# Refactoring UI
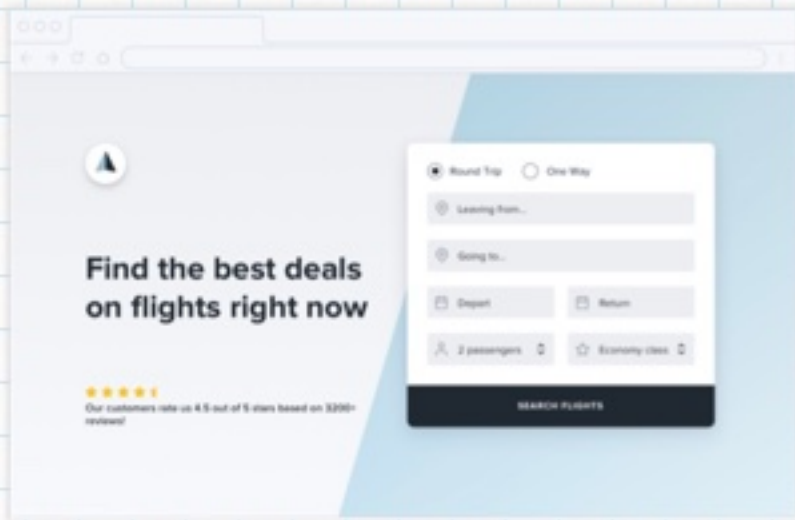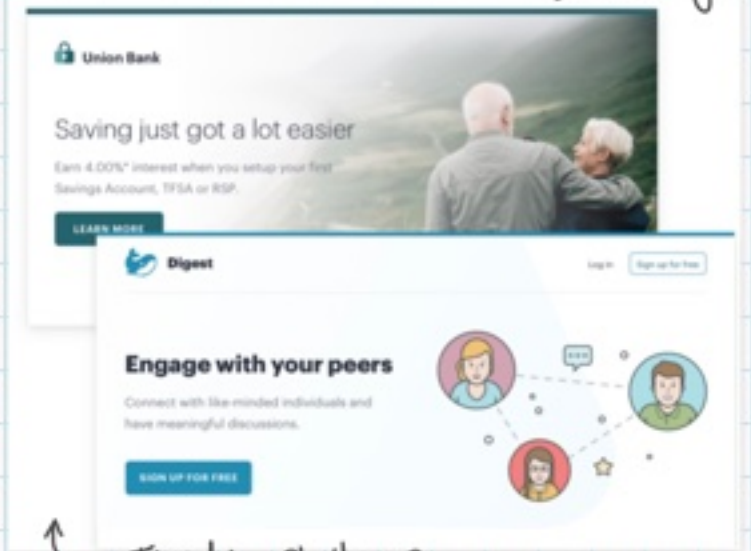
① **Start with a feature not a layout:**
Start your design with a piece of actual functionality
ex: A page for search flights.
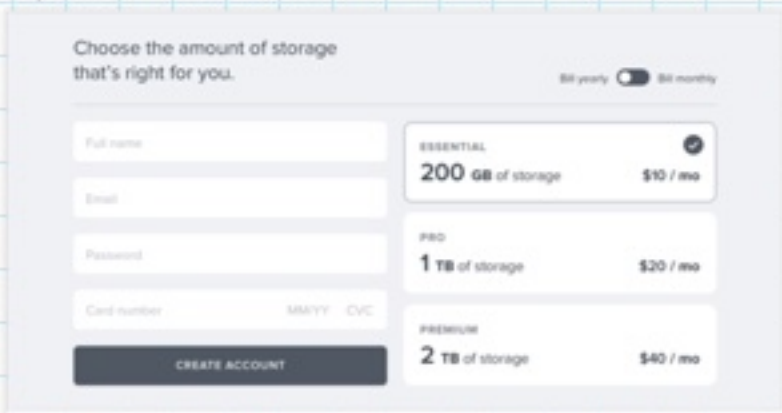
- **Details come later:** Start with a Paper and Sharpie
- **Hold the color:** Design in a greyscale and focus on space contrast and size

- **Don't over invest:** Use mockups and wireframes to move fast

- **Don't design to much:** You don't need to design every single feature in the app at the start

- **Work in cycles:** Start with a simple version Iterate on the working design until there is not more problems to resolve.

- **Don't be a Pessimist:** Expect that the new feature will be hard to build. Design it later.

- **Choose a Personality:** Every design has some kind of personality.

✓ Banking site

← Trendy start-up

- **Font choice:** A huge part in how the design feels.

↗ elegant classic bok Serif

font-family: freight text

font-family: proxima soft    playful - rounded sans-serif

With a plainer look a neutral sans-serif

- **Color:** There is a lot about color psychology but it is about what color feel good to you

- **Border radius:** A larger border radius feels more playful while not border radius feels serious and formal. stay consistent!

- **Language:** - Personal tone → Professional but casual language → friendlier

**Limit your choices:** Create a design system.

Don't reach for the color picker every time you need to pick a new shade of blue — choose from a set of 8-10 shades picked out ahead of time.
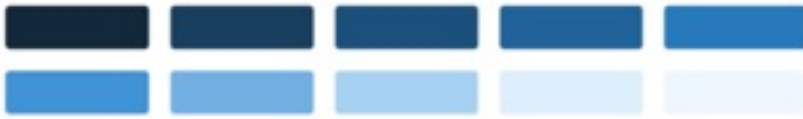
Similarly, don't tweak a font size one pixel at a time until it looks perfect. Define a restrictive type scale in advance and use that to make any future font size decisions.

| 12px | The quick brown fox jumps over the lazy dog |
| 14px | The quick brown fox jumps over the lazy dog |
| 16px | The quick brown fox jumps over the lazy dog |
| 18px | The quick brown fox jumps over the lazy dog |
| 20px | The quick brown fox jumps over the lazy dog |
| 24px | The quick brown fox jumps over the lazy dog |
| 32px | The quick brown fox jumps over the lazy dog |
| 48px | The quick brown fox jumps over th |

Design by elimination. Choose the what it seems to be the best.

**Systematize everything.** Have a system for:

- Font size
- Color
- Width
- Border radius

- font weight
- Margin
- Height
- Border width

- Line height
- Padding
- Box shadows
- Opacity

## HIERARCHY IS EVERYTHING

- **Not all elements are equal:**
It make things look more "design". You can de-emphasize secondary and tertiary information and highlight the elements that are more important
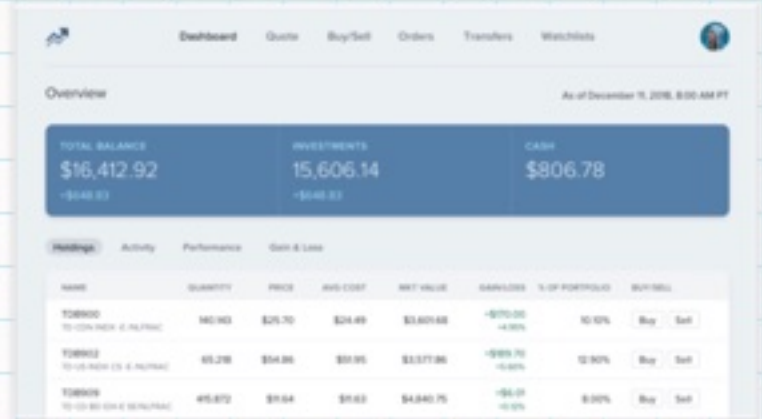
- **Size isn't everything:** Don't rely the hierarchy only on the font size. Try using font size - color weight. You can use:

- A dark color for primary content.
- Grey for secondary content.
- A lighter grey for tertiary content

STAY AWAY FROM FONT WEIGHTS UNDER 400

- **Don't we grey text on color background**

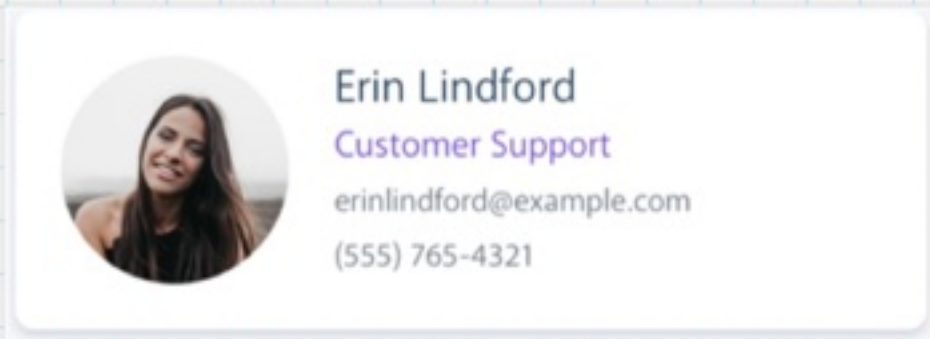Use a lighter version of the background color

- **You can emphasize by de-emphasizing:**

When the primary element don't stand out to much you can de-emphasize the others
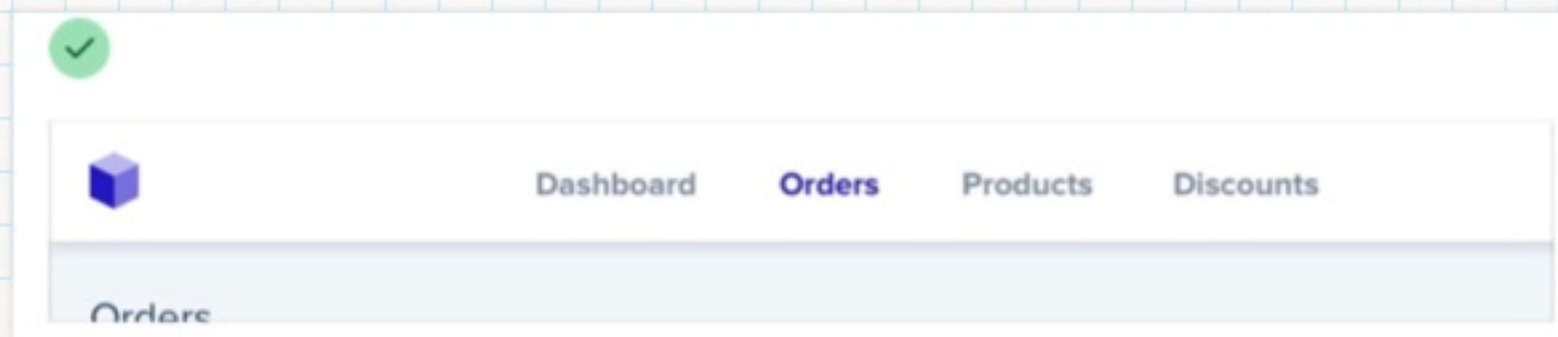
- Labels are a last resort
When presenting data try not to use a label. Hard to make data with any sort of hierarchy. Maybe you don't need a label. It is easier to emphasize
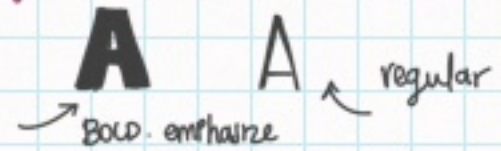
Erin Lindford
Customer Support
erinlindford@example.com
(555) 765-4321

- Combine labels and values: We can avoid the label by adding text to clarify.
ex:     12 left in stock     3 bedrooms.

DETACHED HOUSE - 3,426 SQFT
$1,250,000
742 Evergreen Terrace

Bedrooms: 3     Bathrooms: 2

Tiffany Heffner
(555) 555-4321
SCHEDULE SHOWING ›

DETACHED HOUSE - 3,426 SQFT
$1,250,000
742 Evergreen Terrace

🛏 3 Bedrooms     🛁 2 Bathrooms     label & Text

Tiffany Heffner
(555) 555-4321
SCHEDULE SHOWING ›

Labels are secondary: Put label as supporting content

Heart rate
82 BPM

HEART RATE
82 BPM

make it smaller
less contrast
lighter font weight

When to emphasize the label When the user will be looking for the label.

SEPARATE VISUAL HIERARCHY FROM DOCUMENT ►
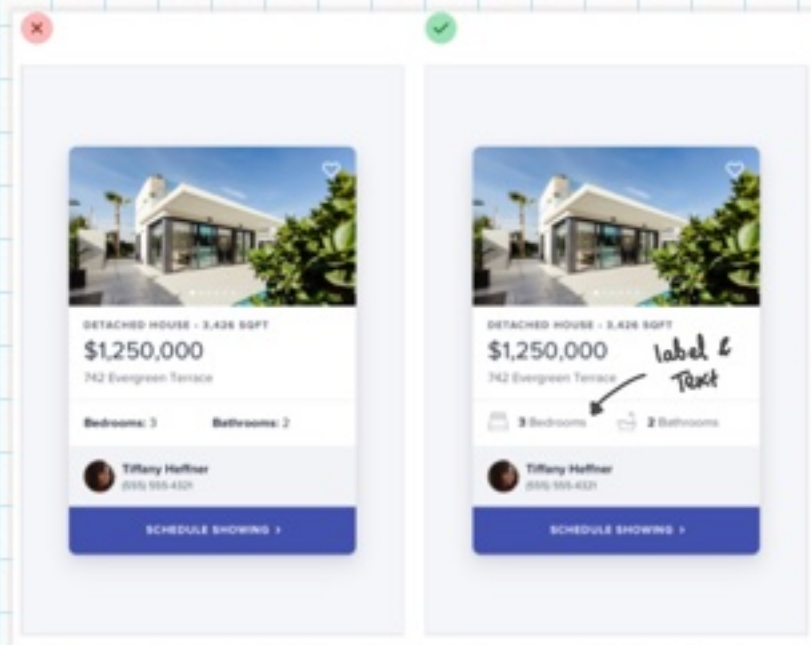- Use semantic markup   h₁. h₂. h₃

- Section titles act more like labels  not to focus.

- You can include titles in your markup (accessibility) but hide it
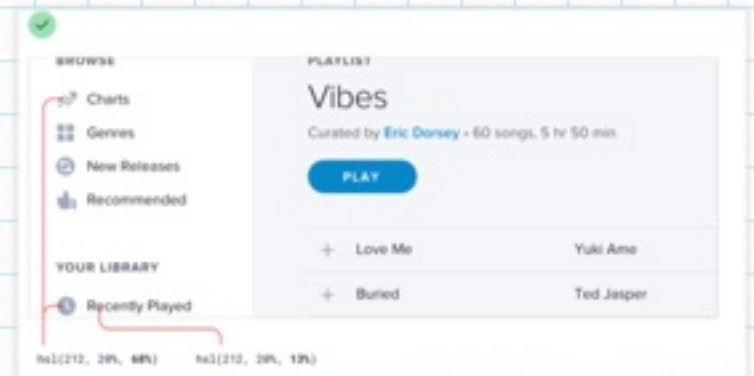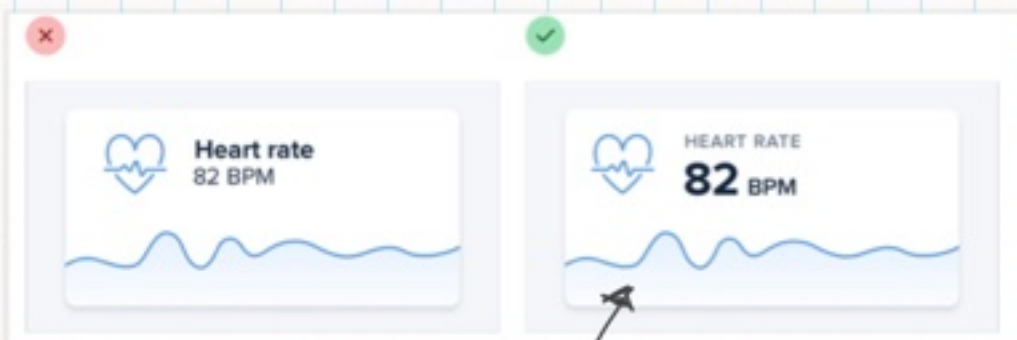
Balance weight and contrast:

$$A \qquad A$$
BOLD. emphasize      regular

using contrast to compensate for weight: [working w icons]

BROWSE
Charts
Genres
New Releases
Recommended

YOUR LIBRARY
Recently Played

PLAYLIST
Vibes
Curated by Eric Dorsey • 60 songs, 5 hr 50 min
PLAY

+ Love Me        Yuki Ame
+ Buried          Ted Jasper

hsl(212, 20%, 60%)     hsl(212, 20%, 13%)

Using weight to compensate for contrast

- increasing weight emphasize low contrast elements.

Amanda Wagner                                    8h ago
Human Resources Specialist
Join us on November 27th for our 1st Dribbble meetup in Waterloo! Calling all designers, UI/UXers, illustrators and other creatives from the KW and surrounding area together to talk shop, mingle, and walk away with some great swag!
👍 23     💬 17     ⚓ Share

Kimberly Kennedy                                 8h ago
Sr. Front-End Developer
Had an inspiring two days at KiteTail HQ learning from the best design thinkers in the biz. Can't wait to start playing with some great new ideas.
👍 45     💬 17     ⚓ Share

Adam Henderson                                   8h ago
Product Designer

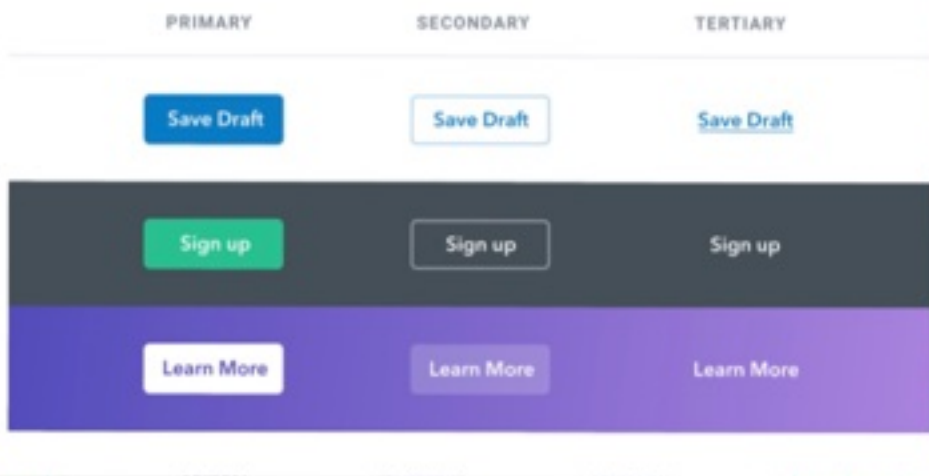Balanced
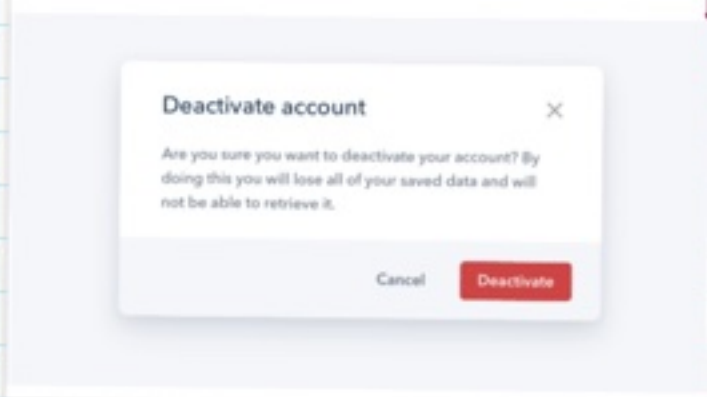border: 2px solid hsl(219, 23%, 95%);

2px solid     95%

# semantics are secondary

- Every action on a page sits somewhere in Δ importance
- PRIMARY ACTIONS SHOULD BE OBVIOUS → solid colors
- SECONDARY ACTIONS SHOULD BE CLEAR BUT NOT PRO outline. lower contrast background colors
- TERTIARY ACTIONS SHOULD BE DISCOVERABLE



Beige Wooden Bar Stool — $40
Greater Toronto Area

Rustic, hand-crafted bar stool. Easy to move thanks to the hole in the seat.

Delete Listing          Edit      Publish
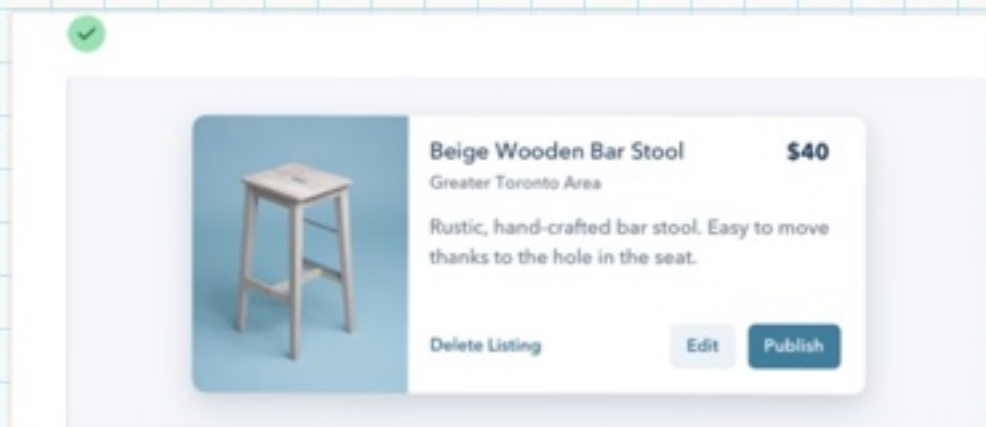
When you take a hierarchy-first approach to designing the actions on page, the result is a much less busy UI that communicates more clearly:

| PRIMARY | SECONDARY | TERTIARY |
|---|---|---|
| Save Draft | Save Draft | Save Draft |
| Sign up | Sign up | Sign up |
| Learn More | Learn More | Learn More |

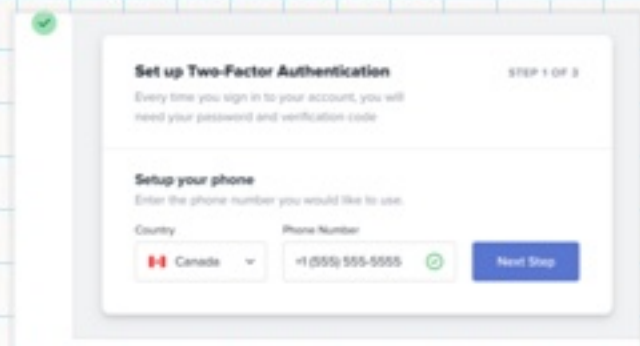| Unpublish | Unpublish | Unpublish |
|---|---|---|

Combine this with a confirmation step where the destructive action actually is the primary action, and apply the big, red, bold styling there.

**destructive actions**

### Deactivate account

Are you sure you want to deactivate your account? By doing this you will lose all of your saved data and will not be able to retrieve it.

Cancel      Deactivate

# LAYOUT AND SPACING

- Start with too much space:



Set up Two-Factor Authentication — STEP 1 OF 3
Every time you sign in to your account, you will need your password and verification code

Setup your phone
Enter the phone number you would like to use.

Country        Phone Number
🇨🇦 Canada     +1 (555) 555-5555      Next Step

## White space should be removed, no added

Start giving too much space and then you can remove it.
But if you are making a dashboard where a lot of information needs to be visible at once.
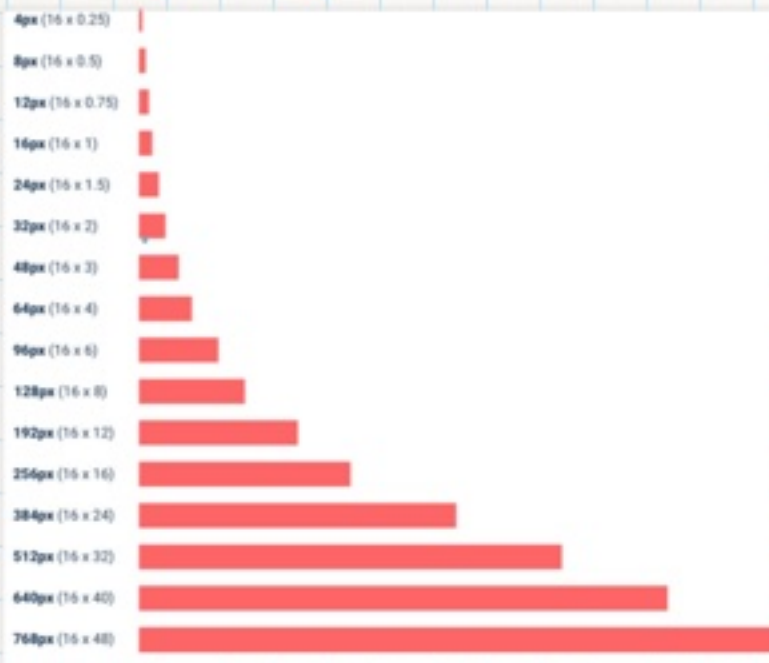
## ESTABLISH A SPACING AND SIZING SYSTEM:
Limit yourself to a constrained set of values. defined in advance
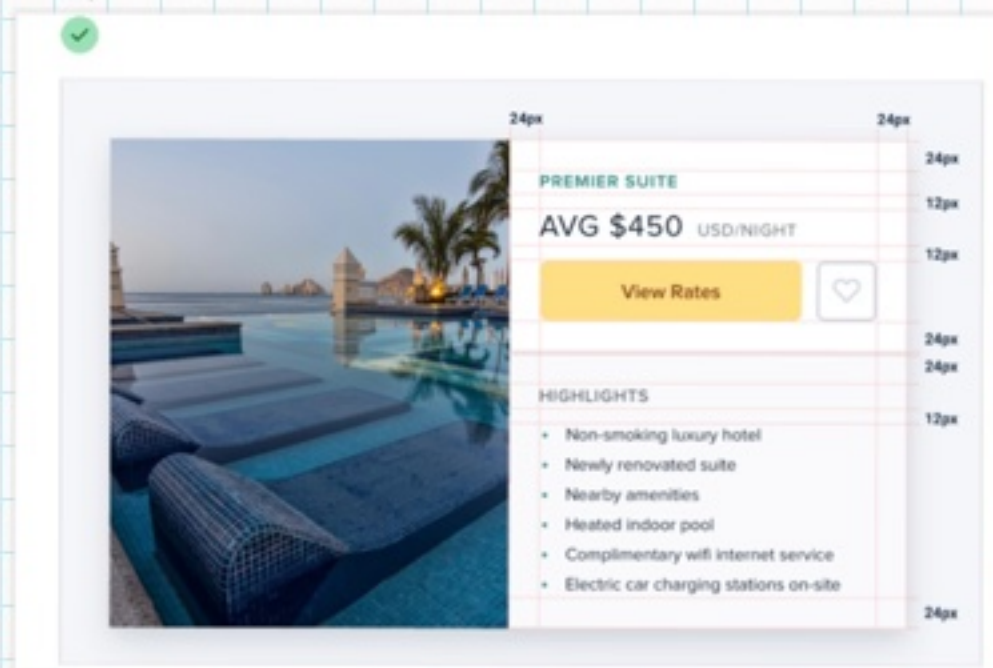
## a linear scale won't work:

For a system to be truly useful relative ≠ between values.



16px (20% decrease) → Download

20px (Actual size) → Download

24px (20% increase) → Download

## Defining the system: You can start at 16px



| | |
|---|---|
| 4px (16 × 0.25) | |
| 8px (16 × 0.5) | |
| 12px (16 × 0.75) | |
| 16px (16 × 1) | |
| 24px (16 × 1.5) | |
| 32px (16 × 2) | |
| 48px (16 × 3) | |
| 64px (16 × 4) | |
| 96px (16 × 6) | |
| 128px (16 × 8) | |
| 192px (16 × 12) | |
| 256px (16 × 16) | |
| 384px (16 × 24) | |
| 512px (16 × 32) | |
| 640px (16 × 40) | |
| 768px (16 × 48) | |

## If you need to add space try with these values



## You don't have to fill the whole screen
- Don't make it full-width.
- Start mobile-first, shrink the canvas
- Make it into colums
- Use grids, so when it shrinks make something fixed that it is optimized for its contents
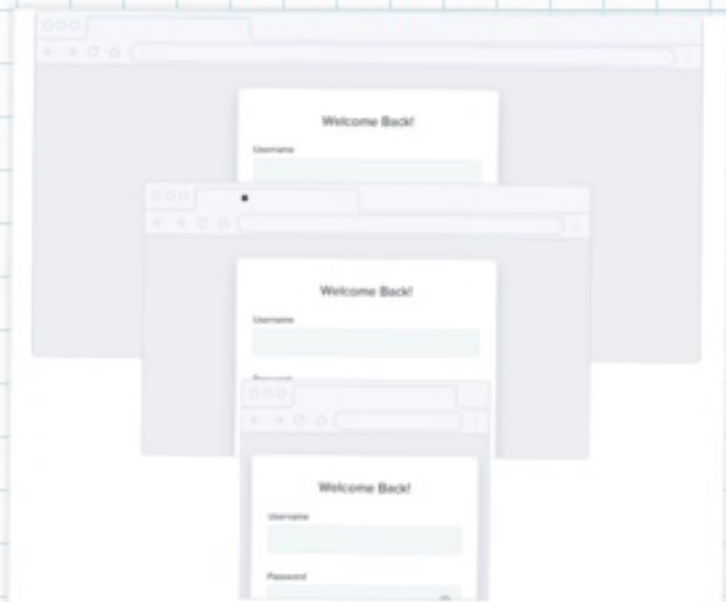
## Don't shrink an element until you need to
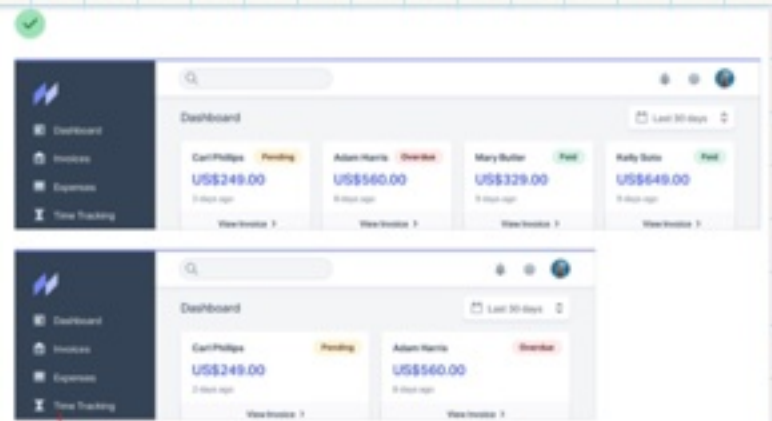


Fixed sidebar width

This applies within components, too — don't use percentages to size something unless you actually want it to scale.
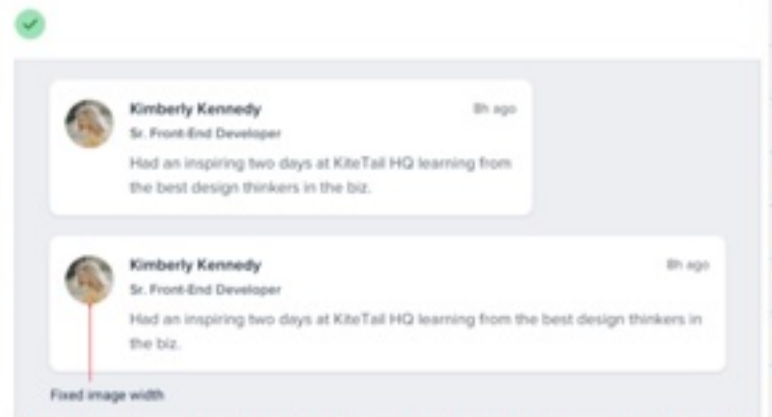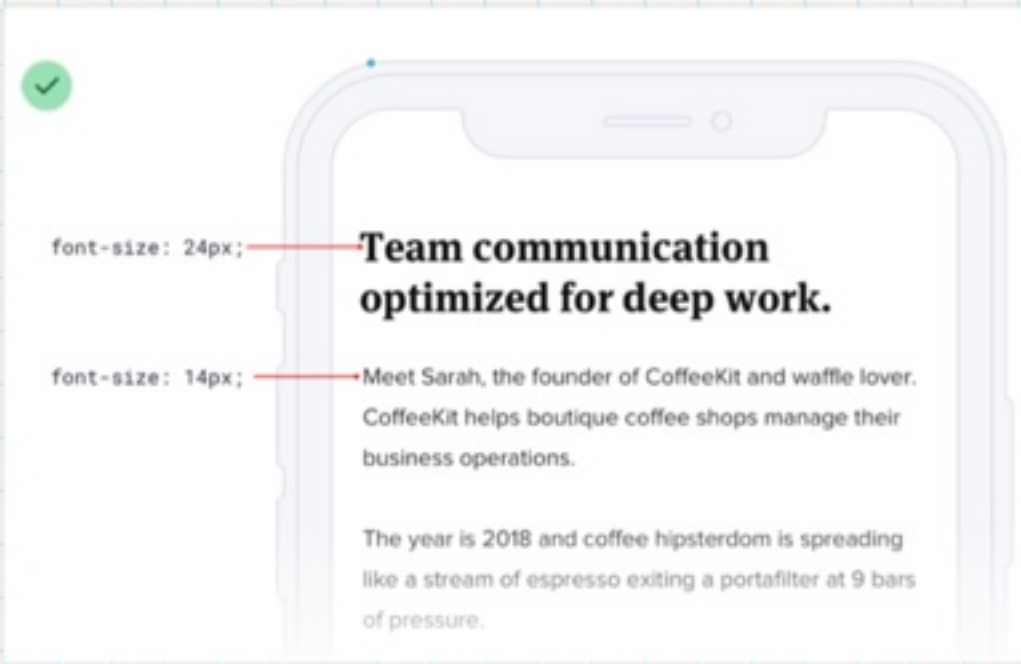


Fixed image width



Don't be a slave to the grid — give your components the space they need and don't make any compromises until it's actually necessary.
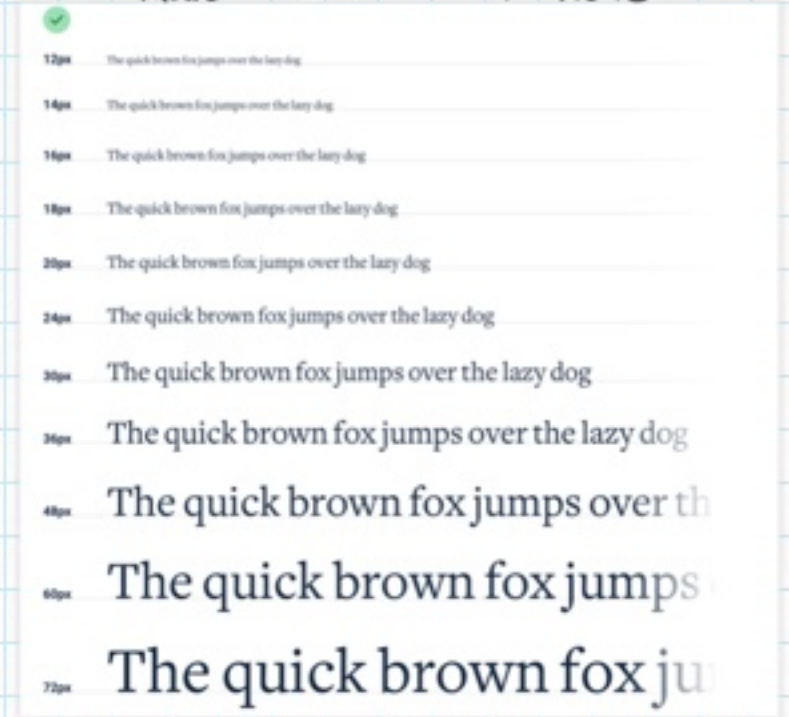
# RELATIVE SIZING DOESN'T SCALE



font-size: 24px;  →  **Team communication optimized for deep work.**

font-size: 14px;  →  Meet Sarah, the founder of CoffeeKit and waffle lover. CoffeeKit helps boutique coffee shops manage their business operations.

The year is 2018 and coffee hipsterdom is spreading like a stream of espresso exiting a portafilter at 9 bars of pressure.

everything not need to be scale propotimaly



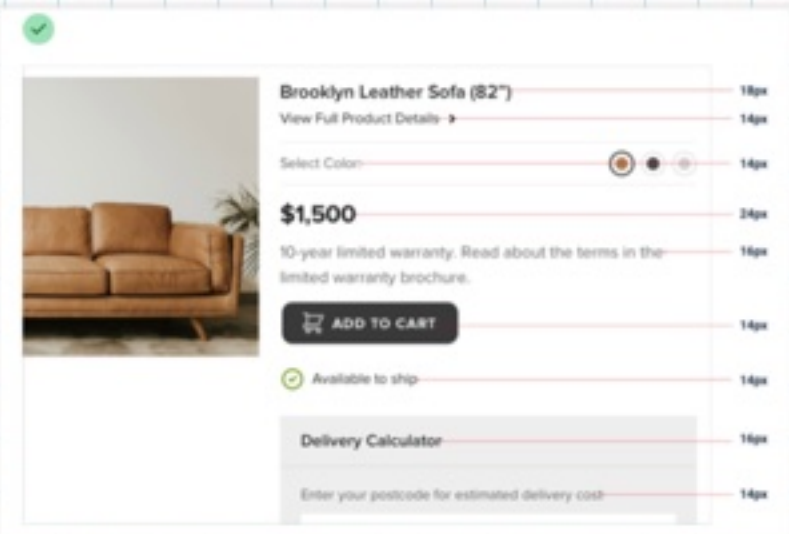| Button | Button | Button | Button |
|---|---|---|---|
| font-size: 20px; padding: 15px 30px; | font-size: 16px; padding: 12px 16px; | font-size: 14px; padding: 8px 10px; | font-size: 12px; padding: 6px 8px; |

A larger bttn feels like a bttn

## Avoid ambiguas spacing:

When there is not a line sparator it is not always obvious that is separate. This could be fix by increase space between each form group.



**2 BILLING ADDRESS**   Are you purchasing for someone else?

Full name

20px
10px   Street address

Same problem with articles space above section headings.

City

and bullet List

Province/Territory

Postal code
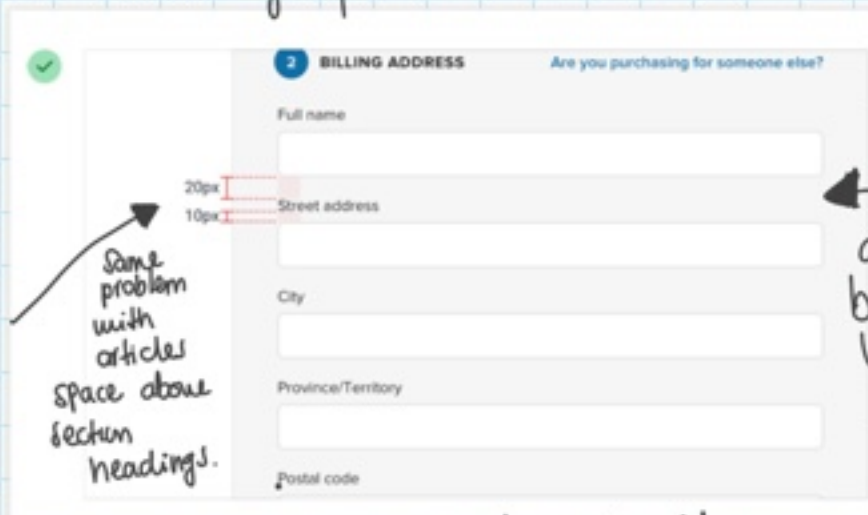
also components Horizontally.

# DESIGNING TEXT: Avoid 7 sizing in UI

- Chosing a scale ▸ Use a modular scale
4:5 radio    2:3    1:1.618



| 12px | The quick brown fox jumps over the lazy dog |
| 14px | The quick brown fox jumps over the lazy dog |
| 16px | The quick brown fox jumps over the lazy dog |
| 18px | The quick brown fox jumps over the lazy dog |
| 20px | The quick brown fox jumps over the lazy dog |
| 24px | The quick brown fox jumps over the lazy dog |
| 30px | The quick brown fox jumps over the lazy dog |
| 36px | The quick brown fox jumps over the lazy dog |
| 48px | The quick brown fox jumps over th |
| 60px | The quick brown fox jumps |
| 72px | The quick brown fox ju |



Brooklyn Leather Sofa (82")   18px
View Full Product Details ▸   14px
Select Color   14px
$1,500   24px
10-year limited warranty. Read about the terms in the limited warranty brochure.   16px
ADD TO CART   14px
Available to ship   14px
Delivery Calculator   16px
Enter your postcode for estimated delivery cost   14px

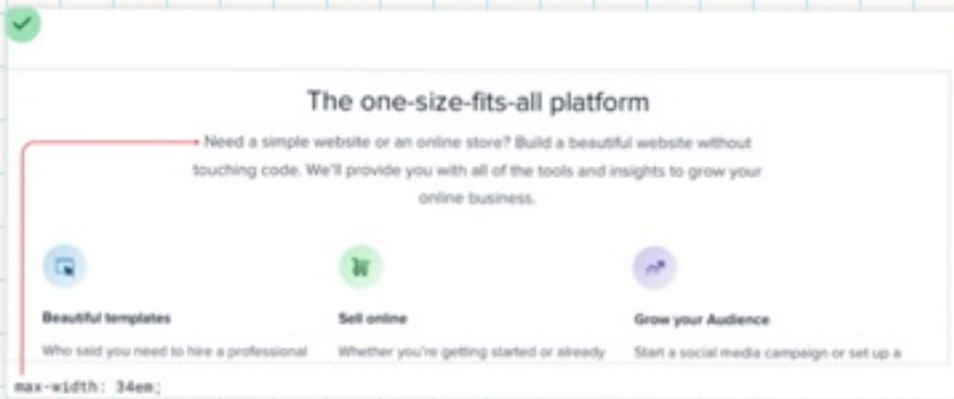Use good fonts - Helvetica web safe

Optimize for legibility

Trust the wisdom of the crowd

Steal from people who care

# KEEP YOUR LINE LENGTH IN CHECK —

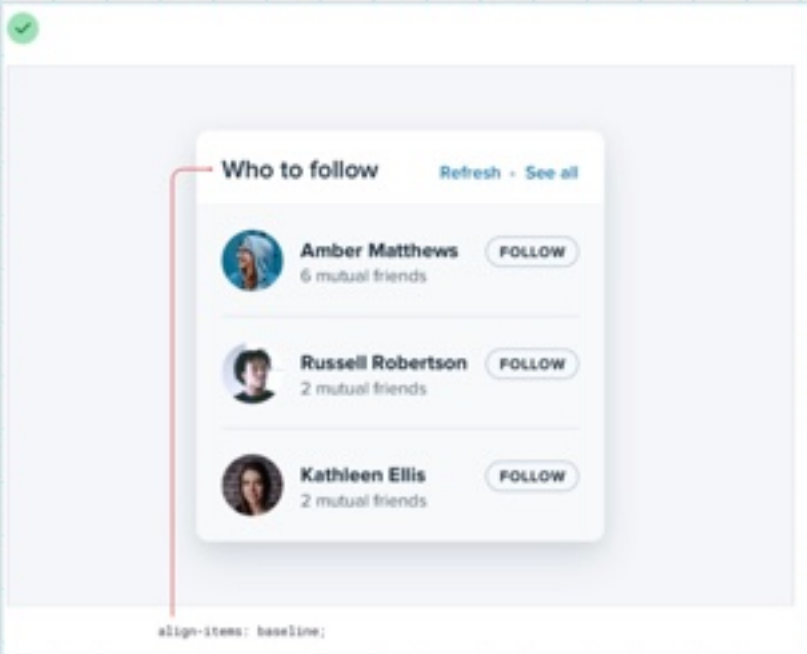For best reading experience ℙ should be
45 to 75 characters per line.
Wider content still limit the ℙ



The one-size-fits-all platform

Need a simple website or an online store? Build a beautiful website without touching code. We'll provide you with all of the tools and insights to grow your online business.

Beautiful templates
Who said you need to hire a professional

Sell online
Whether you're getting started or already

Grow your Audience
Start a social media campaign or set up a

`max-width: 34em;`

## Baseline not center:
A better approach should be align mixed
font size by their baseline

baseline typography



Who to follow          Refresh · See all

Amber Matthews      FOLLOW
6 mutual friends

Russell Robertson   FOLLOW
2 mutual friends

Kathleen Ellis      FOLLOW
2 mutual friends

`align-items: baseline;`

## Line-height is proportional: 1.5 good reading
2 wide content

When text is small extra line spacing **1.75**
larger text - **1**

inversely proportional

## Not every link needs color:
In a block full of text links need to stand out
But when almost everything is a link
Just emphasize them or when hover
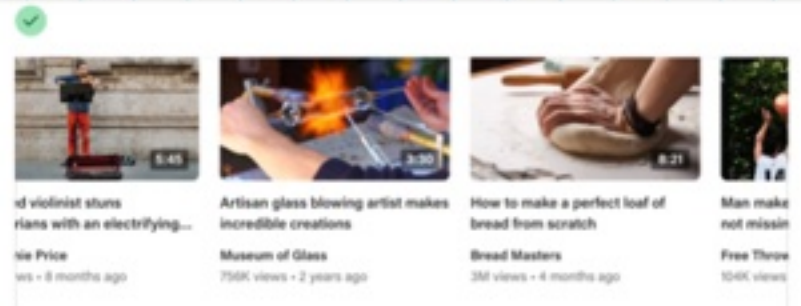


Some links might not even need to be emphasized by default at all. If you've got links in your interface that are really ancillary and not part of the main path a user takes through the application, consider adding an underline or changing the color *only on hover*.



## Align with readability in mind:
Majority should be left-align

- Dont center long form text
- Center-align for headings-independent
- Right-align numbers
- hyphenate justified text

## Use letter spacing effectively:

headline fonts rarely work well in small size
Improve ALL CAPS by adding letter spacing

# WORKING WITH COLOR ─────────

- **HUE:** Is a color position on the color wheel identify # types of blue · measure in °



**Tasks**
- Completed (35%) ——— hsl(**220, 95%, 34%**)
- Assigned (40%) ——— hsl(**220, 65%, 61%**)
- Due (25%) ——— hsl(**220, 69%, 88%**)

- **SATURATION:** How colorful or vivid a color looks
  0 % grey     100 %  vibrant



| H 210 | H 210 | H 210 | H 210 | H 210 |
| S **0%** | S **25%** | S **50%** | S **75%** | S **100%** |
| L 50% | L 50% | L 50% | L 50% | L 50% |
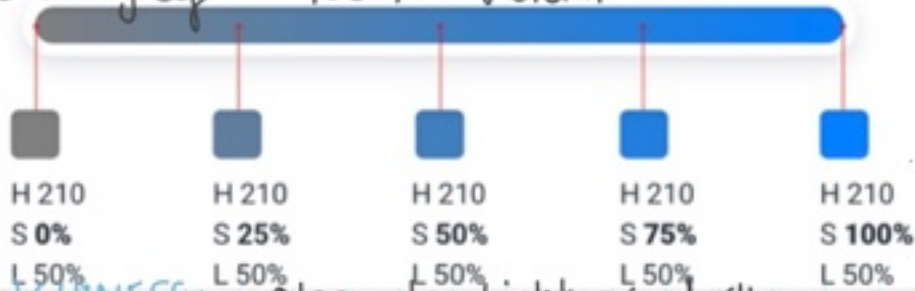
- **LIGHTNESS:** Close to light or dark
  **HSL** - 0% is black   100% white 0%
  when saturation is 100% - 100% brightness
  in HSB is the same as 100% S — 50% lig HSL
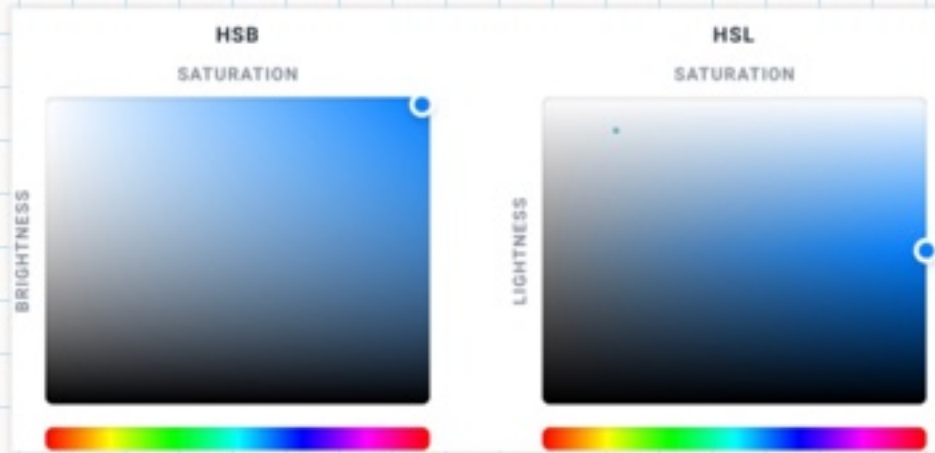


You need more colors than you think:



Break it in 3 categories:

① **GREY:**
text - backgrounds - panels - form controls
3-4 shades

② **PRIMARY COLORS:**
active navigation · overall look

③ **ACCENT COLORS:**
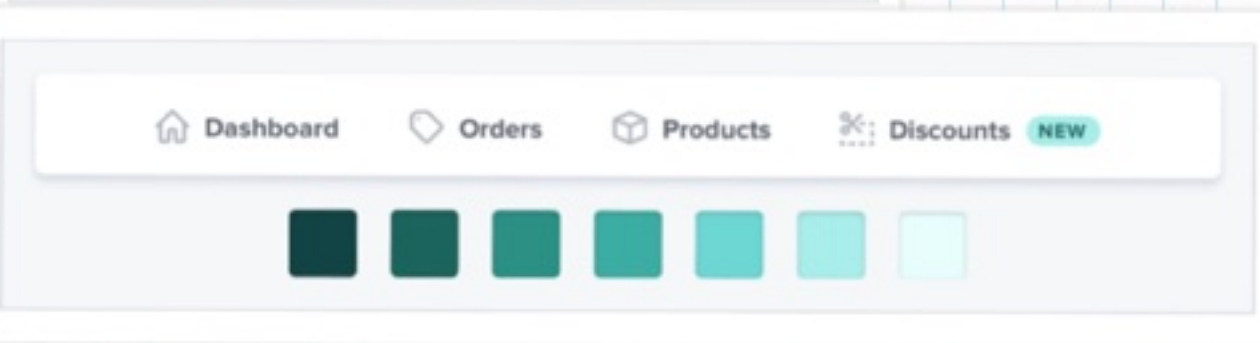communicate # thing to the user
eye grabbing color.
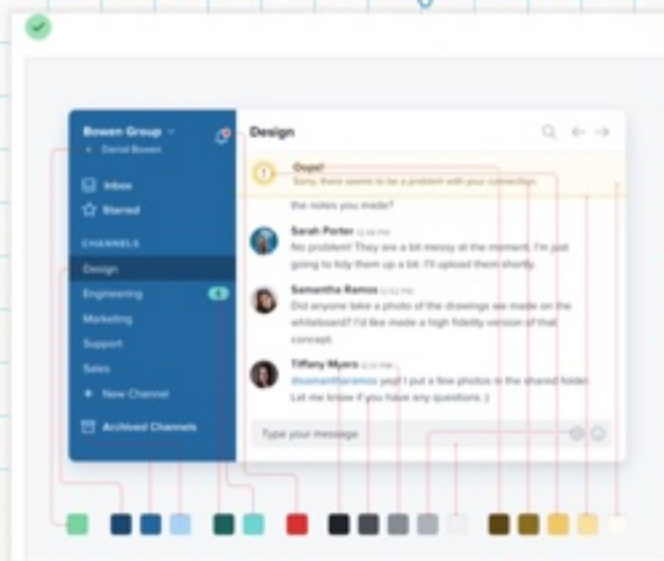
You might also need colors to emphasize different semantic states, like red for confirming a destructive action:
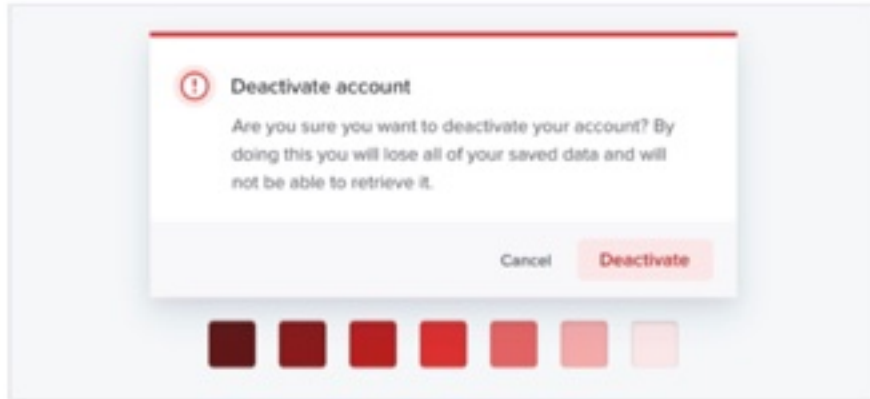


...yellow for a warning message:
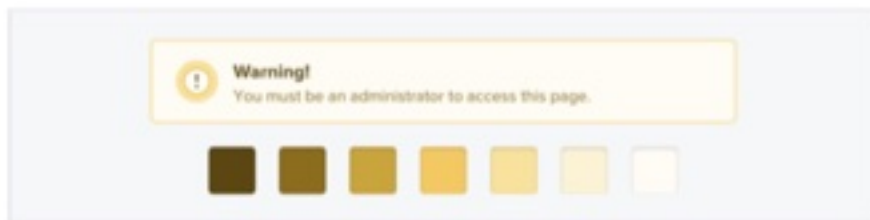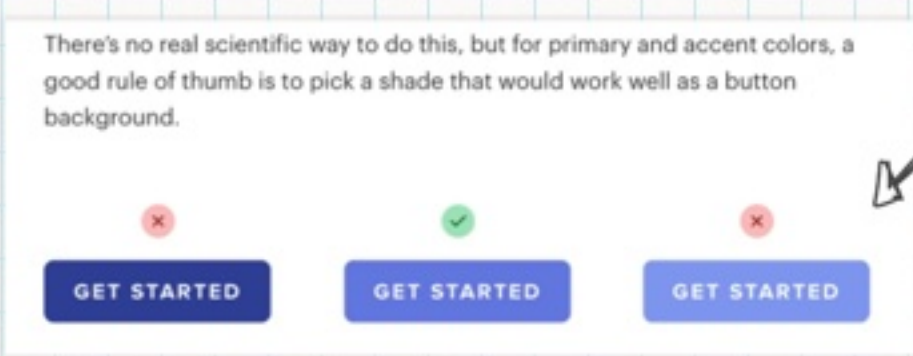


...or green to highlight a positive trend:





# ACCENT COLORS

On top of the primary
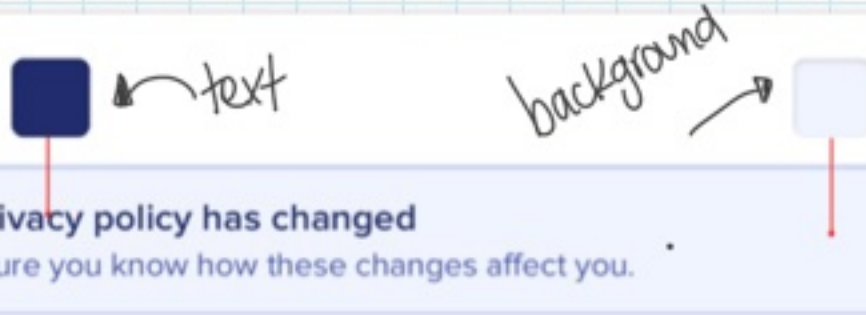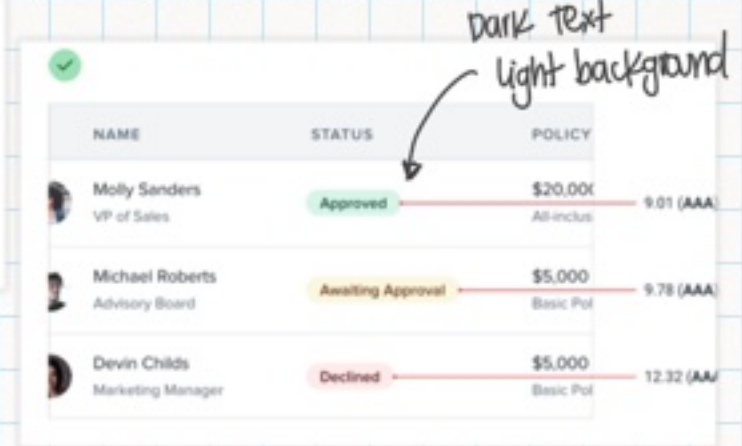
# Define your shades upfront:

① Choose a base color

There's no real scientific way to do this, but for primary and accent colors, a good rule of thumb is to pick a shade that would work well as a button background.



good as button background color

② Find the darkest shade - lightest

But when in color:

text → 

background →

**Our privacy policy has changed**
Make sure you know how these changes affect you.

FLIPPING THE CONTRAST

Dark text
light background

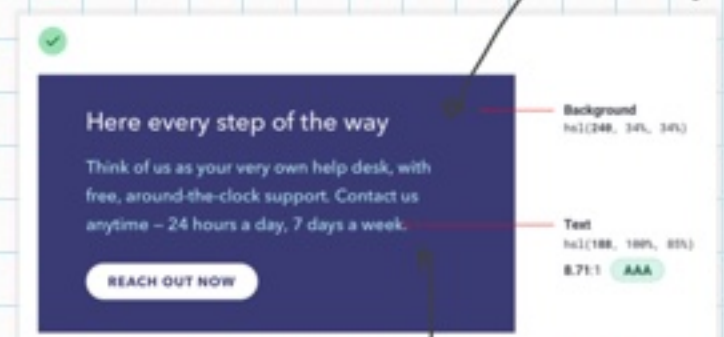| NAME | STATUS | POLICY | |
|------|--------|--------|---|
| Molly Sanders — VP of Sales | Approved | $20,00 All-inclus | 9.01 (AAA) |
| Michael Roberts — Advisory Board | Awaiting Approval | $5,000 Basic Pol | 9.78 (AAA) |
| Devin Childs — Marketing Manager | Declined | $5,000 Basic Pol | 12.32 (AA |

③ Fill the gap (up to **5**)
700 - 300 shade

Remembember

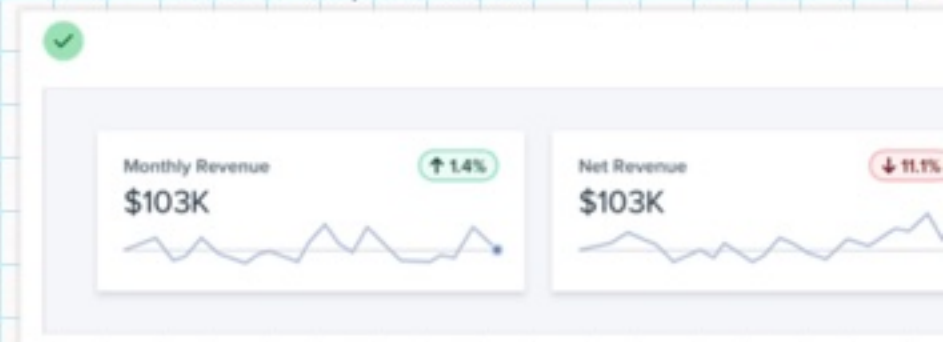- changing hues to color for lightness
- Grey's can feel warm or cold

**Accesible** →

contrast radio

Rotating the hue : hue to yellow

**Here every step of the way**

Think of us as your very own help desk, with free, around-the-clock support. Contact us anytime – 24 hours a day, 7 days a week.

REACH OUT NOW

Background
hsl(240, 34%, 34%)

Text
hsl(188, 100%, 85%)
8.71:1 AAA

≠ from head - text

Don't rely on color alone:
You can add icons communicates the same information.

**Normal Text**

| EXAMPLE | COLOR | CONTRAST | GRADE |
|---------|-------|----------|-------|
| The five boxing wizards jump quickly. | hsl(0, 0%, 54%) | 3.45:1 | Fail |
| The five boxing wizards jump quickly. | hsl(0, 0%, 42%) | 5.41:1 | AA |
| The five boxing wizards jump quickly. | hsl(0, 0%, 33%) | 7.57:1 | AAA |

**Large Text**

| EXAMPLE | COLOR | CONTRAST | GRADE |
|---------|-------|----------|-------|
| The five boxing wizards jump... | hsl(0, 0%, 59%) | 2.96:1 | Fail |
| The five boxing wizards jump... | hsl(0, 0%, 54%) | 3.45:1 | AA |
| The five boxing wizards jump... | hsl(0, 0%, 42%) | 5.41:1 | AAA |

Monthly Revenue ↑ 1.4%
$103K

Net Revenue ↓ 11.1%
$103K

For graphs you can change the hue

Never use color as the only mean to communication

# CREATING DEPTH

Mimic real world light to make feel elements on top or insert in the UI

- Use shadows to convey elevation
  - SMALL: BUTTONS
  - MEDIUM: DROPDOWNS
  - LARGE: MODAL DIALOGS

Define your shadows

```
0 1px 3px hsla(0,0%,.2);    0 5px 15px hsla(0,0%,.2);    0 15px 35px hsla(0,0%,.2);
```

```
0 4px 6px hsla(0,0%,.2);    0 10px 24px hsla(0,0%,.2);
```

- Combining shadows with interactions:
  feel Press - selected
- Use two shadows
  makes feels the edges defined

- CREATE DEPTH WITH COLOR:
  An element lighter than the background make it feel like it is raised off the page
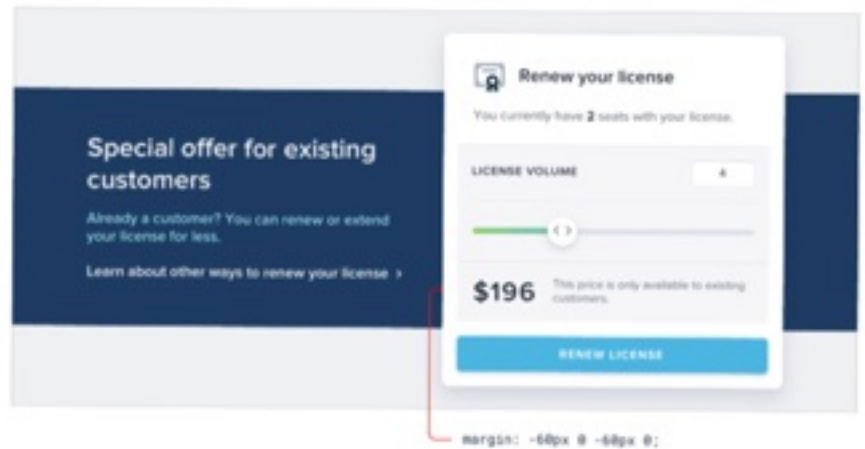
Overlap elements to create layers:
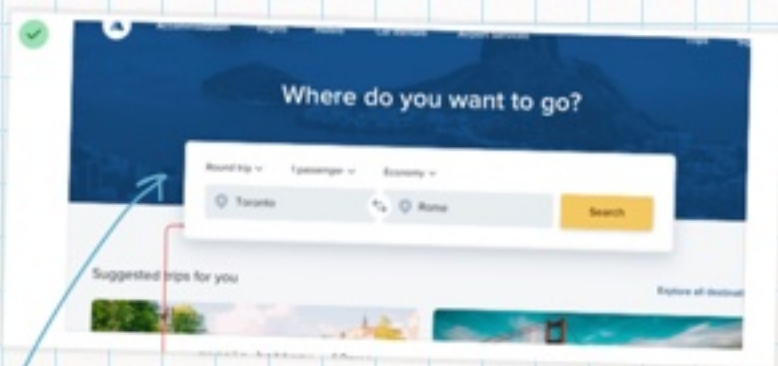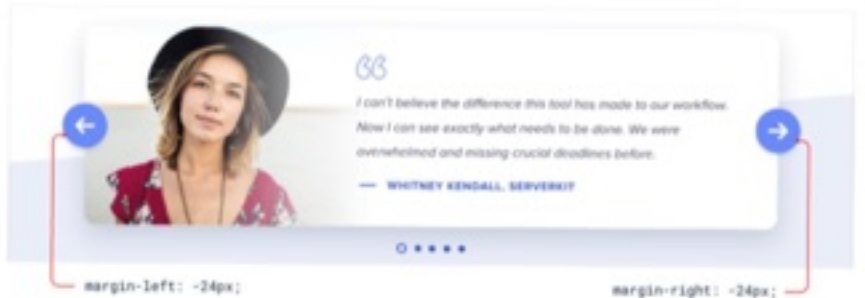
feels like multiple layers

add a border so can feel the layer

```
border: 4px solid #FFFFFF;
```

---

You could also make an element taller than its parent, so it overlaps on both sides:

```
margin: -60px 0 -60px 0;
```

Overlapping elements can add depth to smaller components too, for example the controls on this carousel:

```
margin-left: -24px;        margin-right: -24px;
```

# WORKING WITH IMAGES

- Text need consistent contrast: with vivid images

  → Add an overlay: semi-transparent
  → lower image contrast:
  → Colorize the image:
  → Add a text shadow

- Everything has a size: Don't scale up icons

  → Keep it in the intented size
  → encapsulate it
  → Don't scale down SS
  → Consider Partial SS
  → Don't scale down Icons
    redraw them

Prevent background bleed

# FINISHING TOUCHES

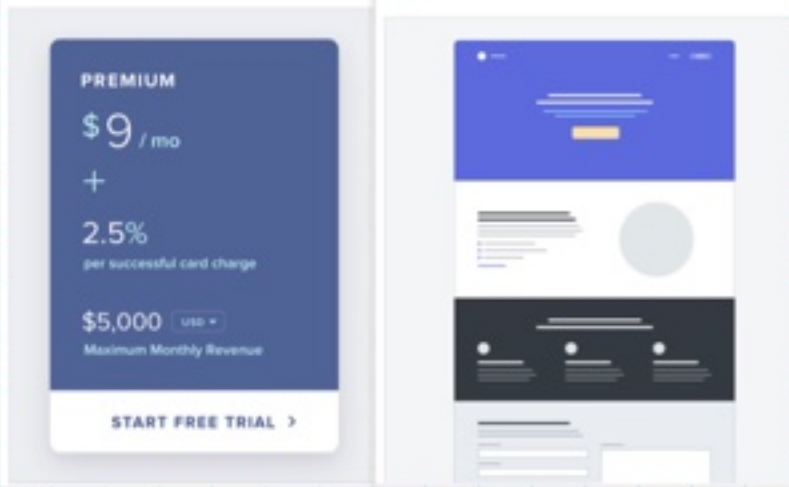- **Supercharge the defaults:** Have a better design with
  - Change • for ✅
  - If is about security 🔒
  - Working with a Testimonial increase size and color " "
  - Links change color · font weight or a think colorful underline
    Something with a **link**     Something with a <u>link</u>
  - With a form using custom checkboxes ☑ ⦿
  - Add color with accent borders   `THIS IS A CARD`

  - Highlight active navigation items 🗄 Dashboards **Products**
  - Or Along the side of alert message  ⓘ Checking
  - Short accent underneath a headline   some <u>information</u>
    <u>Here</u> to help every step of the way

  - Or even across the top of your entire layout

  - Decorate your background

  - Using a repeating pattern

---

- Don't overlook empty spaces - user generated content. empashizing with an illustration to grab user's attention.

- Something with a bunch of UI like tabs and filters. Consider hidding stuff There's no point in preseting so much information. DON'T DO ANYTHING UNTIL CREATE SOME CONTENT
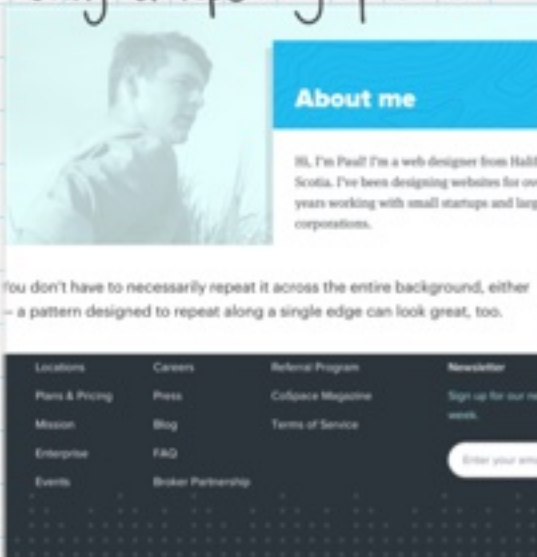
- Use fewer borders
- Use box shadow - outline the element
- Use different backgrounds
- Add extra spacing
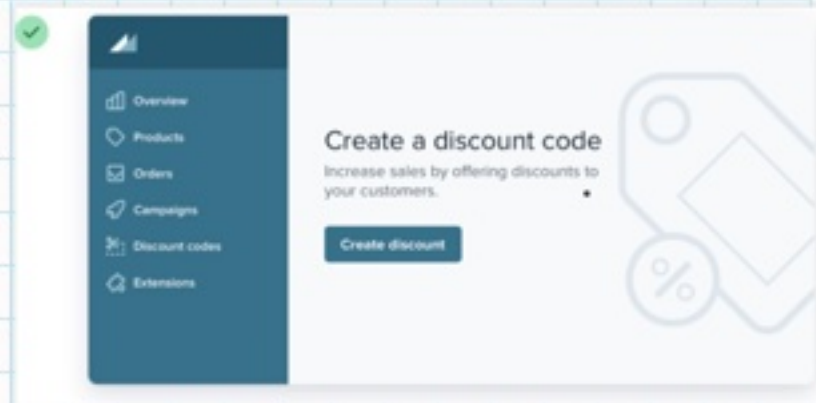- THINK OUTSIDE OF THE BOX

eg: Dropdown menu

Add a simple shape or illustration

· Simple geomatric shape

· Or a world map

## - Table:

| NAME | POLICY | LOCATION | STATUS | |
|------|--------|----------|--------|---|
| Molly Sanders<br>VP of Sales | $20,000<br>All-inclusive Policy | Denver, CO | Approved | ... |
| Michael Roberts<br>Advisory Board | $5,000<br>Basic Policy | New York, NY | Approved | ... |
| Devin Childs<br>Marketing Manager | $5,000<br>Basic Policy | Chicago, IL | Awaiting Approval | ... |

## - Selector

**Change Plan**  Cancel your plan

| HOBBY<br>**1** GB<br>**$5** / mo | GROWTH ✓<br>**5** GB<br>**$10** / mo | BUSINESS<br>**10** GB<br>**$15** / mo | ENTERPRISE<br>**20** GB<br>**$20** / mo |
|---|---|---|---|

## - Accent colors

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✓ **5** Projects
✓ Download prototypes
✓ Password protected prototypes

**GET STARTED**

## - Details

**Protecting your customers and income**

🔒 Machine learning monitors suspicions transactions

🔒 No fee when your customer disputes a payment

## - Few borders

**Contacts**

🔍 Search teams or members

| 21 Industries | Team |
|---|---|
| Darcy Patterson | Member |
| Alex Hamilton | Member |
| Bowen Group | Team |
| Taylor Smith | Member |

Cancel  **Invite**

`margin-bottom: 6px;`