



Sketch + InVision

A guide to high-speed design

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PREFACE:

Why Sketch and why InVision

Why Sketch

[Sketch](#) is a (macOS-only) dedicated vector and user interface design tool, critically-acclaimed for its image asset export tool, intuitive controls, and easy-to-remember keyboard shortcuts. Oh, and *plugins*—lots of them.

Because Sketch mostly focuses on designing for screens, its user interface is beautifully minimal in comparison to Photoshop or Illustrator. If you're coming from an Adobe background you might feel a little underwhelmed by the seemingly lack of features, but in actuality, Sketch has been heavily optimized to offer an ultra-clean designing experience. Believe me, Sketch is *very powerful*—you'll see that over the course of this book.

If you're eager to learn about Sketch—or you're short on time—you might want to start with InVision's free, 8-installment video course, [Switch to Sketch](#).

Why InVision

InVision is a platform for prototyping user flows, demonstrating how screens link up, and collaborating with others. Essentially, it's where team members come together and bring a digital product to life.

Sketch sets up the pins and InVision knocks them down. By using them together you can bowl a strike every time, but only if you know how to use the two efficiently and effectively. In this book I'll show you how to design, iterate and prototype using InVision's Craft plugins for Sketch, how to use the InVision web-app to collaborate with your team, and how to ensure that your design remains effortlessly consistent between the two apps.

What about Photoshop?

InVision does work with Photoshop as well, however I would personally advocate for the use of Sketch (for macOS users, at least) because it's specifically dedicated to helping you design user interfaces. Photoshop, on the other hand, is a multi-disciplinary and GUI-heavy application; it wasn't initially intended for user interface design.

Before we begin

Sketch is wonderfully simple, as you'll see in the demonstrations to come. That being said, it would be useful if you were somewhat acquainted with Sketch beforehand—although I wouldn't consider it a strict requirement. My book, [Jump Start Sketch](#) (also available on [Amazon](#)) can make you a Sketch ninja in a weekend — its reviews average at 4.5/5 stars!

While you can totally digest everything you need to know about using Sketch and InVision by simply reading this book, you might find it extra useful to follow along with the tutorials. I'll be using [Relate](#), a free .sketch kit by InVision, as a base for my examples.

Grab it, and I'll see you in the first chapter!



CHAPTER 1

How InVision integrates with Sketch

As you may already know, Sketch is very minimalistic (not to be confused with basic). Sketch is equipped with the essential tools every designer needs. For anything that may be considered *unessential*, you can extend your feature set by installing *plugins*. I mention quite a few extensions in my first book, however in this book we'll be focusing on the Craft suite of plugins for Sketch. Craft was built by InVision and offers a range of features that will help you design better and faster.

[DOWNLOAD CRAFT HERE](#)



CHAPTER 1:

Why Craft is a “power-up,” not a plugin

While Craft is essentially a suite of plugins, it's so robust I would consider it more like a toolbox of crucial features, rather than an extension. It's your rapid prototyping, your lorem ipsum, *and* your asset manager extension all rolled into one; a highly-impressive set of tools built on top of an already-useful, already-intuitive design app.

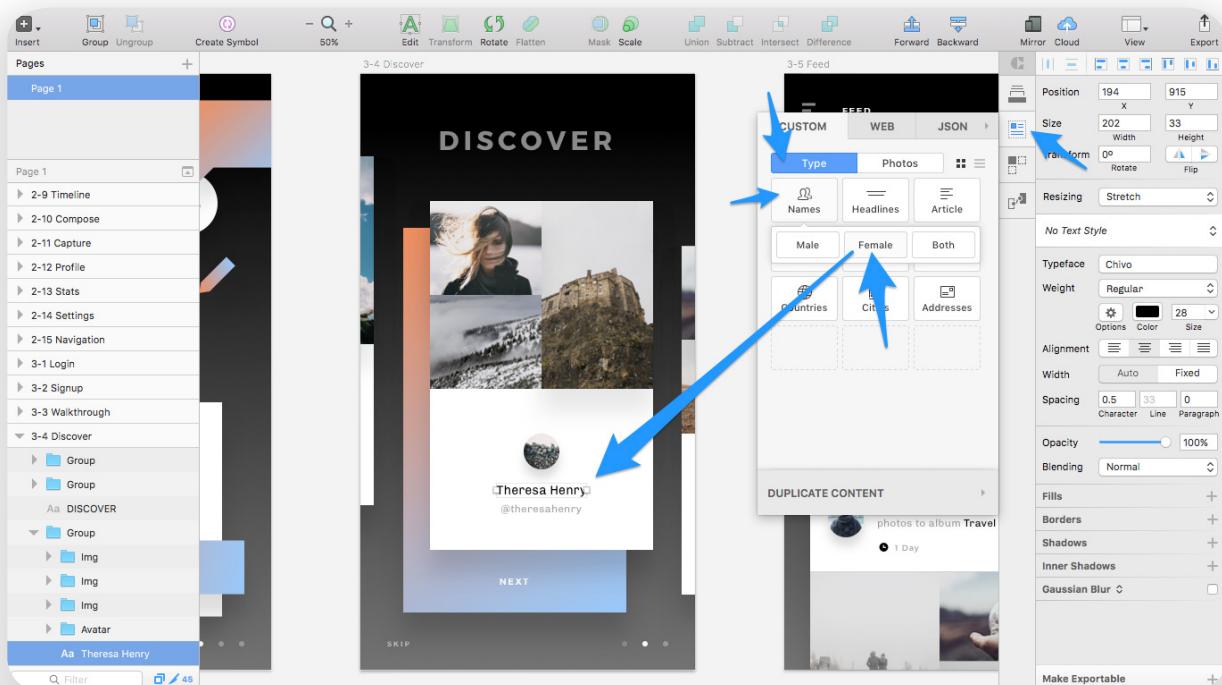
Craft is like the delicious stuffed crust option on your Pizza Hut order—the ordinary thin crust was perfectly fine before, but now you wonder how you ever survived without the stuffed crust (well, at least some of us do). Let's take a brief look at what makes Craft so tasty!

Craft can...



Quickly insert contextual dummy content

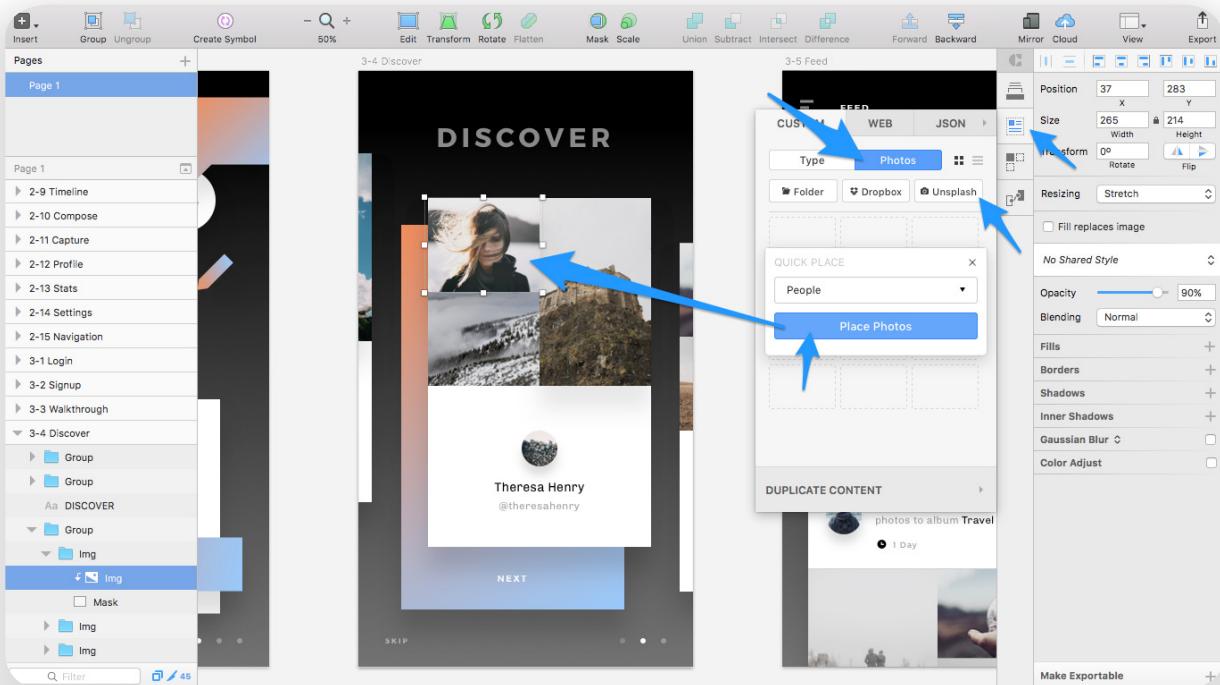
Forget trying to come up with fake content for your designs—Craft can insert realistic headings, names, dates, addresses (etc, etc!) into your design with only a few clicks. Craft can even access API's so that you can extract real data from real websites, so that you're not designing for imaginary scenarios.



Inserting a random female name



For images, Craft can source from your Dropbox account, from your own computer, from [Unsplash](#), or from a website chosen by you. Craft brings you content by any means necessary, without having to leave Sketch.

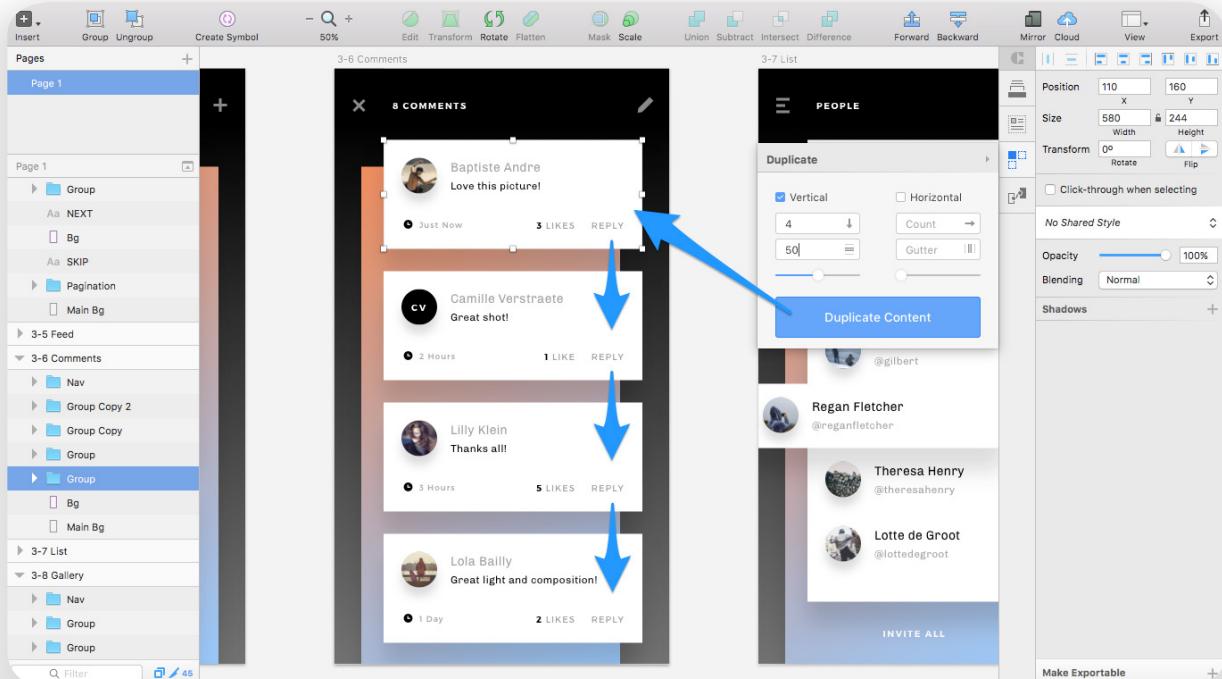


Inserting a random image of a person



Rapidly create grids of repeated elements

Let's say that you're designing a list of comments for a blog layout (composed of the commenter's name, comment, timestamp and like count). Craft can help you duplicate comments into as many rows and columns as you'd like. If you had previously used Craft to insert the names, likes, and timestamps for the content, Craft will again ensure that each duplicate has unique data.



Duplicating vertically with unique content

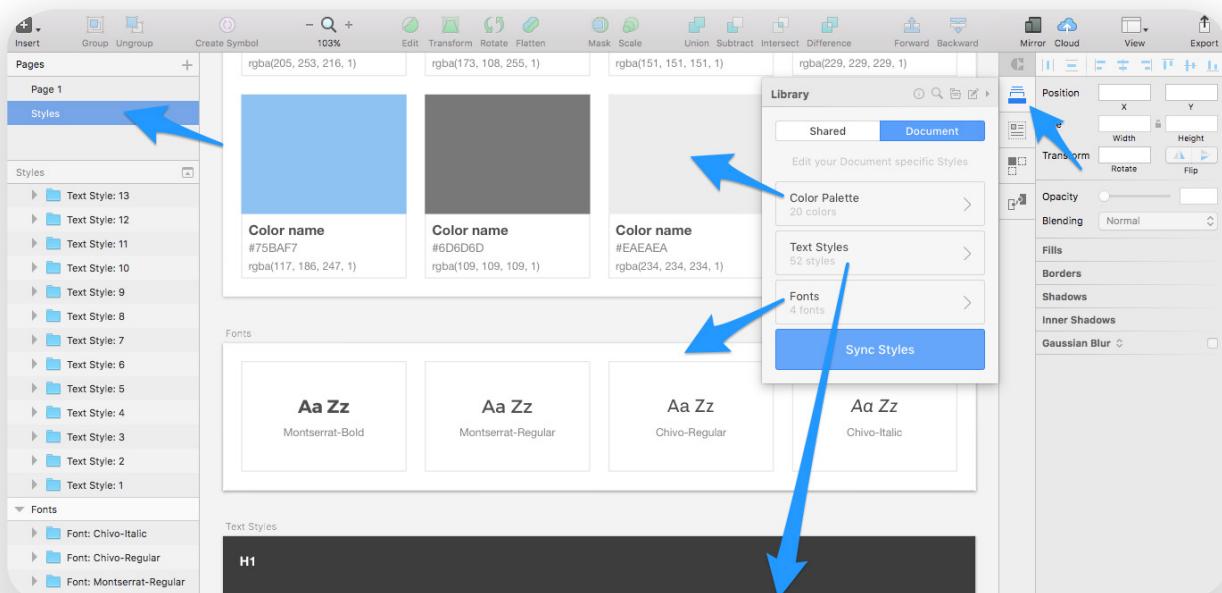


Synchronize design assets in the cloud

As you dive deeper into a design, you'll inevitably start to craft (see *what I did there?*) design assets. Design assets are anything related to your brand/visual aesthetic that you'll use time and time again; image assets (e.g. logos, icons, backgrounds) and style assets (e.g. colors, fonts, sizes) being 2 prominent examples.

Craft lets you generate style guides based on your design, helping you to reuse assets while also keeping them consistent throughout your team's shared library of assets. You can make changes to your team's library, and you can receive changes made by other teammates. Assets can be kept in-sync via Dropbox, Box, Google Drive, or a networked drive on your macOS computer.

Shared libraries ensure that everybody in your design team is working with the most recent versions of the assets.



Generating style guides



You can create new libraries, import a library already created by someone else in your team, and you categorize design assets (e.g. social media icons, navigation icons, illustrative icons, company logos) to make asset finding easier.

The screenshot shows the Sketch application interface with a shared library open in the center. The library contains various assets categorized under 'Shared' and 'Document'. A blue arrow points from the 'PEOPLE' category in the library to a specific icon in the 'Nav Icons' section of the interface. The interface includes a toolbar at the top, a sidebar on the left with a file tree, and a right-hand panel for object properties like position, size, transform, and opacity.

Sorting assets in a shared library

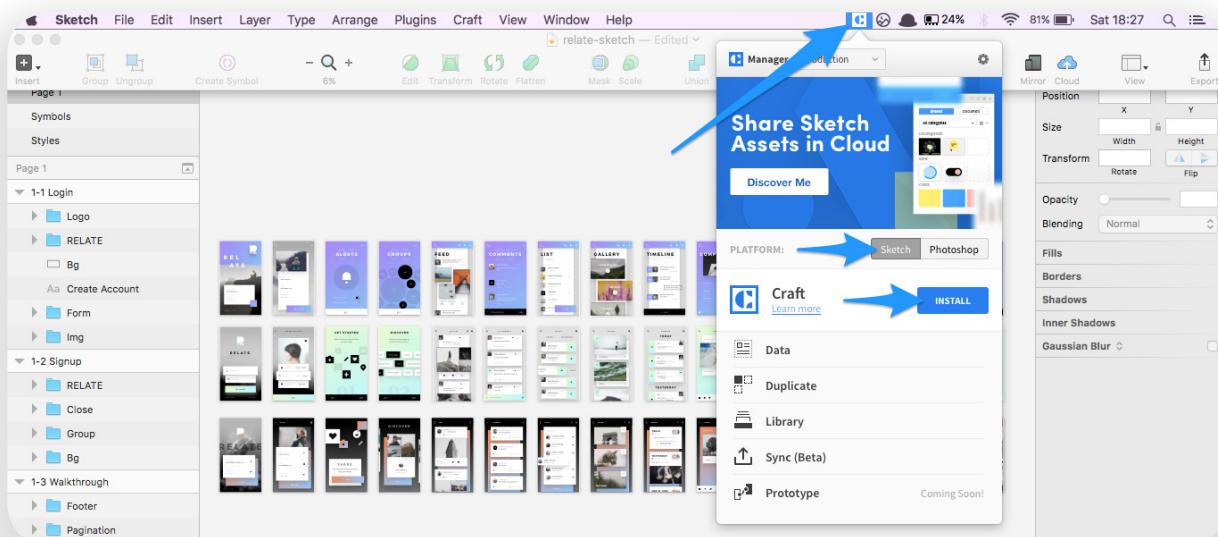


Installing Craft

Now that you know exactly what Craft does, let's install it so that you can experience the magic for yourself. Most extensions are installed via [Sketch Toolbox](#), by double-clicking a downloaded `.sketchplugin` file, or by simply dragging the uncompressed extension files into the "Plugins" folder. Craft is different.

We want the ability to easily update Craft when InVision releases more features, so we'll need to download and install [Craft Manager](#), a macOS app for managing Craft. From here we can then install Craft plugins. Craft Manager can also be used to turn features on and off (maybe there are certain features that you don't use, and you like your Sketch interface to be as minimal as possible).

When you're done with the installation, open Craft Manager from the macOS menu bar. Select "Sketch," and then "Install."



Installing Craft for Sketch

UP NEXT:

Up next: Low-fidelity prototyping with Sketch and Craft

In the next chapter we're going to dive straight into low-fidelity prototyping as we learn,

- a) the in's and out's of designing with Sketch
- b) how Craft can speed things up



CHAPTER 2

Low-fidelity prototyping with Sketch and Craft

Now that we're all set up, it's time to open Sketch and use Craft. We're going to dive right into the tools, and by the end of this chapter you'll be familiar with how Craft works.

After this chapter we'll descend into much more detail, but for now we're going to breeze over the features to create a low-fidelity mockup. First, let's explore what that actually means.



CHAPTER 2:

What's low-fidelity prototyping?

Low-fidelity prototyping is the creation of a rough concept for the purpose of proving or disproving its effectiveness early on. This mitigates the risk of designing a product to completion without first optimizing the user experience. The aim, then, is to rapidly mockup an idea without going into detail, to see if it will work.

A low-fidelity prototype should resemble a reasonably basic wireframe—styles, like colors and font families, shouldn't be a concern at this stage. Instead, we need to be focusing on how the design and layout impacts the user's overall experience.

If you're not overly confident on how to use Sketch, you might benefit from checking out the free [Switch to Sketch](#) video course first—videos 2 through 6 cover the finer aspects of using Sketch. That being said, if you are a keen learner, you should be able to follow along in this book without issue.

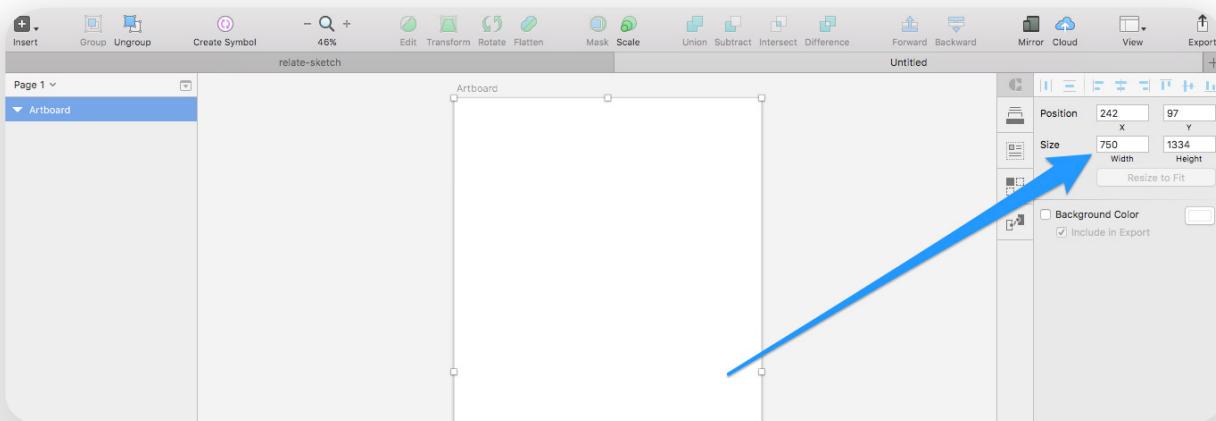


Diving into Sketch, Part 1

Let's start by creating an *Artboard* with the keyboard shortcut A and drawing it out on the canvas (using the mouse or TrackPad).

We need the dimensions of the Artboard to be *750px x 1334px* (these are the dimensions for designing an iPhone 6 app, and the dimensions will appear alongside the mouse cursor as you draw).

You can use the Inspector (on the right-hand side) to change the *Width* and *Height* styles of this Artboard, but since Sketch is very keyboard-friendly, you can also hold command while tapping the up, down, left or right arrows. If you throw the shift key into the shortcut you can resize an object by increments of 10px. As you'll soon see, this is one of the many ways that you can design using the keyboard in Sketch.



Creating an Artboard

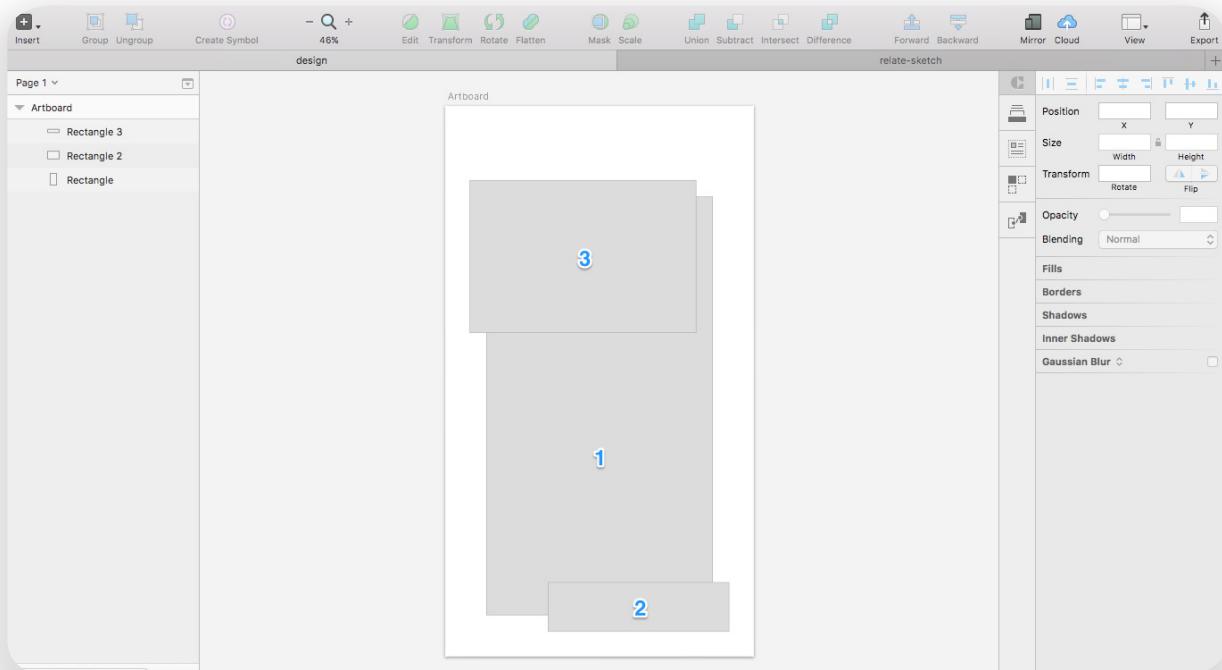
Since visual styles are not our concern right now, we will only use the Inspector for resizing and repositioning.

Now let's start designing a sign-up screen.



Diving into Sketch, Part 2

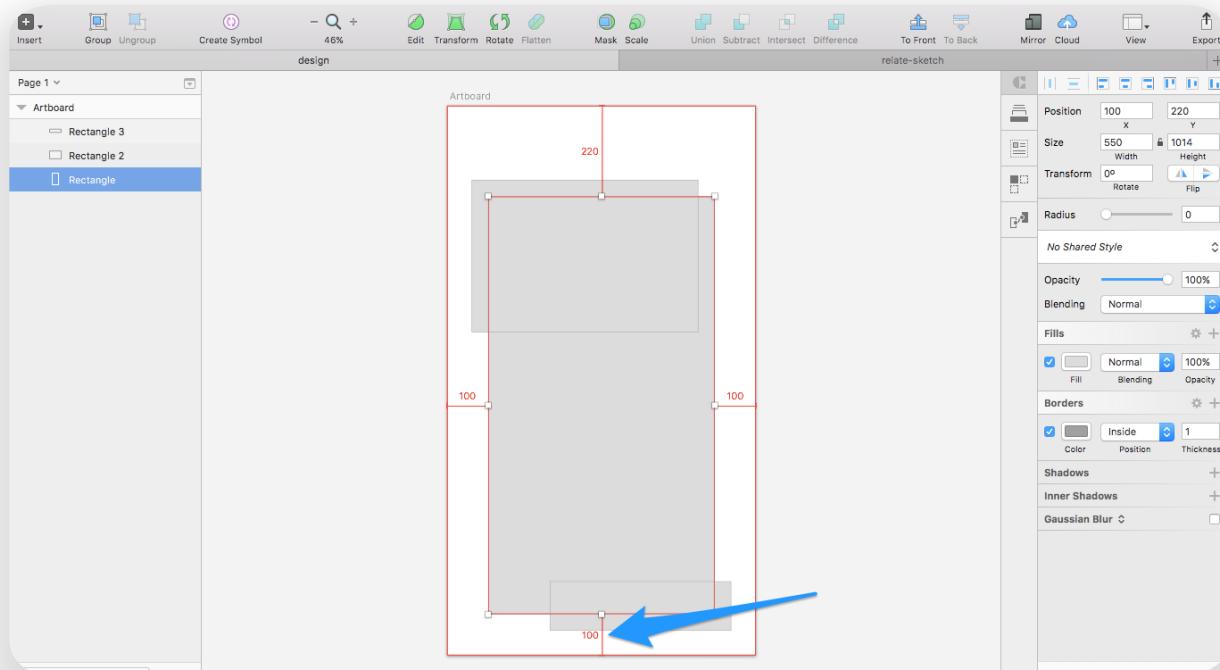
Let's create our first shape. Begin by creating a *Rectangle* using the keyboard shortcut R—this is similar to how we created the Artboard. Ensure the rectangle is *550px wide x 1014px tall*. Repeat this step with another rectangle that's *440px x 120px*, and finally one more time with *550px x 370px*. You should have three rectangles in total.



Building the foundation



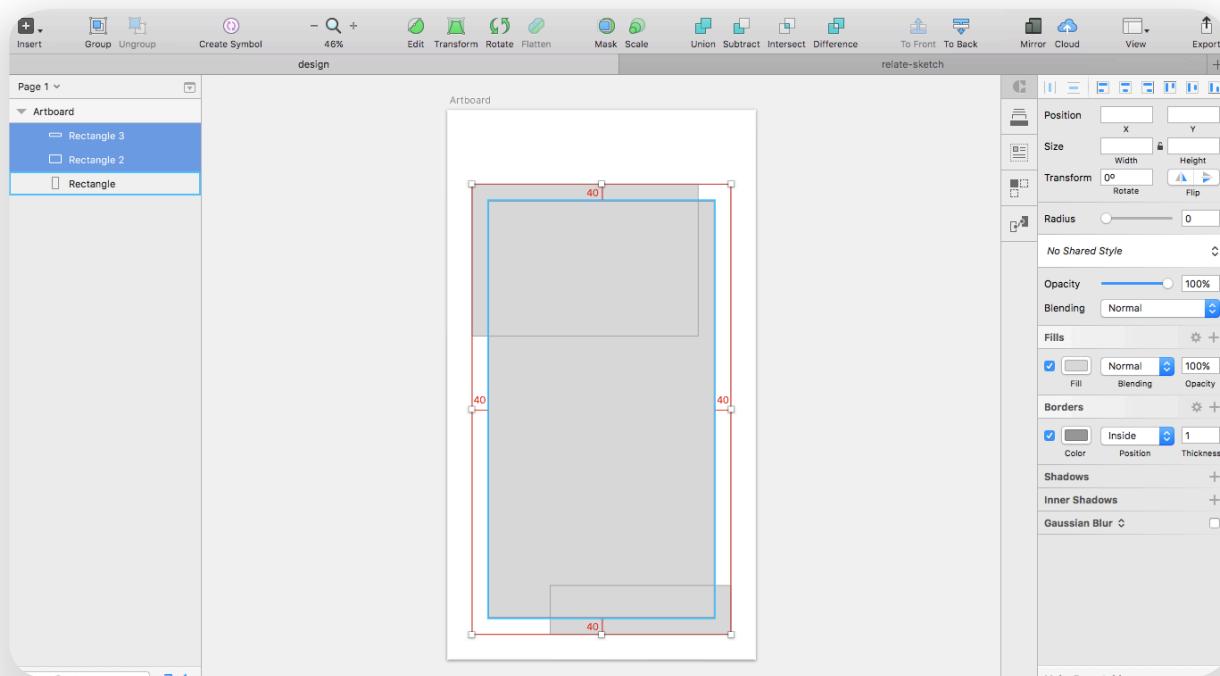
Reposition the largest rectangle (by dragging it) so it becomes horizontally centered and fixed to the bottom of the Artboard with a margin of 100px. If you hold option while hovering over the Artboard you can activate *Smart Guides*, which will indicate exactly how much space exists between the rectangle and the Artboard. You can move the rectangle (with the arrow keys) while using the Smart Guides to help you reposition layers with accuracy. Pretty cool, right?



Aligning objects with Smart Guides



For the smallest rectangle, drag it to the bottom-right corner of the largest rectangle (until it automatically “snaps” to the corner) and “nudge” (shift + arrow keys) it a little further to create an offset of 40px. Now repeat these steps with the final, medium-sized rectangle—although this time offset from the top-left corner. You should have something like this:



Repositioning objects with Smart Guides



Diving into Craft, Part 1

Let's break this next step down a little:

1. Press T for *Text*, then click on the canvas
2. Enter "NAME" as the text value
3. Press command + D to *Duplicate* the layer
4. Press esc to exit editing mode
5. Move the layer underneath the other text layer
6. Press command + option + P to open Craft
7. Select the *Data* tab from the Craft toolbar
8. Navigate to *Custom → Type → Names → Female*

Still following along with me? Good.

The screenshot shows the Sketch application interface with the Craft extension installed. The canvas contains a text layer with the value 'NAME' and another text layer with the value 'Matilda Adkins'. A blue arrow points from the 'Matilda Adkins' text layer towards the 'Names' tab in the Craft sidebar. The Craft sidebar is open, showing the 'CUSTOM' tab selected, followed by 'WEB' and 'JSON'. Under the 'Type' section, the 'Names' tab is active, showing categories like 'Male', 'Female', and 'Both'. Other tabs include 'Photos', 'Headlines', and 'Article'. Below the 'Names' tab, there are sections for 'Countries', 'Cities', and 'Addresses'. The right side of the Craft sidebar contains various styling options such as Position, Size, Transform, Typeface, Weight, Alignment, Width, Spacing, Opacity, Blending, Fills, Borders, Shadows, Inner Shadows, and Gaussian Blur.

Bringing real data into the design



What we've done is designed an input field label, and an input field with a user-defined value. We've used Craft to create the input field value for us, meaning we can now choose an appropriate font size and font weight from the Inspector (knowing that the input field contains a text value that a user would realistically choose).

As for the actual font sizes, font weights and spacing between layers, that's your call. You need to think about readability, spacing and emphasis, while resisting the urge to play around with colors and font families.

In short, real data helps us design realistically. It ensures that the content we're using in our designs reflects the type of content that will appear in our final design.

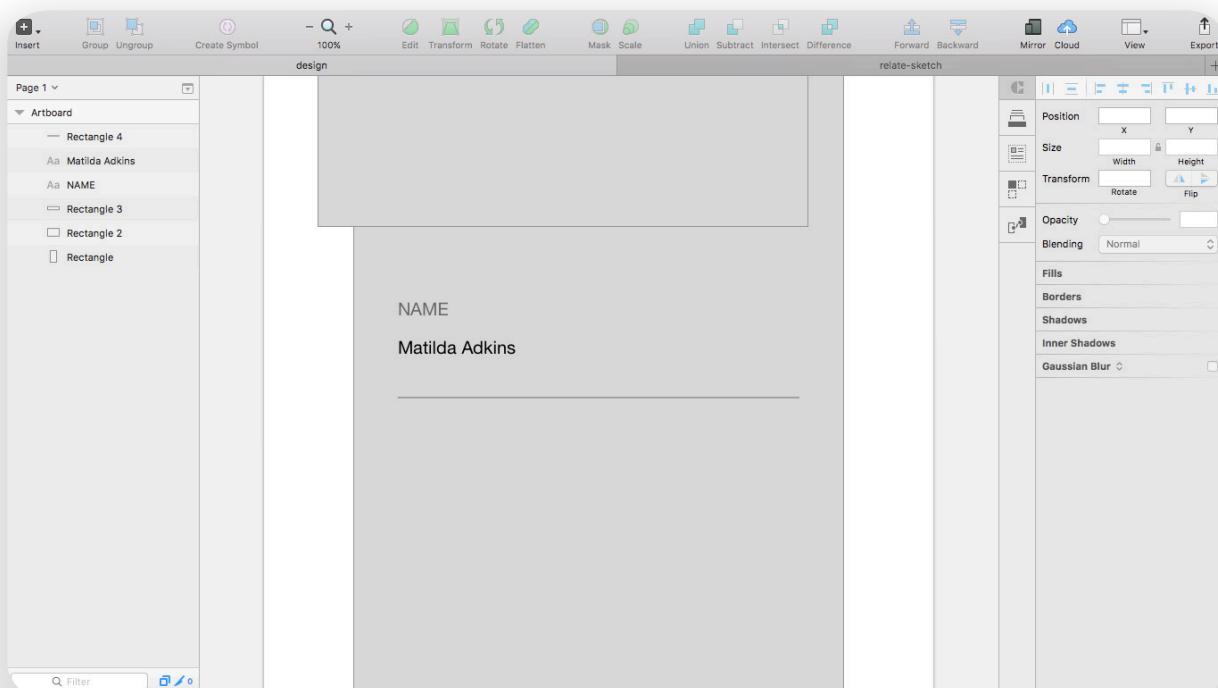


Diving into Craft, Part 2

In the following steps, we'll use the Inspector:

1. Make sure the *Color* of both text layers is “#000000”
2. Select the label and tap 5 to make the *Opacity* “50%”
3. Make a rectangle separator with dimensions of “450px x 2px”
4. Make the *Fill* “#000000” and *Opacity* “25%”
5. Reposition the layers until they feel right to you
6. Select all three layers and ready yourself for the next step

Styling all text layers black (#000000) and establishing visual hierarchy using opacity is a terrific way to prototype without concerning yourself with the colors you’re going to use.



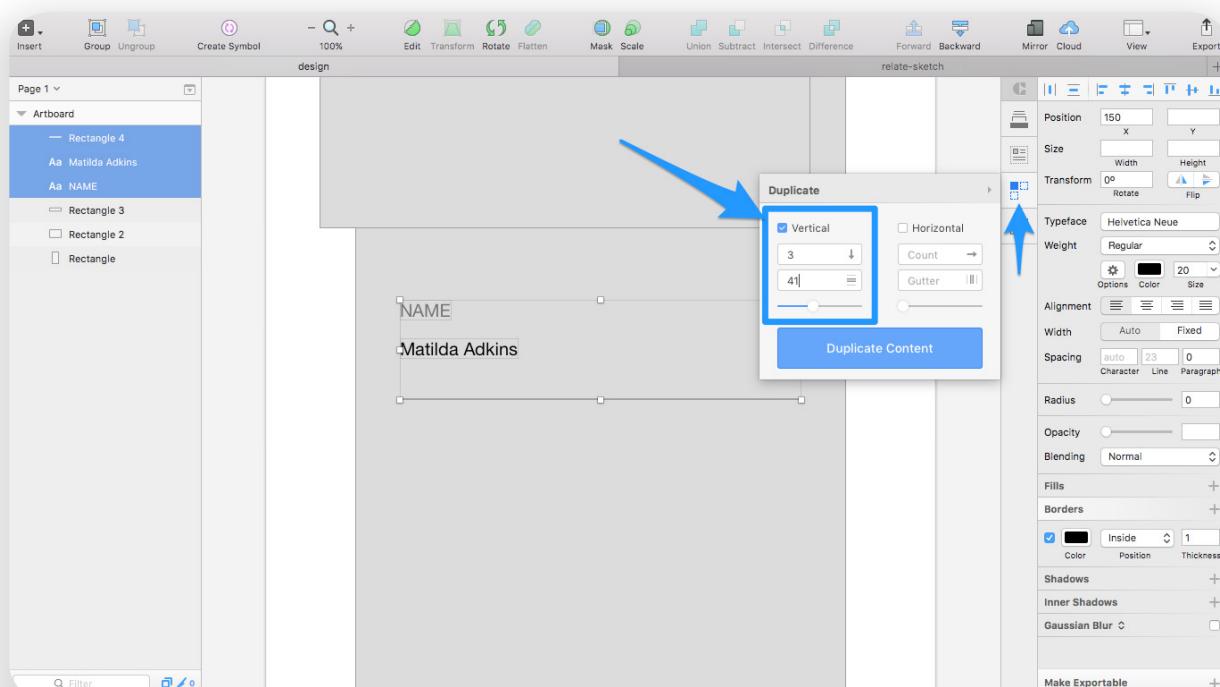
Quickly mocking up our design



Now that our input field is reasonably spaced, the more important areas are emphasised clearly, and the font sizes are large enough that they can be read without squinting, we need to advance with 2 more input fields. With all 3 layers still selected (simply click each layer in succession while holding shift), choose the *Duplicate* tab from the Craft toolbar.

Once again, let's break this down:

1. Make sure the "Vertical" checkbox is checked
2. Insert "3" as the first value (i.e. 3 rows)
3. Insert "41" as the second value (i.e. 41px between each row)



Vertically duplicating the input fields



We now have 3 rows of input fields, however the text values aren't quite what they should be. We first need the labels to read: "NAME," "EMAIL," "PASSWORD" in that order. Double-click the layer or tap **return** to enter editing mode.

Press **esc** to leave editing mode.

After that we need to use Craft to create a fake, but very realistic email address for us (*Data → Custom → Type → Email*).

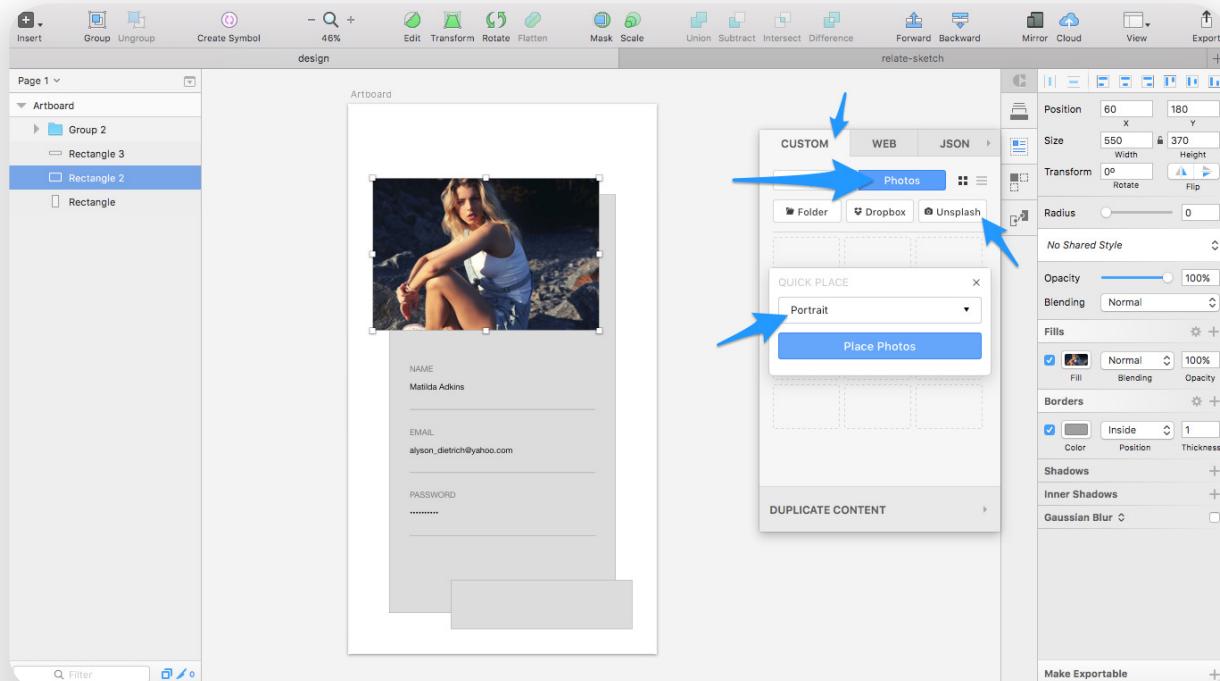
The screenshot shows the Sketch application interface with the following details:

- Toolbar:** Insert, Group, Ungroup, Create Symbol, - Q + 100%, Edit, Transform, Rotate, Flatten, Mask, Scale, Union, Subtract, Intersect, Difference, Forward, Backward, Mirror, Cloud, View, Export.
- Left Panel (Artboard):** Shows an Artboard with a single layer named "Group 2" containing a "Rectangle 4" layer. The "Rectangle 4" layer contains the text "alison_dietrich@yahoo.com".
- Center Panel:** Displays three input fields:
 - NAME:** Matilda Adkins
 - EMAIL:** alison_dietrich@yahoo.com
 - PASSWORD:** (redacted)
- Custom Type Editor:** A floating panel titled "CUSTOM" with tabs for CUSTOM, WEB, and JSON. The CUSTOM tab is selected, showing a grid of icons for different data types: Names, Headlines, Article, Dates, Curren (highlighted with a blue arrow), Countries, Cities, and Addresses.
- Right Panel (Inspector):** Shows various properties for the selected layer:
 - Position: X 150, Y 826
 - Size: Width 250, Height 23
 - Transform: Rotate 0°
 - Resizing: Stretch
 - Type Style: No Text Style
 - Typeface: Helvetica Neue
 - Weight: Regular
 - Alignment: Auto
 - Width: Auto
 - Spacing: auto 23 0
 - Opacity: 100%
 - Blending: Normal
 - Fills, Borders, Shadows, Inner Shadows, Gaussian Blur options
 - Make Exportable

Generating fake emails using Craft



Lastly, navigate to *Custom* → *Photos* → *Unsplash* after selecting the medium-sized rectangle to have Craft source a random image.



Generating images with Unsplash

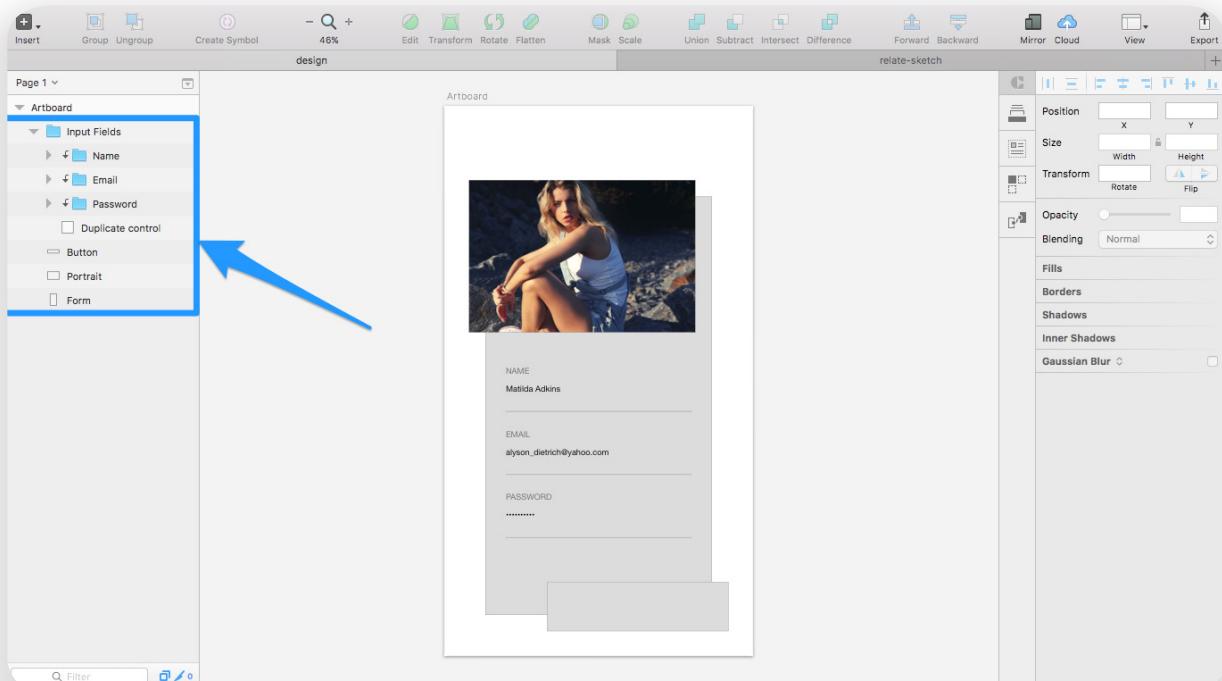


Quick tip: How to organize the layer list

Because the art of creating user flows sometimes involves linking deeply nested components to another screen, it's important to keep the layer list relatively clean, ensuring that we can understand and access the finer details of our design with ease. For example, you could rename (command + R) the smallest rectangle to "Button" for better search visibility.

It's also important that you delete unused/unnecessary layers and group (command + G) related layers together.

You can also drag objects (or use command + option + ↑↓) in the layer list to reorder them according to sensible logic.



Keeping the layer list organised



And now, the million-dollar question...

Does our design *work*?

Now that we have a low-fidelity mockup of our screen, it's time to debate whether or not the layout works. If it doesn't work, then we need to iterate and improve the design. If it does work, then we can move onto designing another screen. We're not focusing on the intricate details of the design (i.e. the visual aesthetics), so we can iterate as many times as needed without wasting time.

Right now, I'm not using Craft (or Sketch) to its full potential, but that's okay. At this stage we're only prototyping quick ideas. The question we need to answer is, "Is this idea worth exploring, or should we go back to the drawing board?" Here are some of the things you should be thinking about when designing low-fidelity prototypes:

1. Is the layout cluttered or confusing?
2. Does the user know what to do on this screen?
3. Is the user able to advance onto other screens with ease?

In order to answer these questions, you need to stop being a designer and start being a user. However, to validate your answers, you need to ask for feedback from your teammates and potential users.

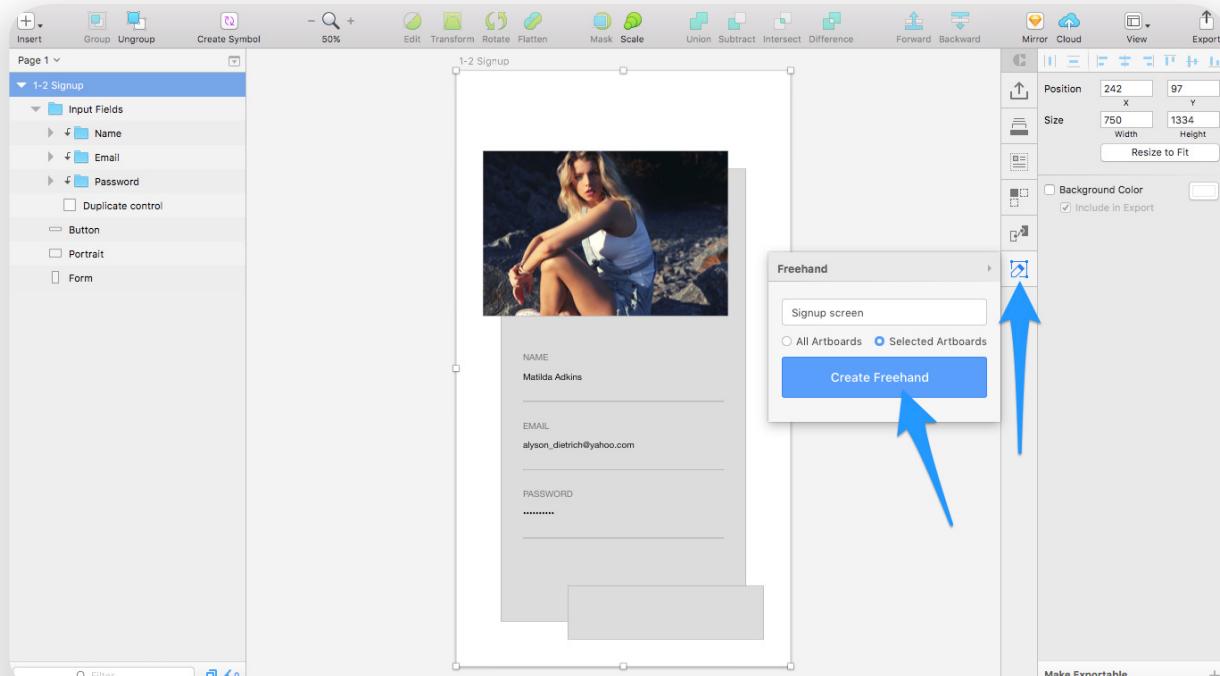


Getting instant feedback with Craft Freehand

This brings me to Craft Freehand.

Craft Freehand takes your Artboards into the browser, where you can collaborate with your teammates by freehand sketching on top of the screen. It's instant, it's easy, and it's a very effective way of receiving feedback with contextual annotations.

Let's try it out. Click on the *Freehand* tab in Craft, decide whether you want to sketch-collaborate on the "Selected Artboards" or "All Artboards," and then click "Create Freehand."





Your design will then open up in the browser. Start by clicking on the green “Share” button to receive a share link, then share the link with your teammates.

The screenshot shows the Freehand application interface. On the left, there is a wireframe of a sign-up form titled "1-2 Signup". The form includes fields for NAME (Matilda Adkins), EMAIL (ayson_dietrich@yahoo.com), and PASSWORD. A red "REL ATE" logo is at the top left, and a red "X" is at the top right. At the bottom, there is a progress bar showing "1/2" and a red hand-drawn mark. On the right, a sharing dialog box is open, titled "Share this Freehand". It contains a "Copy Link" button and a link URL: <https://freehand.invisionapp.com/document/YJNv7cfir>. Below the link, it says "Anybody with this link will be able to join and draw". To the right of the sharing dialog is a keyboard shortcut legend:

Quick pointer	⌘
Shape detection	Alt
Straight line	Shift
Delete	Backspace or Delete
Undo	⌘ + Z
Redo	⌘ + Shift + Z
Move	Space
Zoom in	⌘ + +
Zoom out	⌘ + -
Zoom to 100%	⌘ + 0
Zoom to fit	⌘ + .

At the bottom left of the main window, there is a "in POWERED BY INVISION" logo. At the bottom right, there are zoom controls (-, 43%, +) and a close button (X).

First look at Freehand



As you'll quickly discover, Freehand will let you:

1. Sketch (freehand)
2. Add text
3. Add images

So that you can:

4. Demonstrate vision and functionality of the design
5. Receive instantaneous feedback from your team

Simplicity really is the beauty of this tool!

Click the ? icon to see a list of keyboard shortcuts that can help you speed up your workflow. Many of these shortcuts are exactly what you'd expect (undo, redo, zoom, etc). One neat shortcut: command will let you switch to the *Pointer Tool* temporarily.

Tip: If you make changes to the design, click "Update Freehand" in Sketch to show off your new iteration immediately!



Quick tip: Applying a forward-thinking approach to user flows

Even though we're still far away from having a fully-designed app, user flows are something you need to be thinking about early on in the design process. Later, we will literally link up our screens (we will have more of them by then), but for now we simply need to keep the flows in mind.

Ask:

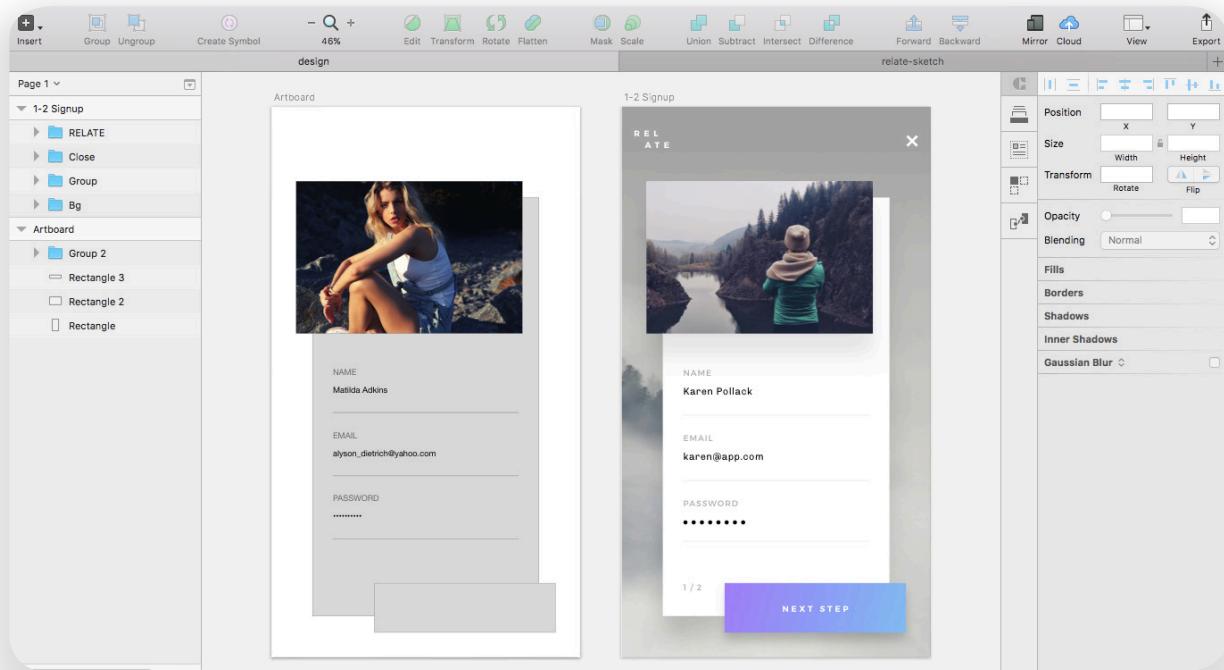
1. Can the user physically reach the tap targets?
2. Are the tap targets large enough to be clicked with ease?
3. Are they situated where the user expects them to be?
4. Do they link to where the user would expect to end up?
5. How visible does [this] tap target need to be?

These are also some of the questions that you can ask (or maybe your teammates will ask you) during a Craft Freehand session.



Fast forward

Further down the line (after feedback and iteration, and with the addition of visual aesthetics), we may end up with something like this:



Fast-forward

UP NEXT:

Designing with real data

In the next chapter we'll dig deeper into how you can source real data to use in your designs using Craft.



CHAPTER 3

Designing with real data

In this chapter we're going to discuss the *Data* features of Craft in a little more detail. Aside from having Craft source dummy content for you, you can also extract more specific data from the web, and also from JSON files (local files or API responses).

If you've been enjoying the [Switch to Sketch](#) video course and you'd like to continue with it, video #7 also tackles the Data feature set.



CHAPTER 3:

Extracting content: Web

You might want to extract data from the web for two reasons:

1. You might be redesigning a website where the content pretty much needs to stay the same—in which case you would extract content from your own, existing website
2. You may want to borrow from or remix a concept that already exists

Let's try out this workflow.

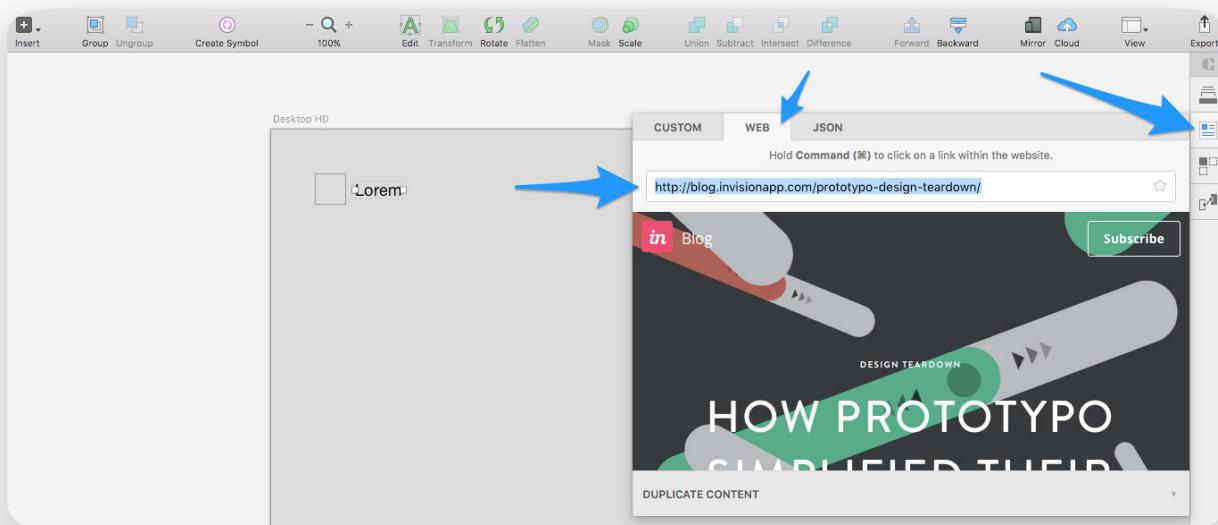


Loading a webpage into Craft

Start by opening the supporting .sketch file (which should also contain the low-fidelity screen from the previous chapter). You'll see an Artboard called "Desktop HD."

Select the text logo in the top-left corner and revert back to the Data tool in Craft, selecting the "Web" tab while you're there. You'll see a modal that resembles a mini web browser—it'll have nothing more than an address bar and favorite icon.

Paste "<http://blog.invisionapp.com/prototypo-design-teardown/>" into the address bar and drag the edges of the modal to resize it (so that we can observe the desktop version of the webpage).



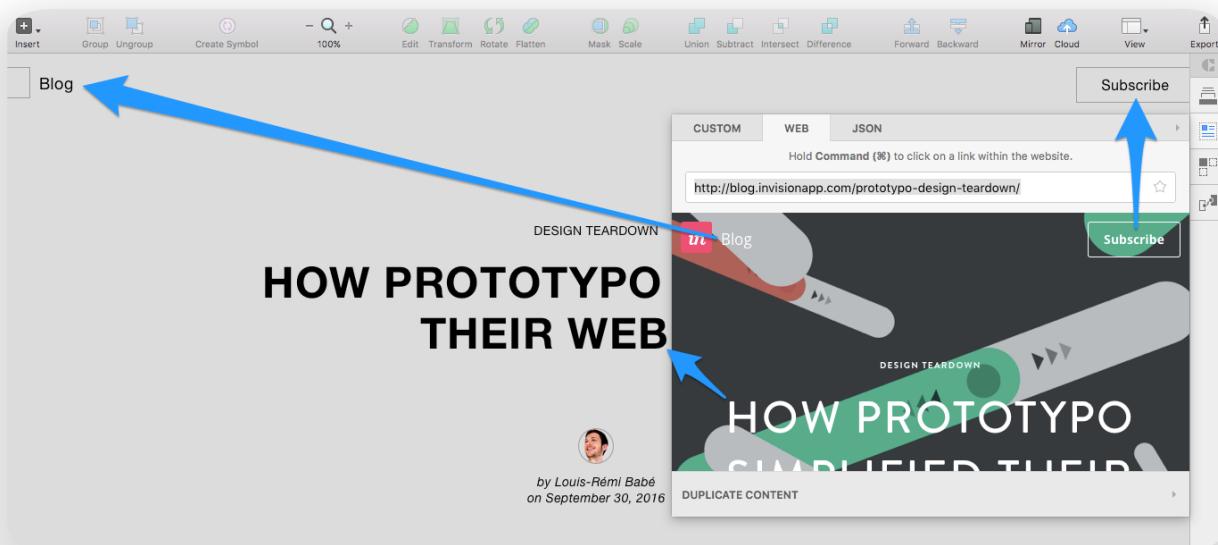
Loading a webpage into Craft

Note: The favorite/star icon in the address bar is used to bookmark websites that we need to keep referencing back to.



Extracting data from a webpage

With the logo text layer still selected, click its real-life counterpart from the web browser modal to extract the content into that layer. After that, follow suit with the images and other text layers (background images aren't supported yet).



Extracting real data from websites

“Lorem ipsum” text is fine in the short run, but your mockups need realistic data if you want your concepts to receive the highest level of validation. Extracting content from real websites using the *Data → Web* feature is a super easy way to do that.

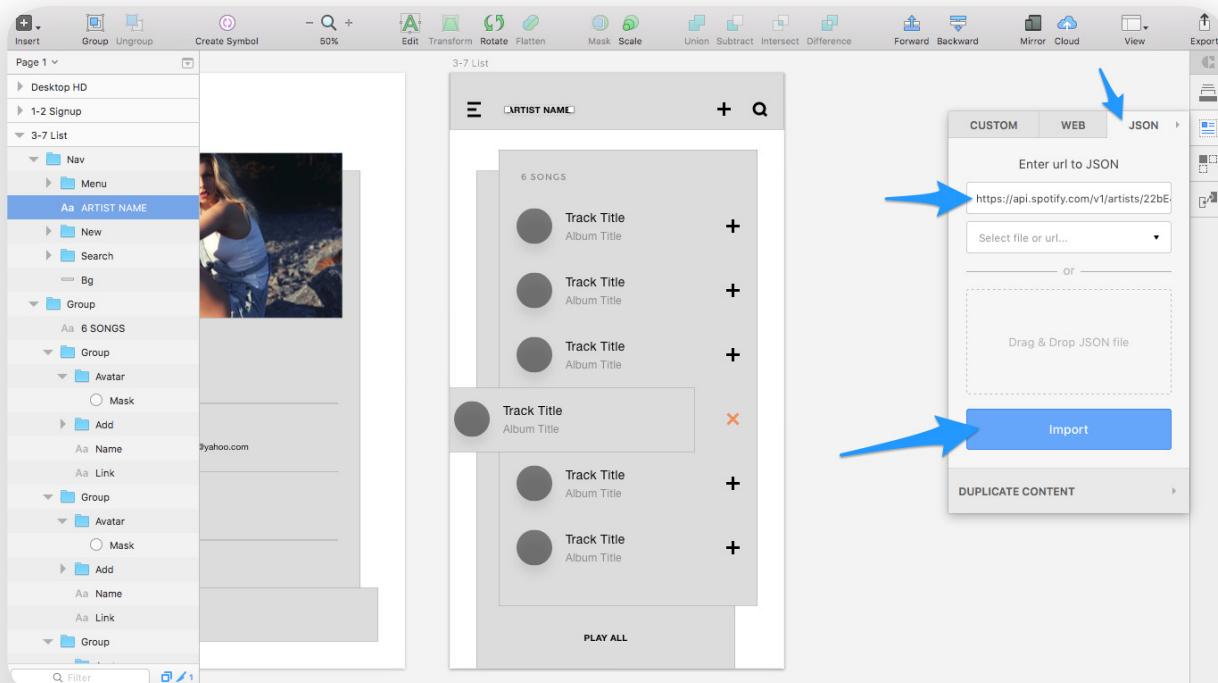


Extracting content: JSON

You can also insert data from JSON files that are hosted on the web or locally (i.e. on your computer). As a designer, you don't really have to understand how JSON works, only how to access it from Craft to extract content.

In this example, we'll dive right into the Spotify API and begin extracting track information for *The Rolling Stones*.

Start by selecting Artboard "3-7 List" from the supporting .sketch file. Now select the "Artist Name" layer and navigate to the *Data → JSON* tab in the Craft toolbar.



Accessing the JSON tab



Accessing a JSON endpoint

Paste the Spotify API endpoint ([“<https://api.spotify.com/v1/artists/22bE4uQ6baNwSHPVcDxLCe/top-tracks?country=US>”](https://api.spotify.com/v1/artists/22bE4uQ6baNwSHPVcDxLCe/top-tracks?country=US) in our case) into the *url* field and click “Import” to begin. You should be able to navigate through and decipher the data with no trouble at all, even if the JSON formatting is a little unfamiliar to you. What we have now is a tree-view of a JSON object and its sub-objects—we’ll be browsing this tree for data to extract (this is the exact same data that appears within Spotify).

The screenshot shows the Sketch application interface with a JSON tree view on the right side. The URL <https://api.spotify.com/v1/artists/22bE4uQ6baNwSHPVcDxLCe/top-tracks?country=US> is pasted into the "url" field. The JSON tree is expanded to show the following structure:

```
https://api.spotify.com/v1/artists/22bE4uQ6baNwSHPVcDxLCe/top-tracks?country=US
  name: "The Rolling Stones"
  ...
  artists: [
    {
      href: "https://api.spotify.com/v1/tracks/6H3kDe7CGoWYBabA"
      ...
      name: "Gimme Shelter"
      ...
    }
  ]
  ...
  available_markets: []
  type: "track"
  explicit: false
  preview_url: "https://p.scdn.co/mp3-preview/dcc0bc7ee6b48"
  duration_ms: 270773
  name: "Gimme Shelter"
  ...
  external_urls: {}
```

The left panel shows a wireframe of a mobile application interface with various components like "ARTIST NAME", "6 SONGS", and "Track Title". The bottom left of the screen has the text "First look at the JSON tree".



Extracting data from a JSON API

Click the JSON values to import them into the currently selected layer, much like we did before when we used the Web tab.

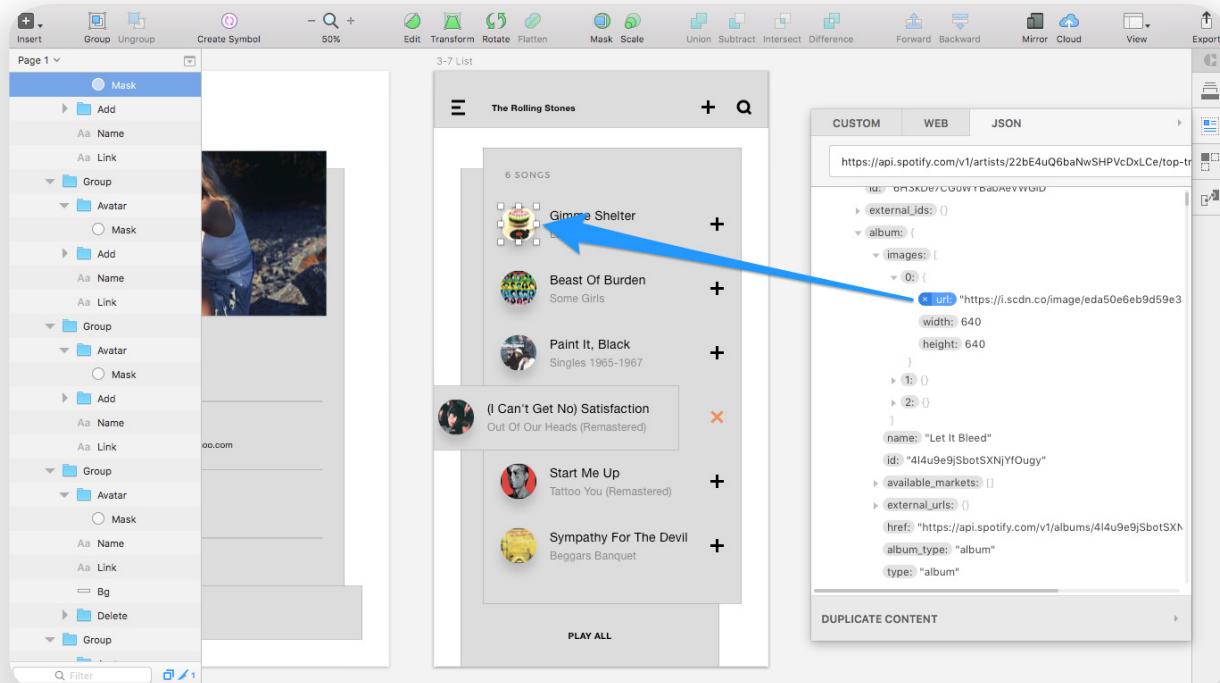
The screenshot shows the Sketch interface with a JSON panel open on the right side. The JSON data is for the artist "The Rolling Stones". It includes fields for name, href, url, popularity, available_markets, type, explicit, preview_url, duration_ms, and a list of tracks. The "name" field is expanded, showing its value and a preview URL. Two blue arrows point from the JSON panel to the "+" buttons on the right side of the song list in the center panel. The central panel displays a list of songs by The Rolling Stones, including "Gimme Shelter", "Beast Of Burden", "Paint It, Black", "(I Can't Get No) Satisfaction", "Start Me Up", and "Sympathy For The Devil". The bottom of the central panel has a "PLAY ALL" button.

```
https://api.spotify.com/v1/artists/22bE4uQ6baNwSHPVcDxLce/top-tracks?limit=5&offset=0
{
  "name": "The Rolling Stones",
  "href": "https://api.spotify.com/v1/tracks/1IdcKYNv6ggirO6lvnHL",
  "uri": "spotify:track:1IdcKYNv6ggirO6lvnHL",
  "popularity": 62,
  "available_markets": [],
  "type": "track",
  "explicit": false,
  "preview_url": "https://p.scdn.co/mp3-preview/605b1c1a5995a...",
  "duration_ms": 377746,
  "name": "Sympathy For The Devil",
  "external_urls": {}
}
[{"id": "61UuPxxyUvacEH6SHIK3sU", "external_ids": {}, "album": {}}
]
```

Extracting data from a JSON file



If you select one of the shape layers (for example one of the circles next to the track info), and then click on an image url on the JSON tree, the image will be imported into your .sketch design—again, much like we did when we used the Web tab.





What happens to extracted content when duplicating

Craft is excellent at automation—you only lift a finger when you need to. Let's say you've used *Unsplash* to source a random image for your mockup, and you then use the Duplicate tool to repeat that component; Craft, knowing that you've sourced an image for that section of the component, will then source an image for each and every instance of the component. If you've duplicated it 4 times, Craft will then source 4 unique images so that your design looks more real.

If you've used JSON to insert content, this workflow becomes a little more complicated. Craft will try its best to source similar content for duplicated components, so your mockups make sense, but this relies on the JSON file being relatively simple or well-structured. It comes down to luck.

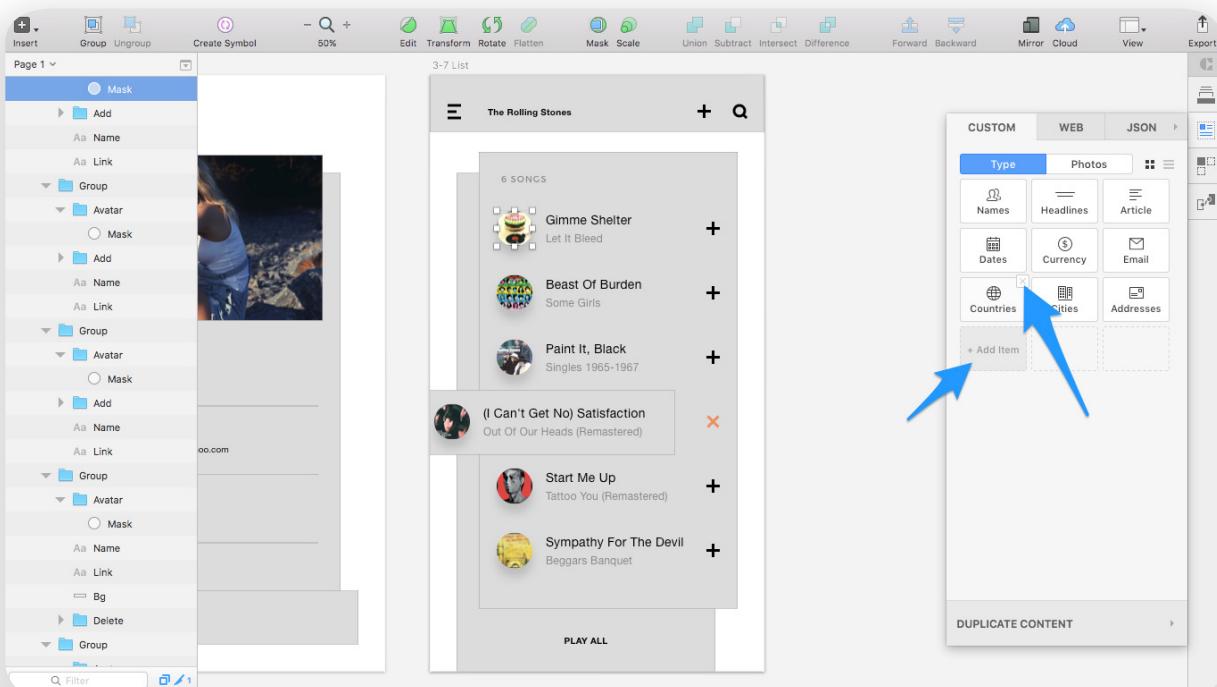


Personalizing the custom Data dashboard

Before we wrap up, flick back to the *Data → Custom tab*, because there's one more thing to mention.

If you find you're using some data options more than others, click the "x" icon in the top-right corner of each box to temporarily remove the options you're not using.

Additionally, you can click any of the "+ Add Item" boxes to bring data back to the dashboard for quick-use. By default, there's a few hidden options that might be worth checking out.



UP NEXT:

Creating a shared library of styles and assets

In the next chapter we're going to fast-forward a little. You'll see our 2 low-fidelity mobile screens are now high-fidelity screens, sporting some beautiful visuals, and there's a bunch of other screens too. In this chapter we'll discuss how to keep those styles visually consistent throughout our design, and for anybody else that's using the design as well. That's right—we're going to explore how Craft enables collaboration!



CHAPTER 4

Creating a shared library of styles and assets

So far we've explored the many ways Craft is excellent for low-fidelity prototyping, but now it's time to move onto *high*-fidelity prototyping. If you're keeping your layers organized, as we discussed in chapter 2 with the keyboard shortcuts for *reorder*, *rename* and *group*, this chapter will be a breeze.

During the first few chapters of this book we learned about low-fidelity prototyping—not a *massive* amount, but enough to understand the basics of Sketch, the aims and benefits of lo-fi prototyping, and how Craft fits into all that. We've now skipped ahead to the stage where we have a stunning visual design.



CHAPTER 4:

If you open the [Relate .sketch kit](#), you'll see the lo-fi screens looking a little more finished (with colors, icons and fonts).

We now have a high-fidelity mockup to work with.

One of the issues that tends to accompany high-fidelity design is that not only do we need to organize layers, but also the layer's styles and image assets too. A lack of organization in this respect leads to a lack of consistency in visual design, which will ultimately damage the user's experience.

And that's where Craft Library comes in.



What does Craft Library do?

Craft Library can:

1. Keep commonly used design components in-sync
2. Let you reuse those components time and time again (a timesaver)
3. Maintain visual consistency with colors/fonts/text styles
4. Create libraries to store all of these assets
5. Allow teammates to import your assets into their work
6. Allow you to absorb a teammate's changes into your work

In short, Craft Library is your one-stop-shop for reusable design elements, helping you to maintain visual consistency to save time, but also so your teammates can have access to the same assets as you, even when you (or another designer) makes changes to those assets. How? All you need to do is store the library in a shared location such as Dropbox or Google Drive.

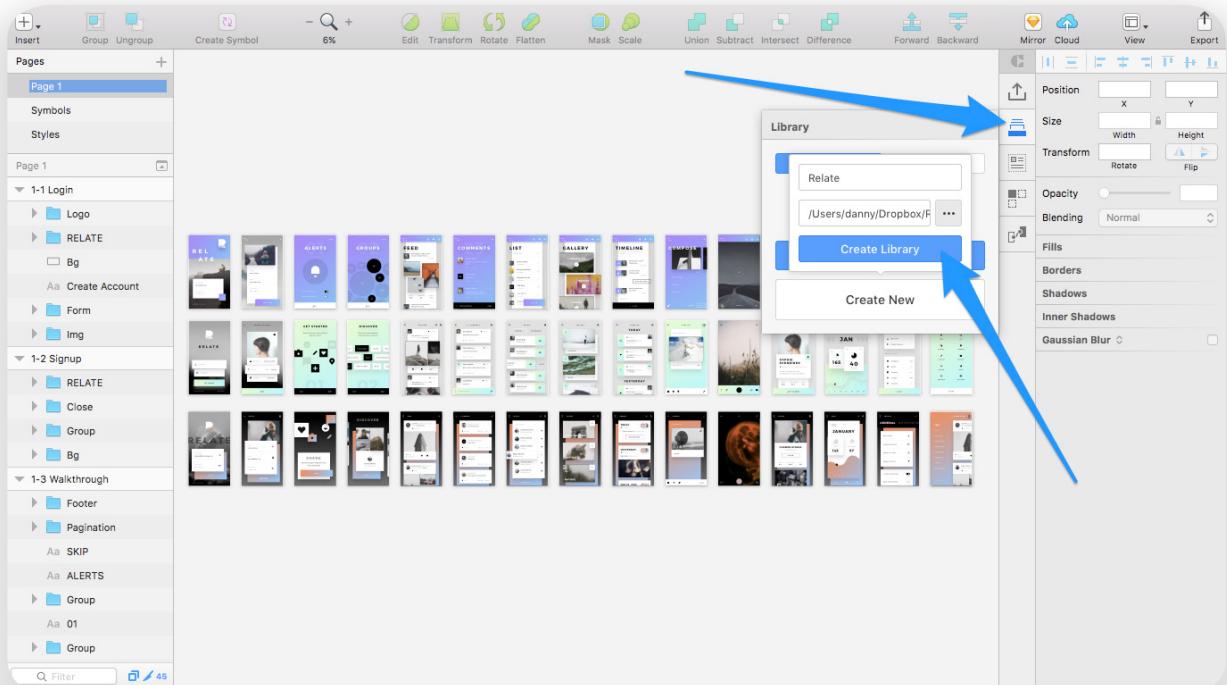
By storing your shared library of assets in the cloud, you're enabling a level of collaboration so effective you'd wonder how you ever survived without it. Now your team can have as many designers as needed all working from the exact same visuals.

Download the [Relate .sketch kit](#), made by InVision, and we'll dive right in.



Creating a shared library

Start by clicking on the *Library* tab in the Craft toolbar, and then click on “Shared,” and then click on “Create New.”

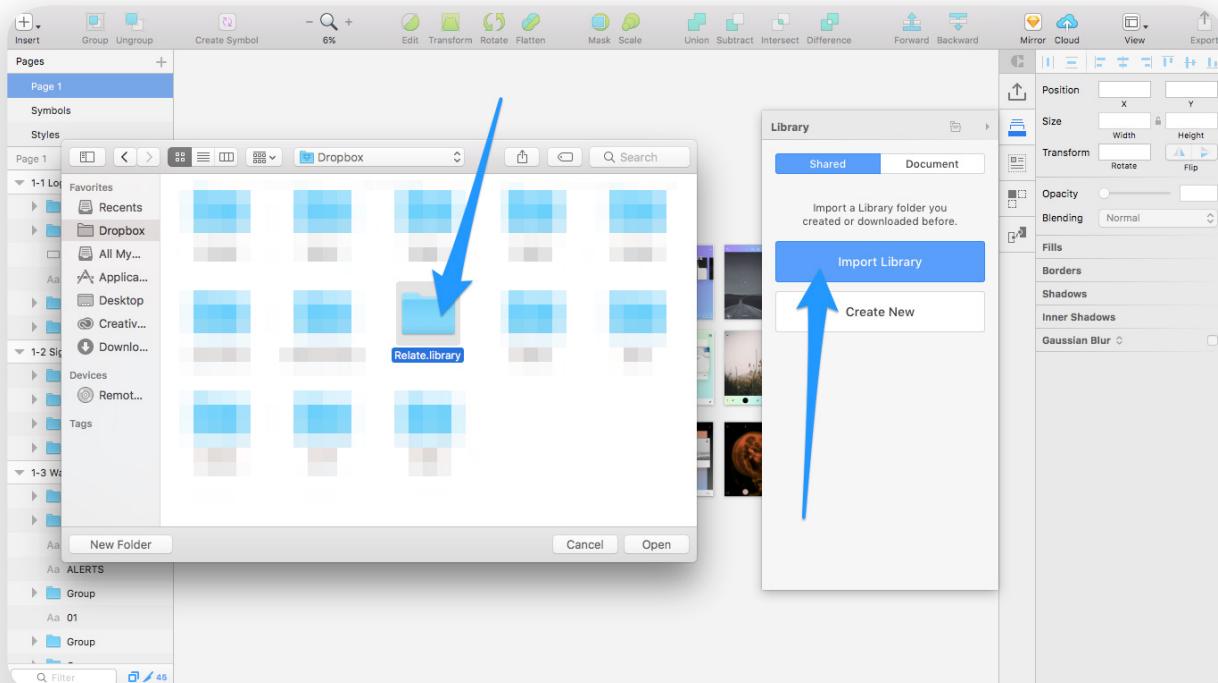


Give this library a name, and if working in a team, click the ellipsis (...) button to choose a destination that is shared between the team (this can be something like Dropbox or Google Drive, which we'll discuss in more detail later).



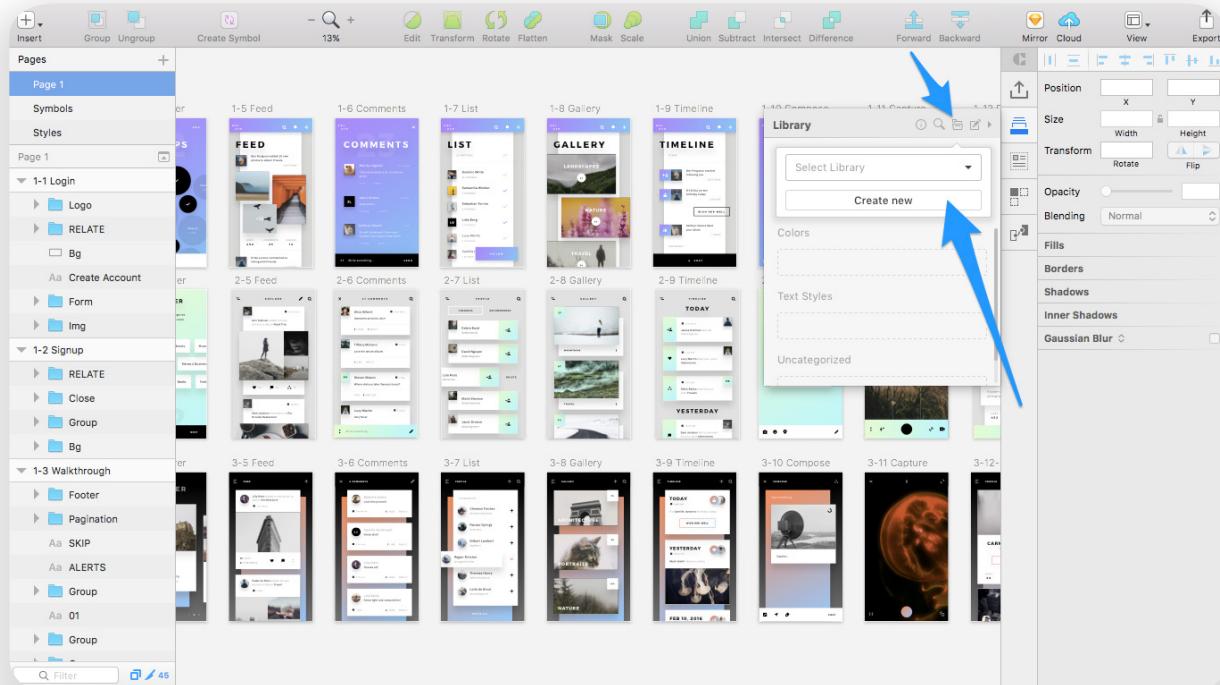
Importing a library

When you need to import a library created by a teammate, or import a library you previously created into a new .sketch document, simply click “Import Library” instead. Just make sure that you import the library folder (it will have a .library extension) rather than the *contents* of the library.





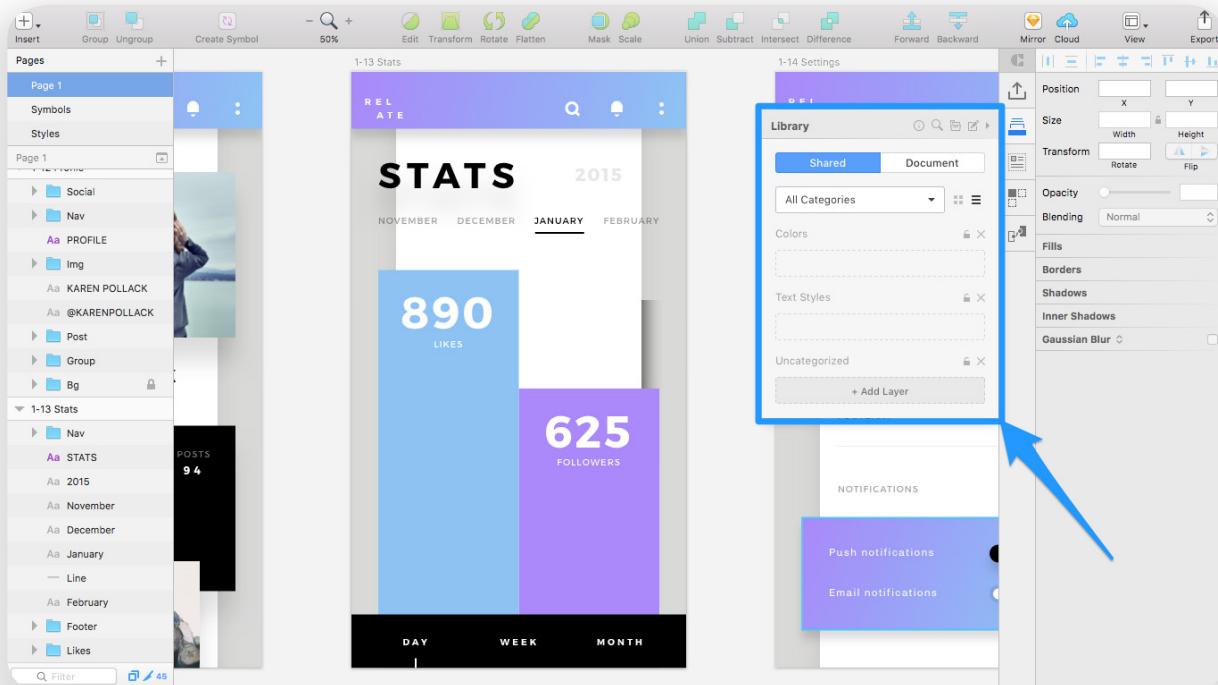
Should you need to re-access the create library/import library modal later on (it can be a little tricky to find a second time), click on the file icon and then choose “Create New.”





Organizing libraries

Once your library is loaded, you'll see 3 ready-to-use categories: *Colors*, *Text Styles* and *Uncategorized*.

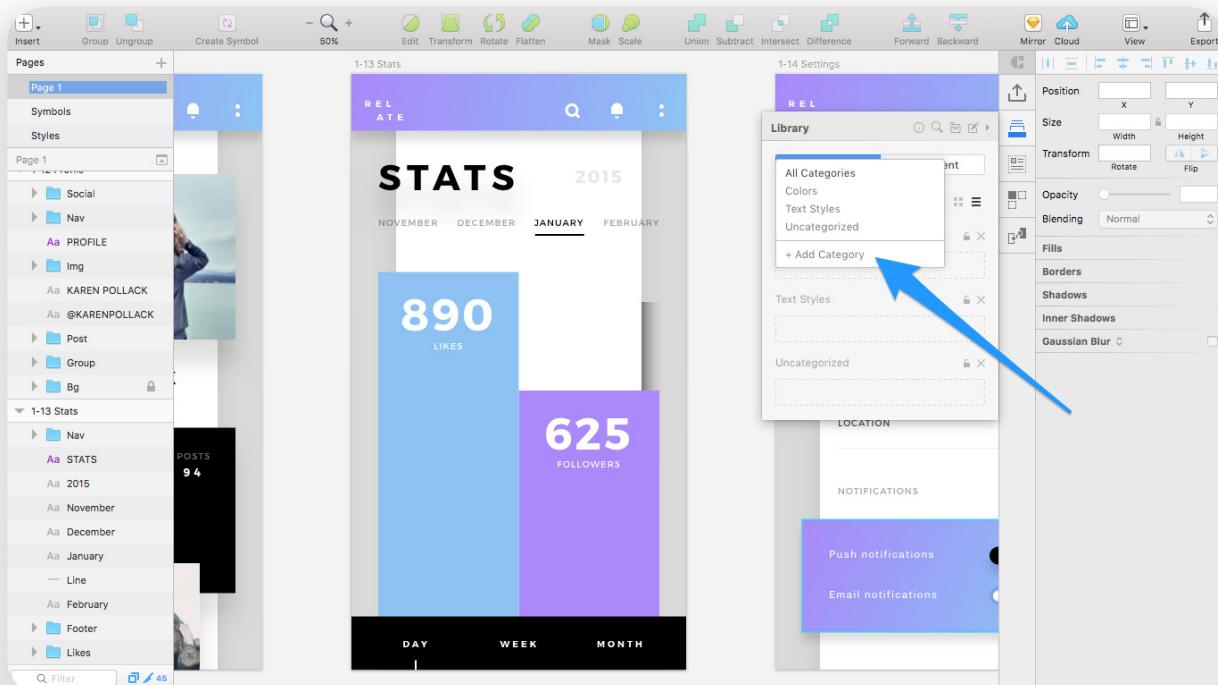


Reusable image assets (whether an individual layer or group of layers) fall under *Uncategorized*, although we can organize our library even further by creating custom categories.



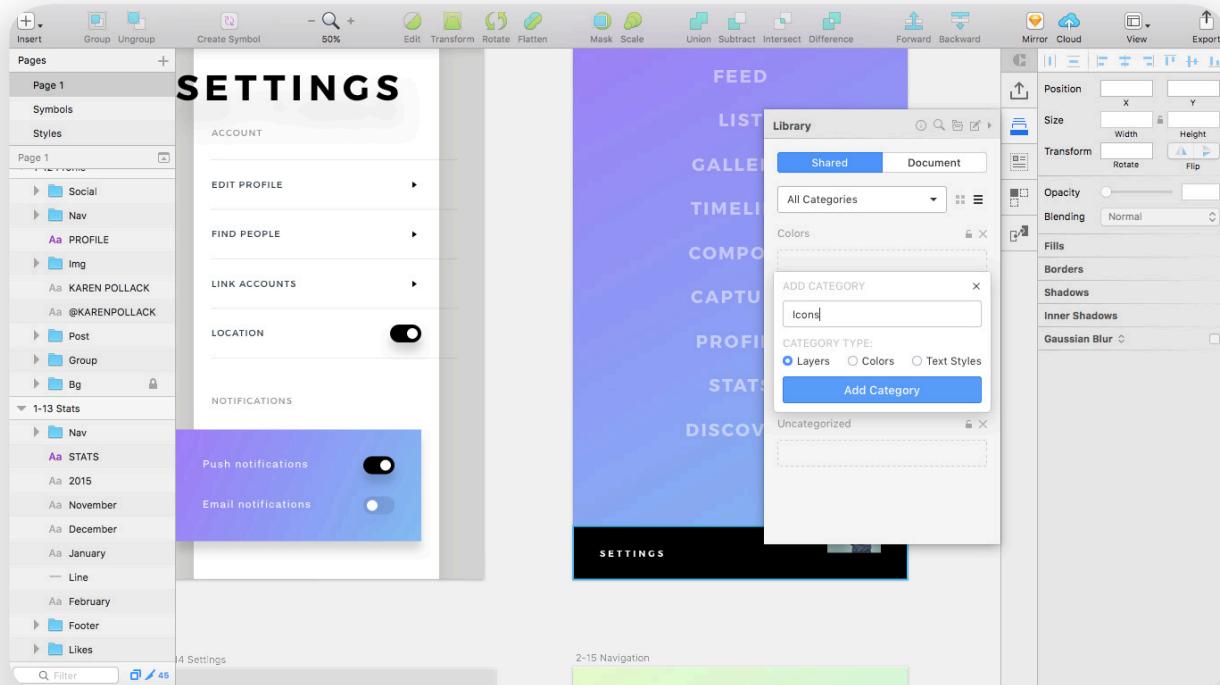
Creating custom categories

Let's create a category for icons. Select the dropdown box that says "All Categories" and then choose "+ Add Category."





Call it “Icons” and ensure the category type is “Layers.”



You can add as many categories as you'd like. It's commonplace to create categories for things like icons or other UI elements, so when you or another designer needs to start a new design using the library, those colors, text styles, and image assets will be readily available.

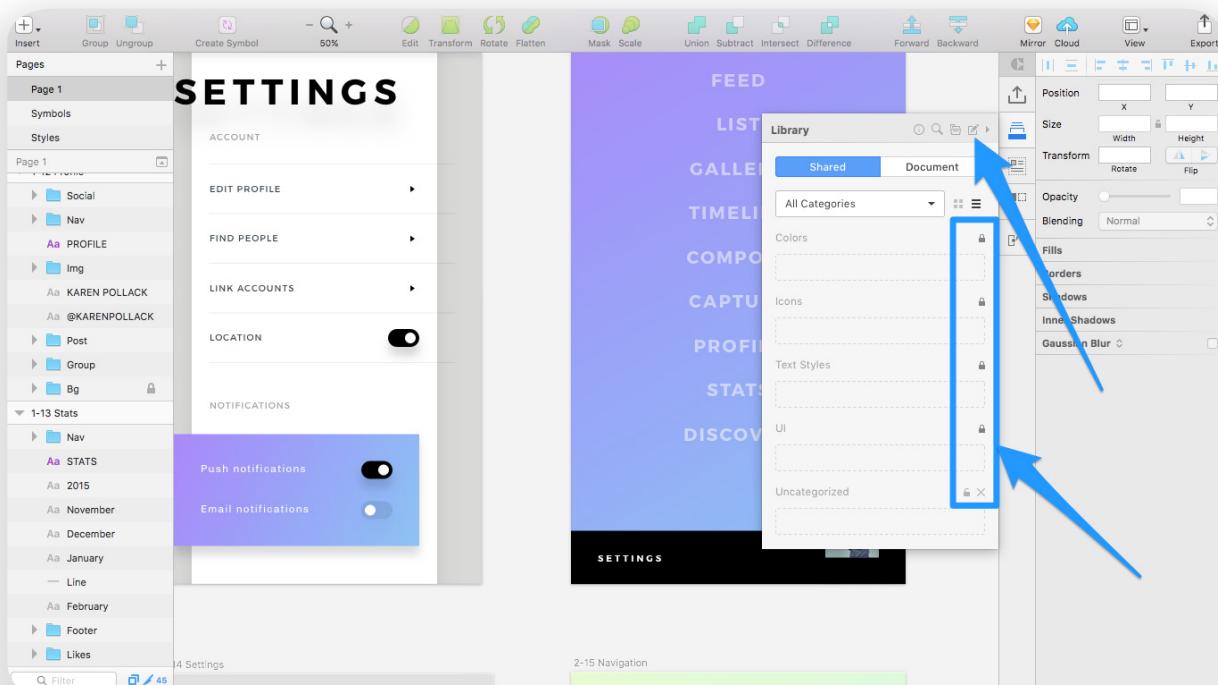


Locking and deleting categories

Before we begin populating our library, let's breeze over the ways we can control our categories. There's the lock icon; locking the category means the delete icon will disappear (so you don't erase the category by mistake), although this also thwarts you from adding items to it.

In short, locked means locked and delete means forever.

Note: You must be in “edit mode” to lock and delete categories—the edit icon appears to the right of the file icon.

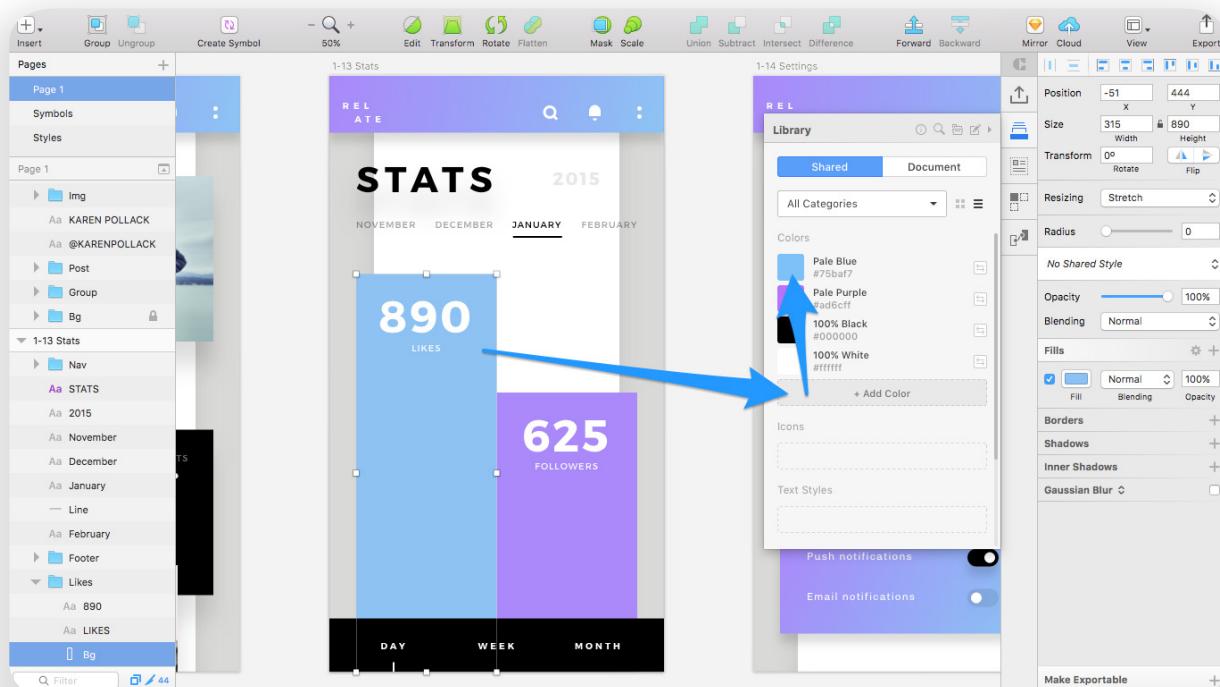




Adding items to the library

Let's start populating our library manually—we'll add a commonly used color. First, identify a common color in the design and select a layer that shows off that color (with shape layers the color will be extracted from the background). After that, click the "+ Add Color" button to add it to the library.

The exact same process applies to image assets and text styles.

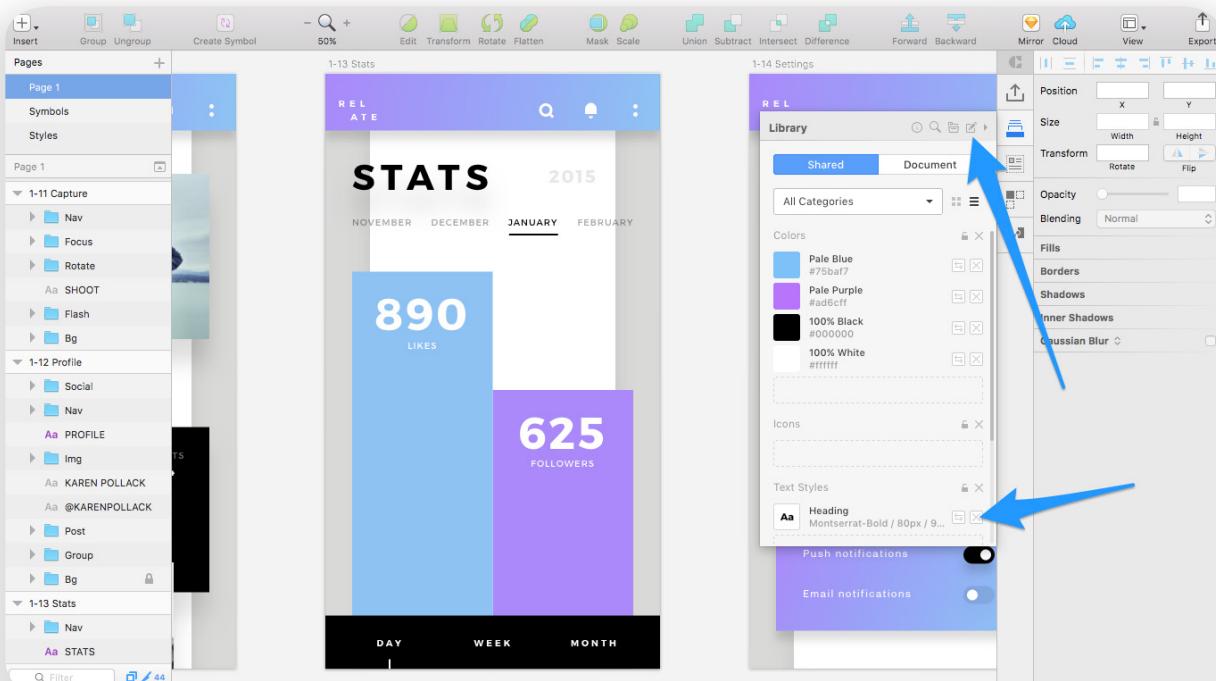




Deleting items from the library

Once again, you'll need to enter edit mode to delete items from the library. You should bear in mind once you delete an item from the library, not only is this irreversible, but the action will also sever ties between the item and the library in all .sketch documents that use that library.

In short, you'll have to re-add the item to the library and then replace all instances of it manually (this is why the lock feature exists, so you don't delete items by accident).





Renaming items in the library

Enter edit mode to rename items, as it helps keep the library organized for those using it. Simply click on the item's name to rename it, and make sure you turn off editing mode after.

Continue adding more colors and text styles as you see fit, renaming them along the way and deleting them if you make a mistake. Don't worry, we'll tackle image assets shortly.

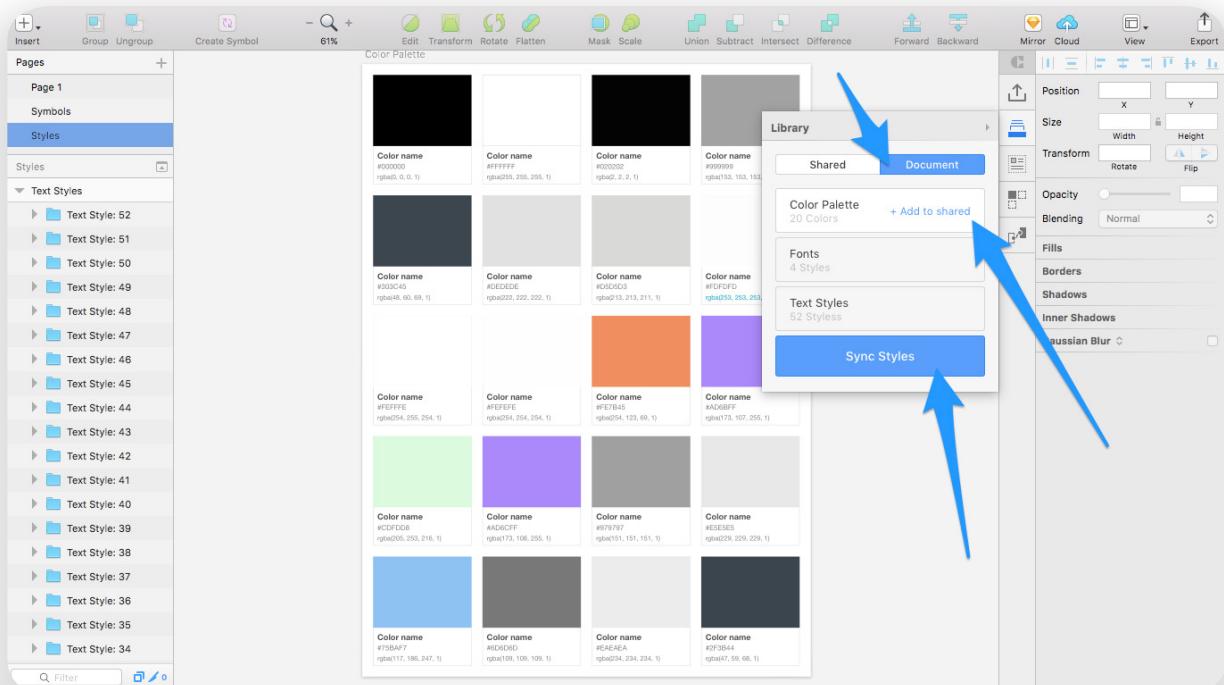


Populating the library automatically

Craft Library is able to collect all of the colors, text styles, and fonts used in the design and import them into the shared library automatically, saving you from the hassle of having to do it manually.

To do this, switch to the “Document” tab. From here, choose the assets you’d like to sync into the shared library; if you wanted Craft to import all colors used in the document, hover the “Color Palette” option and click “+ Add to Shared.” When you’re done, click the “Sync Styles” button, and viola! You’ll also notice Craft has displayed all of these colors in an auto-created Artboard.

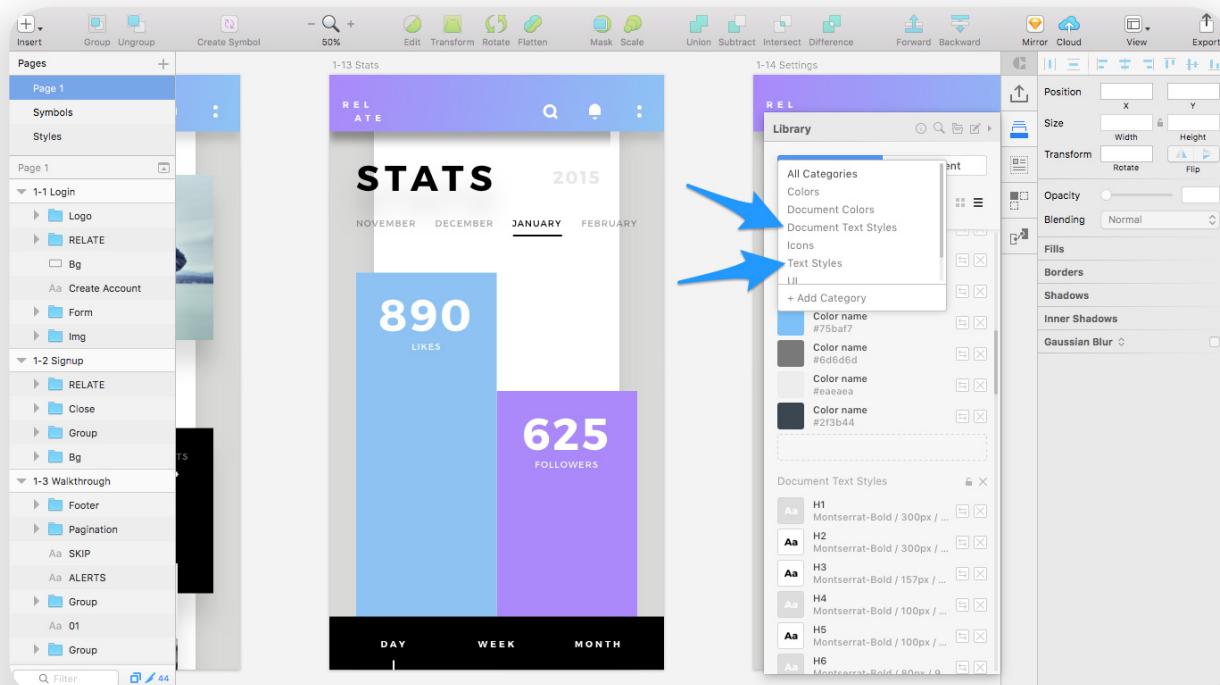
Now, add the text styles too.





When you revert back to the “Shared” tab, you’ll see the library looks a lot more alive than it did before. All you need to do now is delete redundant items and rename the keepers!

Tip: If you’re worried about conflicts with your manually added items, don’t worry, synced styles live in their own categories!



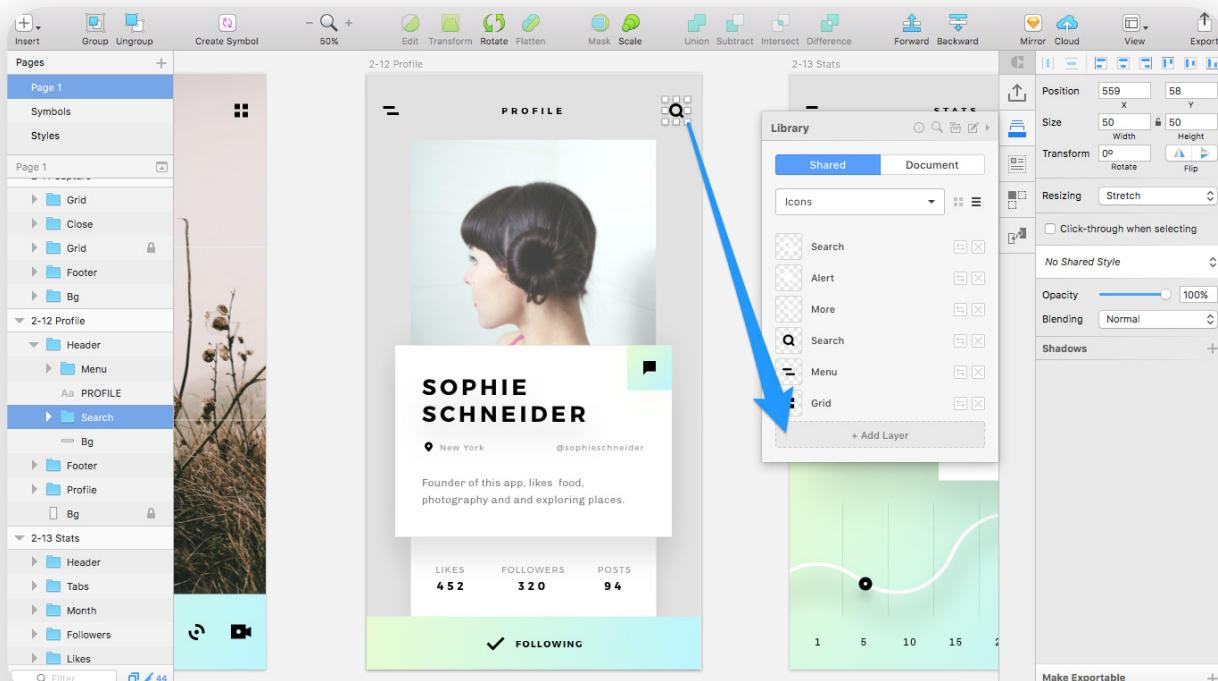
Does this save time? Well, that depends on the complexity of your design and how concise you want the library to be. If you only want to add the most important items to the library, the manual approach might be better for you. If the design is pretty complex, you could use the Sync Styles method and delete what you don’t need.



Stacking related items

Whether you've imported styles from the document into your shared library or added them manually, the library interface will eventually become crowded (especially with larger designs). Luckily, you can group related items together.

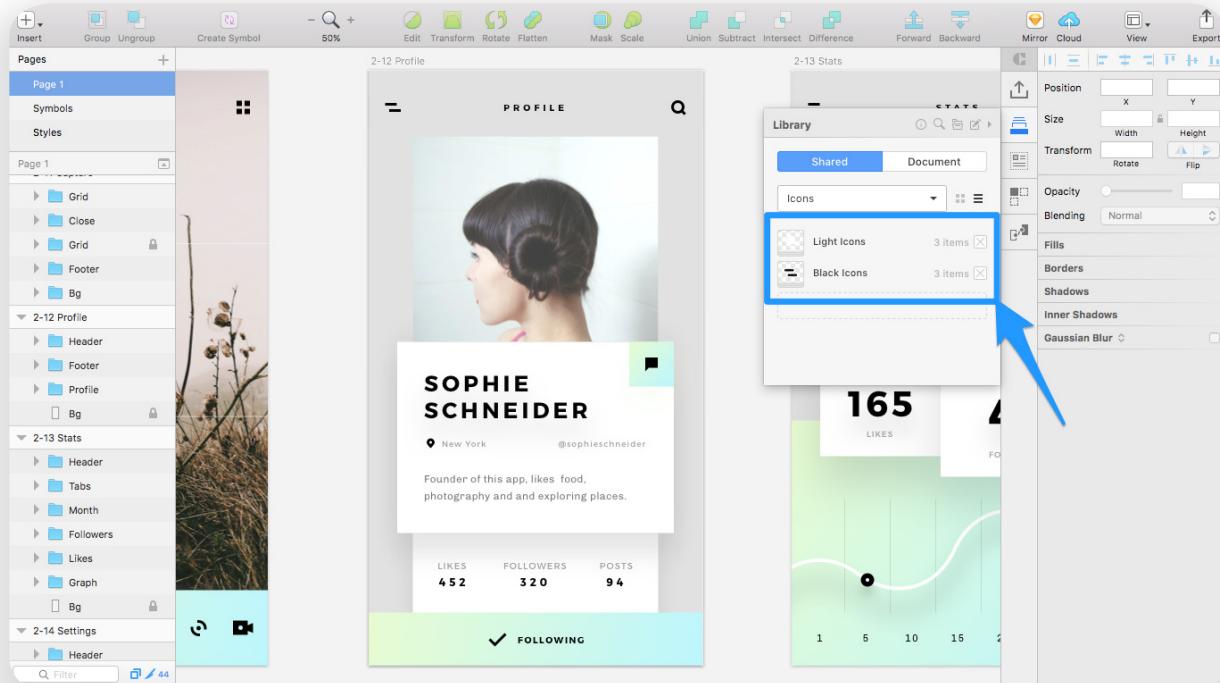
Start by adding design assets into the library. Select the "Icons" category from the select box and add 3 white icons from the design. Repeat these steps with 3 black icons.





Now, rather than create 2 new categories for the black and white icons respectively, we'll group them instead. Drag one of the light icons and drop it *into* another of the light icons until a stack forms, and then rename it by clicking on the stack title (don't forget that you must be in edit mode to do this).

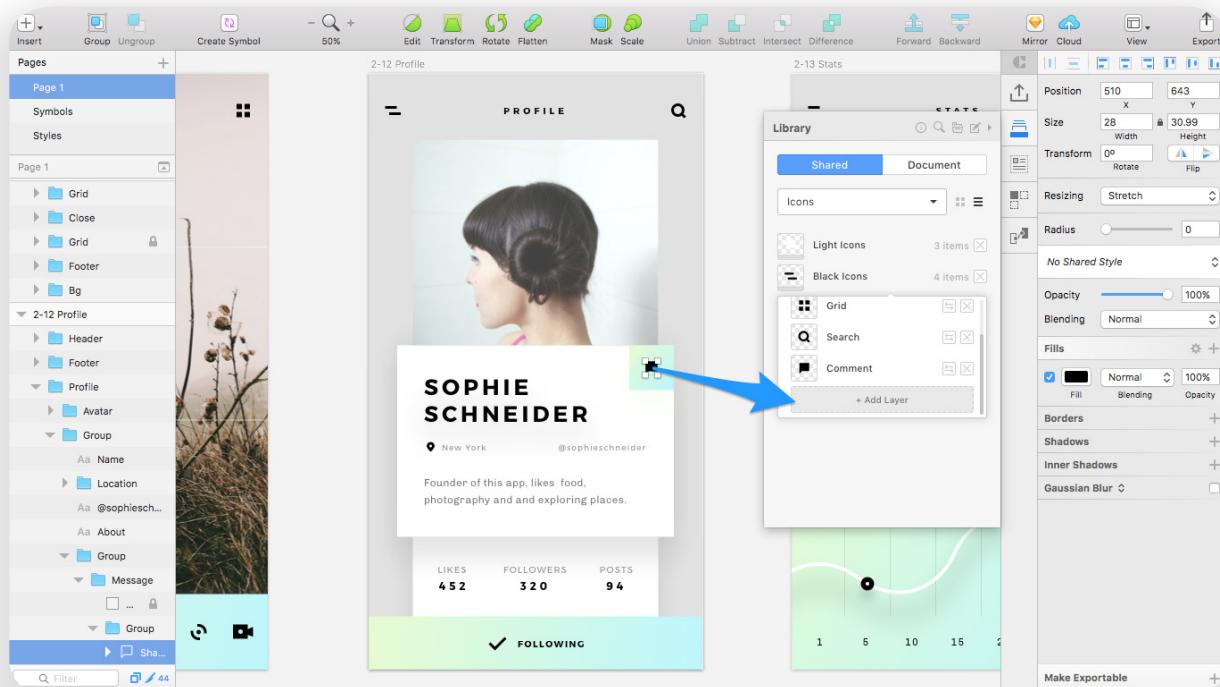
Repeat these steps until all icons are stacked.





When you need to add more items to the stack, simply expand the stack first and add it from there. If you want to remove an item from the stack, drag it out of the stack back into the category.

Stacking works with color and text style items too.



Reusing items in your design

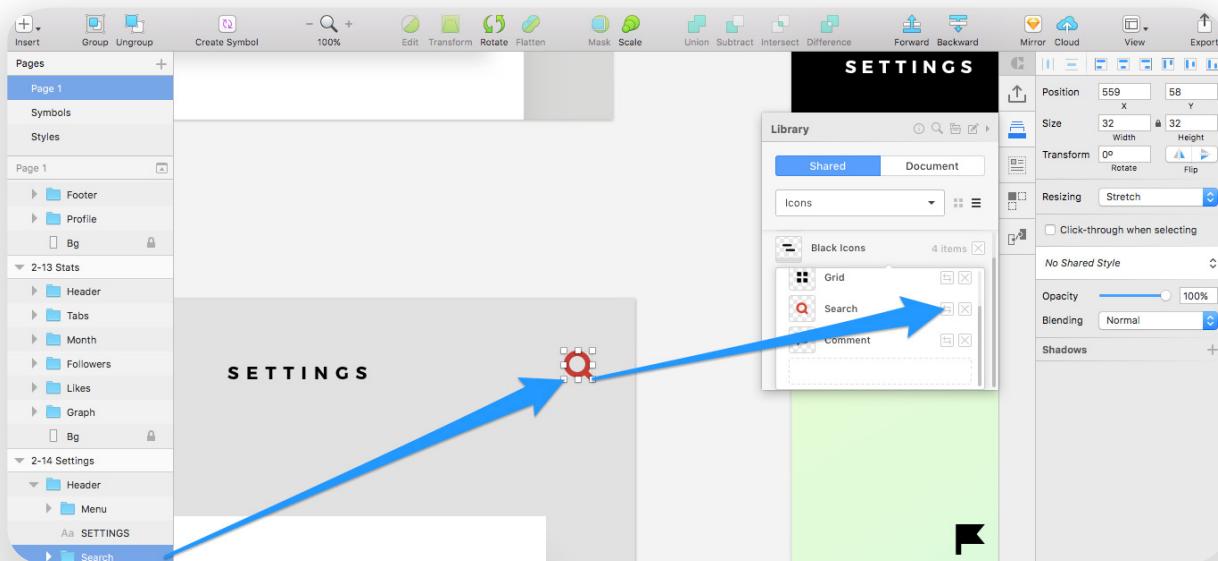
If you want to reuse an image asset (such as an icon or UI element) in your design, simply drag it from the category (or stack) into the design itself. If you want to use colors and text styles, you'll have to manually create the layer and click on the item in the category/stack to apply the styles.



Syncing the library with your team

Okay, so we now have a shared library of common colors, text styles, and image assets, and your teammates have imported the library into their .sketch file. Now you need to make a change to some of the items in the library; you've decided that the dark icons may be too dark and you've changed the color to #333333 grey (I'm actually going to make them red so that you can see what I'm doing).

When you've made the necessary changes to the item, hit the item sync button that appears next to the item delete button.



Tip: If an object is a duplicate of another object and one of those objects is made into a library item, and you then update that library item, both objects will simultaneously update in the canvas because they're duplicates of one another. This works similarly to the Shared Style and Symbol features in Sketch.



How teammates accept changes

This workflow isn't automatic—your teammates need to accept changes before they can use the updated styles and assets. It is, however, very easy—all they need to do is click the very same sync button, and if you are using the library in another .sketch document, you would need to do the same.

Note: You'd need to ensure that you replicate this process for each and every individual Page in your .sketch design.

UP NEXT:

Building dynamic prototypes

In the next chapter we'll learn how to use Craft Sync to prototype—right inside Sketch!



CHAPTER 5

Building dynamic prototypes

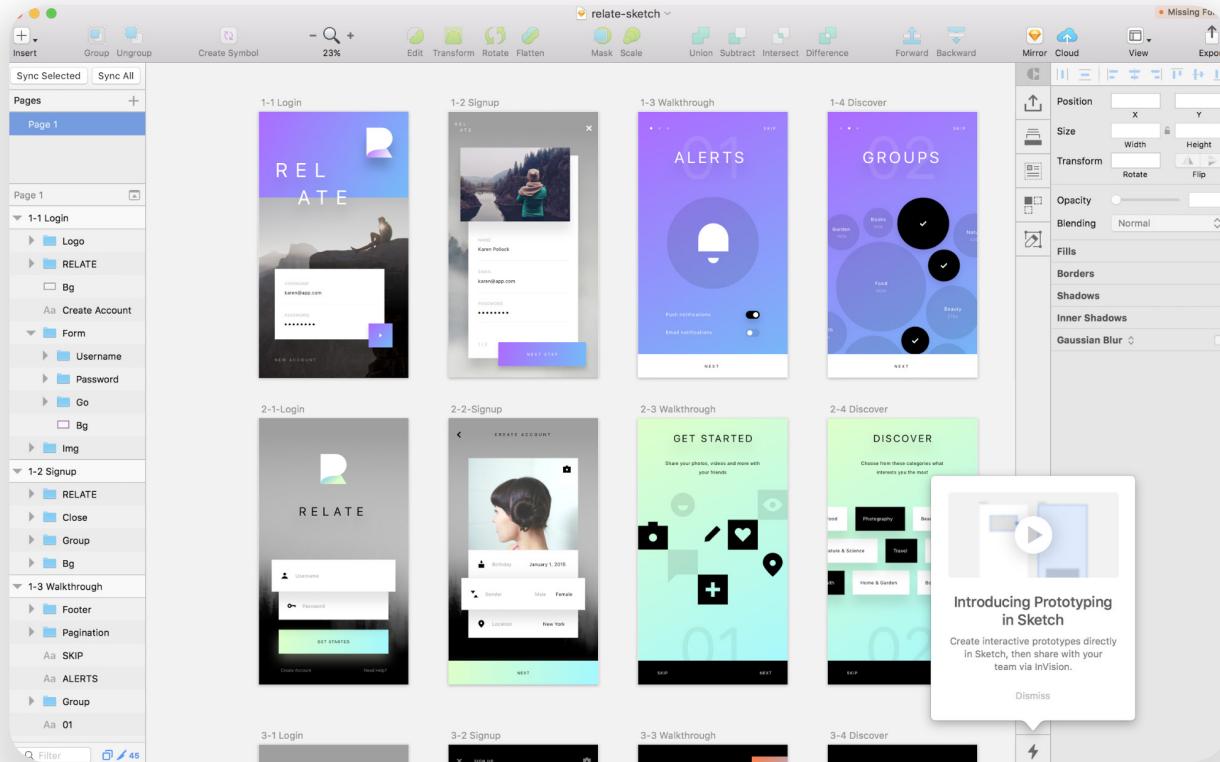
Welcome to chapter 5. In this chapter we're going to breathe life into our design by creating interactive prototypes directly in Sketch, then we'll publish our prototype to InVision for our team to view and collaborate on.



CHAPTER 5:

Prototyping with Craft

Prototyping functionality in Craft is built into the Craft Sync plugin. You'll notice a little prototype toggle at the bottom right of the Craft sidebar. This toggle can be used at any time to view or hide links between artboards.

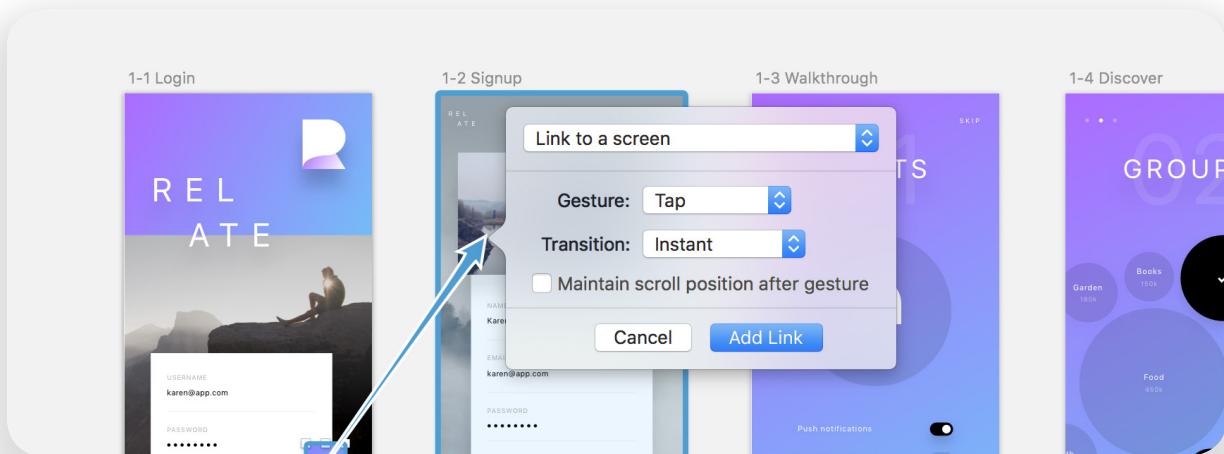


Creating links

Links are used to connect artboards. They're the key component to interactive prototypes in Sketch. Links can be added to any layer, group, or symbol in an artboard.

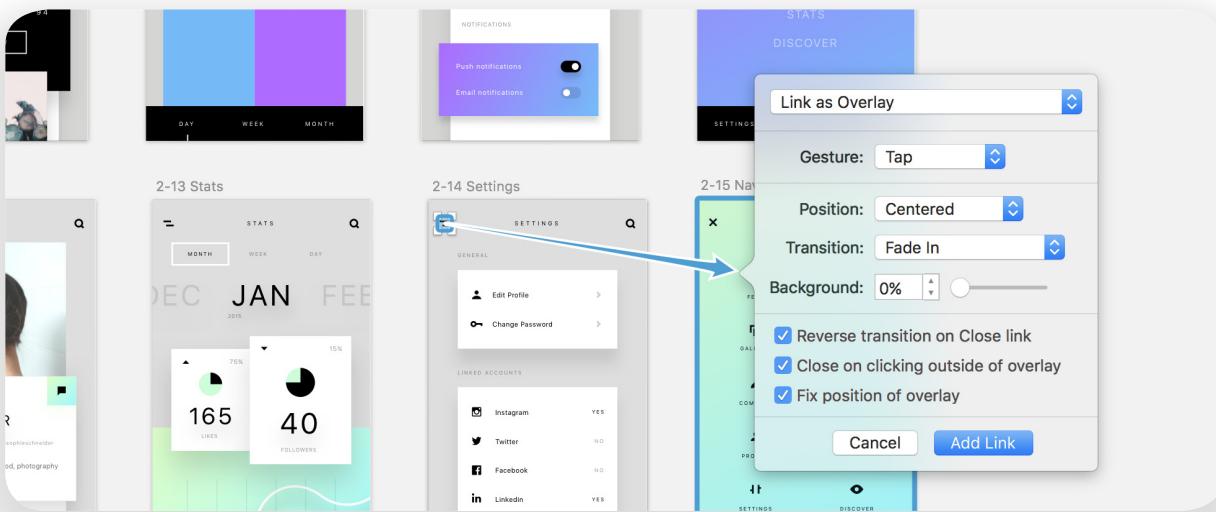
Adding links can be done at any time by selecting a layer and pressing **c**. This will create an arrow, which you can use to set the destination of the link. There are several types of destinations available, each serving their own purpose. Let's take a look at them now.

Link to a screen



Using the arrow, click on another artboard to create a link between the two artboards. By default, it will be set to "Link to Screen." This is the most common type of link and simply connects the two artboards in a similar way to generic web links. There are several gesture and transition types we can use, but we'll get into those a little later in the chapter. Click "Add Link" to create our first screen-to-screen link.

Link as an overlay



Overlays can be used to position content over the top of the current screen. They are incredibly useful for things like modals, dialogs, and sidebar navigational elements.

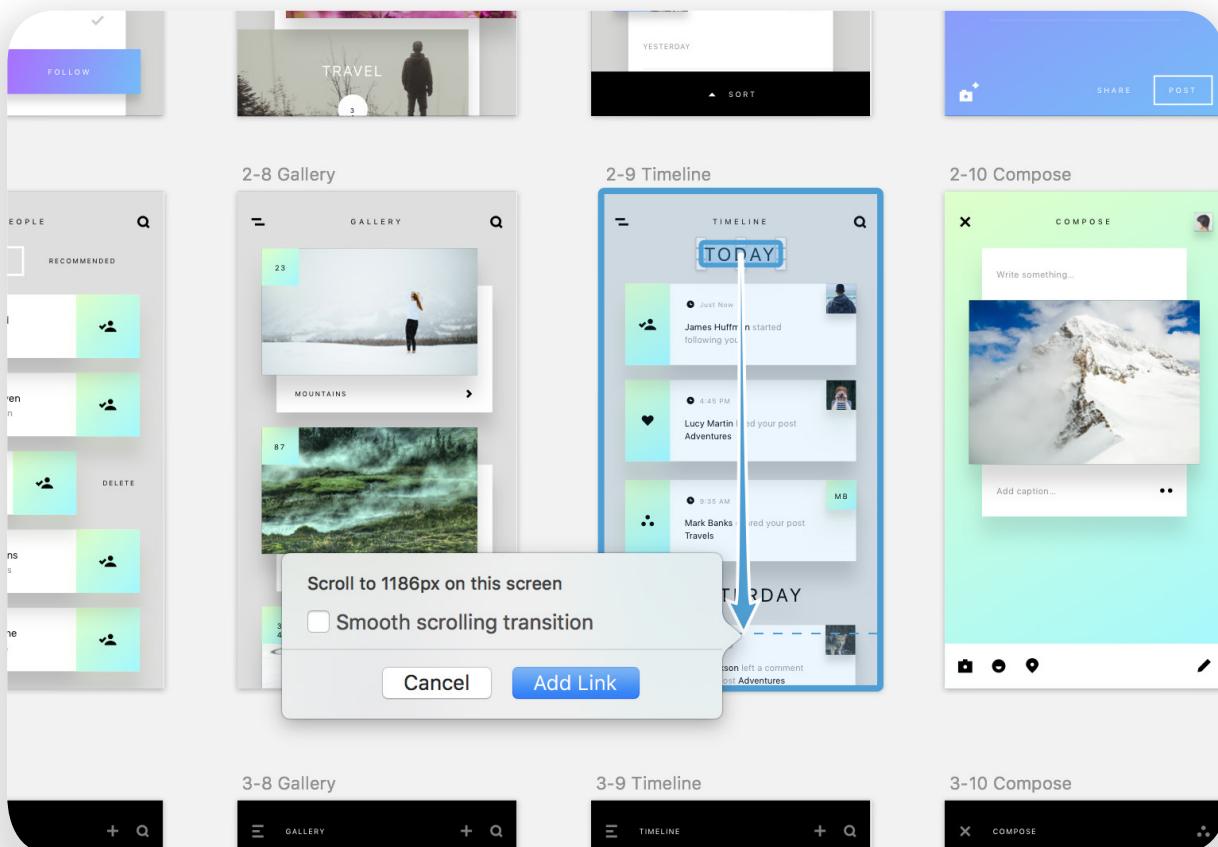
Choose a different Artboard this time around—“2-14 Settings.” Select the navicon in the top-left corner and link it to “2-15 Navigation,” but now, change the “Link to Screen” dropdown to “Link as Overlay.”

You’ll notice you get a few more settings this time around:

- Position: Positions the linked artboard relative to the current artboard.
- Transition: Determines how the linked artboard will come into view.
More on this later.
- Background: Partially or fully block out the current screen. Useful if you want to put more attention on the overlaid content.

Let’s leave the default settings in place for now. Hit “Add Link” and voila, you’ve created your first overlay link!

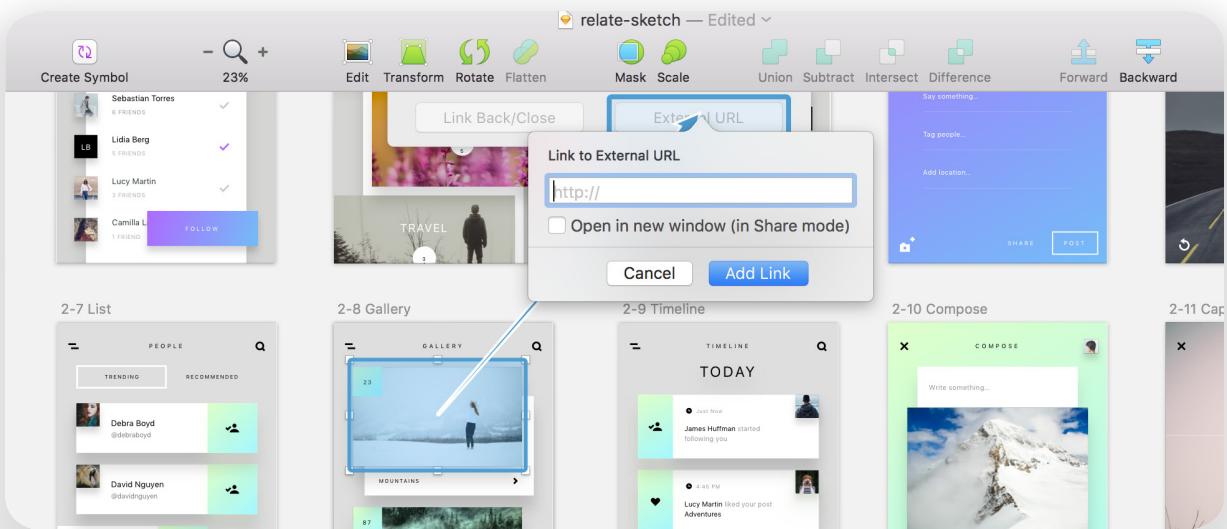
Position on screen



Sometimes you may want to link to another part of the current screen. Hit c and hover over the current artboard—you'll see a horizontal line that represents the position on the screen the user will be taken to after clicking the link.

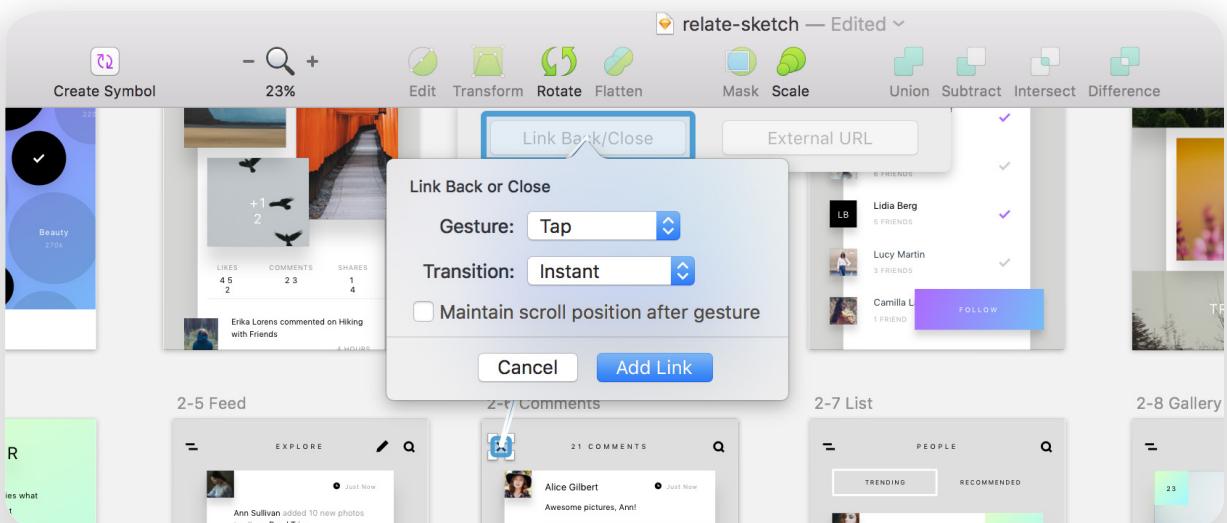


External link



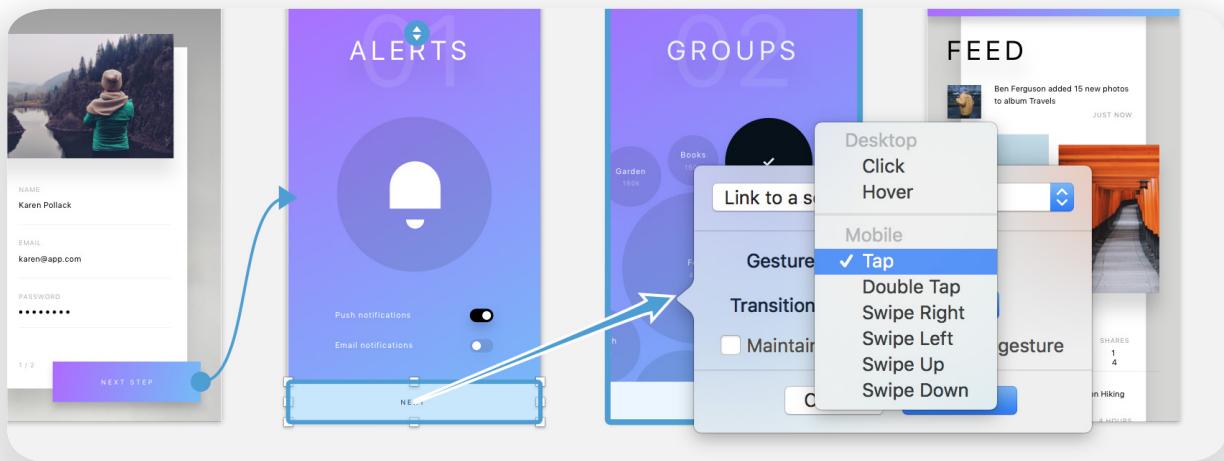
After hitting c you'll notice a top bar that gives you a couple of different link options. Clicking on external url will set the destination to an external url when clicked.

Link back



Clicking on Link Back/Close will set the destination to the previous screen the user was on.

Gestures



Let's talk about Gestures.

When creating a link, you'll notice a gesture dropdown. This gesture dropdown defines the type of interaction required to trigger the link. There are different gestures depending on whether you're building a mobile or desktop prototype.

Desktop

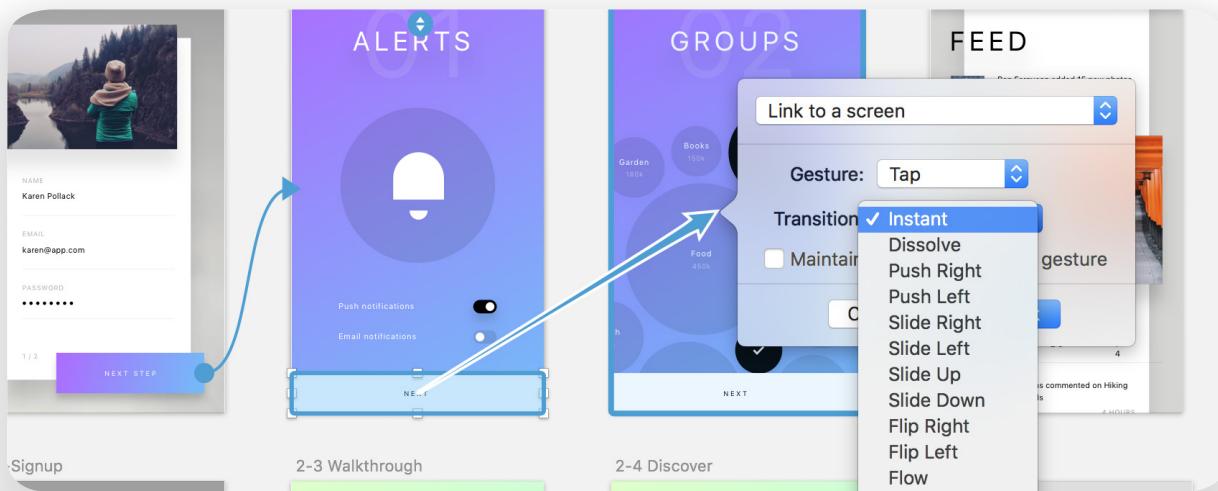
- Click
- Hover

Mobile

- Tap
- Double Tap
- Swipe Right
- Swipe Left
- Swipe Up
- Swipe Down

Gestures help to create a more immersive and realistic prototype, and are a great way to validate whether a particular interaction is usable.

Transitions



If you're building a mobile prototype you have access to a number of different transitions. Most of the time a simple instant transition will work just fine. Sometimes, though, there are occasions when a more advanced transition will actually result in a more usable product.

Here's what's you can choose from:

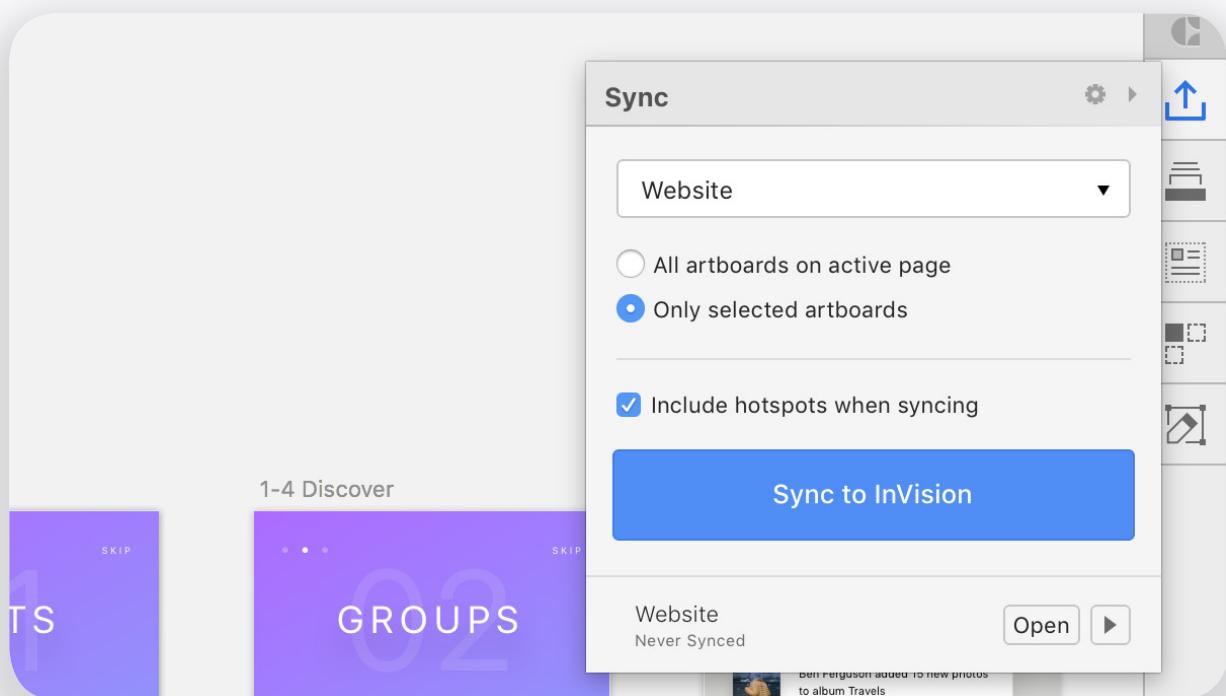
- Instant
- Dissolve
- Push Right
- Push Left
- Slide Right
- Slide Left
- Slide Up
- Slide Down
- Flip Right
- Flip Left
- Flow
- Pop
- Slide Dissolve

Play around to see what works. Remember, subtlety is key—nothing too fancy!

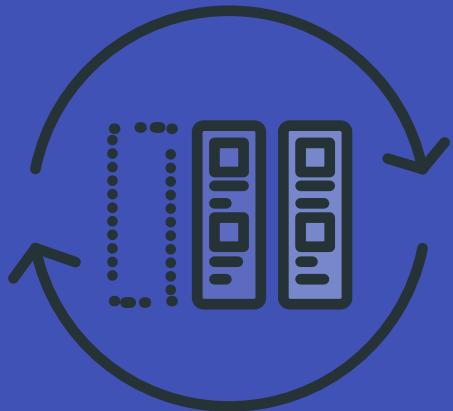
There are 3 different designs in the Relate .sketch file. Now that we've learned how to link screens with transitions, choose 1 of the designs and try to make the prototype interactive using different link types, gestures, and transitions.

UP NEXT:

Previewing and publishing prototypes to InVision



In the next chapter we'll learn how to use Craft Sync to drive our prototype into the actual InVision app, where you'll become a collaborator. We'll familiarize ourselves with InVision, and learn why it's essential for designers to be at the frontline of collaboration.



CHAPTER 6

Syncing prototypes into InVision

Now that we have our hi-fi prototype, let's sync it into InVision, where our teammates can comment on it and offer feedback, and our developers can inspect the design and download the image assets required to begin coding it. In this chapter we'll familiarize ourselves with the core features of InVision while learning how to be a terrific designer-collaborator.

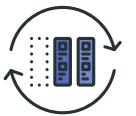


CHAPTER 6:

Craft Sync

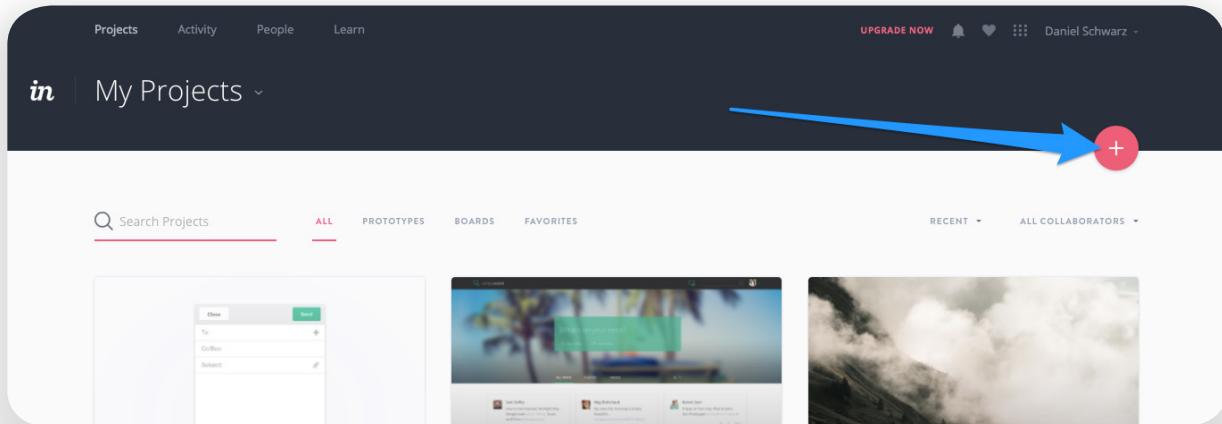
We'll begin by using Craft Sync to import our design into InVision. Craft Sync offers an easy way to sync prototypes into InVision directly from Sketch, without the need to export assets—no exporting, no saving, no dragging, no dropping.

Let's try it out.

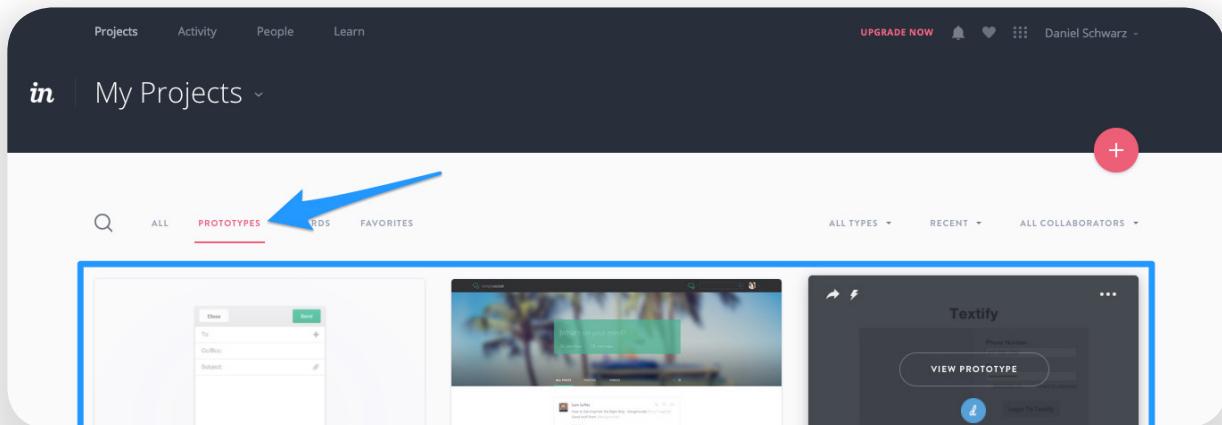


Creating prototypes in InVision

Start by heading over to invisionapp.com and logging in or signing up. When you're logged in, click on the delightfully obvious "+" icon to begin.

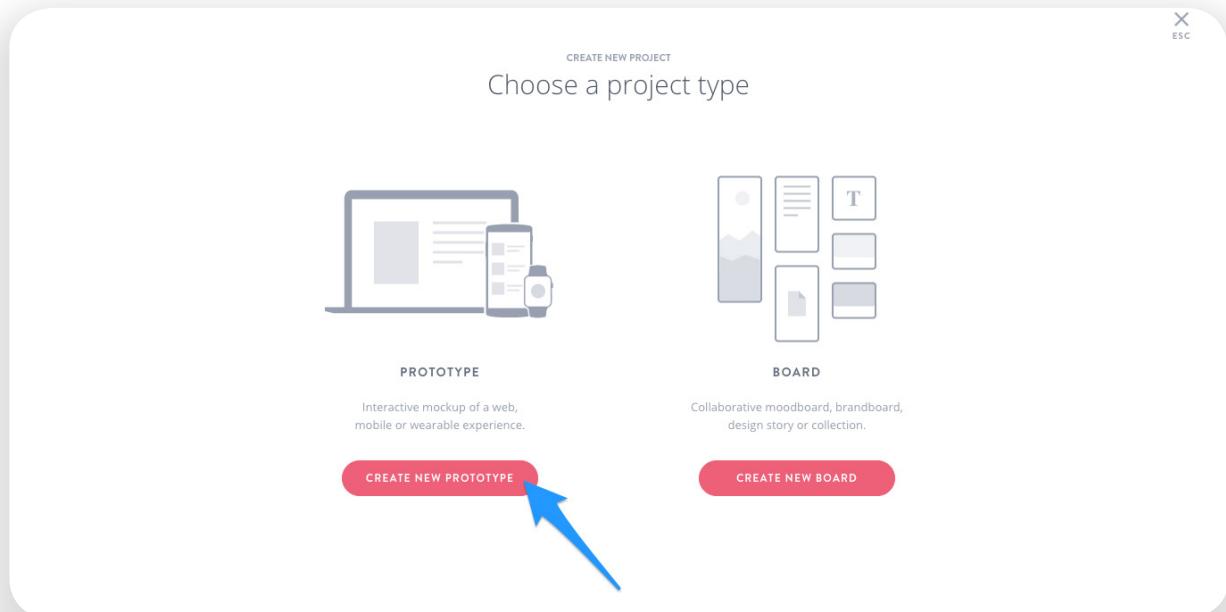


Don't worry if everything else looks a little overwhelming right now—InVision is easy to learn and we *will* cover the essentials over the last 2 chapters of this book, although if you are quite keen to dive in, you'll notice there are template prototypes to try.

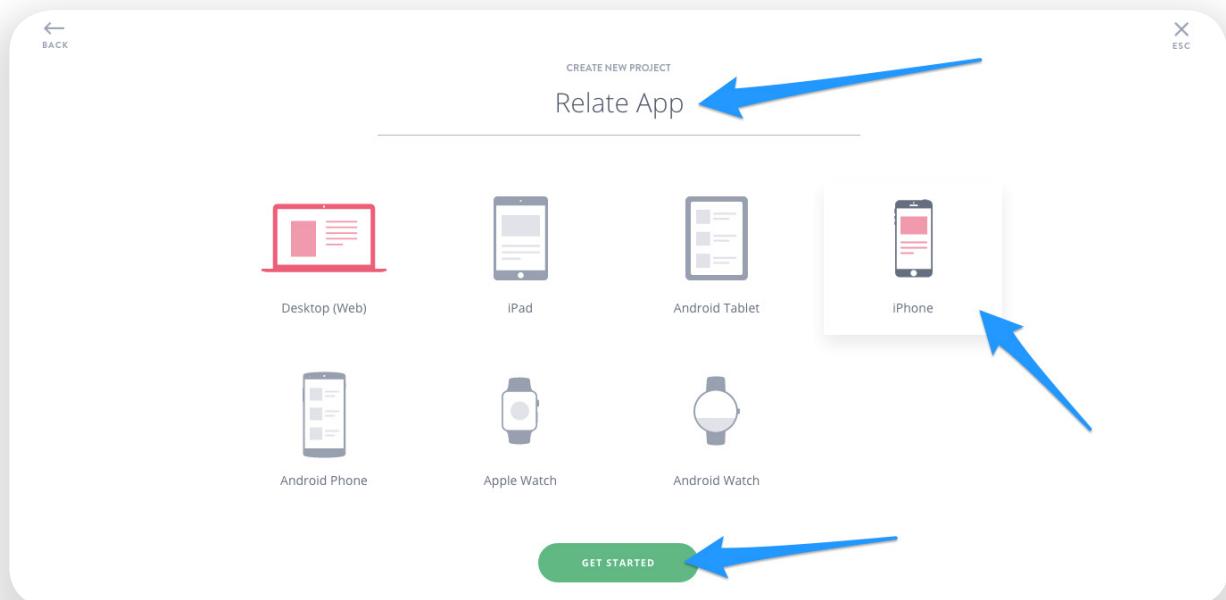




Carrying on from the last step, choose the “Create new prototype” option from the *Choose a project type* modal.



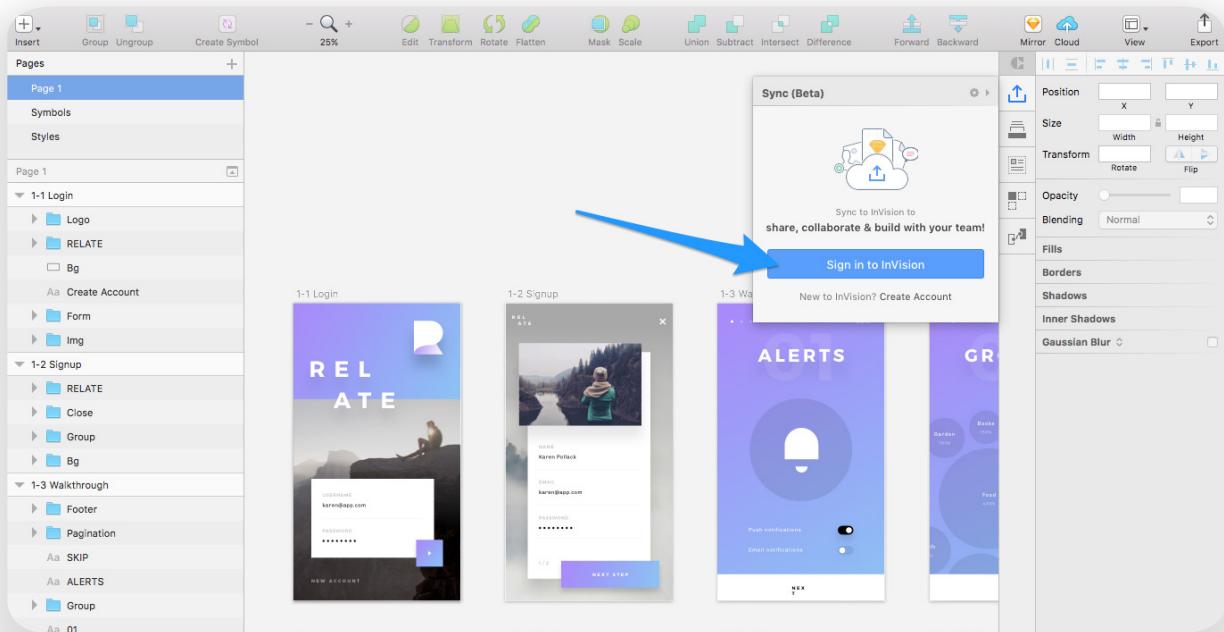
Give your prototype a name (“Relate App” in this case), select “iPhone,” and then click the “Get started” button to continue.





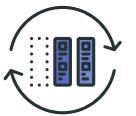
Syncing prototypes

Switch back to Sketch. Select the Craft Sync tab, then sign in when asked using your InVision credentials.



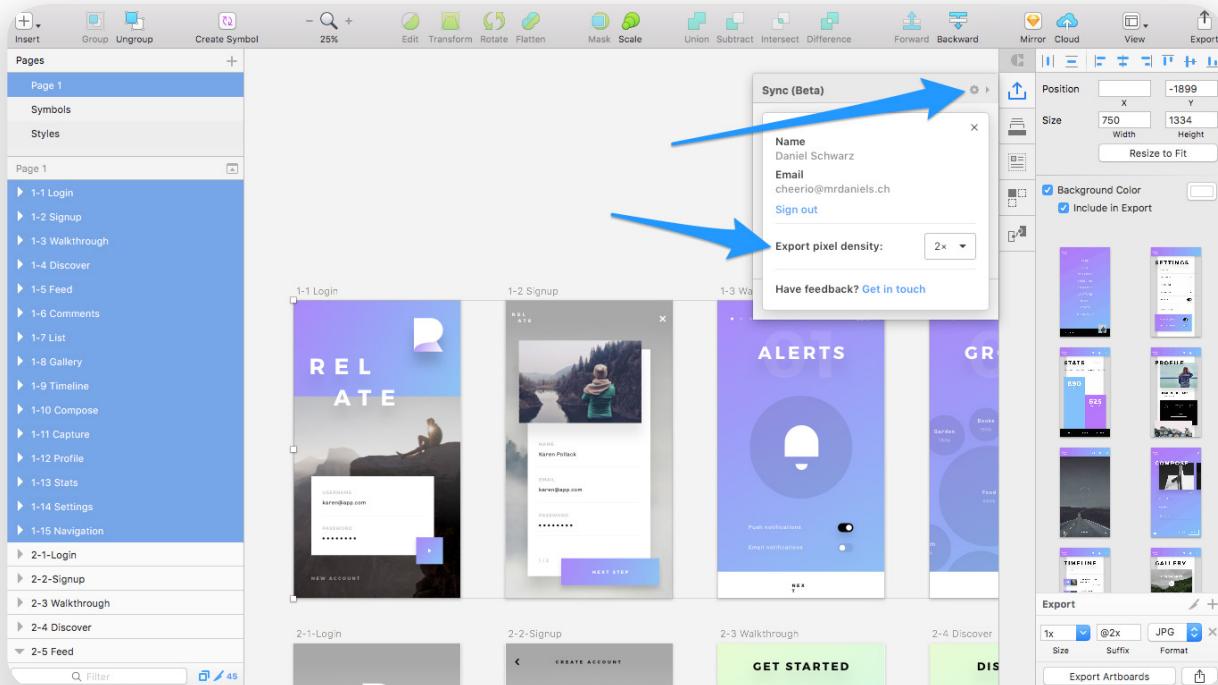
Now choose your prototype from the select box, choose the “Only selected artboards” option (while making sure that you’ve selected all of the artboards from 1-1 to 1-15), and hit the “Sync to InVision” button. At the moment there is no way to un-sync artboards, so make sure you take care with this step!

Note: We didn't choose the “Sync all artboards” option because the Relate .sketch kit contains 3 different designs and we only want to sync 1 of those designs with InVision.



Specifying export resolution

If you click on the settings/cogwheel icon, you'll be able to change the *pixel density* of the artboards. If "2x" is the selected option, artboards will be uploaded to InVision at double-size, although displayed at normal-size (1x), which will result in the artboards looking much crisper when displayed in the prototype.





Exporting image assets

Does this mean that image assets will be exported @2x? No.

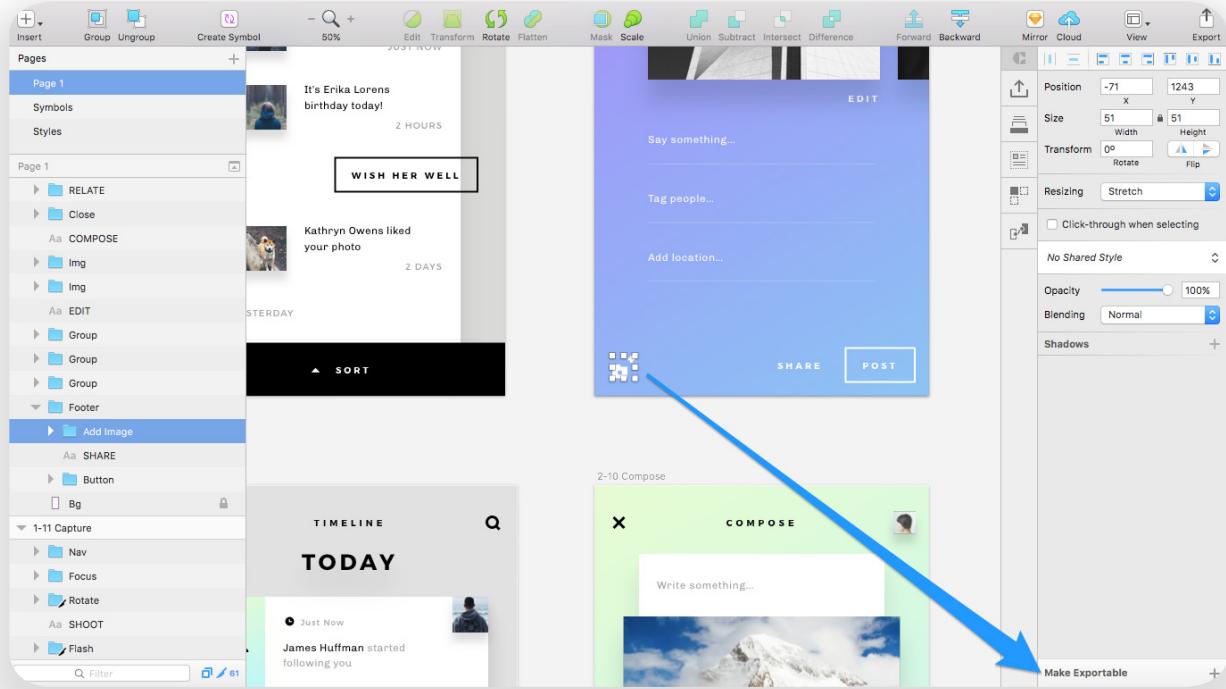
Pixel density (as specified in the sync settings) only affects the viewing quality of the prototype; to export individual image assets to be used in the coded design, we'll need to define export options for those layers. When exported, these assets will be conveniently boxed up in InVision, where developers can browse, download, and implement the assets to build our app.

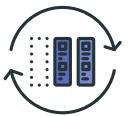
Exporting assets to InVision requires no extra work than usual. Define export options in Sketch as you normally would—the only difference is you don't actually export the assets, instead you simply re-sync the prototype to InVision!

Let's try it.



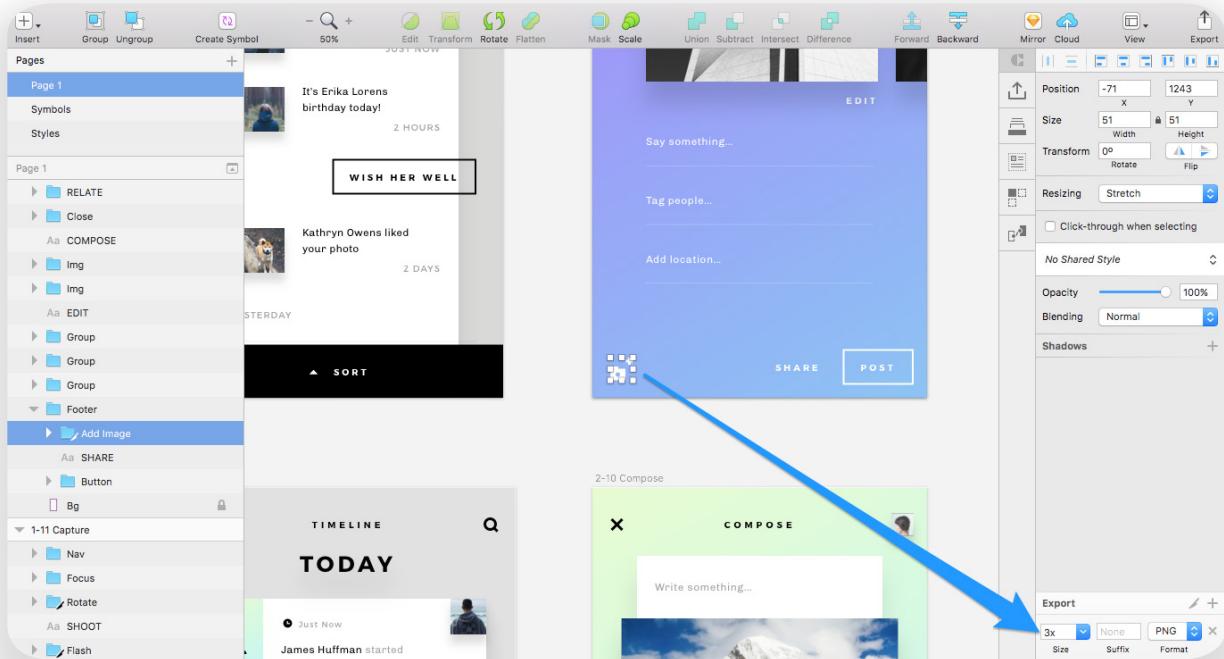
Select each image asset (only 1 of each type – no need to select the search icon twice for example), and click the “Make Exportable” button at the bottom of the Inspector in Sketch.





Choose “3x” as the Size (iPhone 6’s have a very high resolution due to their retina technology and require assets to be exported at this resolution).

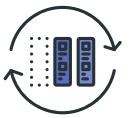
Ensure that Format is “PNG.”



All we need to do now is re-sync our prototype. While we can sync through the Craft toolbar like we did before, there are actually two useful keyboard shortcuts that can help us here:

- Sync all artboards: control + shift + A
- Sync only selected artboards: control + shift + S

Like before, we want to sync only the selected artboards.



Congratulations, you're now a collaborator!

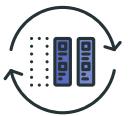
InVision is the mightiest of all prototyping tools; it has tons of useful features, but it isn't bloated and complicated to use. As we wrap up this chapter, we'll familiarize ourselves with InVision, and you'll have the chance to see how easy it is to collaborate with InVision. We'll also take deeper look at assets.

We'll skip over the ultra-basic stuff like filtering, searching, duplicating, deleting, archiving, and favoriting screens—InVision has an easy-to-use and intuitive user interface, so you'll find that accomplishing basic tasks like this requires little to no help. If you do find yourself stuck, though, consult the help section by selecting “Learn” from the top navigation.

The screenshot shows the InVision web application interface. At the top, there is a dark header bar with the following navigation items: Projects, Activity, People, and Learn (which is highlighted with a large blue arrow pointing to it). To the right of the Learn item are links for UPGRADE NOW, a notification bell, a heart icon, a more options menu, and a user profile for Daniel Schwarz. Below the header, the main content area is titled "My Projects". It features a search bar and filters for ALL, PROTOTYPES, BOARDS, and FAVORITES. The main content area displays several project cards:

- Relate App** (JAN 28, 2017): A card for a mobile app prototype titled "Relate App" with a purple and white design.
- Mobile App Prototype** (NOV 6, 2016): A card for a mobile app prototype showing a keyboard interface.
- SimplySocial** (MAR 17, 2016): A card for a social media prototype titled "SimplySocial" showing a feed of posts.
- Sketch + InVision: A guide to high-speed design** (FEB 22, 2017): A card for a prototype titled "Sketch + InVision: A guide to high-speed design" showing a design of a workspace.

At the bottom right of the content area, there is a "Help" button with a question mark icon.



Switch back to InVision, select the “Prototypes” tab, and then select our prototype by clicking on the “View prototype” button.

The screenshot shows the InVision interface with the 'Prototypes' tab selected. There are three prototype cards displayed: 'Relate App' (15 screens), 'Mobile App Prototype' (Nov 6, 2016), and 'Web App Prototype' (Mar 17, 2016). A blue arrow points to the 'VIEW PROTOTYPE' button on the 'Relate App' card.

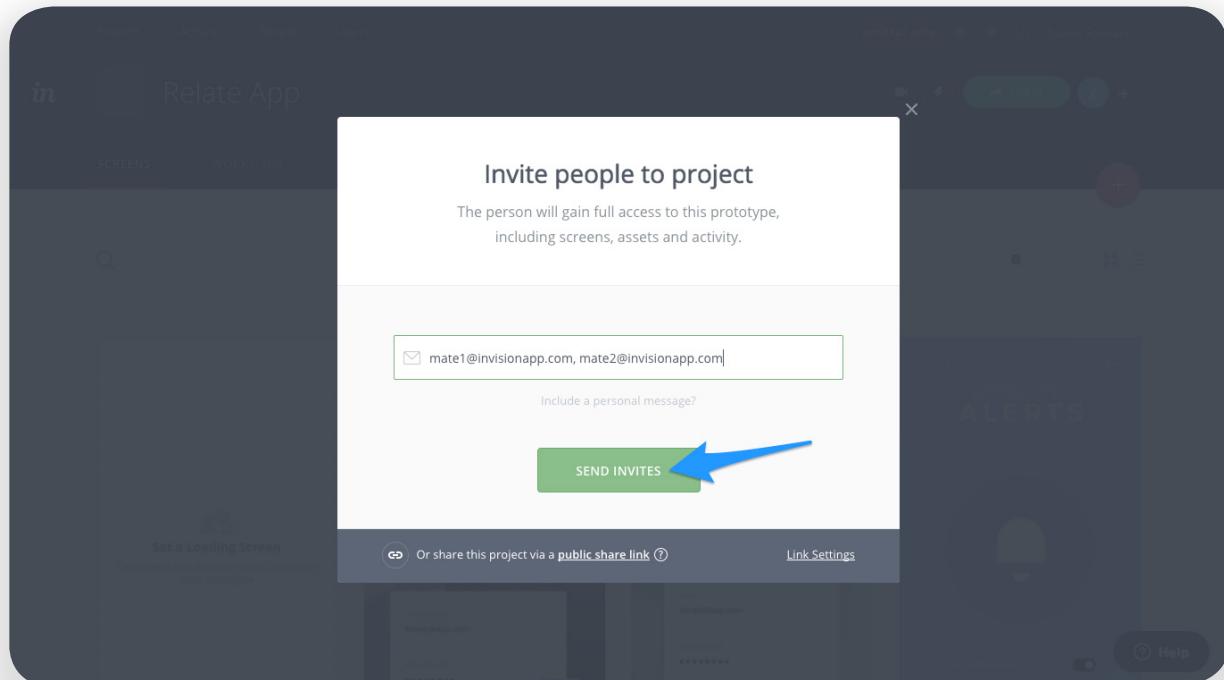
Inviting others to collaborate

Before we begin, let's invite our teammates to collaborate. Start by clicking the “Share” or “Add / Remove” button.

The screenshot shows the InVision interface for the 'Relate App' project. At the top right, there are 'SHARE', 'ADD / REMOVE PEOPLE', and other collaboration buttons. A blue arrow points to the 'SHARE' button.

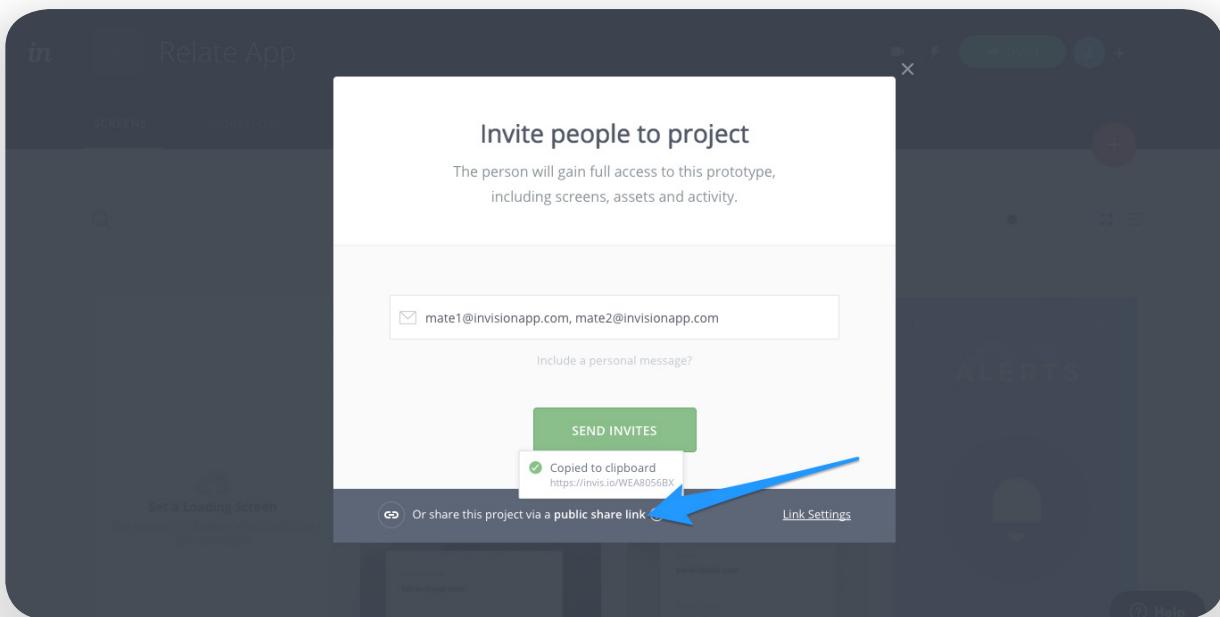
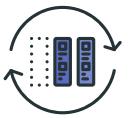


Invite your teammates by typing their email address into the field and hitting the “Send invite” button—separate email addresses with a comma to invite multiple teammates at once.

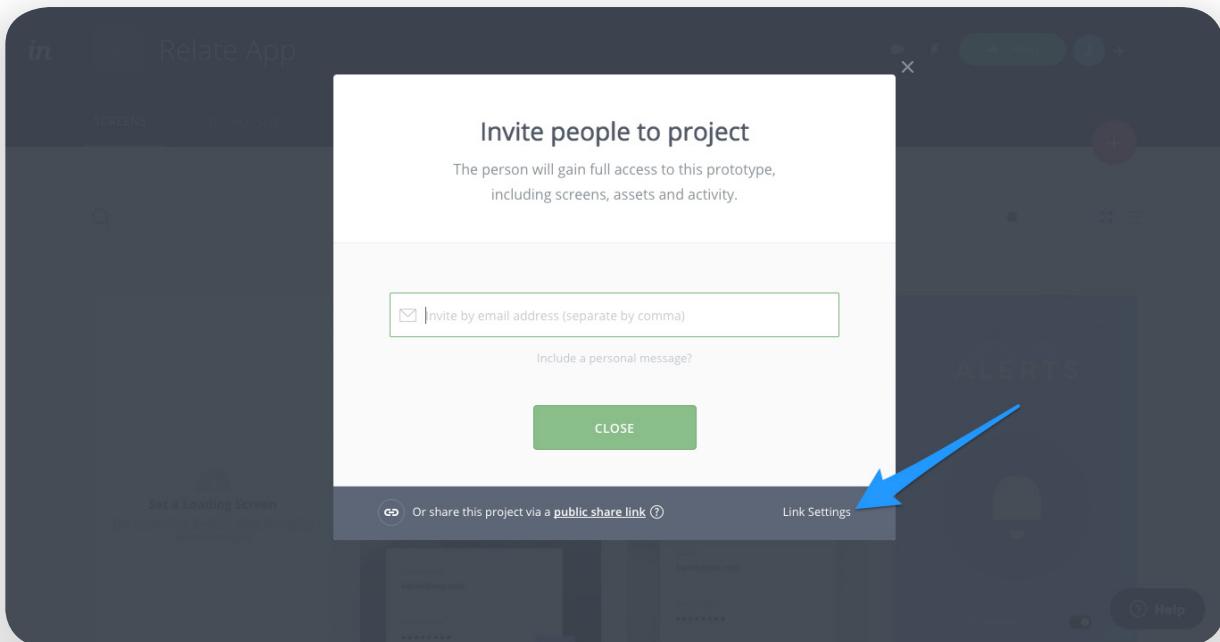


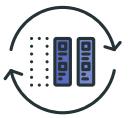
If you work in a large team, this might take a while. If you have a more convenient way of distributing invites (such as via a Slack team), you could choose to create a share link instead, and then share it to your Slack team.

Click the “*Or share this project via a public share link...*” link at the bottom of the invite modal to copy the link.



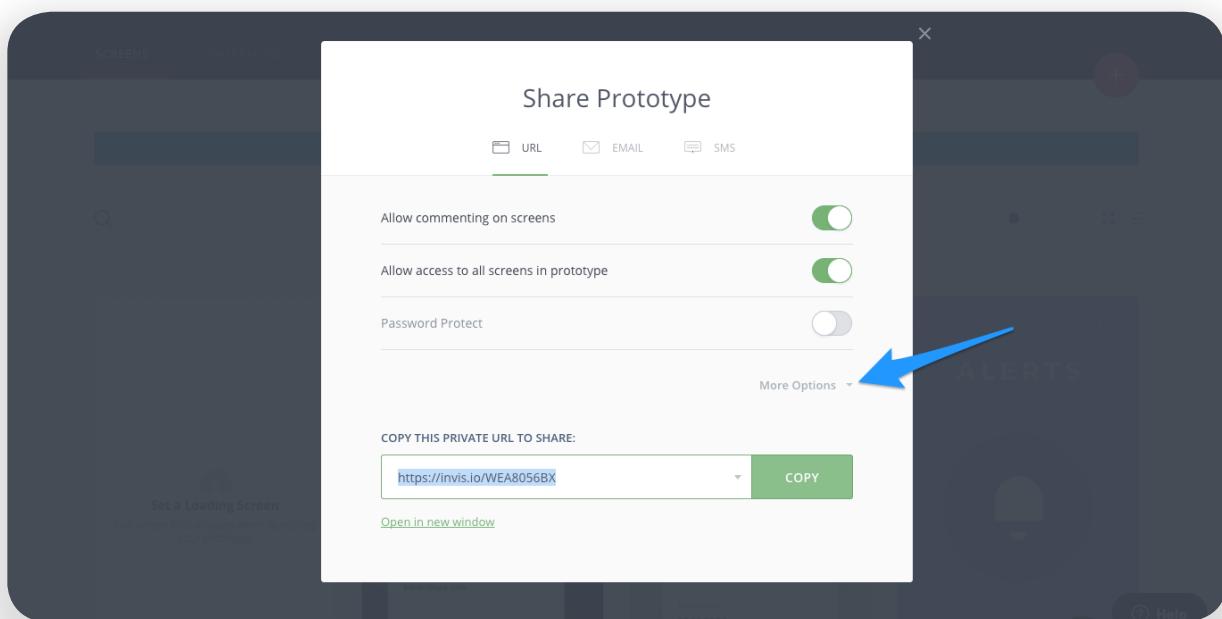
Share links don't enable full collaborative rights by default, so they're pretty useful for when you want to impose certain user-restrictions such as disabling the ability to comment on screens. Click "Link settings" to customize these restrictions.

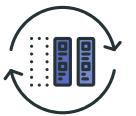




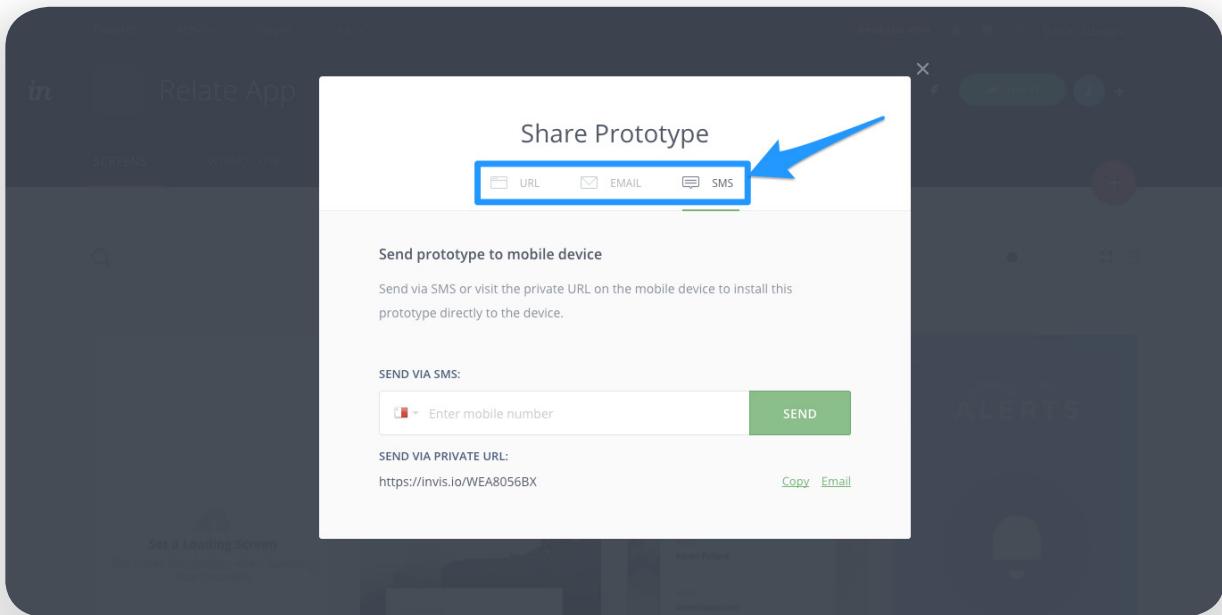
Here's a summary of the settings that can be customized:

- *Allow commenting on screens*
- *Allow access to all screens in prototype*: forces hotspot-only navigation when viewing prototypes (disables left/right keys)
- *Password Protect*
- *Force "Add to Home Screen" on iOS and Android*: an app icon is automatically added to the user's home screen when previewing
- *Start the share link at*: defines which screen should be the first screen in the app (usually the welcome/signup screen)
- *Hotspots enabled*: if disabled, user can only navigate the prototype by using the left/right keys or navigation buttons
- *Prevent hotspot hinting*: stop hotspots from revealing themselves when the user clicks a region that isn't a hotspot
- *Require user identification*: requires name/email from user





From here the prototype can be shared using any of the ordinary methods (email and share link), but also via SMS too!





Regarding the home screen app icon that teammates see when they view the prototype in a mobile device—you can upload it from the “Screens” tab (along with a loading screen image that users see while your app is loading all of the assets). Both of these are optional, but they do make your prototype feel more real.

The screenshot shows the InVision interface with the 'Screens' tab selected. At the top, there's a bar with 'Projects', 'Activity', 'People', 'Learn', 'UPGRADE NOW', and a user profile for 'Daniel Schwarz'. Below the bar, the title 'Relate App' is displayed. The main area shows several screens: a loading screen with a cloud icon, a login screen with fields for 'USERNAME' (karen@app.com) and 'PASSWORD', a profile creation screen with fields for 'NAME' (Karen Polack), 'EMAIL' (karen@app.com), and 'PASSWORD' (redacted), and an 'ALERTS' screen with a bell icon and a 'Push notifications' toggle. A blue arrow points from the 'Set a Loading Screen' button at the bottom left to the 'SCREENS' tab at the top left.



Screens

Now that we've synced our screens to InVision and invited our teammates, we can actually start collaborating with them. Before we move onto the next chapter and do that, though, we'll familiarize ourselves with InVision, starting with the "Screens" tab, which is basically an overview of all screens in our prototype. From here we can select specific screens.

Once you've navigated to the "Screens" tab, click the tab once more to see a list of status filters (*On Hold*, *In Progress*, *Needs Review*, *Approved*); these screen statuses help us establish an iterative feedback workflow where we upload screens, request for them to be reviewed, design a new iteration if needed, re-sync, and then ultimately mark them as completed.

The screenshot shows the InVision interface with the 'Screens' tab selected. On the left, a sidebar displays a list of screens categorized by status: ALL SCREENS (15), ON HOLD (0), IN PROGRESS (15), NEEDS REVIEW (0), APPROVED (0), WITHOUT HOTSPOTS (15), and ARCHIVED SCREENS (0). A blue arrow points to the 'IN PROGRESS (15)' item. The main area shows three preview cards for screens titled 'RELATE' and 'ALERTS'. The top navigation bar includes 'Projects', 'Activity', 'People', 'Learn', 'UPGRADE NOW', and a user profile for 'Daniel Schwarz'.

We'll take a deeper look at screens in the next chapter, where we'll discuss inspect mode, comment mode, build mode and more, but for now, let's assign the correct status to our screens.



Workflow

Switch to the “Workflow” tab. You’ll see each status filter has its own column, and our screens currently reside in the *In Progress* column.

The screenshot shows the InVision interface with the "Relate App" project open. The top navigation bar includes "Projects", "Activity", "People", and "Learn". On the right, there are icons for notifications, heart, and more, along with the user name "Daniel Schwarz". Below the navigation is a header with "in" and a plus sign, followed by the project name "Relate App". To the right of the project name are buttons for video, share, and a plus sign. The main content area has tabs: "SCREENS", "WORKFLOW" (which is highlighted with a blue arrow), "ACTIVITY", "COMMENTS", "ASSETS", and "***". Under the "WORKFLOW" tab, there are four columns representing different status filters: "On Hold (0)", "In Progress (15)", "Needs Review (0)", and "Approved (0)". Each column contains a plus sign button. The "In Progress" column is expanded, showing five items: "1-1 Login", "1-2 Signup", "1-3 Walkthrough", "1-4 Discover", and "1-5 Feed", each with a plus sign below it. A "Help" button is located in the bottom right corner of the workflow area.



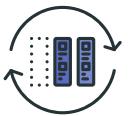
Since we've uploaded our screens for the very first time, we need team members to review them. We *could* drag each screen into the *Needs Review* column manually; however, because we need to move all of the screens, it would be easier to click on the menu icon in the column, and then select the status from there.

Move all of the screens to the *Needs Review* column.

Now, when a teammate logs into InVision with the intention of reviewing screens, he or she can navigate to the "Screens" tab and filter for screens that have the *Needs Review* status—teammates can spend less time searching for tasks to complete.

The screenshot shows the InVision interface with the "Workflow" tab selected. The interface is dark-themed. At the top, there are navigation links: Projects, Activity, People, Learn, and a user profile for Daniel Schwarz. Below the header, there are tabs for SCREENS, WORKFLOW (which is active), ACTIVITY, COMMENTS, ASSETS, and a three-dot menu. The main area displays four columns: "On Hold (0)", "Needs Review (0)", and "Approved (0)". The "Needs Review" column contains two screens: "1-3 Walkthrough" and "1-4 Discover". A blue arrow points to a context menu that has appeared over the "Needs Review" column header. The menu title is "Move all to another status" and includes three options: "On Hold", "Needs Review" (which is highlighted in orange), and "Approved".

We'll revisit the "Workflow" tab when we discuss comments in the next chapter, where we'll learn how to create actionable tasks and assign them to certain team members.



Activity

If you've been away for a few days and you want to see what you've missed, the "Activity" tab is where to look. You'll see what's happened in your absence in a timeline-type interface, with a brief overview of how much time each team member has spent looking at the prototype, how many comments they've left, and so on. If you're a project manager, this is an ideal way to see who is being an active collaborator!

The screenshot shows the InVision interface with the 'ACTIVITY' tab highlighted in red and selected. The top navigation bar includes tabs for 'SCREENS', 'WORKFLOW', 'ACTIVITY', 'COMMENTS', 'ASSETS', and '...'. Below the navigation bar, there is a 'Prototype View History' chart and a timeline section titled 'YESTERDAY' showing activity from 9:38 am. A specific update by 'Daniel Schwarz' is highlighted, stating 'Daniel Schwarz updated 15 screens' with three preview cards.

If you're curious to monitor activity across *all projects* that belong to your team, click "Activity" in the top navigation.

The screenshot shows the Relate App interface with the 'ACTIVITY' tab highlighted in red and selected. The top navigation bar includes tabs for 'Projects', 'Activity', 'People', and 'Learn'. Below the navigation bar, there is a 'Prototype View History' chart and a timeline section titled 'YESTERDAY' showing activity from 9:38 am. A specific update by 'Daniel Schwarz' is highlighted, stating 'Daniel Schwarz updated 15 screens' with three preview cards.



Comments

In the next chapter we'll discover how comments are involved with nearly every action we take as a collaborator, but for now, simply switch to the "Comments" tab where you'll see a complete overview of all the comments made on the prototype.

The screenshot shows the InVision interface with the 'Relate App' project open. The top navigation bar includes 'Projects', 'Activity', 'People', 'Learn', and user profile 'Daniel Schwarz'. Below the navigation is a toolbar with icons for video, lightning bolt, share, and a plus sign. The main content area has tabs for 'SCREENS', 'WORKFLOW', 'ACTIVITY', 'COMMENTS' (which is highlighted with a red underline and has a blue arrow pointing to it), and 'ASSETS'. A search bar and a 'LOAD RESOLVED CONVERSATIONS' button are also present. The 'COMMENTS' section displays three messages from user 'Daniel': 1. 'I don't think it's 100% clear what this icon means.' (Today). 2. 'I'm not sure how I feel about this overlapping, can we reduce this to 3 links at a time?' (Today). 3. 'Can we add another link for "Settings"?' (Today). Each comment includes a small thumbnail of the prototype screen and a reply icon.

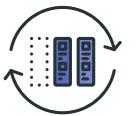


Not all comments in this overview will apply to you. As you'll soon see, your teammates can tag you in comments when they seek your attention on a specific matter, and when that happens you'll receive a notification in the upper-right corner.

The screenshot shows the InVision interface with the 'Relate App' tab selected. The top navigation bar includes 'PROJECTS', 'ACTIVITY', 'PEOPLE', and 'LEARN'. On the far right, there's a user profile for 'Daniel Schwarz' with a dropdown arrow. Below the navigation, there are tabs for 'SCREENS', 'WORKFLOW', 'ACTIVITY', 'COMMENTS' (which is underlined in red), and 'ASSETS'. A blue arrow points from the text above to the notification bell icon in the top right corner of the header. The main content area displays a comment from 'Daniel' with the text: 'I don't think it's 100% clear what this icon means.' There is also a 'LOAD RESOLVED CONVERSATIONS' button.

If you don't have any notifications that require your attention, you could browse through the comment overview and respond to your teammate's requests for help (even if you weren't originally tagged in the comment). By default, the comment overview will display all unresolved matters, so if you have the time, it's nice to dive in here and be helpful.

Should you decide to take action on a comment, you won't need to locate it in the screen where the comment was made. You can directly access the comment from here to reply to it, view any accompanying sketches associated with it, "resolve" it, or modify it if the comment was made by you.



Assets

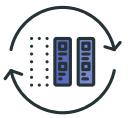
Before we wrap up this chapter, let's take a look at the final tab—the “Assets” tab. Remember when we made certain objects exportable in Sketch? Well, this is where those objects are exported to—this is where developers find the assets.

If you click-through into the */Images* folder, you'll find the image assets we exported earlier. You'll notice the images have taken the name of the original object from Sketch, so if the exportable object was called “Logout,” the asset exported to InVision would be called “Logout.png.”

From here you can download the assets, delete them, see older versions of the assets, and share them too.

The screenshot shows the InVision interface with the "ASSETS" tab selected. The list of files includes:

NAME	KIND	MODIFIED
Logout.png	png	880 bytes
More.png	png	Yesterday at 9:37am
Rotate.png	png	Yesterday at 9:37am
Adjust.png	png	Yesterday at 9:37am



If you travel back to the root folder (where we started off after clicking on the “Assets” tab), you’ll notice two other folders (*Source Files* and *Fonts*). You can actually create as many folders as necessary (to neatly organize your assets) by clicking on the “Create a new folder” button, and manually drop files into them by clicking the “Create a new file” button.

Source Files (in our case) would be the .sketch file we’ve been working from, and *Fonts* would be the font files used in the .sketch file. If developers are to implement the fonts you’ve chosen, they’ll need to download these fonts from here.

The screenshot shows the Sketch application interface. At the top, there are tabs for Projects, Activity, People, and Learn. On the right side, there are icons for notifications, heart, and Daniel Schwarz. Below the tabs, there's a search bar with 'in' and '+ Relate App'. Underneath, there are buttons for SCREENS, WORKFLOW, ACTIVITY, COMMENTS, ASSETS (which is highlighted in red), and three dots. The main area displays a list of assets:

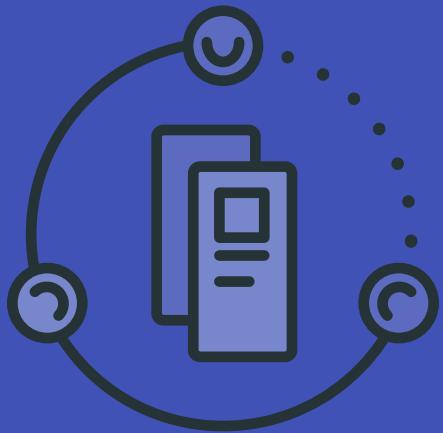
NAME	KIND	MODIFIED
Source Files	Folder	Yesterday at 7:12am
Fonts	Folder	Yesterday at 7:12am
Images	Folder	Yesterday at 7:12am

A blue arrow points to the 'CREATE A NEW FOLDER' button at the top right of the list.

UP NEXT:

Collaborating and handing off designs

In the final chapter of this book we'll learn about building hotspots, configuring prototypes, and more about commenting; we'll also discover the InVision feature Inspect, which lets developers analyze your design on a layer-to-layer basis so they can implement your design right down to the very last detail.



CHAPTER 7

Collaborating and handing off designs

Now that we've been briefed on InVision and we're somewhat familiar with its interface, let's dig a little deeper and learn how to use it from a variety of different viewpoints; as a collaborator, as a designer, and even as a developer.

Some of the notable features we'll cover in this final chapter are: Inspect Mode (developers use this to implement your design accurately), Prototype Configuration (where you'll be able to choose options like whether or not to disable hotspots hints when previewing prototypes), and Comment Mode (the foundation of all collaborative efforts).



CHAPTER 7:

Configuring prototypes

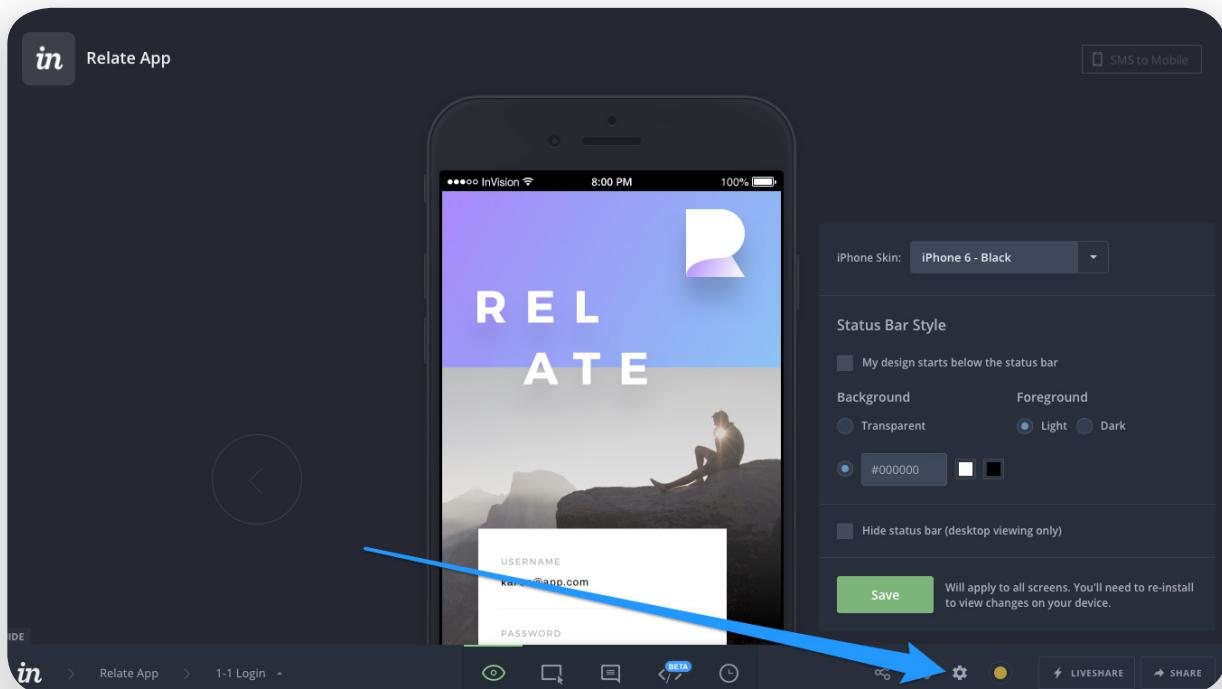
Let's configure our prototype first—this is the first action you'll want to take after syncing your screens to InVision.

From the "Screens" tab, click on the very first screen in your design.

A screenshot of the InVision interface. At the top, there are tabs for 'Projects', 'Activity', 'People', and 'Learn'. On the right, there are icons for notifications, heart, and profile, with the name 'Daniel Schwarz'. Below this is a header bar with a 'in' logo, a '+' button, the project name 'Relate App', and buttons for 'SHARE', 'd', and '+'. The main navigation bar has tabs for 'SCREENS' (which is highlighted with a red arrow), 'WORKFLOW', 'ACTIVITY', 'COMMENTS', and 'ASSETS'. Below the navigation is a search bar with a magnifying glass icon. The main content area shows four screens of a prototype. The first screen is a purple landing page with a large white 'R' logo and the word 'RELATE' below it. A blue arrow points from the 'SCREENS' tab in the navigation bar down to this first screen. The other three screens are partially visible behind it. The bottom of the interface has a horizontal slider and a set of three small icons.



This is where we'll configure our prototype, comment on it, inspect it, and explore a bunch of other features as well. Start by clicking on the cogwheel icon to access the prototype's configuration settings.

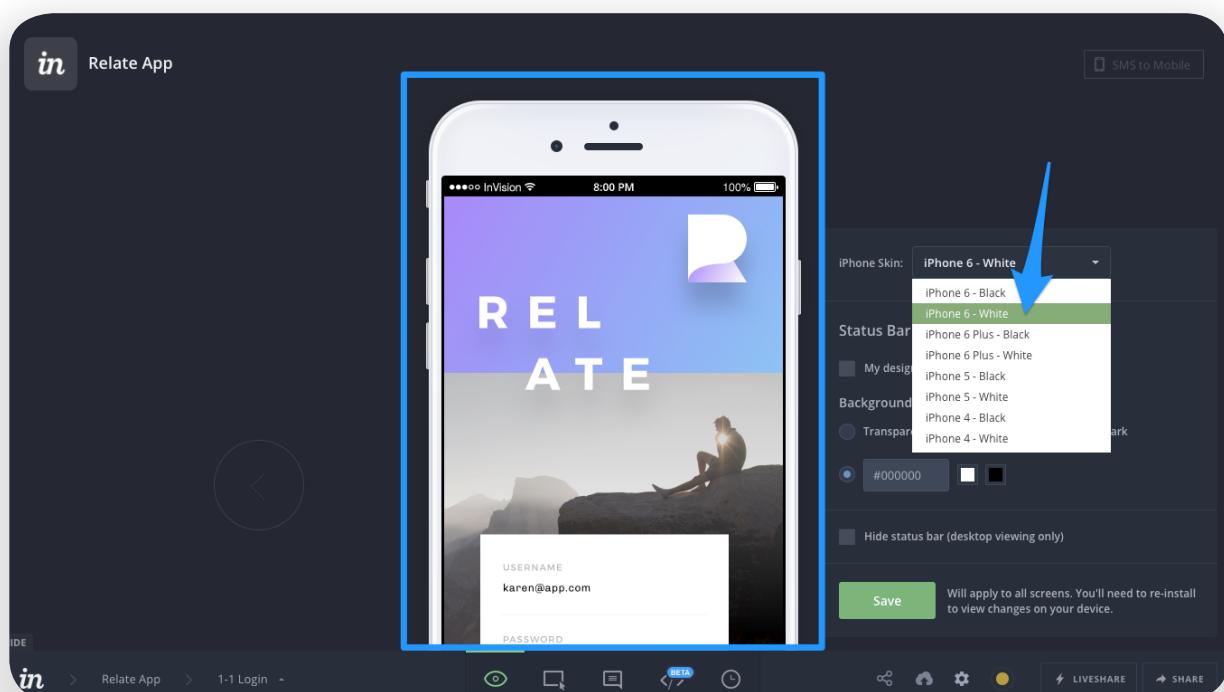


Now let's run through the available settings.



iPhone skin

By default, the *iPhone skin* is set to “iPhone 6 - Black.” InVision already knows that our design is intended for the iPhone 6, but we can still customize the color. Let’s change it to “iPhone 6 - White.”



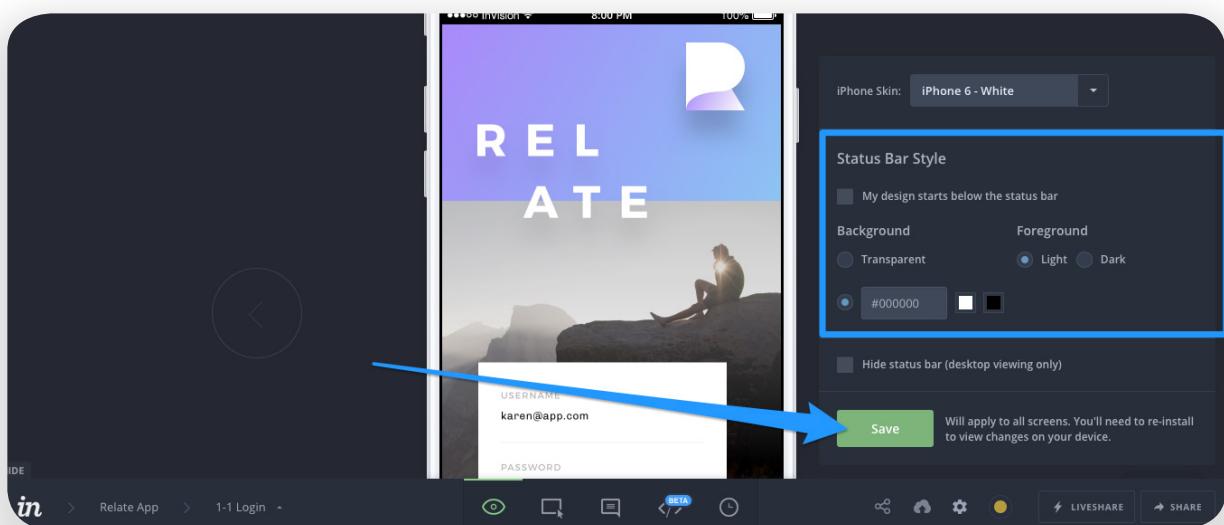


Status bar style

Since our design already accounts for any space taken up by the status bar (you'll notice that each screen design has allocated space for it), we can leave the "My design starts below the status bar" checkbox unchecked. This setting is reserved for designs that don't take the status bar into account, and would like the design to appear underneath the status bar instead.

Any settings that follow relate to the status bar's color—should it be black, white, or transparent? A custom color such as red? What about the text color? It's totally up to you, but I think a light foreground with black text works best with our design (remember, these settings will apply to every screen).

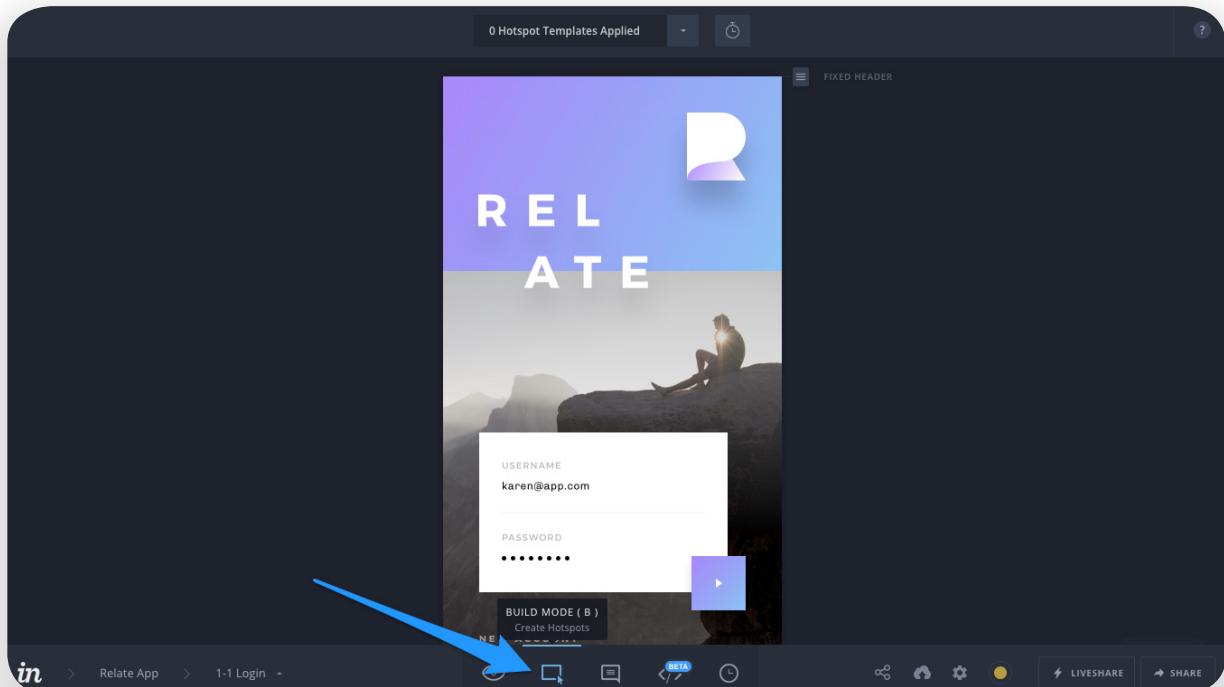
Click "Save" when you're done to finish the configuration.





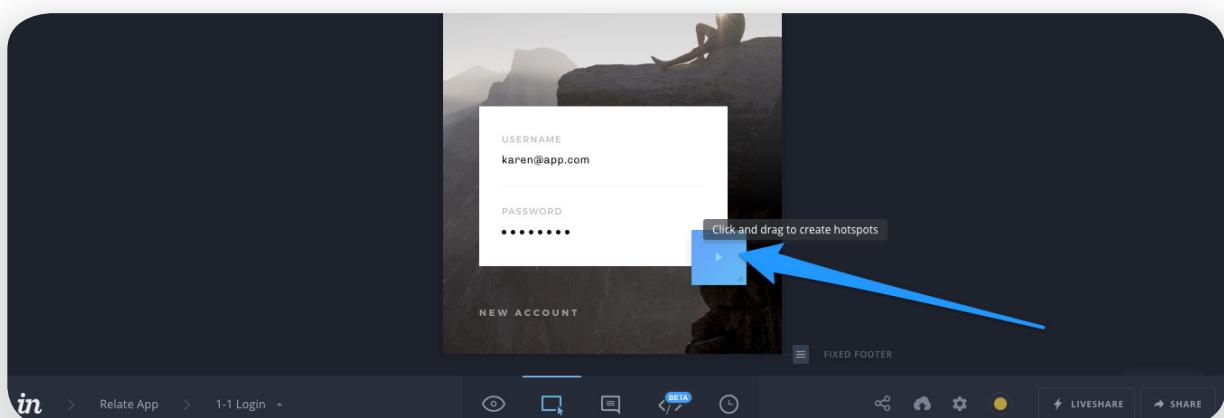
Building hotspots

Let's now link our screens together to make our prototype more interactive and dynamic. Press B to enter *Build Mode*.



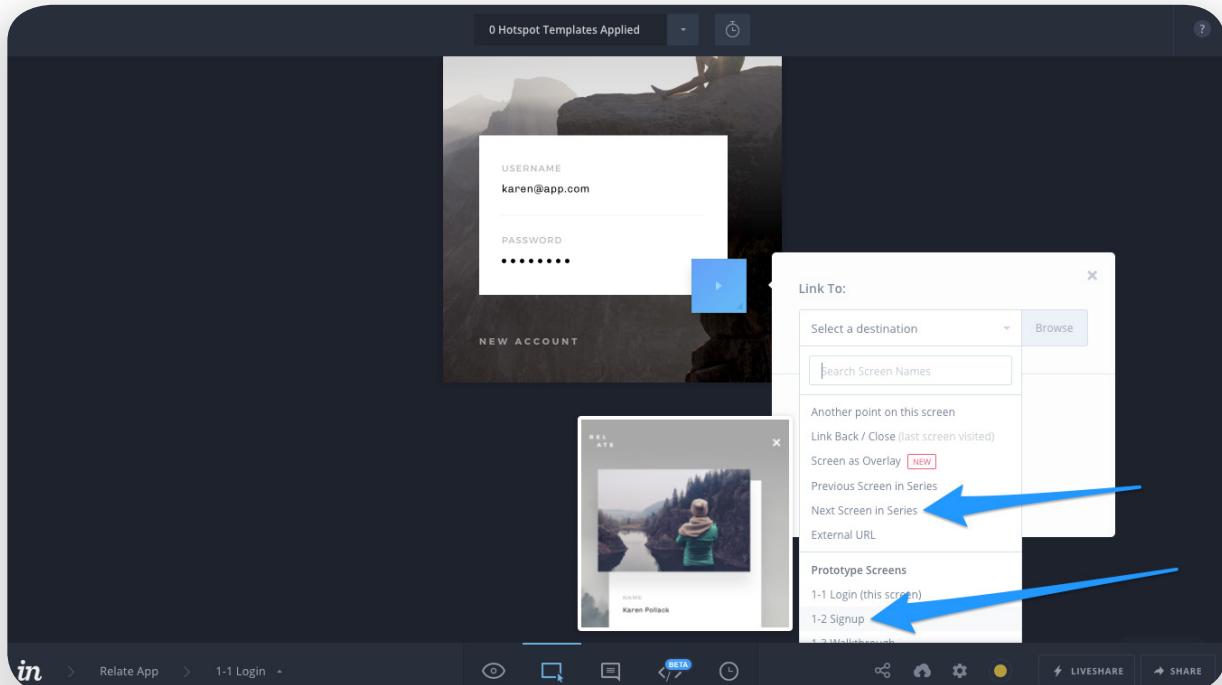
Drawing hotspots

Draw a hotspot/tap target over the submit button with the mouse.





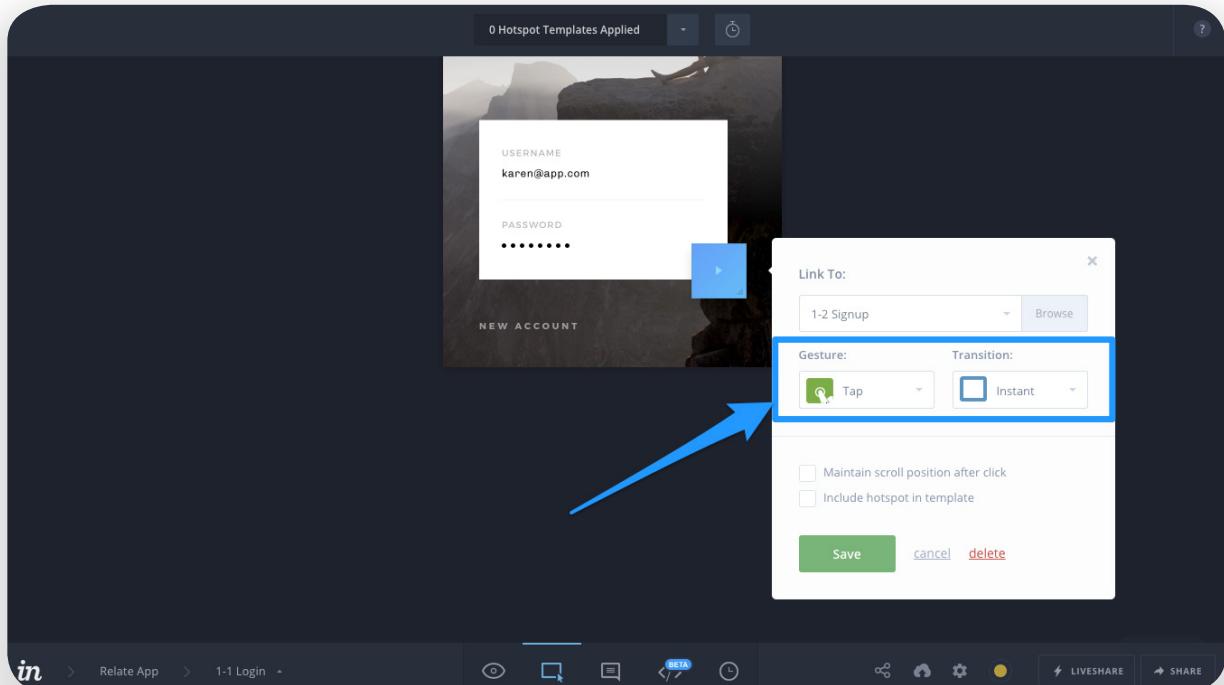
Now under the list of *Prototype Screens*, choose the “1-2 Signup” screen, or select the “Next Screen in Series” option.



InVision gives us some very useful options here; the option to link back to the previous screen, show the next screen as a modal overlay, and so on. Choosing how one screen links to the next is extremely straightforward. You'll have the option of deciding on the “Gesture” (how the user interacts with the hotspot – i.e. by tapping, swiping, etc) and “Transition” (how the screen animates as it flows into the next screen).



Click “Save” to save your hotspot settings—the default *Gesture* and *Transition* settings are more than fine.



Before clicking “Save,” you may have noticed two unfamiliar settings—“Maintain scroll...” and “Include hotspot in template.”

Let’s see what they do.



Prototyping hover states

The “Maintain scroll...” setting is used for prototyping interactions that occur on the same screen, such as a hover state. Let’s say you want to show off a button transition on-hover, mid-way down the screen.

Technically you would design the hover state in a new Artboard, but you would use the “Maintain scroll...” setting to ensure that the interaction doesn’t cause the screen to scroll up.

Creating hotspot templates

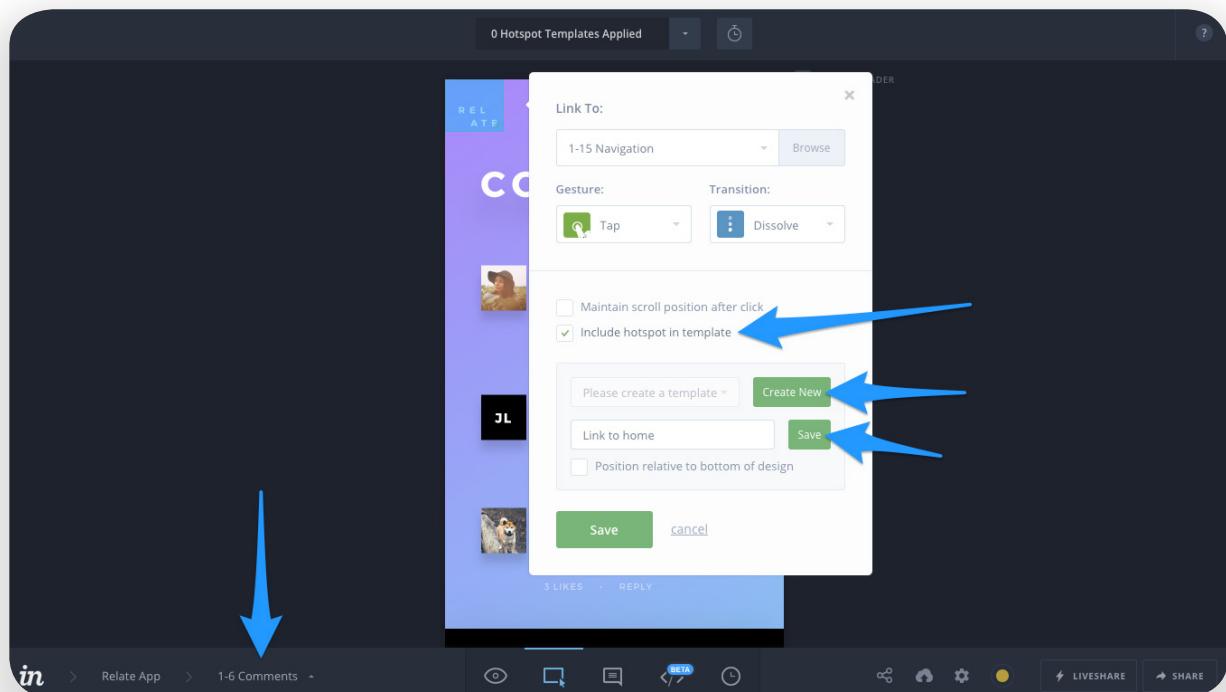
“Include hotspot in template” lets you add the hotspot to a template, or create a new template from scratch if one doesn’t already exist. Imagine a navigational component that exists on every (or at least, nearly every) screen—to save you from the hassle of having to create the same hotspots on every screen, you would simply apply the template, which is much quicker.

Let’s try it.



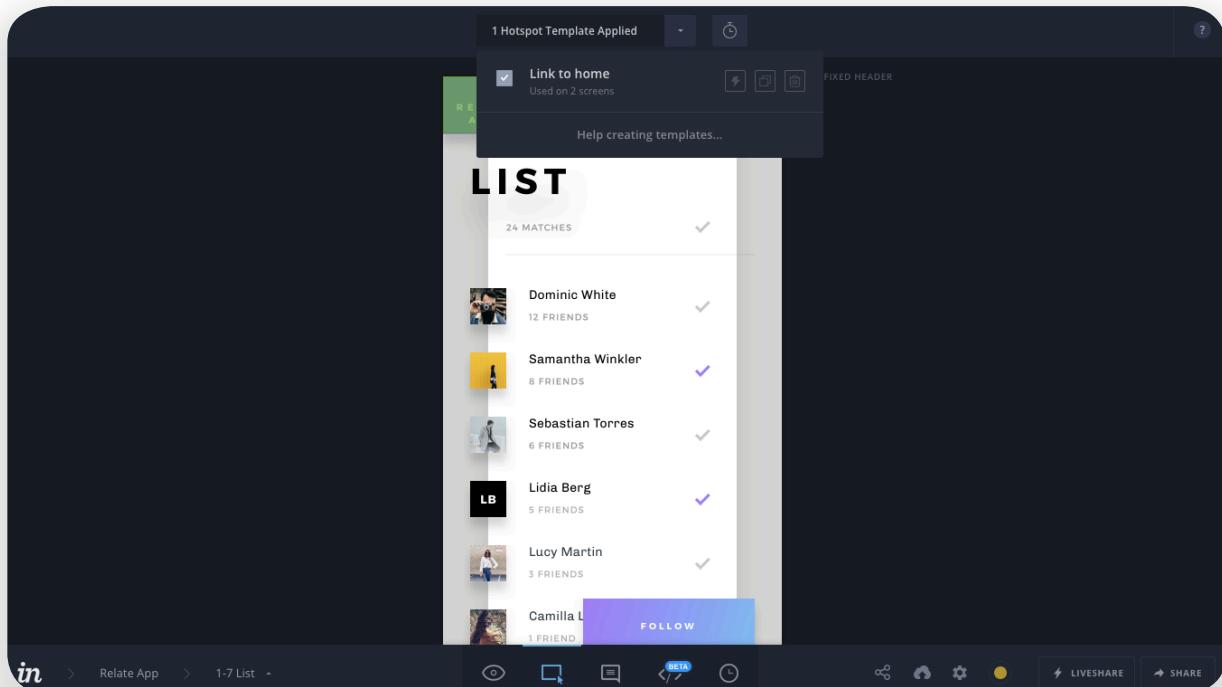
Switch to a screen that uses the “REL-ATE” logo (you can do this using the breadcrumbs in the bottom-left corner of the window), then draw a hotspot around the logo. Check the “Include hotspot in template” checkbox, click “Create new,” and then give this template a name. By default, templates are relative to the top-left corner of the screen, but if your hotspot was linked from a fixed footer component, you should check the “Position relative to bottom of design” checkbox.

Screens can have a mixture of template-driven hotspots, and hotspots that are unique to only that screen.





Press the right arrow key to move onto the next screen, and then using the template select box (which should say “0 Hotspot Templates Applies” right now), select the template we created.



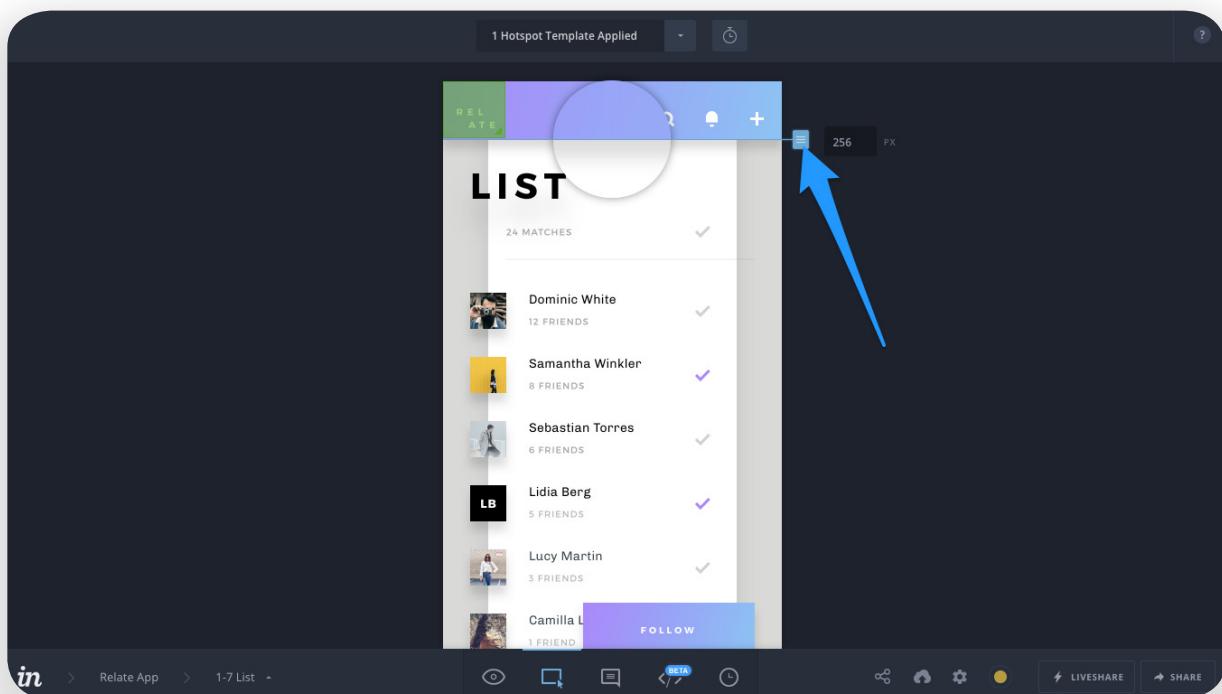
Our template has now been applied and the hotspot around the “REL-ATE” logo has therefore been created automatically.



Fixed headers and footers

Fixed components are components that remain fixed to the top (for headers) or bottom (for footers) of the screen.

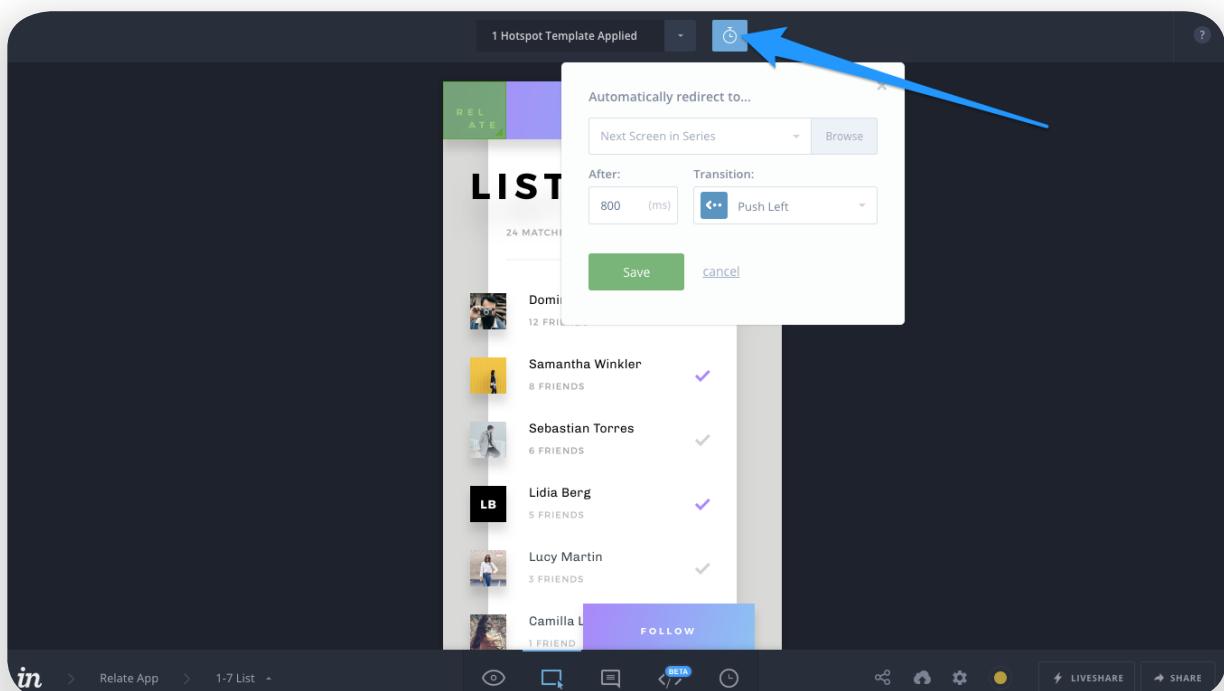
Next to each screen (at the top-right for headers, and at the bottom-right for footers), you'll see a button that you can slide to adjust a *px* value. This value marks the boundaries of the area that is to define the fixed header or footer, so in the case of our app's fixed header component, which is 256px, you would slide to that value (or if you're finding it tricky, you can manually insert the value into the input field).





Redirects

Lastly, there is a timed redirect feature. Most of the timed redirect settings, such as the destination screen and transition effect, are the same as hotspots settings; however, the setting that differs is of course the *After* setting—this is the amount of time in milliseconds that the screen will wait before redirecting.



In order to really understand the additional features InVision offers, I recommend running through each screen and recreating the tap targets/hotspots. You could also turn the fixed header into a template and apply it to relevant screens.

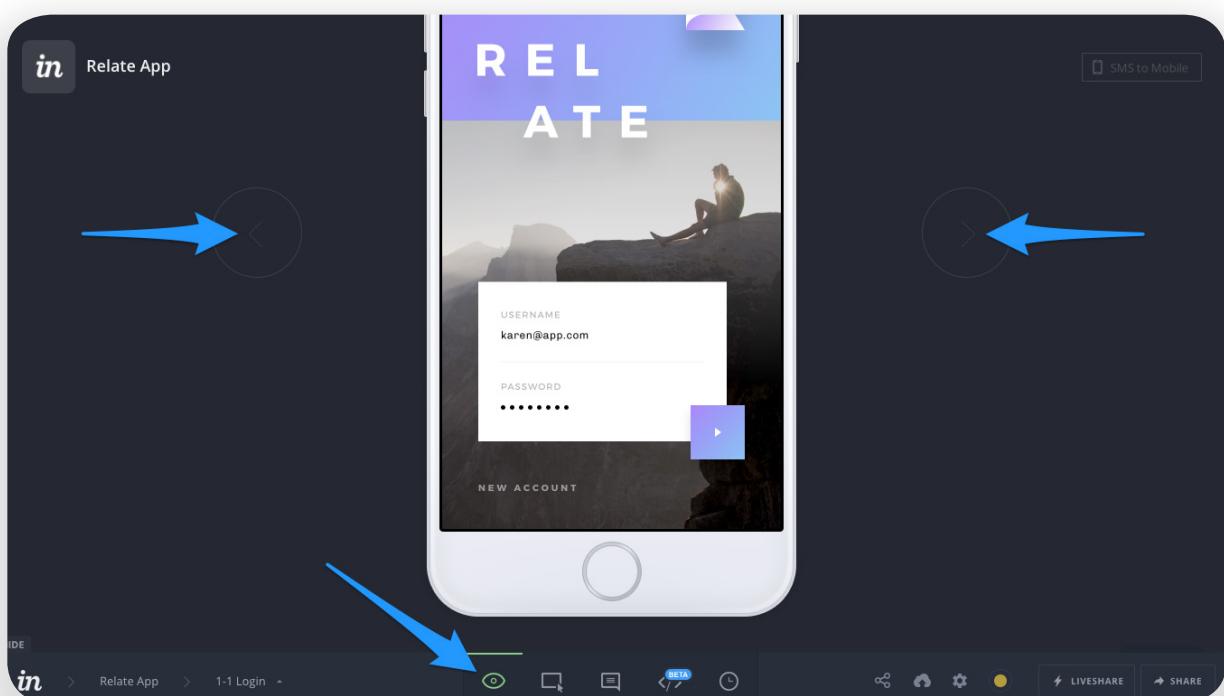


Previewing prototypes

Now it's time to test the prototype.

Press P to enter *Preview Mode*, where you'll be able to click your way through the prototype to confirm that the screens link up correctly. It's also a quick and easy way for you (or your teammates) to revisit the prototype anytime you/they want, without having to fire up the InVision iOS app every time.

You can also navigate the prototype by using the left and right navigation buttons, or by using the ← and → arrow keys.

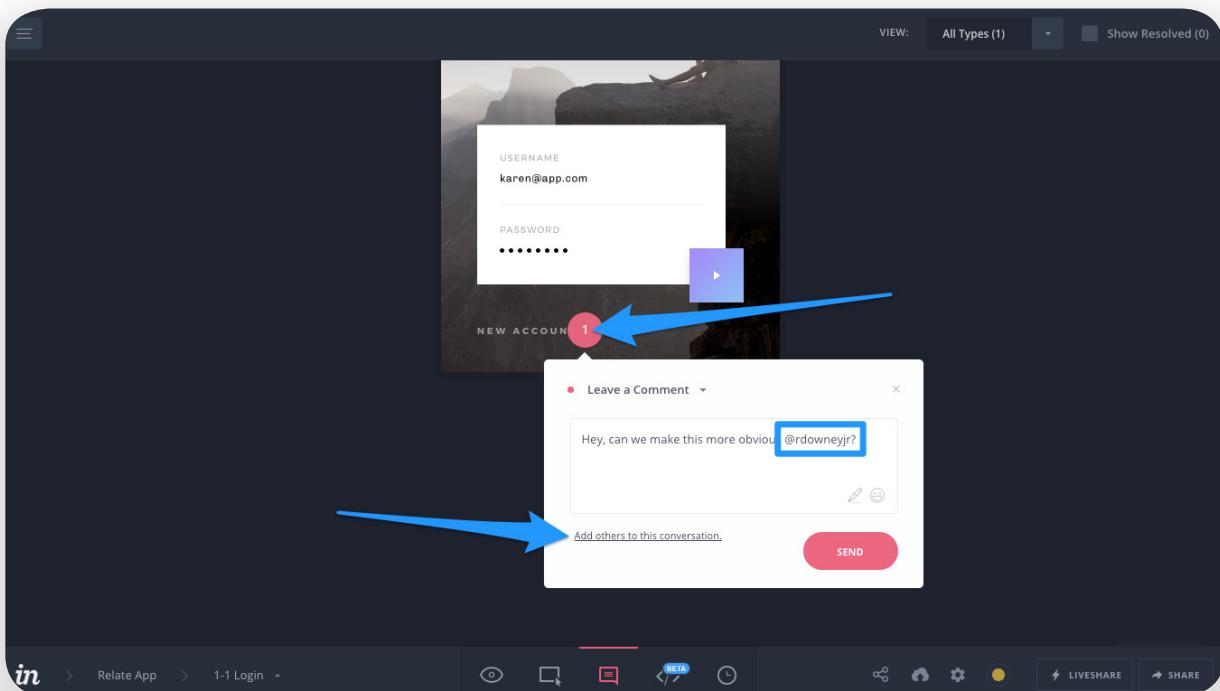


If everything seems fine, let's learn more about commenting!



Commenting on screens

Press C to enter *Comment Mode*, then click on the screen where you want your comment to appear. Type your comment, tagging any teammates using the @ symbol where necessary (or click on the “Add others to the conversation” link). If you skipped over the step where we invited our collaborators, don’t worry—you can create a fake comment for now!

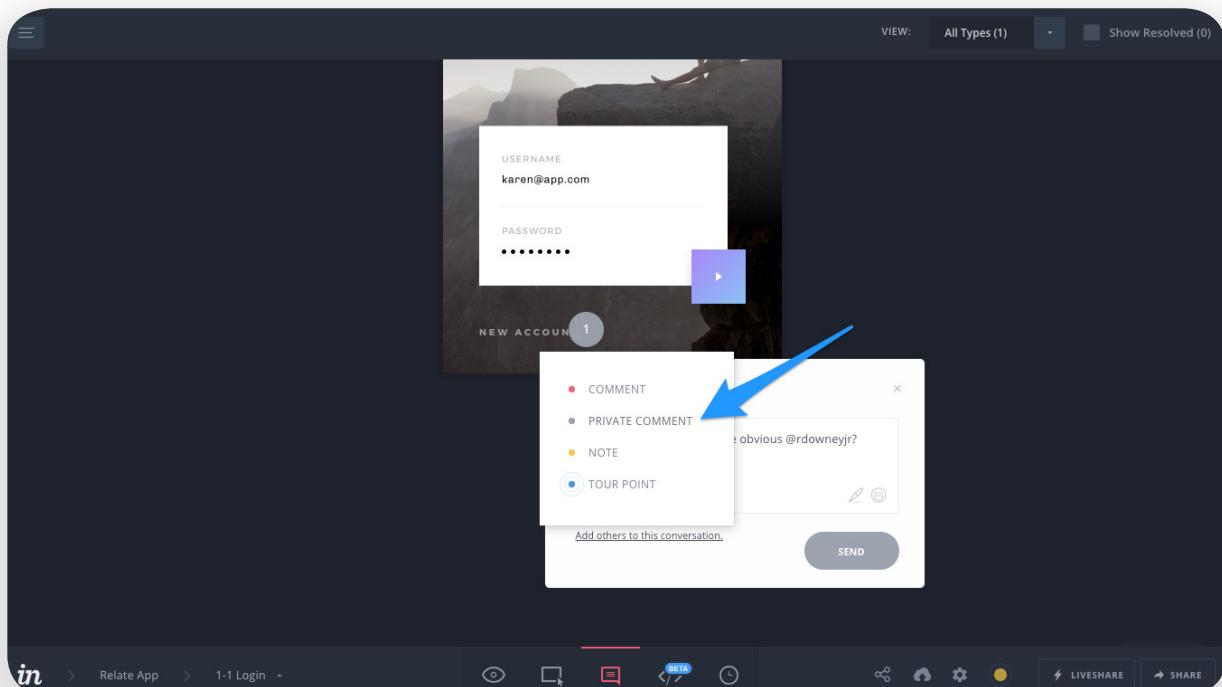




Comment types

If you want this comment to be seen by your team only (i.e. not clients, only collaborators), choose “Private Comment” from the select box. Other options also include “Tour Point” and “Note.” The difference between these is that a comment warrants a reply, whereas a note doesn’t, and a tour is like a note but is aimed at clients as a way to showcase specific areas of your design.

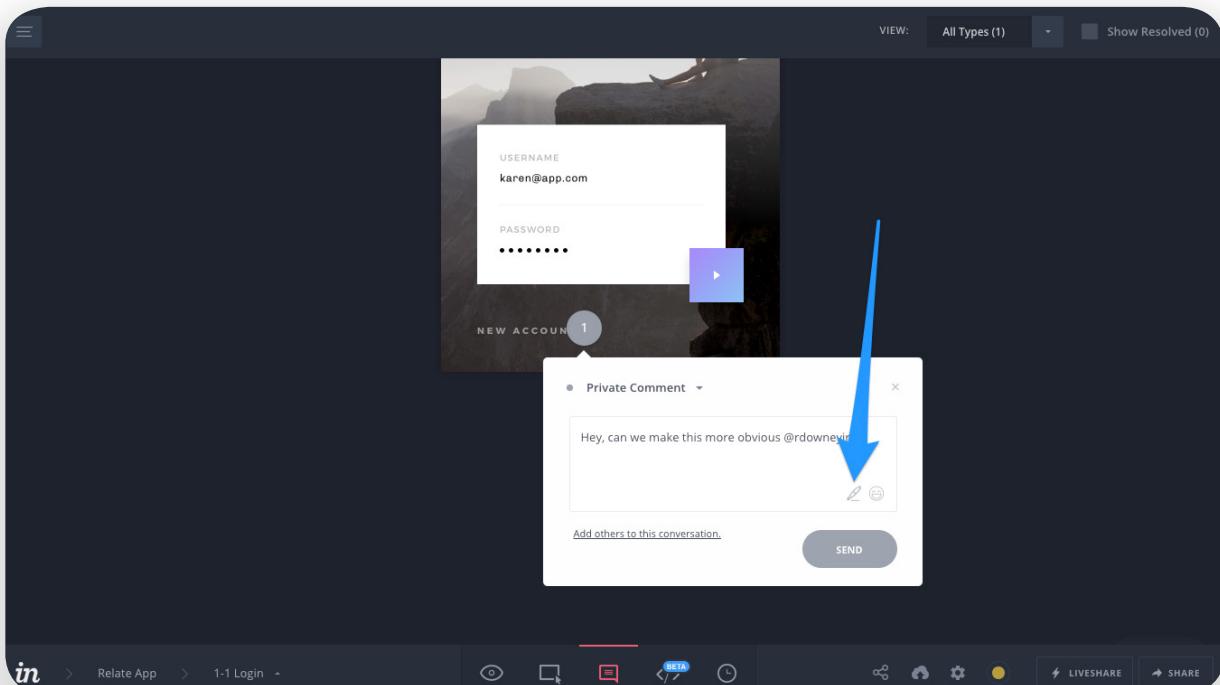
An ordinary comment is fine for now.





Comment sketches

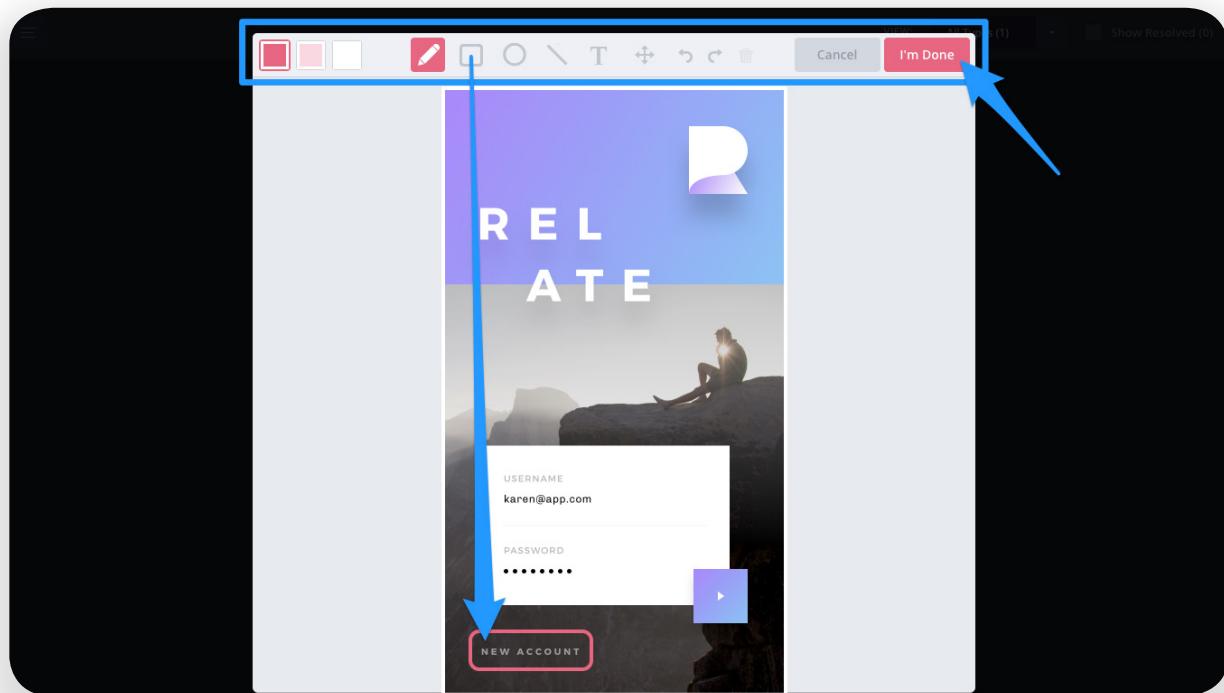
If you don't feel like you're explaining yourself all that well, click the brush icon to add a sketch to your comment.



Here you'll be able to draw or use shapes and text to express yourself better (this is very similar to the Freehand feature in Craft). Don't worry, the sketch will only appear when the user clicks on the attachment in the conversation; it won't automatically appear on the screen itself.



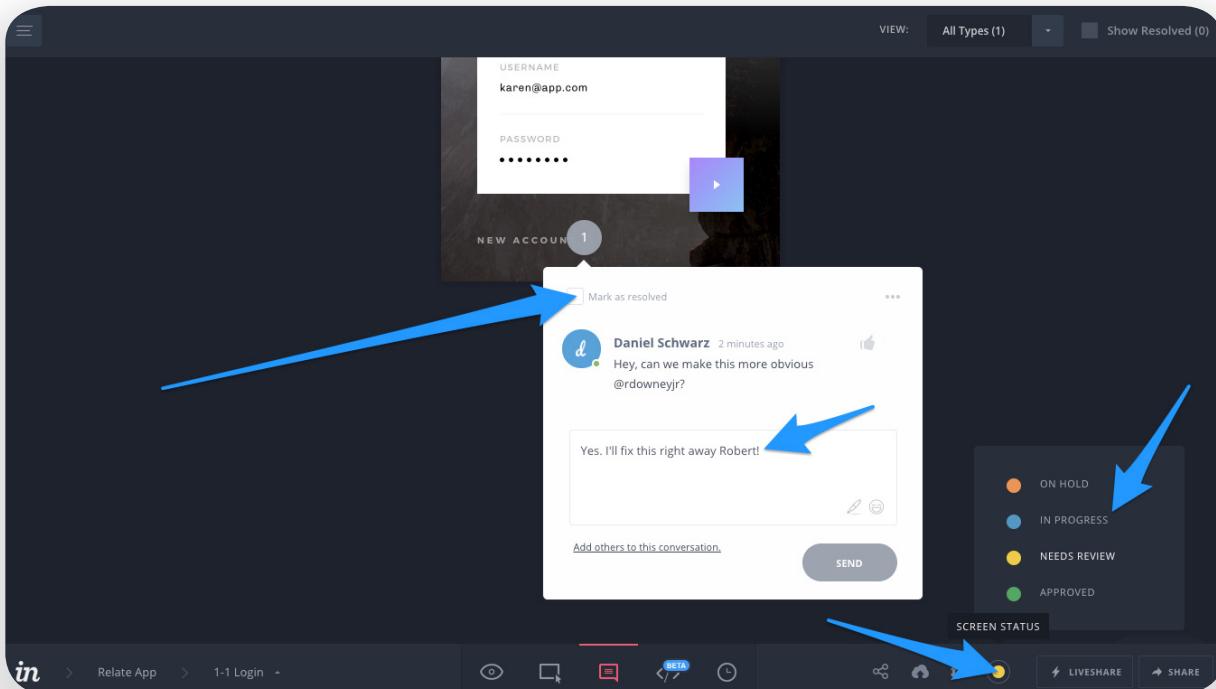
Click "I'm done" to attach the sketch to the comment.





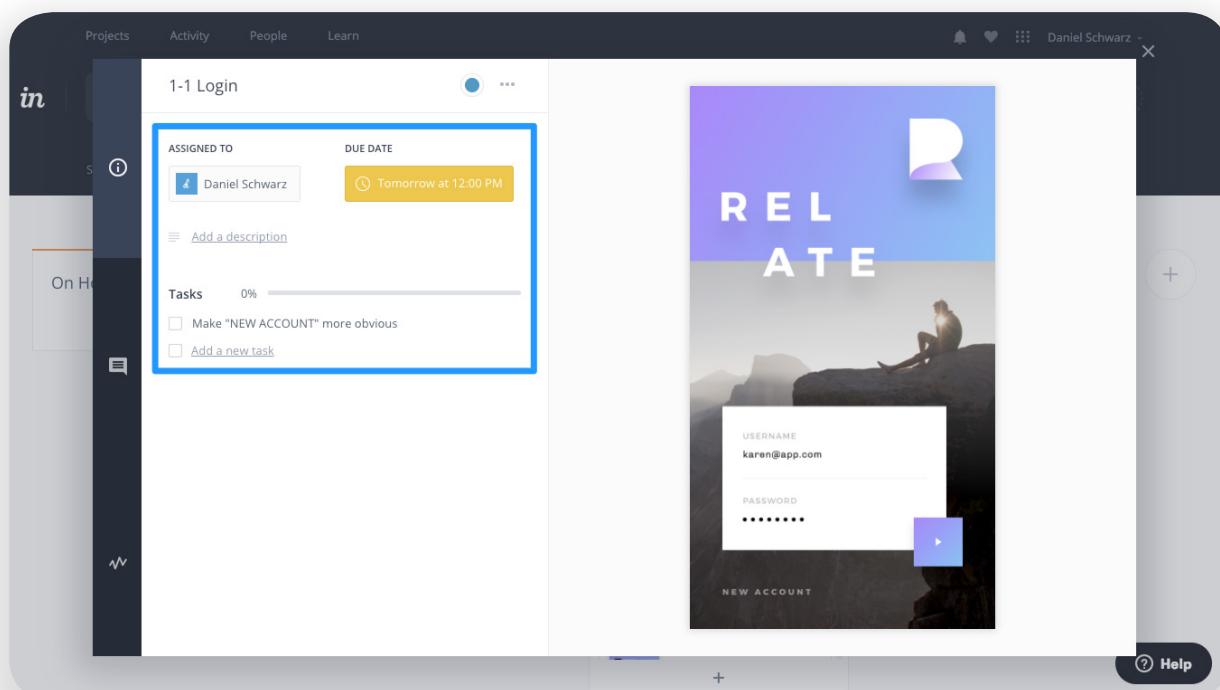
Resolving comments

So, a comment has been made, another collaborator has contributed to the conversation with their reply, and it's been decided that a change to the design is needed—this is where we move the comment back to the *In Progress* column by clicking on the screen status icon in the bottom toolbar, and resolving the comment by checking the “Mark as resolved” checkbox. The resolution is that a change to the design is needed.



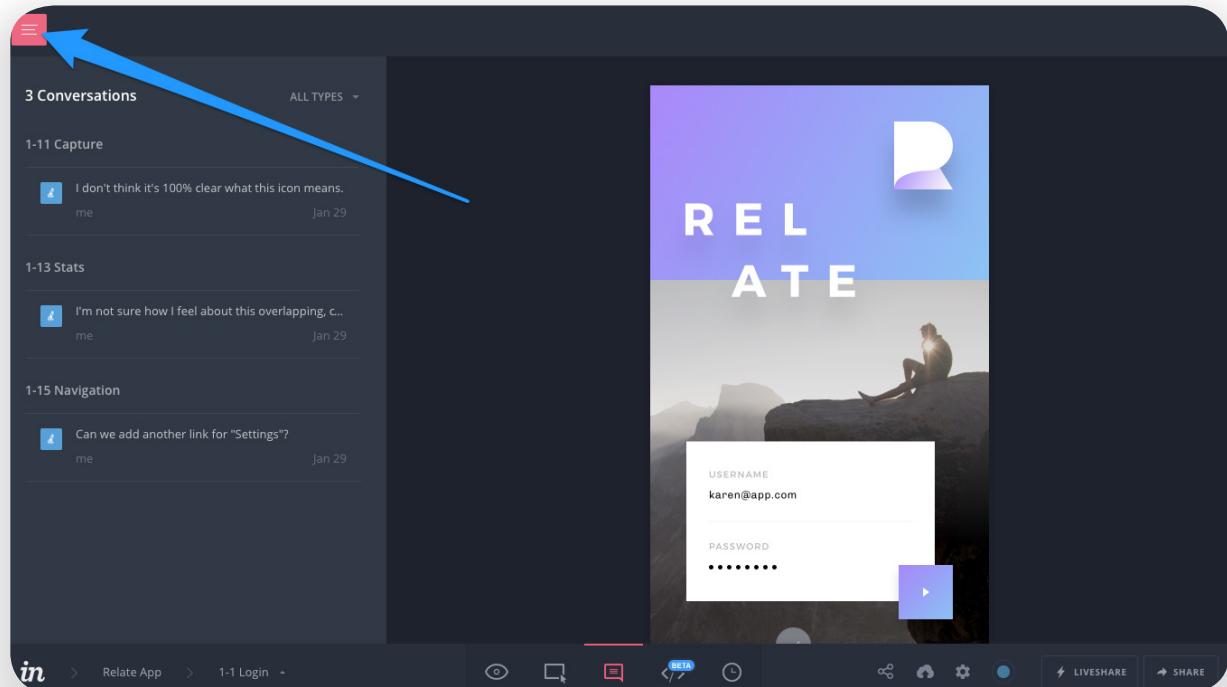


Switch back to the “Workflow” tab and click on the screen in question; this is where the original commenter (probably a project manager or client) would click the “Add a new task” link, assign a designer to this task, and create a due date for when the task should be completed. This is how we turn collaboration and communication into actionable tasks; this is how commenting becomes *productive* and creates results.





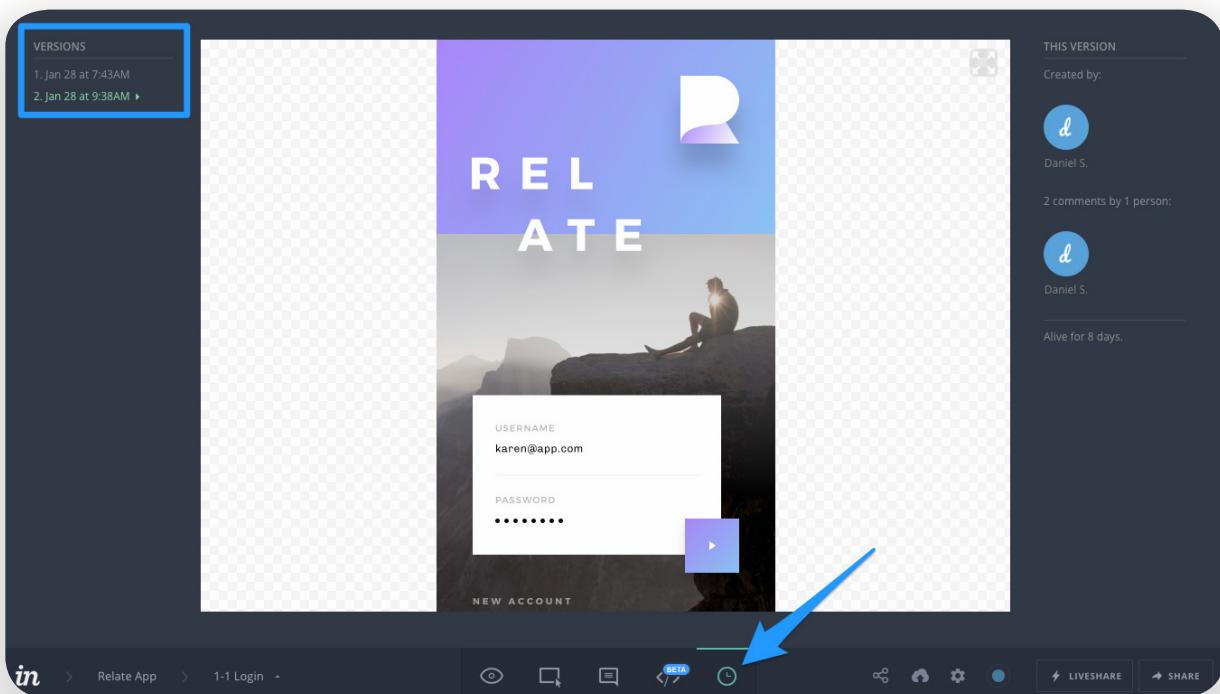
In *Comment Mode*, click the hamburger menu to see a brief overview of all the unresolved comments in the prototype.





Viewing previous versions

Press H to enter *History Mode*. Here you'll see an overview of how many times the prototype has synced between Sketch and InVision, and you'll also be able to browse those versions and see how many comments were made on it. If you feel like your newer versions aren't necessarily *better*, you'll be able to backtrack through the previous ones and see what went wrong.





Inspecting designs

Inspect shows developers a summarized view of the design and its exportable image assets, so the design can be analyzed and implemented with ease.

Developers can select layers directly (or use the layer list on the left-hand side) and read the styles for those layers using the Inspect tool (on the right-hand side). Sketch users will think, “Hey, this is like Sketch” (and it kind of is), however it only contains a limited subset of tools (such as the eyedropper and zoom tools). Inspect offers developers the same amount of insight into a design as a designer will have, but without all of the design tools that are unnecessary to a developer.

As usual, if you’d rather learn about Inspect by watching a video, flick back to the [Switch to Sketch](#) video course and select video 8.

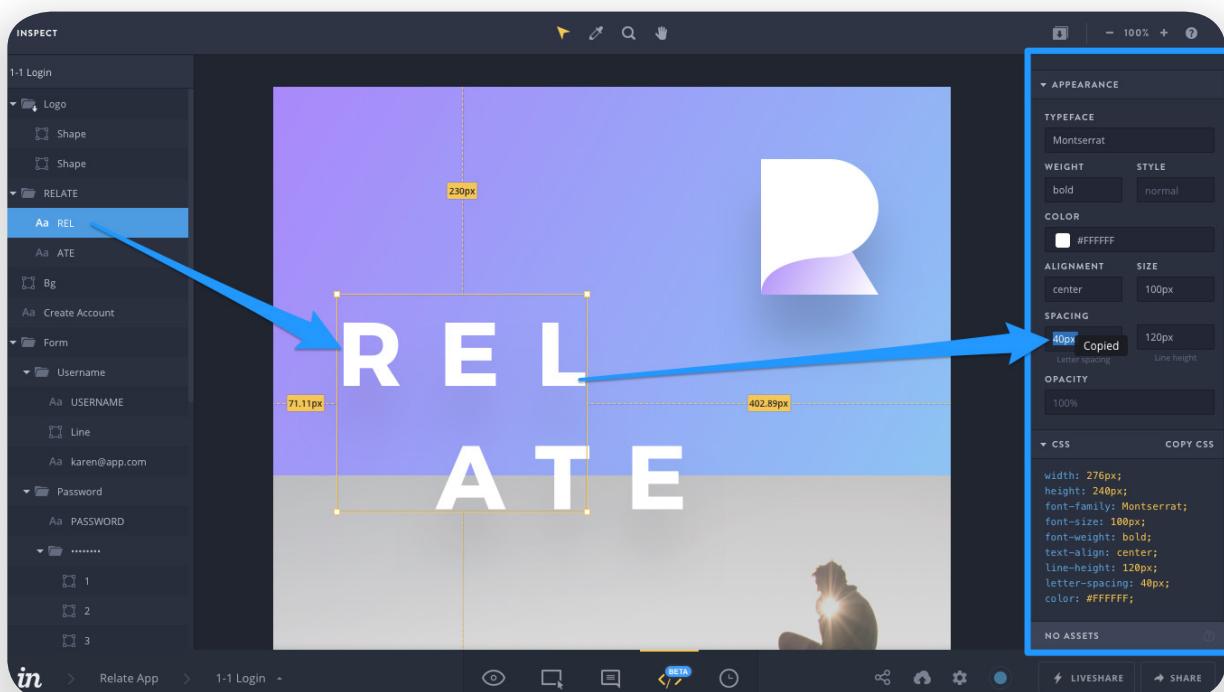
If not, tap I to enter *Inspect Mode* and we’ll begin.



Extracting styles

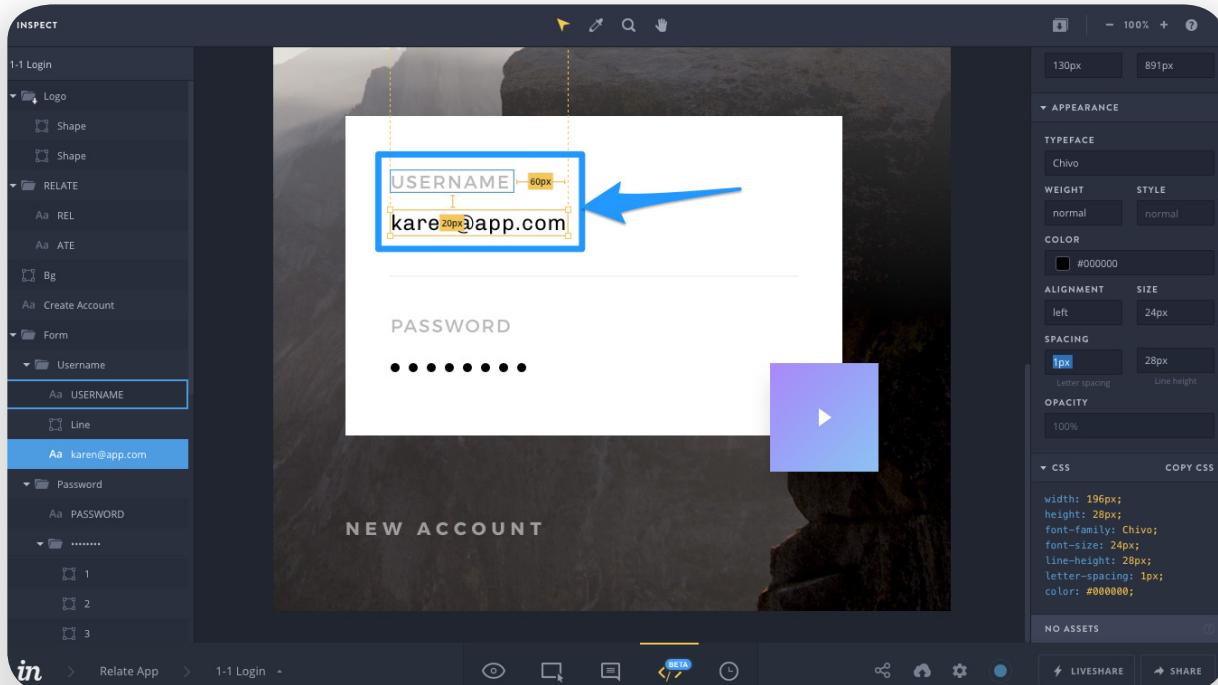
Inspect makes it easy for developers to extract styles from the design.

Select a text layer. You'll be able to extract the text value, typeface name, font weight, and more, simply by clicking on the property or value in the inspector. Inspect is essentially a click, copy, and extract tool. You can even copy the styles as CSS code (if you were building a web-app that is).



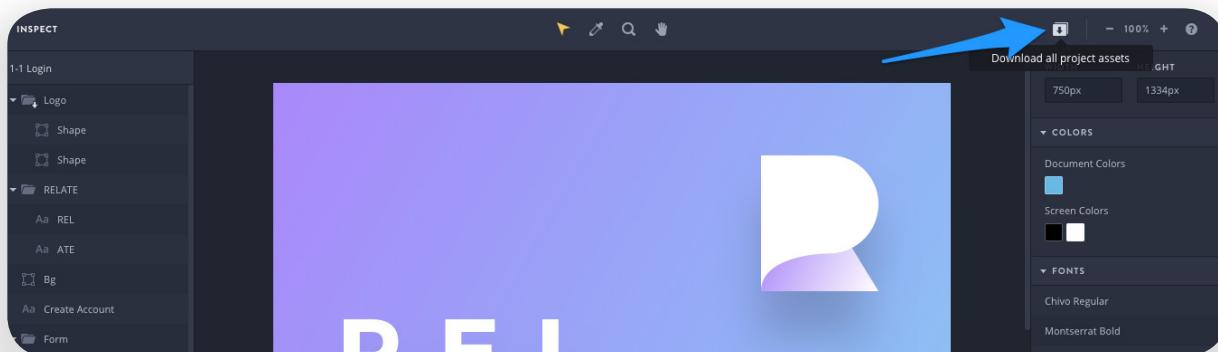


By selecting one layer and hovering over another, developers can see how much space exists between the two layers. As a designer you'll see that this is very similar to Smart Guides in Sketch.



Downloading image assets

Developers can also extract the assets from here too. This is essentially everything from the Assets folder (source files, fonts, images, etc.) we spoke about in the previous chapter.



Further reading

InVision has a few other tools that can improve your workflow in a variety of different ways. Not all of these tools will apply to your workflow, but it's nice to know that they're there when your needs change. Here's a brief overview of them:

- *LiveShare*: real-time collaboration centered around your prototype, with group voice chat and annotation features
- *Whiteboard*: similar to LiveShare, but centered around a whiteboard – ideal for collaborating on ideas
- *LiveCapture*: a Chrome extension for screen-capturing webpages – ideal for site audits and integration with LiveShare meetings
- *Snaps*: a useful storage box for images of all kinds
- *Desktop Sync*: enable syncing via Dropbox, Box, Google Drive, InVision Sync for Mac, or Craft Plugin for Sketch
- *Embeddable Prototypes*: embed your prototype (with device borders) as a HTML <iframe> or via Embedly
- *User Test*: connect to Lookback or UserTesting to allow real users to test your prototype and give feedback
- *Social Share*: send screens to Slack, Dribbble, or Behance

Fin

You've reached the end of this book!

InVision is a massive platform, so don't feel too disappointed if you've forgotten how to use some of the features mentioned in this book. If you haven't checked out the [Switch to Sketch](#) video course, you might find it beneficial to recap some of the things we learned about prototyping with Sketch, using Craft to source data, and syncing designs into InVision so they can be inspected by developers.

If you're feeling pretty confident, and you want to try your hand at using InVision on a real design, you totally should. Learning by doing is the best way of learning!