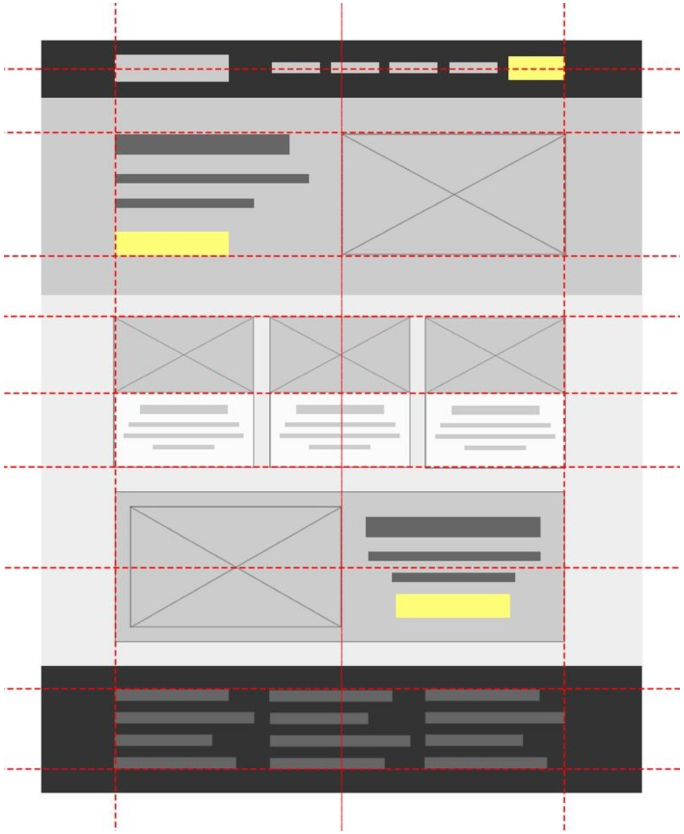


More negative space, more emphasized section.

https://uxplanet.org/https-medium-com-viktorija-bachvarova-the-power-of-empty-space-in-uidesign-14f14f8b203

Alignment

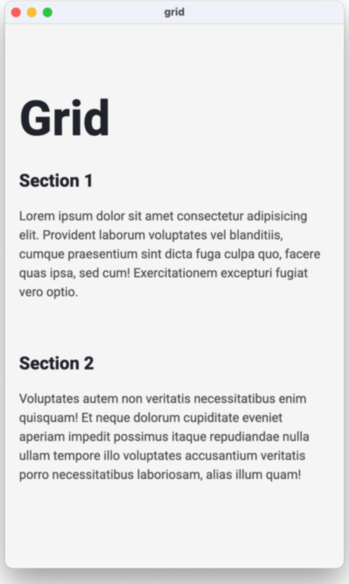
- Alignment is when the dominant visual parts of multiple elements form an implied line
  - alignment must be done on visual parts of an element, which may not be the same as underlying file or bounding box
  - even slight misalignment jumps out
- Using a grid forces good alignment



https://uxengineer.com/principles-of-design/alignment/

grid

- use @media query to change grid layout
- mobile-first approach



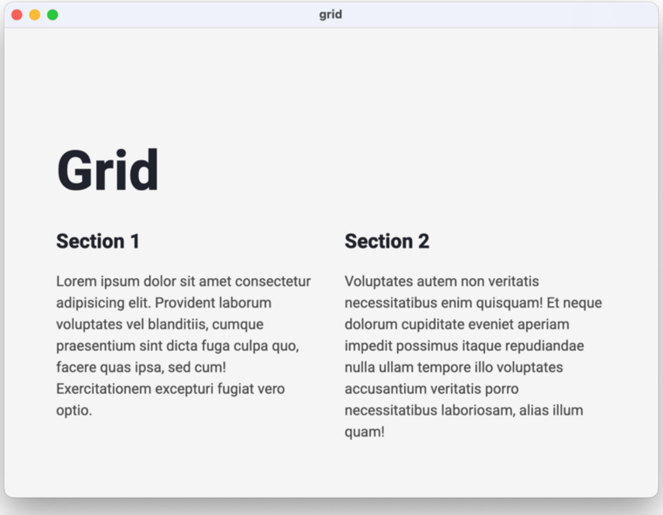
Grid

Section 1

Lorem ipsum dolor sit amet consectetur adipisicing elit. Provident laborum voluptates vel blanditiis, cumque praesentium sint dicta fuga culpa quo, facere quas ipsa, sed cum! Exercitationem excepturi fugiat vero optio.

Section 2

Voluptates autem non veritatis necessitatibus enim quisquam! Et neque dolorum cupiditate eveniet aperiam impedit possimus itaque repudiandae nulla ullam tempore illo voluptates accusantium veritatis porro necessitatibus laboriosam, alias illum quam!



Grid

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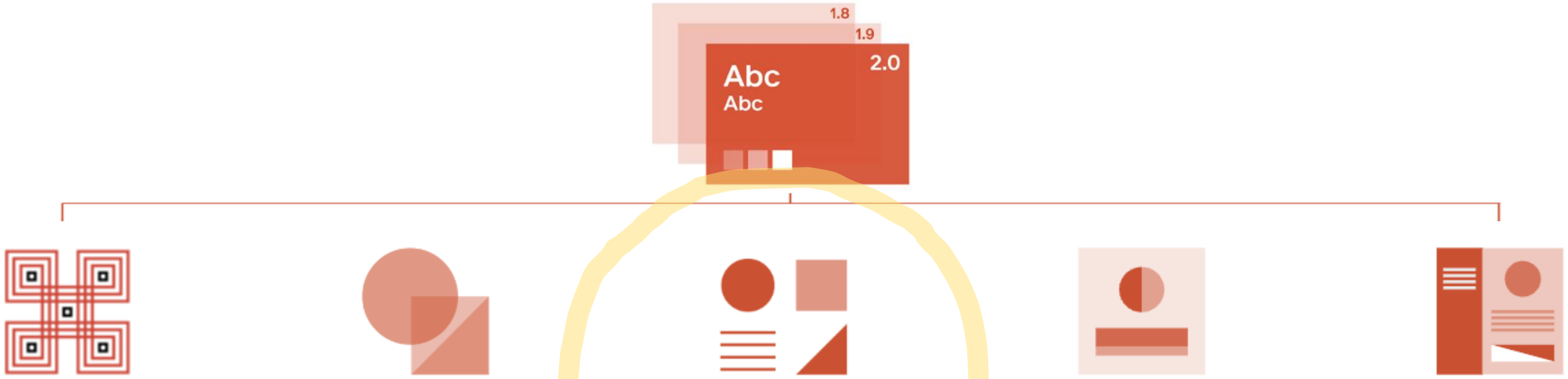
Design Systems

Design Systems

A Design System is a systematic approach to product development, complete with guidelines, principles, philosophies, and code



Design Language

The overall visual design of a digital product.

Defines characteristics such as typography, colors, icons, spacing

Design Kit

A library of shared styles, symbols, and components for designers.

Component Library

A set of implemented components in code that are version controlled and ready to use.

Sandbox

A tool for developing components in isolation.

For Design System developers.

Documentation

Guidelines on how to use the Design System for designers and developers.

Often includes live playground to try out Design System

https://rangle.io/blog/what-is-a-design-system/

Many (Many) Design Systems Available

- Material Design (Google)
- Carbon Design System (IBM)
- Atlassian Design System (Atlassian)
- Polaris (Shopify)
- Global Experience Language (BBC)
- Spectrum (Adobe)
- Goldman Sachs Design System (Goldman Sachs)
- Backpack
- Garden (Zendesk)
- Momentum Design (Cisco)
- Oxygen (Repsol)
- Lightning Design System (Salesforce)
- Lexicon (Liferay)
- Predix Design System (GE) (Skyscanner)

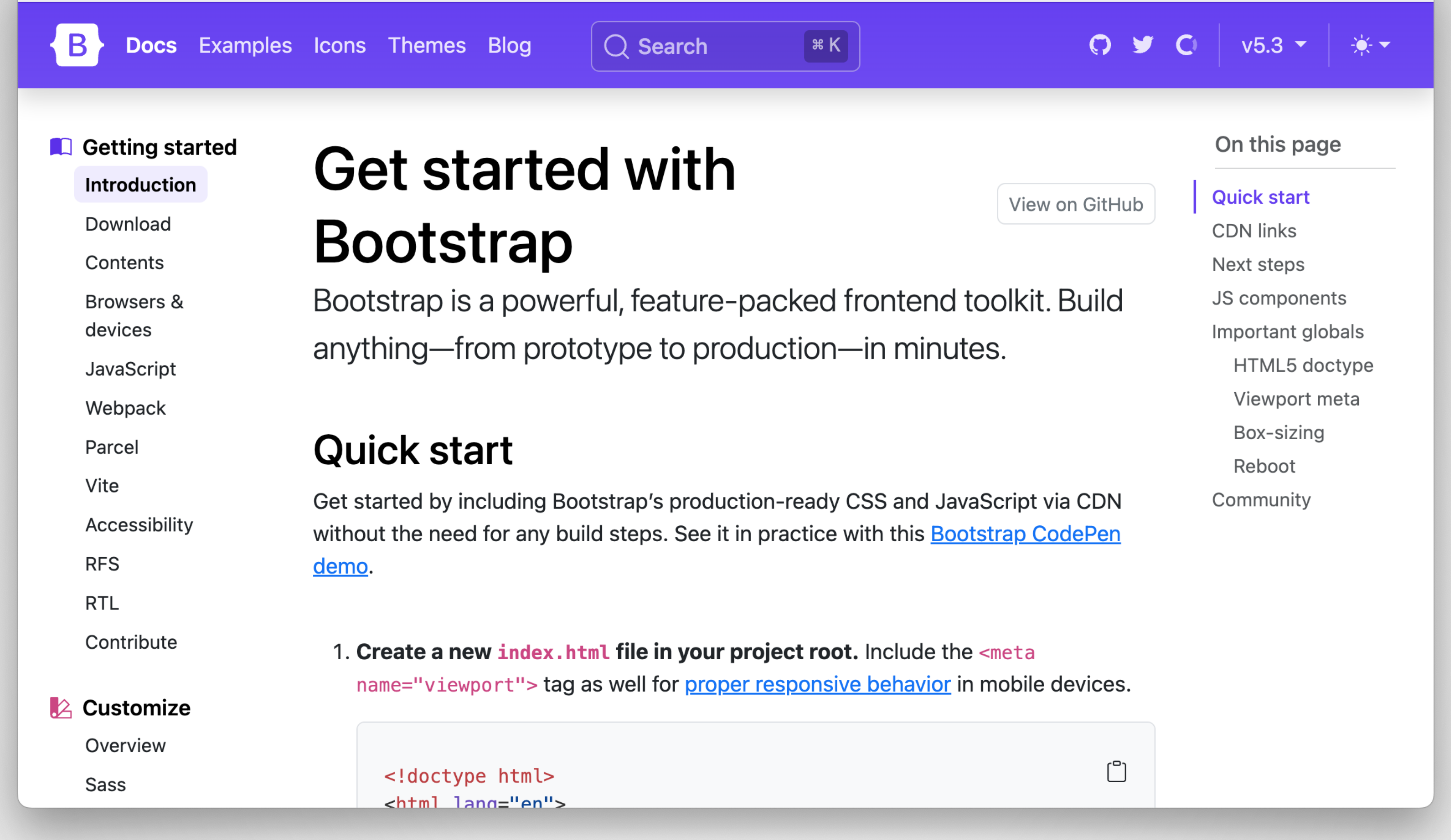
https://uxdesign.cc/some-of-the-best-design-systems-in-the-industry-e491a6e3baaf

Bootstrap

https://getbootstrap.com/

Free and open-source CSS framework directed at responsive, mobile-first front-end web development.

- Design templates
  - typography, forms
- UI Components
  - buttons, navigation, and other interface components.



Get started with Bootstrap

Bootstrap is a powerful, feature-packed frontend toolkit. Build anything—from prototype to production—in minutes.

Quick start

Get started by including Bootstrap's production-ready CSS and JavaScript via CDN without the need for any build steps. See it in practice with this Bootstrap CodePen demo.

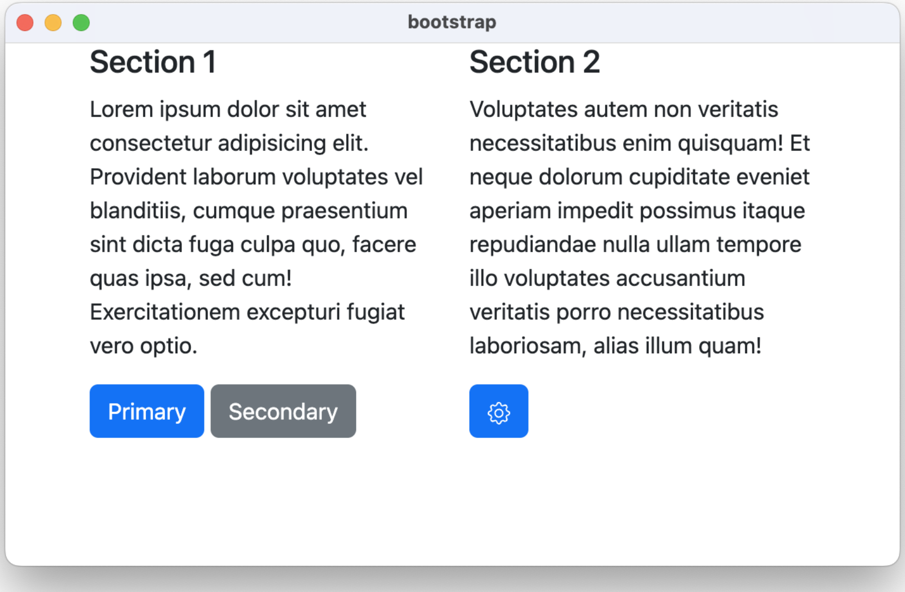
1. **Create a new `index.html` file in your project root.** Include the `<meta name="viewport">` tag as well for proper responsive behavior in mobile devices.

```
<!doctype html>
<html lang="en">
```

https://getbootstrap.com/docs/5.3/getting-started/introduction/

bootstrap

- Using via CDN links
- Baseline typography
- Ready-to-use grid system
  - responsive, e.g. `col-sm` means column when size larger than small
- Widgets (i.e. components)
  - buttons, collapse/expand, etc.
- Icons
  - webfont and svg



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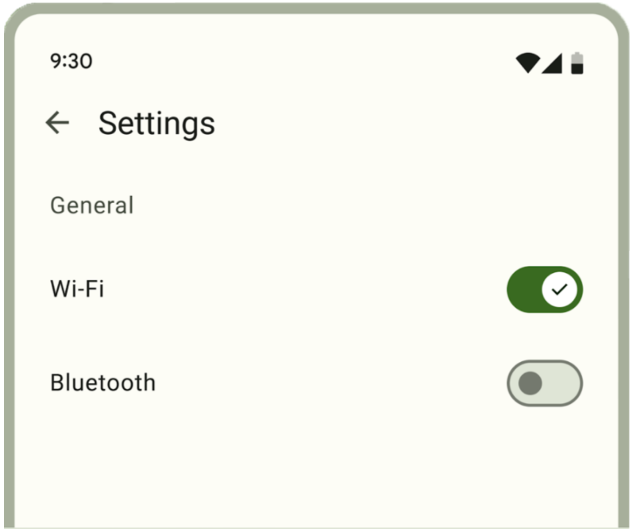
https://getbootstrap.com/docs/5.3/getting-started/introduction/#quick-start

Material Design

- https://m3.material.io/
- Google open-source design system
  - Web, Android, Flutter, ...
- UI Components
  - buttons, navigation, form input, containers, ...
- UX Guidance
  - colour, icons, motion, typography
  - accessibility, adaptive design



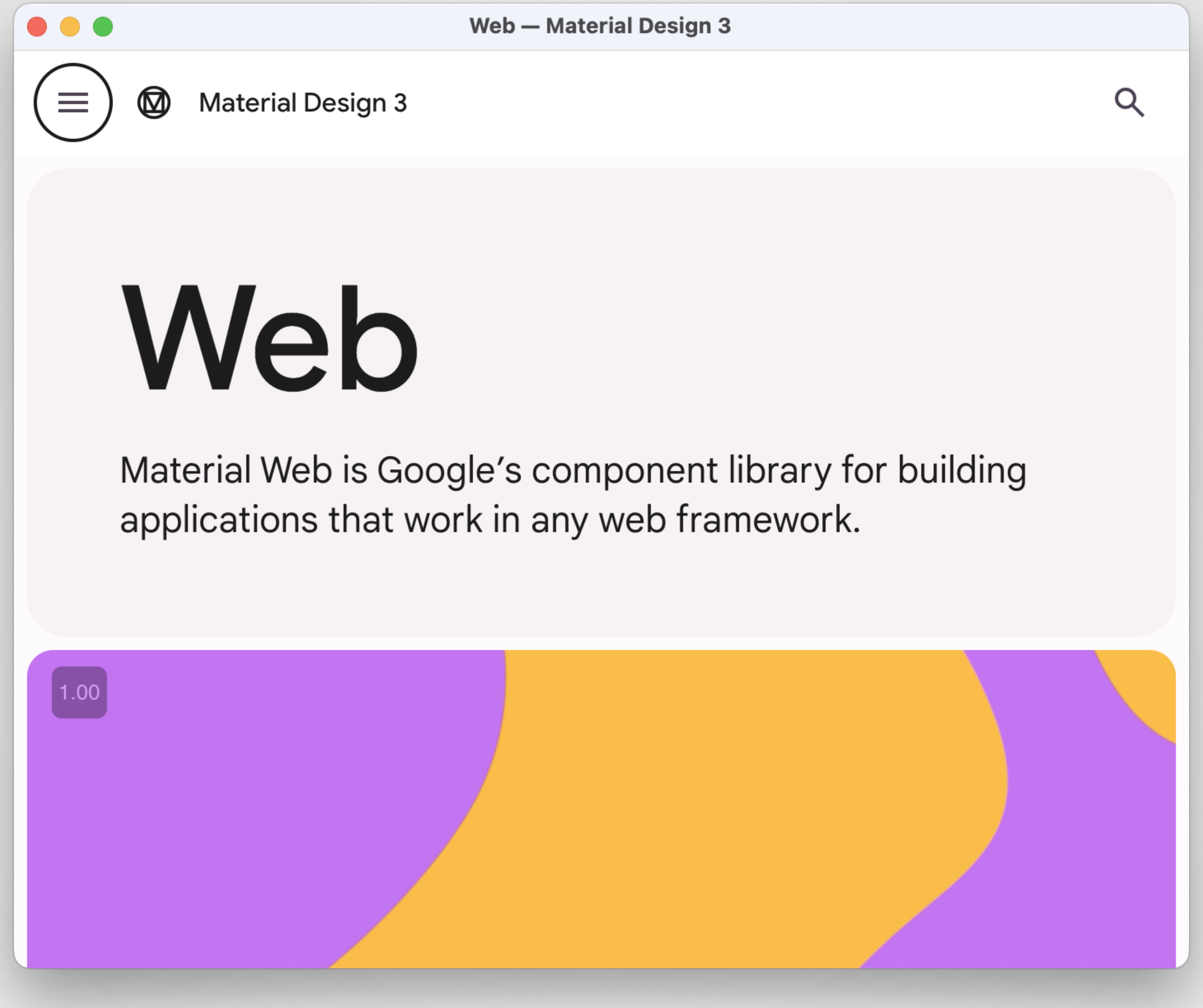
9:30

← Settings

General

Wi-Fi ✓

Bluetooth



Web — Material Design 3

Web

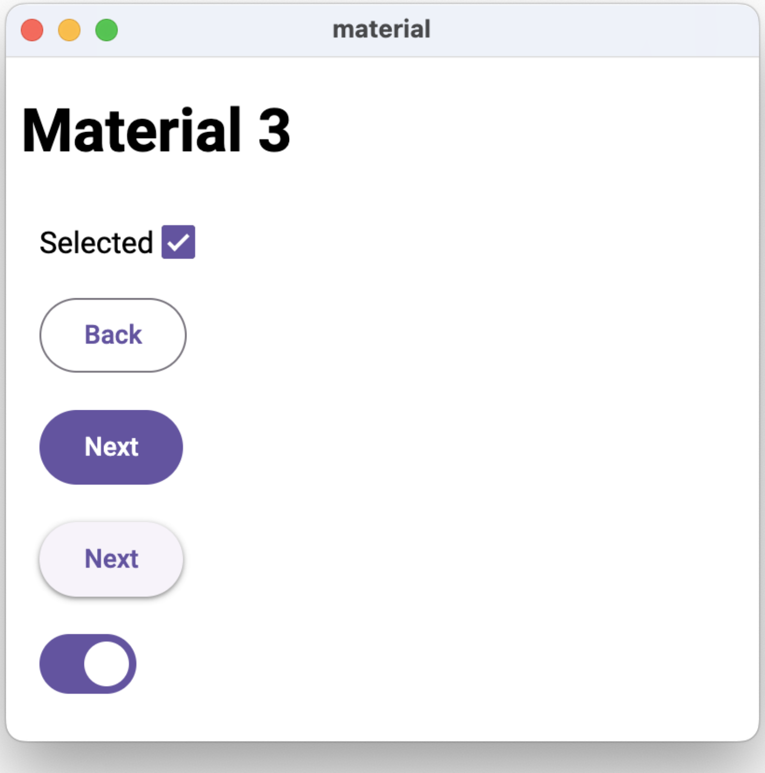
Material Web is Google's component library for building applications that work in any web framework.

Material Design Web

- https://m3.material.io/develop/web

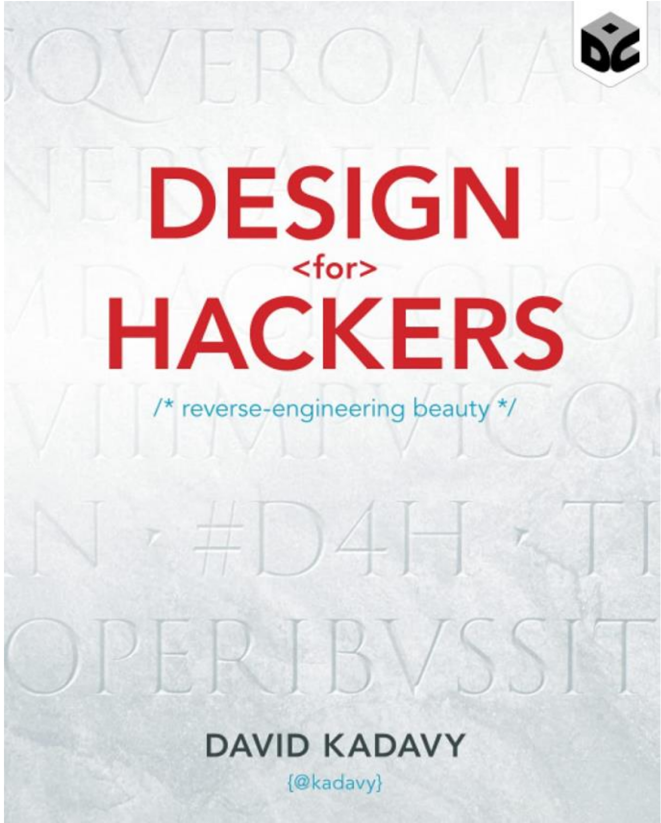
material

- Install Material as npm package
- Using material components
  - they are *web components*



Material 3

Selected ☑



Design for Hackers:
Reverse-Engineering Beauty
by David Kadavy

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