

# **The human side of a Design System**

**#DesignSystemsLondon**



**Brad Frost**  
@brad\_frost



Design systems are 80-90% people stuff, 10-20% design/dev/tools stuff.

3:13 pm · 16 Aug 2019 · [Twitter Web App](#)

---

**163** Retweets   **720** Likes





**Brad Frost** @brad\_frost · 16 Aug

Design systems are 80-90% people stuff, 10-20% design/dev/tools stuff.

26

163

720



**Alex** @MetalHaze

Replying to @brad\_frost

A design system is a language. If people aren't speaking the same language, there will be nothing but confusion. Choosing a new language is a culture shift. Culture doesn't change unless management buys in. Make sure your design system speaks to both technical and non-technical

3:21 pm · 16 Aug 2019 · [Twitter Web App](#)

6 Retweets 25 Likes

**Hi!**

**I'm Bernardo**

**TravelRepublic**  
**@braposo**



**Robin Rendle**

@robinrendle



2yrs ago: the design system is the documentation

1yr ago: the design system is our code

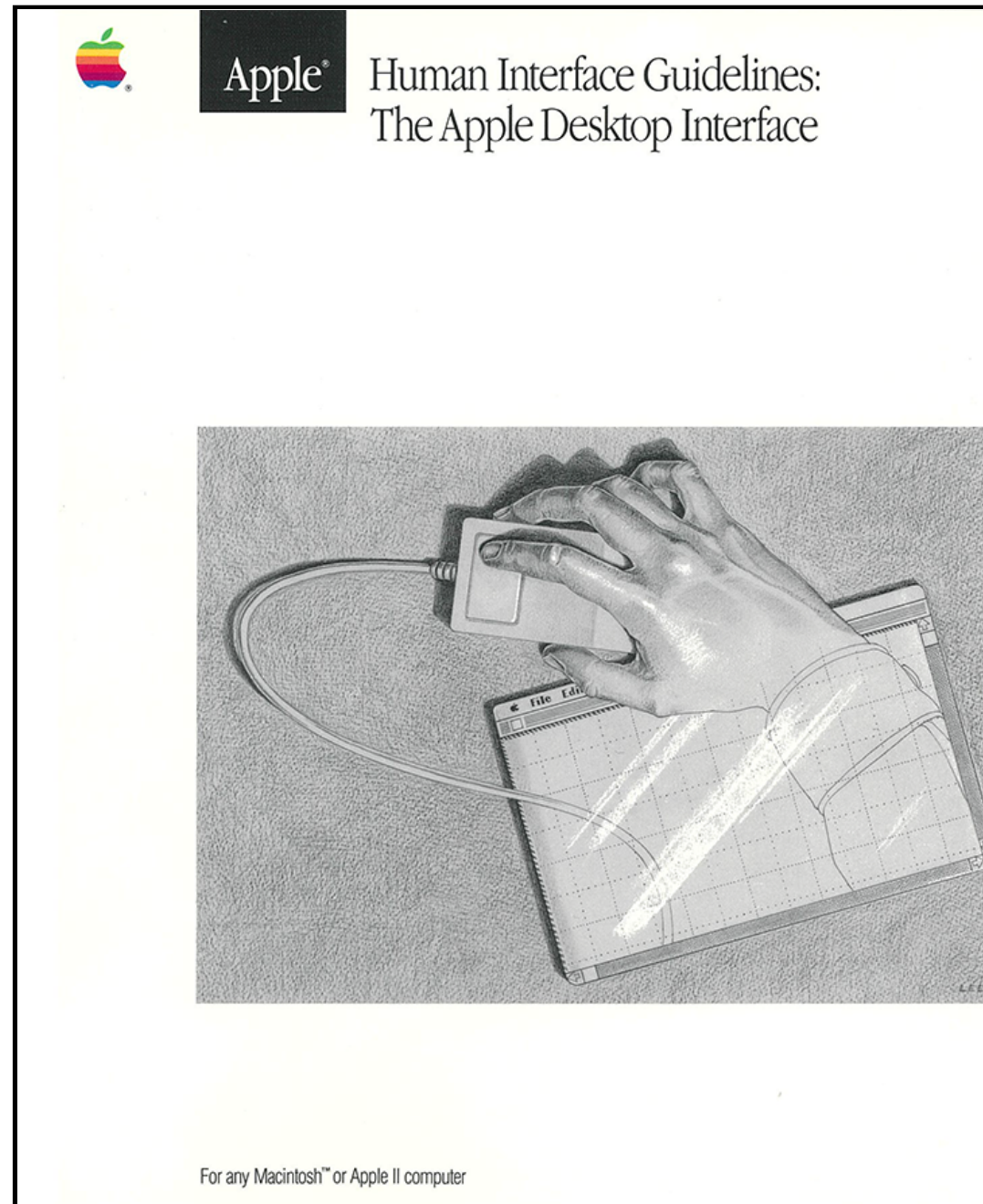
Today: a design system is a mirror of all the relationships  
between designers and managers and engineers

6:30 pm · 19 Mar 2019 · [Tweetbot for Mac](#)

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**38** Retweets   **308** Likes

# Design System is the documentation



**General design principles**

**Principles of graphic communication**

**A strategy for programming**

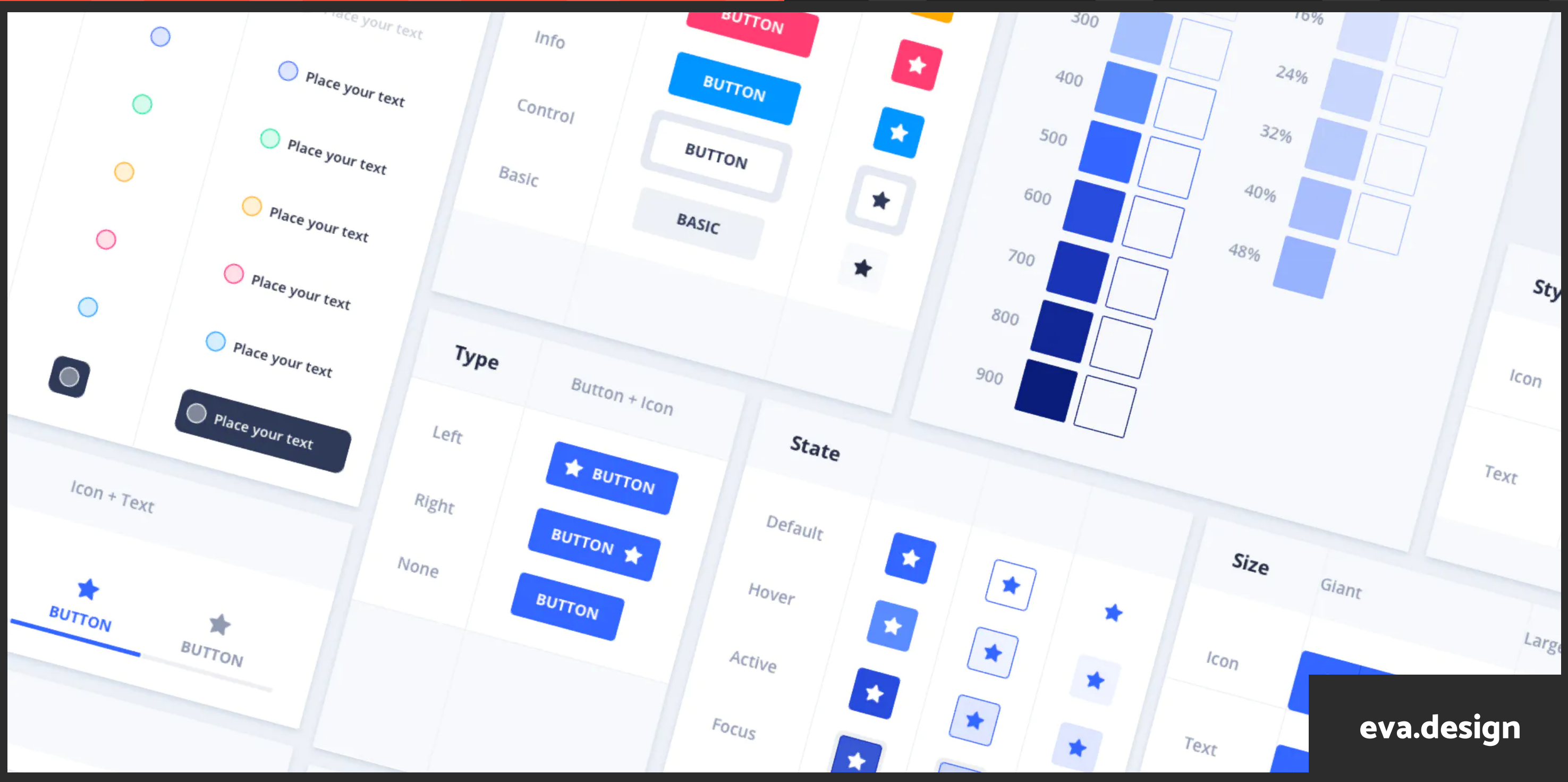
**Designing for disabled people**

**Elements of the Desktop Interface**



[atomicdesign.bradfrost.com](https://atomicdesign.bradfrost.com)





eva.design





**Mark Dalglish**  
@markdalglish



A component library isn't a design system.

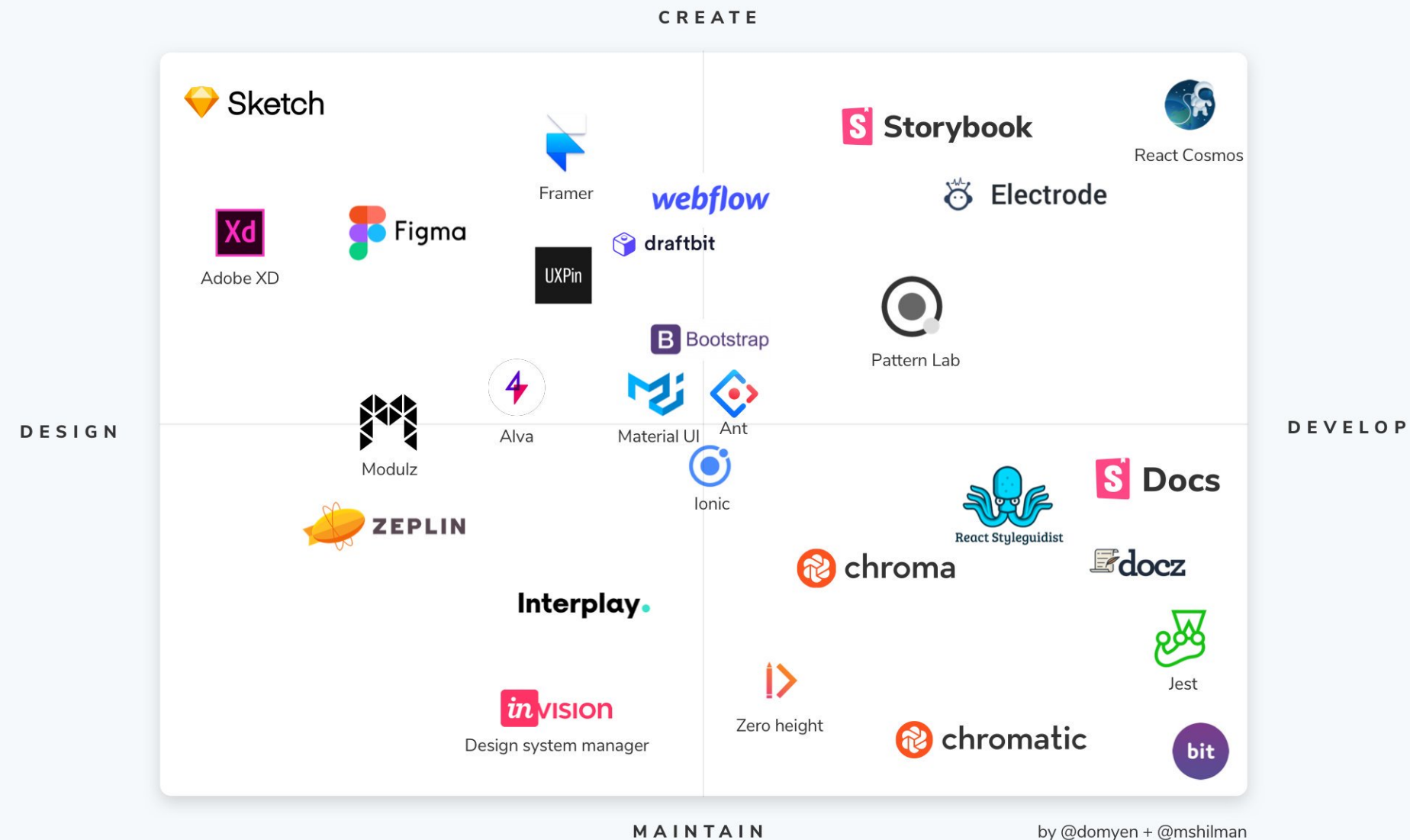
In order to qualify as a design system, it also needs to have a bunch of documentation nobody reads.

1:44 am · 5 Oct 2019 · [Twitter for Android](#)

---

**238** Retweets   **1.8K** Likes

## Component-Driven Development 2019





**Mark Dalglish**  
@markdalglish



The design system's manual is not the design system.

3:07 am · 12 Oct 2019 · [Twitter for Android](#)

---

**2** Retweets   **30** Likes

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**Design System is  
the code**



Smashing Magazine ✓

@smashingmag



Is the latest design system or a style guide that you've recently built and launched, still up-to-date (and usable) today?

Yes, absolutely!

31%

**Outdated but usable!**

**32%**

Outdated and unusable.

11%

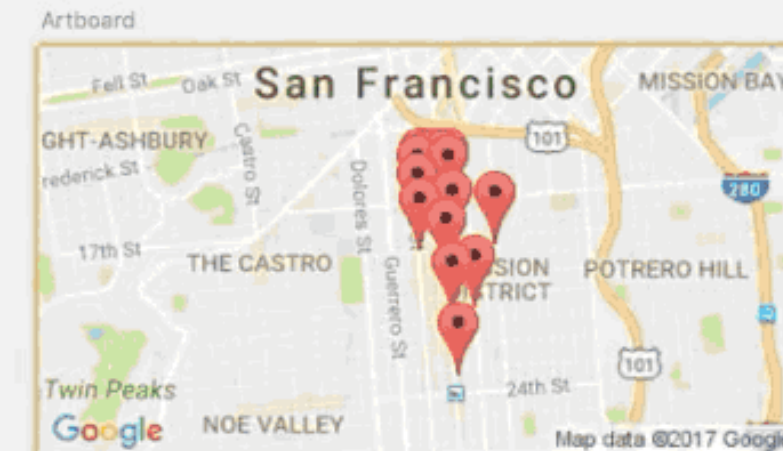
We've given up on it.

25%

220 votes · Final results

# Code in Design Tools

```
1 import param from 'jquery-param';
2
3 const SAN_FRANCISCO = {
4   latitude: '37.7617',
5   longitude: '-122.4216',
6 };
7
8 const BERLIN = {
9   latitude: '52.4986',
10  longitude: '13.3918',
11 };
12
13 export default (platformFetch) => {
14   const query = 'taqueria';
15   const { latitude, longitude } = SAN_FRANCISCO;
16
17   const params = param({ ...
26   });
27
28   return platformFetch(`https://api.foursquare.com/v2/venues/search
29   ...then(res => res.json())
30   ...then(data => ({
31     venues: data.response.venues,
32     latitude,
33     longitude,
34     query,
35   })));
36 };
37
```



## Taqueria Cancún

2288 Mission St

## Taqueria el Buen Sabor

699 Valencia St

## Pancho Villa Taqueria

3071 16th St

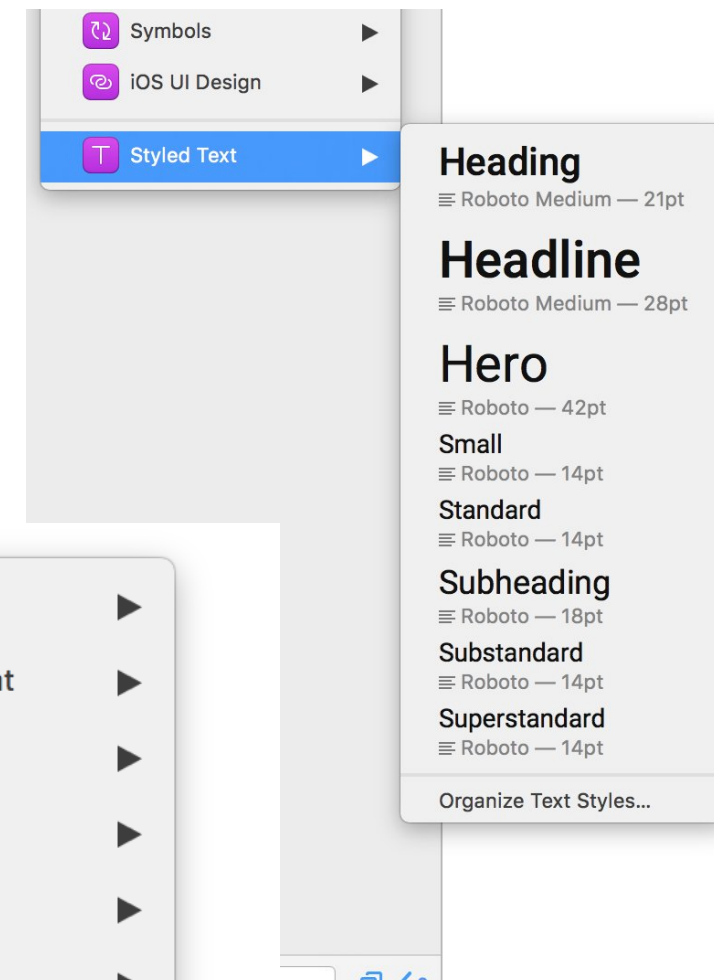
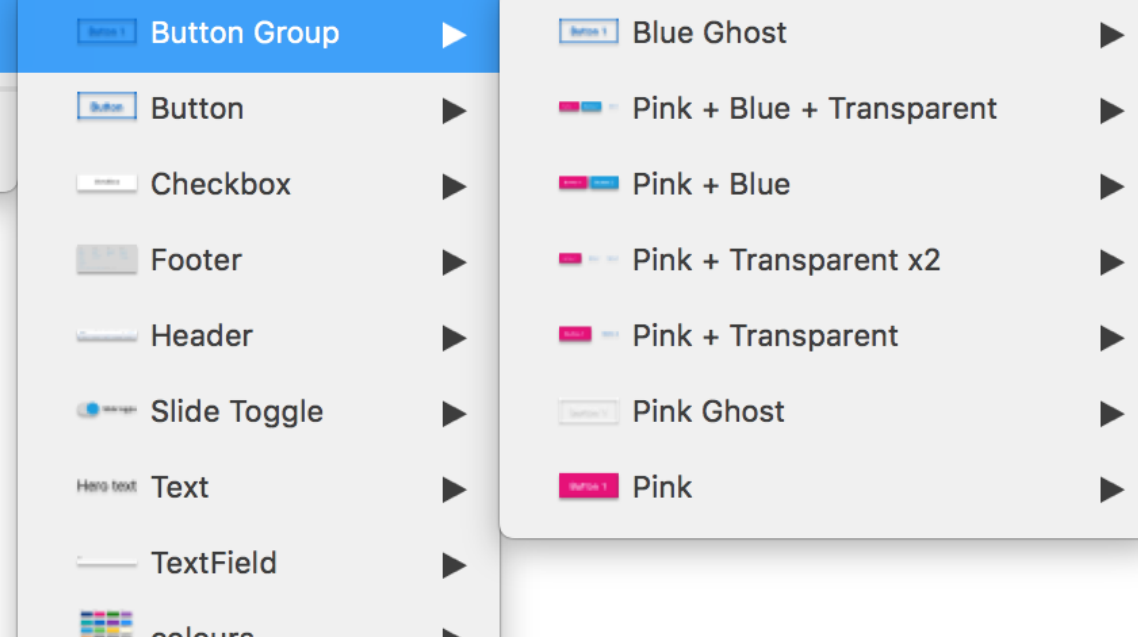
## Taqueria El Toro

598 Valencia St

[airbnb.design/painting-with-code](https://airbnb.design/painting-with-code)



```
export const text = {  
  'Hero': <Text hero>Hero text</Text>,  
  'Headline': <Text headline>Headline text</Text>,  
  'Heading': <Text heading>Heading text</Text>,  
  'Subheading': <Text subheading>Subheading text</Text>,  
  'Standard': <Text>Standard text</Text>,  
  'Superstandard': <Text super>  
  'Substandard': <Text substan  
  'Small': <Text small>Small t  
};
```



[medium.com/seek-blog/sketching-in-the-browser-33a7b7aa0526](https://medium.com/seek-blog/sketching-in-the-browser-33a7b7aa0526)



***Rendering web content into Sketch is incredibly powerful, but our industry needs to take this even further. We need design tools that don't merely imitate the target medium—we need them to be actually built on it.***

**Mark Dalgleish – Sketching in the Browser**

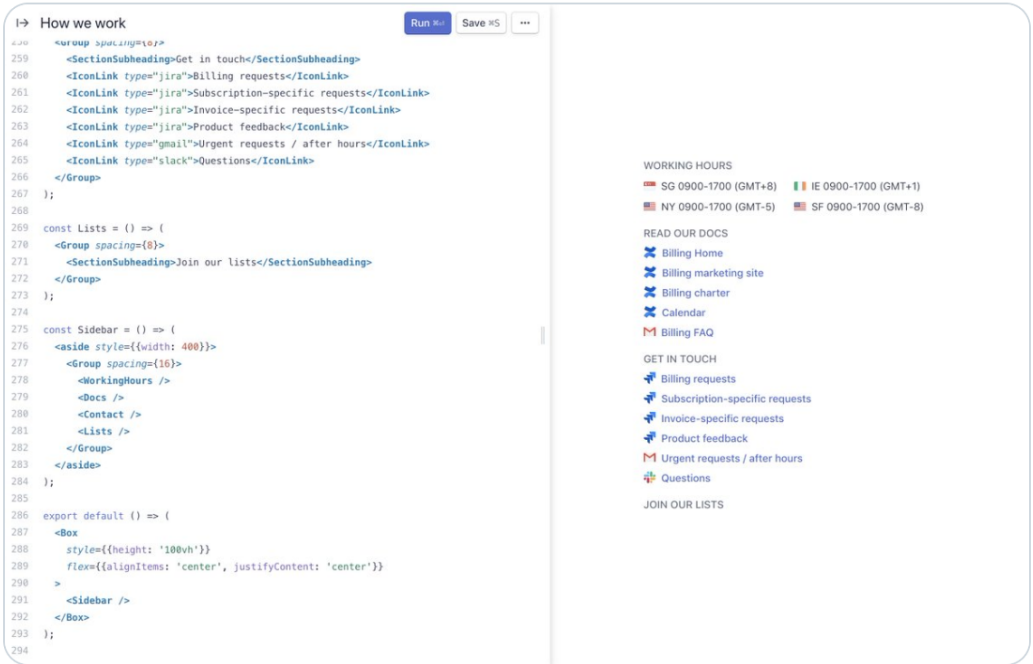
# Design in Code



Jordan Scales  
@jdan

Most of my frontend work at Stripe begins in our internal sketchpad tool, which gives me full access to our design system and offers shareable, fork-able links.

It's a neat way to prototype out features and share it with any Stripe employee. You should build one for your team.







4:42 pm · 22 Oct 2019 · [Twitter Web App](#)

18 Retweets   324 Likes





I→ How we work Run %R Save %S ...

```
258   <Group spacing={10}>
259     <SectionSubheading>Get in touch</SectionSubheading>
260     <IconLink type="jira">Billing requests</IconLink>
261     <IconLink type="jira">Subscription-specific requests</IconLink>
262     <IconLink type="jira">Invoice-specific requests</IconLink>
263     <IconLink type="jira">Product feedback</IconLink>
264     <IconLink type="gmail">Urgent requests / after hours</IconLink>
265     <IconLink type="slack">Questions</IconLink>
266   </Group>
267 );
268
269 const Lists = () => (
270   <Group spacing={8}>
271     <SectionSubheading>Join our lists</SectionSubheading>
272   </Group>
273 );
274
275 const Sidebar = () => (
276   <aside style={{width: 400}}>
277     <Group spacing={16}>
278       <WorkingHours />
279       <Docs />
280       <Contact />
281       <Lists />
282     </Group>
283   </aside>
284 );
285
286 export default () => (
287   <Box
288     style={{height: '100vh'}}
289     flex={{alignItems: 'center', justifyContent: 'center'}}
290   >
291     <Sidebar />
292   </Box>
293 );
294
```

WORKING HOURS

-  SG 0900-1700 (GMT+8)
-  IE 0900-1700 (GMT+1)
-  NY 0900-1700 (GMT-5)
-  SF 0900-1700 (GMT-8)

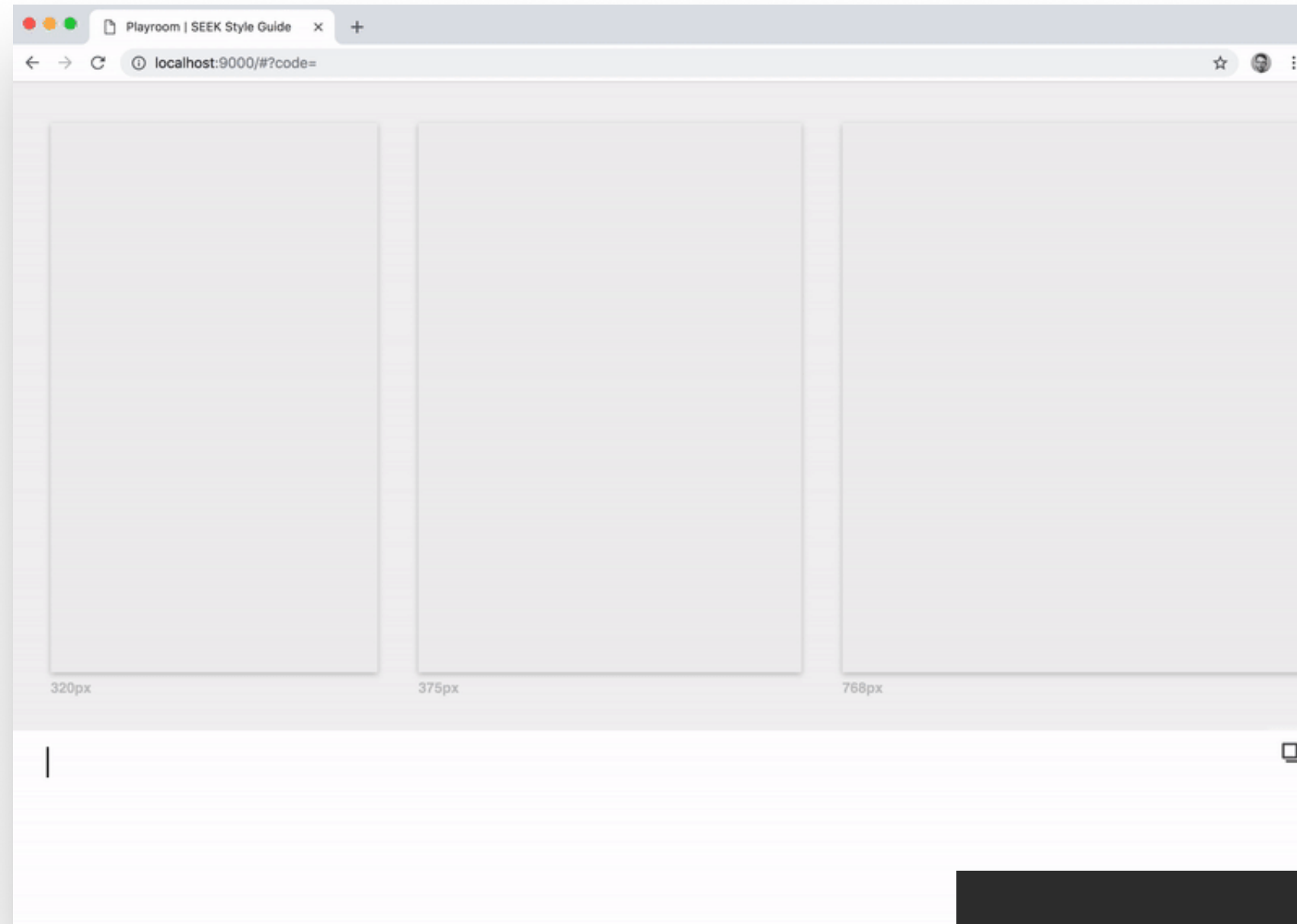
READ OUR DOCS

-  [Billing Home](#)
-  [Billing marketing site](#)
-  [Billing charter](#)
-  [Calendar](#)
-  [Billing FAQ](#)

GET IN TOUCH

-  [Billing requests](#)
-  [Subscription-specific requests](#)
-  [Invoice-specific requests](#)
-  [Product feedback](#)
-  [Urgent requests / after hours](#)
-  [Questions](#)

JOIN OUR LISTS



[github.com/seek-oss/playroom](https://github.com/seek-oss/playroom)



[youtube.com/watch?v=jnV1u67-yVg](https://youtube.com/watch?v=jnV1u67-yVg)



**Mark Dalgleish**  
@markdalgleish



Replying to [@braposo](#)

The more advanced our design system gets, the less sense it makes to perform a lossy translation back to static illustration tools.

Yes, we make changes to the code based on input from designers.

10:55 pm · 25 Oct 2019 · [Twitter for Android](#)

---

1 Like





**Mark Dalgleish**  
@markdalgleish



Replying to [@markdalgleish](#) and [@braposo](#)

We're pushing consumers, including designers, to use our Playroom if they want to design with the system: [seek-oss.github.io/braid-design-s...](https://seek-oss.github.io/braid-design-s...)

10:02 pm · 25 Oct 2019 · [Twitter for Android](#)

---

2 Likes





**Mark Dalglish**  
@markdalglish



Designer: How do I use the design system?

Me: You install it from npm.

Designer:



8:10 am · 22 Oct 2019 · [Twitter for Android](#)

23 Retweets 281 Likes

# Design System is the relationships



**Brad Frost**  
@brad\_frost

A design system isn't just a library of assets with some documentation, it's how you collaborate and communicate between teams and disciplines.

[@natallyathree](#) at [#cssday](#)



3:23 pm · 14 Jun 2019 · [Twitter for Android](#)

43 Retweets 153 Likes



Mark Dalglish  
@markdalglish

Before design systems: Drawing whatever you want.

After design systems: Drawing whatever you want—then asking if the design system can do it.

12:28 am · 8 Oct 2019 · [Twitter for Android](#)

30 Retweets 298 Likes

Designers



Mark Dalglish  
@markdalglish

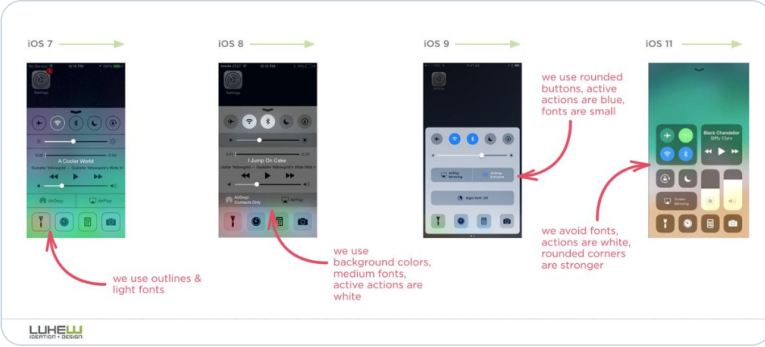
When someone spends months building a component library for you but it's missing one tiny little feature.



Developers



Luke Wroblewski @lukew · 11 Mar  
"time to update the design system" ... again.



17 183 742



Luke Wroblewski  
@lukew

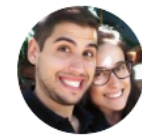
design systems are supposed to save us time, but quite quickly they demand more of our time to keep them up to date & thereby useful.

5:03 pm · 11 Mar 2019 · [Twitter Web Client](#)

61 Retweets 296 Likes

Managers

**Relationships are based on  
trust and being present**

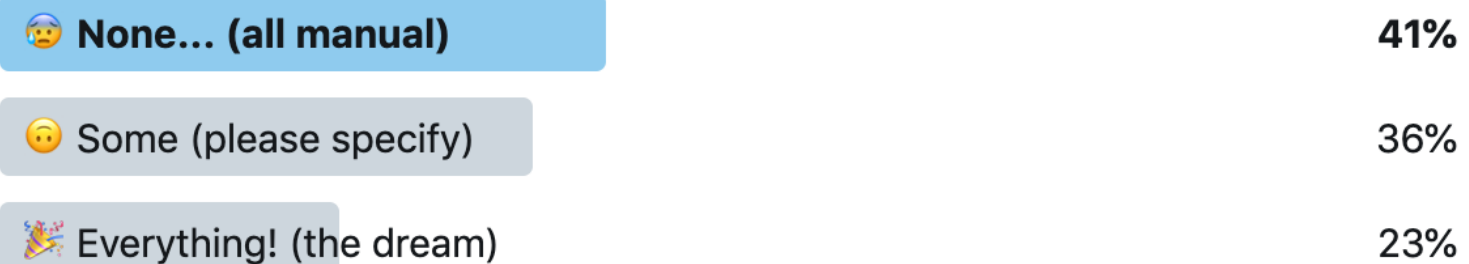


**Bernardo Raposo**  
@braposo



Doing some research for my [#DesignSystemsLondon](#) talk, any help is very much appreciated! 🙏

How many parts (documentation, design files, components, prototypes) of your design system are \*automatically updated\* if you change a primitive/token (let's say the primary colour)?



132 votes · Final results

11:33 am · 20 Oct 2019 · [Twitter Web App](#)

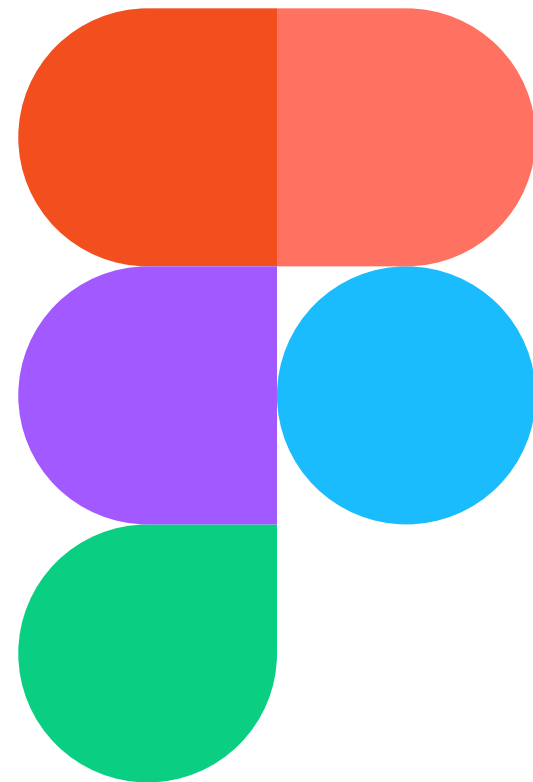
**Design Systems can be  
the single point of failure**

# Make Design Systems more open



# Make Design Systems more accessible

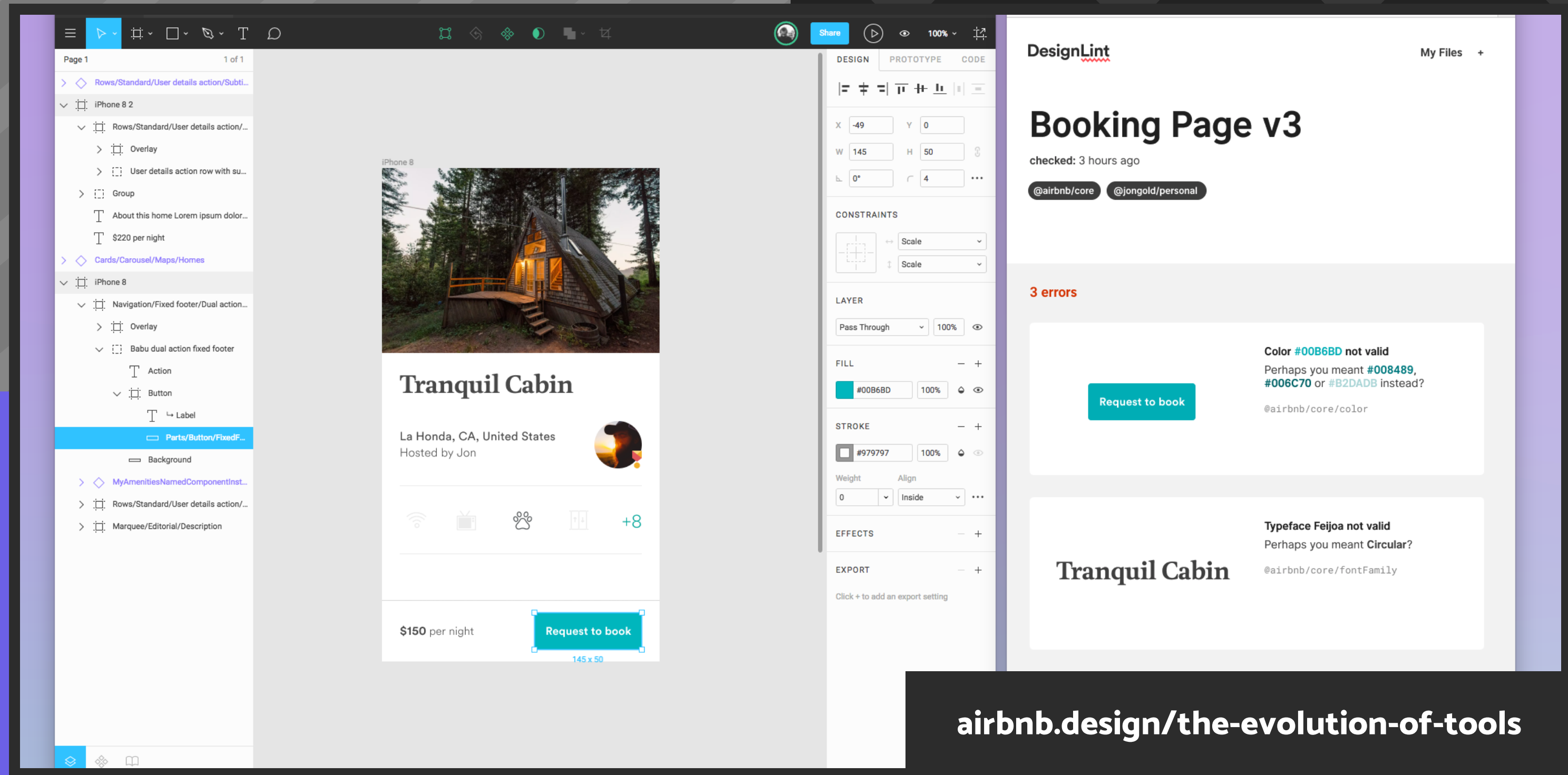
# Make Design Systems more **human**



[figma.com](https://figma.com)

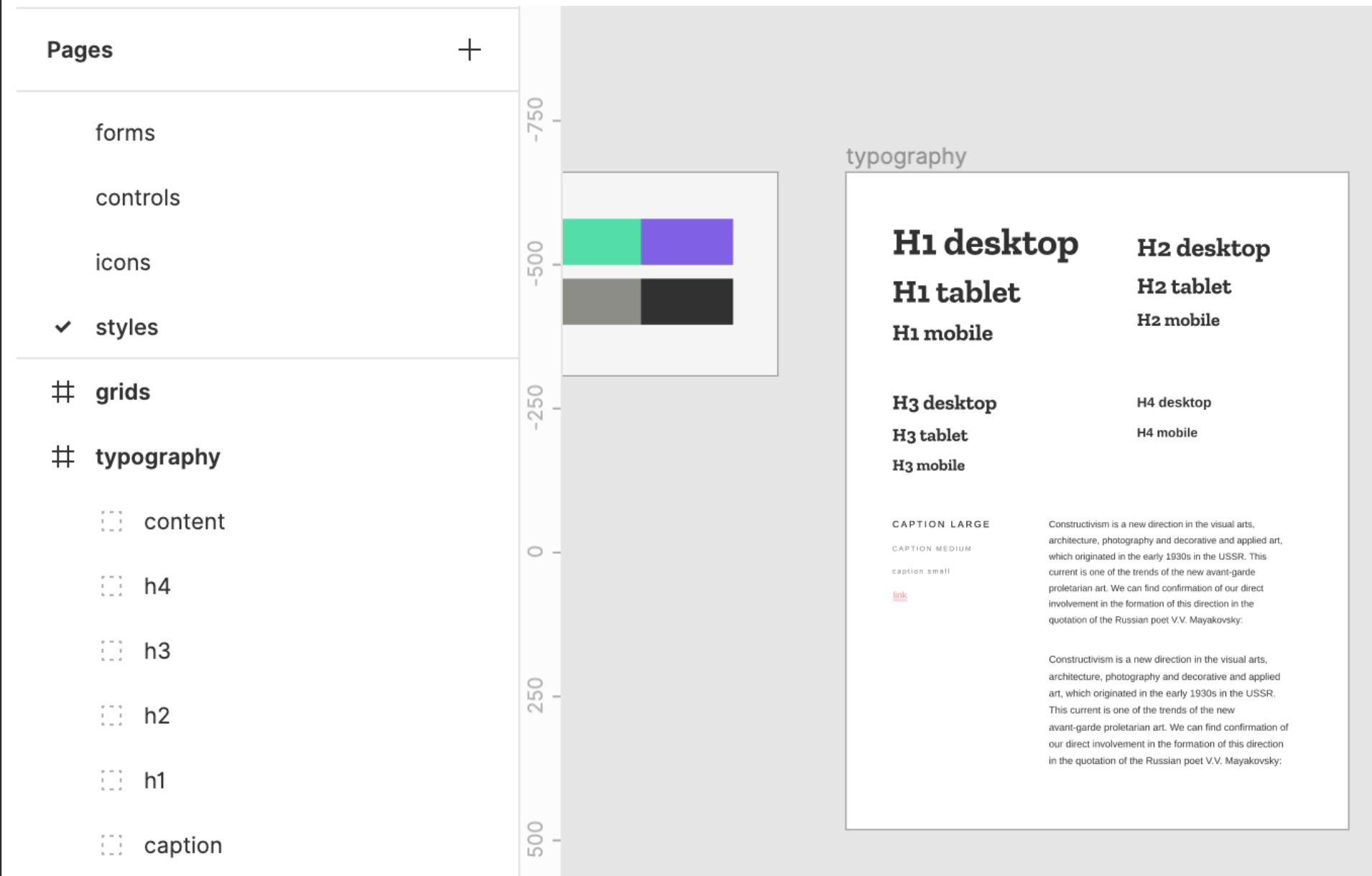
# The human side of a Design System

**@braposo**



# #DesignSystemsLondon

# Get all text styles in a specific frame



```
1  async function getFontStyles(figmaId, figmaApiKey) {
2    // 1 - Fetch File info
3    const result = await fetch("https://api.figma.com/v1/files/" + figmaId, {
4      method: "GET",
5      headers: {
6        "X-Figma-Token": figmaApiKey
7      }
8    });
9    const figmaTreeStructure = await result.json();
10
11   // 2 - Get styles page
12   const stylesPage = figmaTreeStructure.document.children.filter(item => {
13     return item.name === "styles";
14   })[0].children;
15
16   // 3 - Get font styles artboard
17   const fontStylesArtboard = stylesPage.filter(item => {
18     return item.name === "typography";
19   })[0].children;
20
21   // 4 - Go through each group to extract font styles
22   const fontStyles = fontStylesArtboard.map(fontGroup => {
23     return {
24       name: fontGroup.name,
25       styles:
26         fontGroup.children &&
27         fontGroup.children.reduce((groupStyles, subFontItem) => {
28           return {
29             ...groupStyles,
30             [subFontItem.name]: {
31               family: `${subFontItem.style.fontFamily}`,
32               size: `${subFontItem.style.fontSize}px`,
33               weight: subFontItem.style.fontWeight,
34               lineHeight: `${subFontItem.style.lineHeightPercent}%`,
35               spacing:
36                 subFontItem.style.letterSpacing !== 0
37                   ? `${subFontItem.style.letterSpacing}px`
38                   : "normal"
39             }
40           };
41         }, {})
42     };
43   });
44
45   return fontStyles;
46 }
```

**What if we could use  
something simpler?**



# Get all text styles in a specific frame

```
file(id: "fileID") {  
  frames(name: "typography") {  
    texts {  
      name  
      styles {  
        fontSize  
        fontFamily  
        fontWeight  
      }  
    }  
  }  
}
```



**Mark Dalgleish**  
@markdalgleish



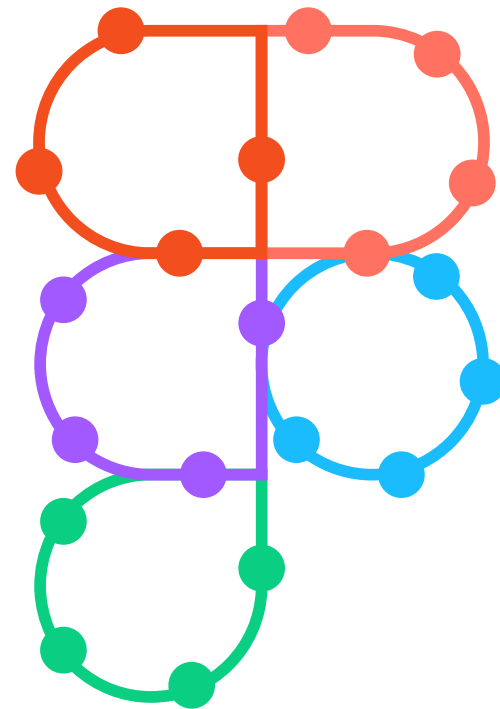
It took design tools about 5 years to notice React. I wonder how long it will take them to notice GraphQL.

9:44 pm · 26 Aug 2019 · [Twitter for Android](#)

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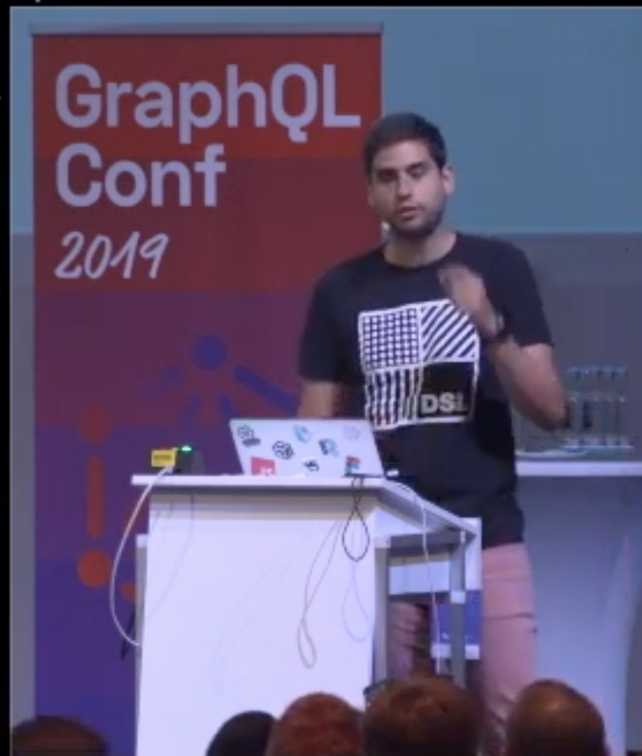
**40** Retweets   **380** Likes

# figma-graphql



[figma-graphql.party](https://figma-graphql.party)

GraphQL  
Conf  
2019



**Bernardo Raposo**  
Software Engineer  
TravelRepublic

## TALK: MAKING DESIGN MORE HUMAN WITH GRAPHQL



Making design more human with GraphQL

@braposo



**figma-graphql**

figma-graphql.party

[brps.me/gqlconf19](https://brps.me/gqlconf19)



**Mark Dalglish**  
@markdalglish



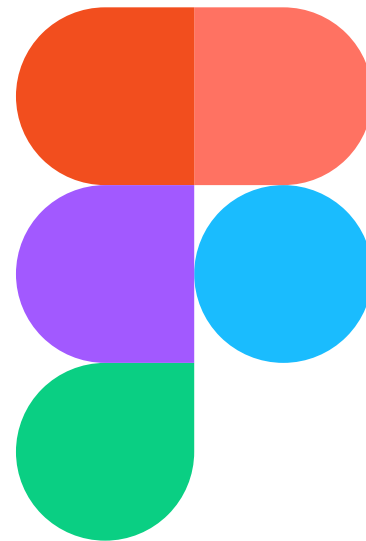
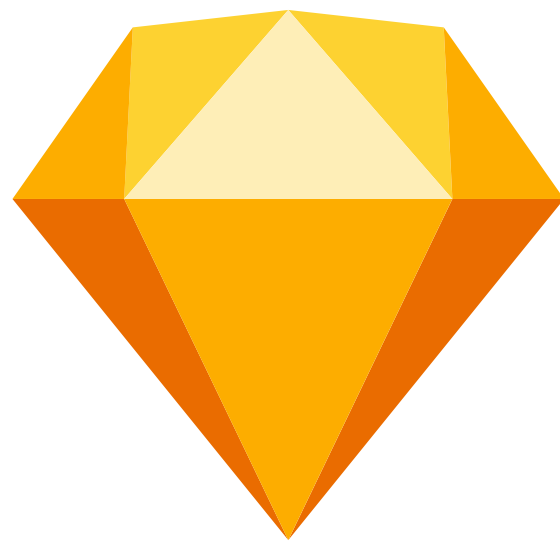
Unpopular opinion: designers are smart and can learn new things.

9:28 am · 30 Oct 2019 · [Twitter for Android](#)

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**19** Retweets   **325** Likes





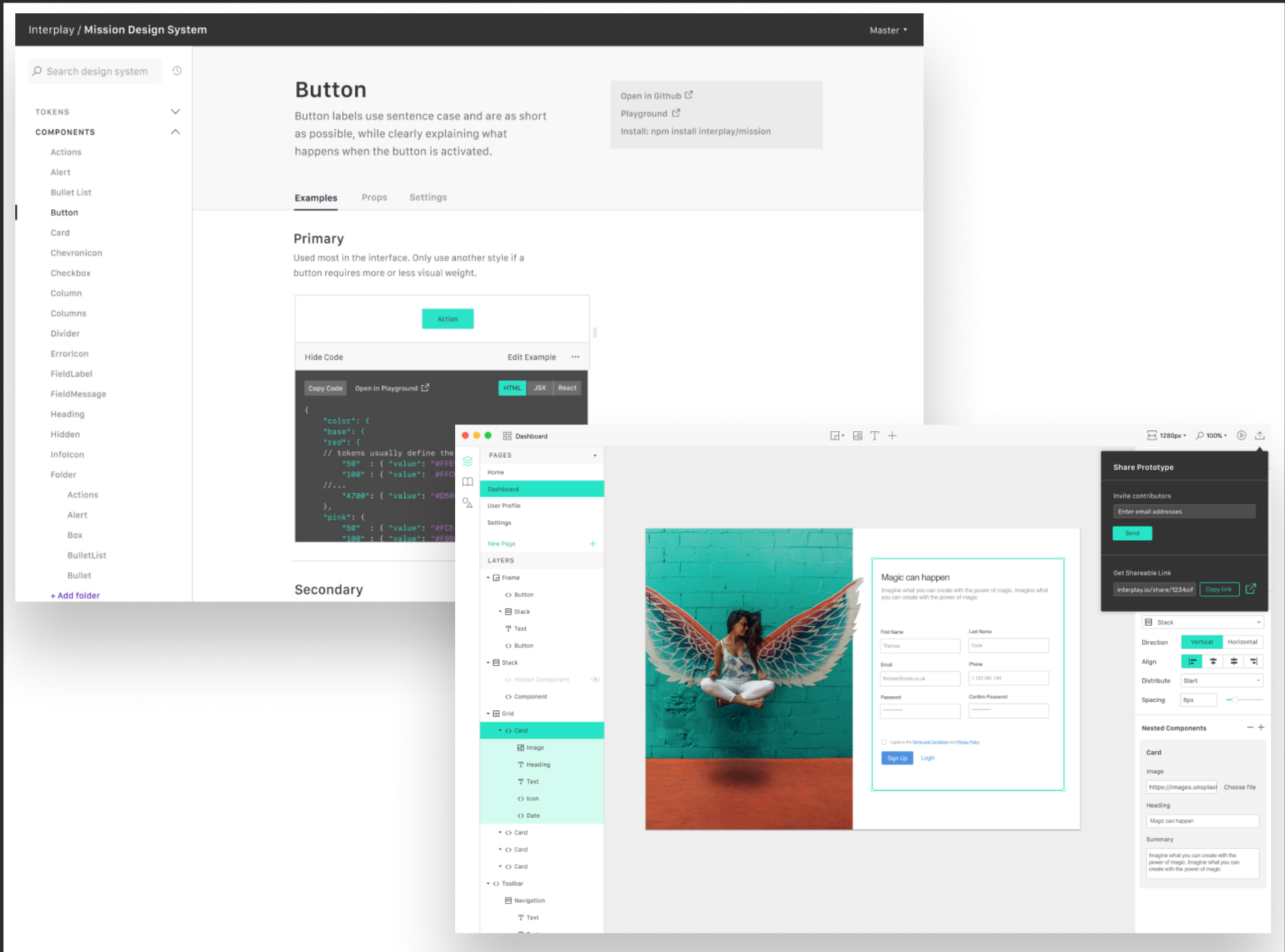


**We need different tools  
for this new relationship**

Interplay

Interplay.

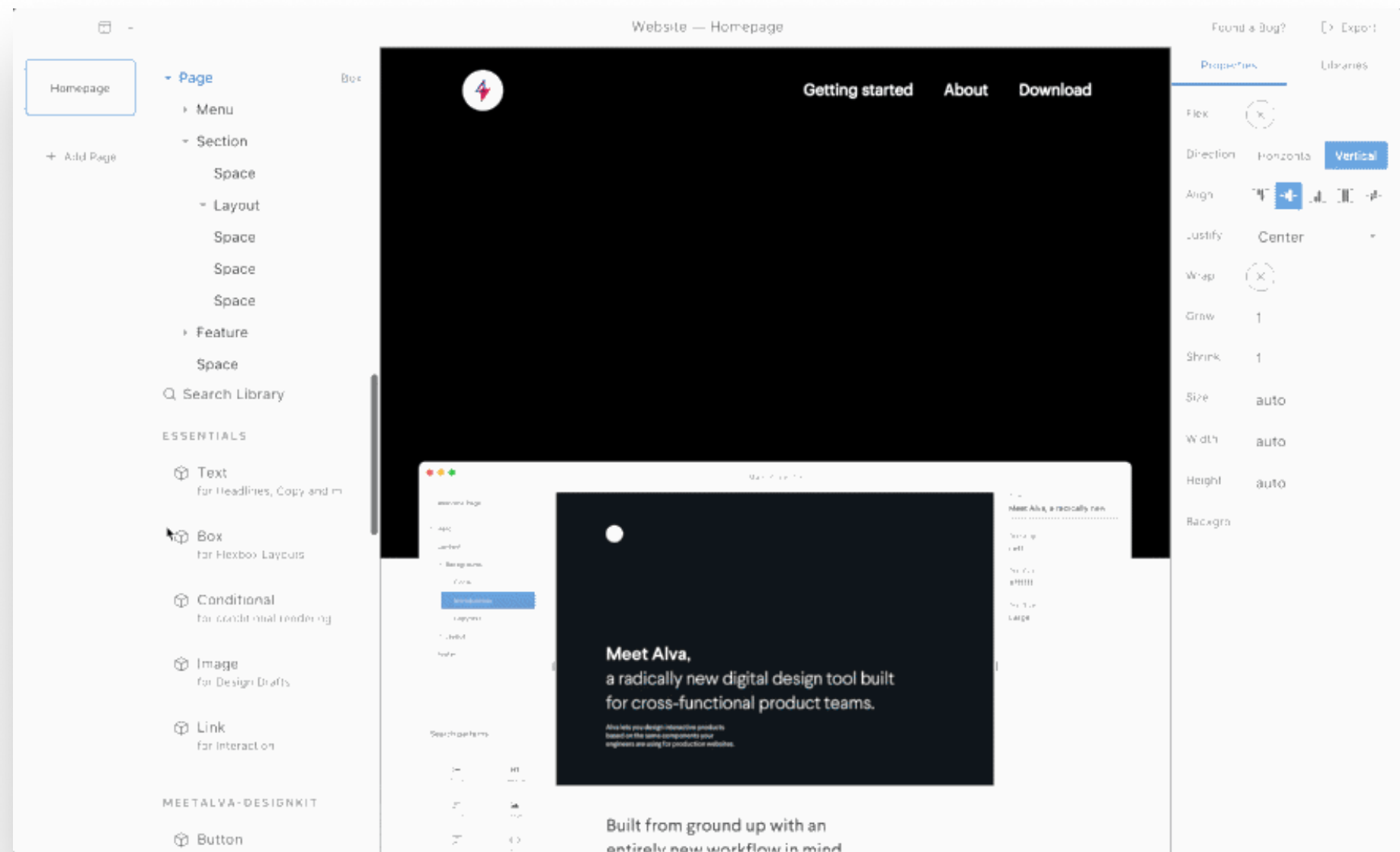
interplayapp.com



# Alva



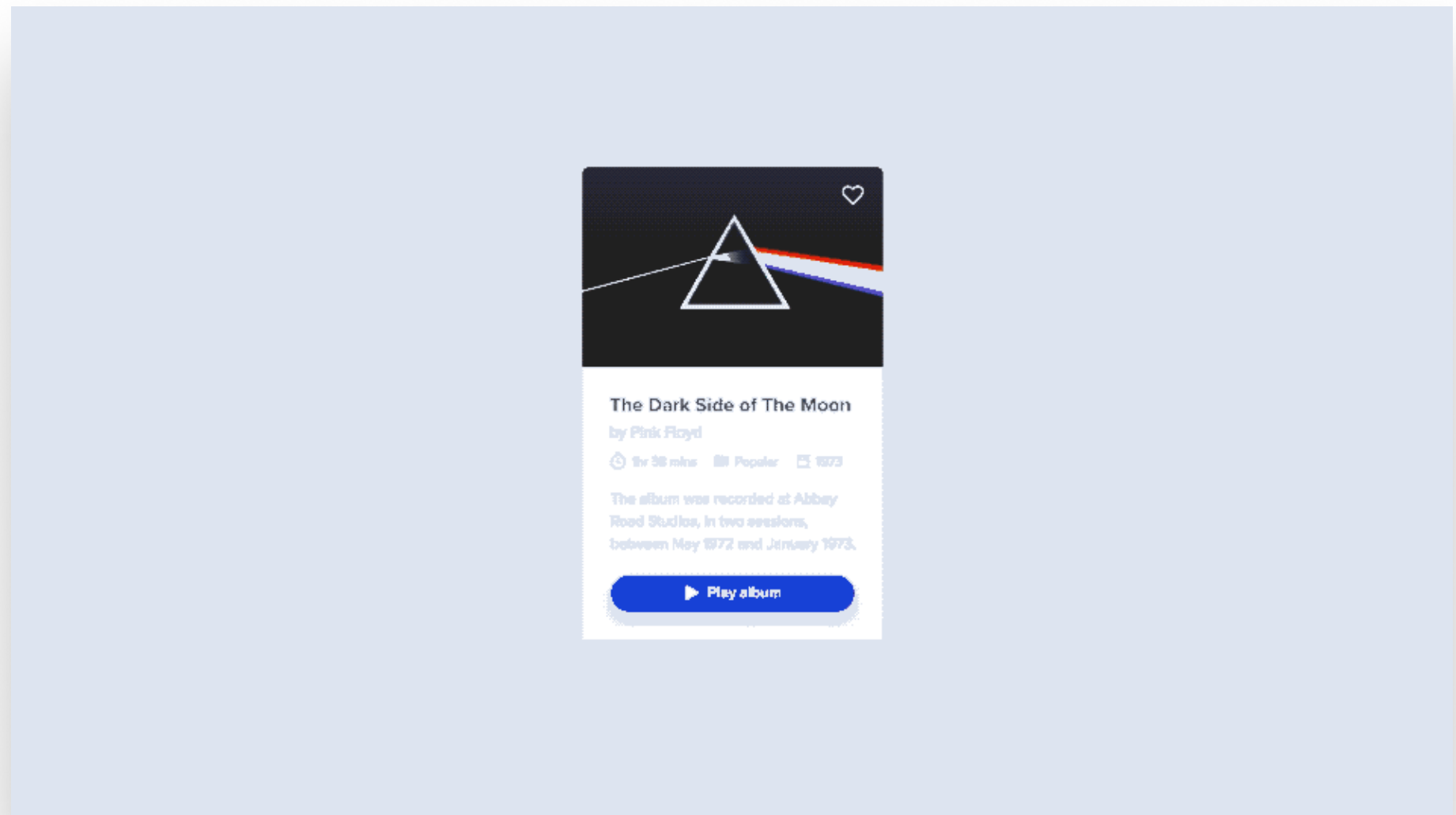
meetalva.io



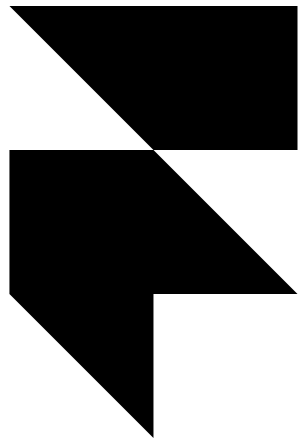
## UXPin Merge



[uxpin.com/merge](https://uxpin.com/merge)



# Framer X



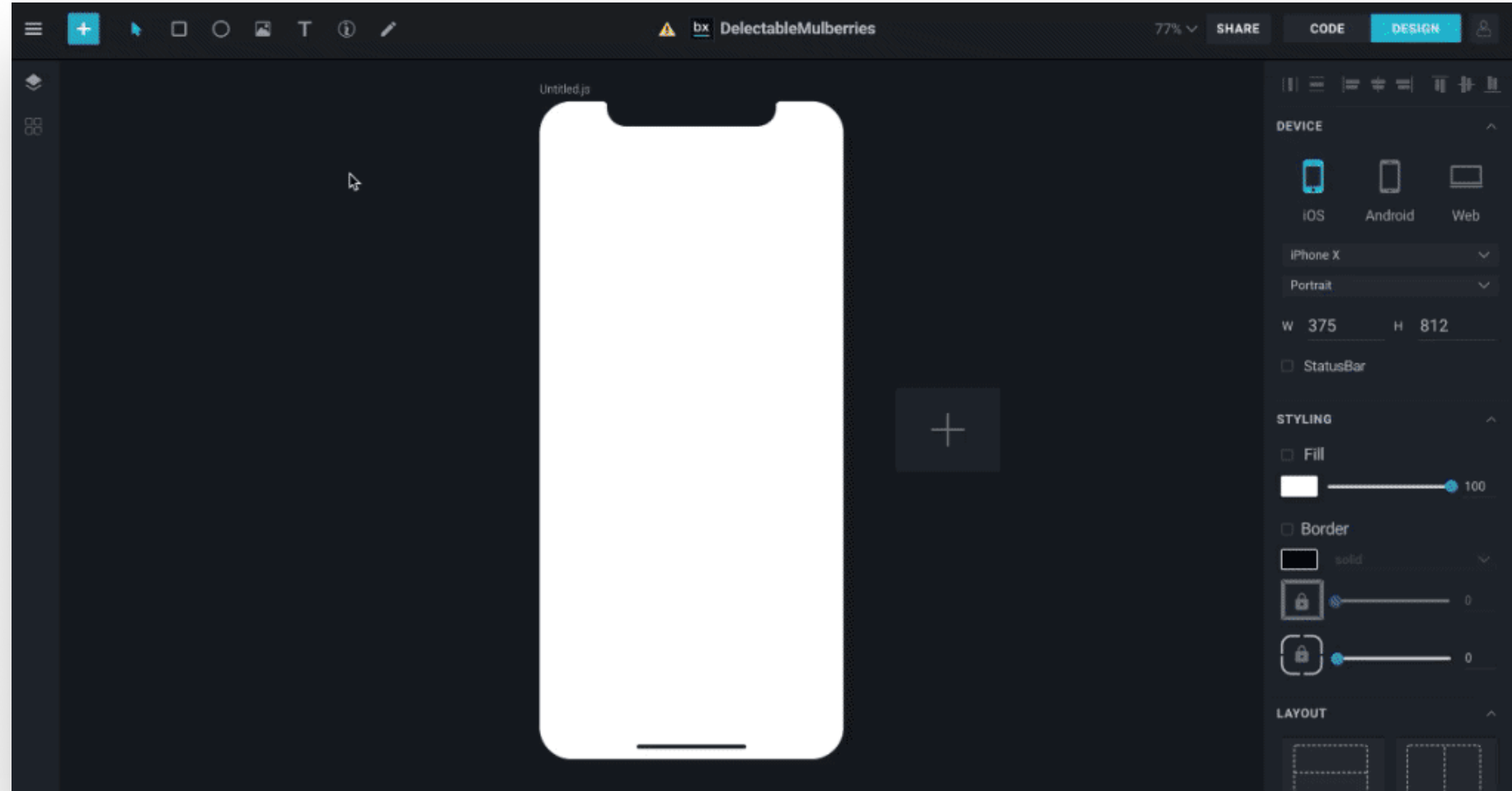
[framer.com](https://framer.com)

Shows.tsx

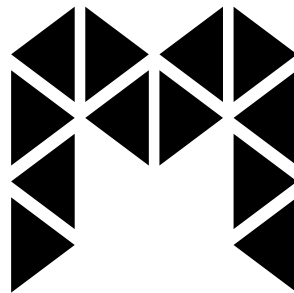
# Builder X

bx

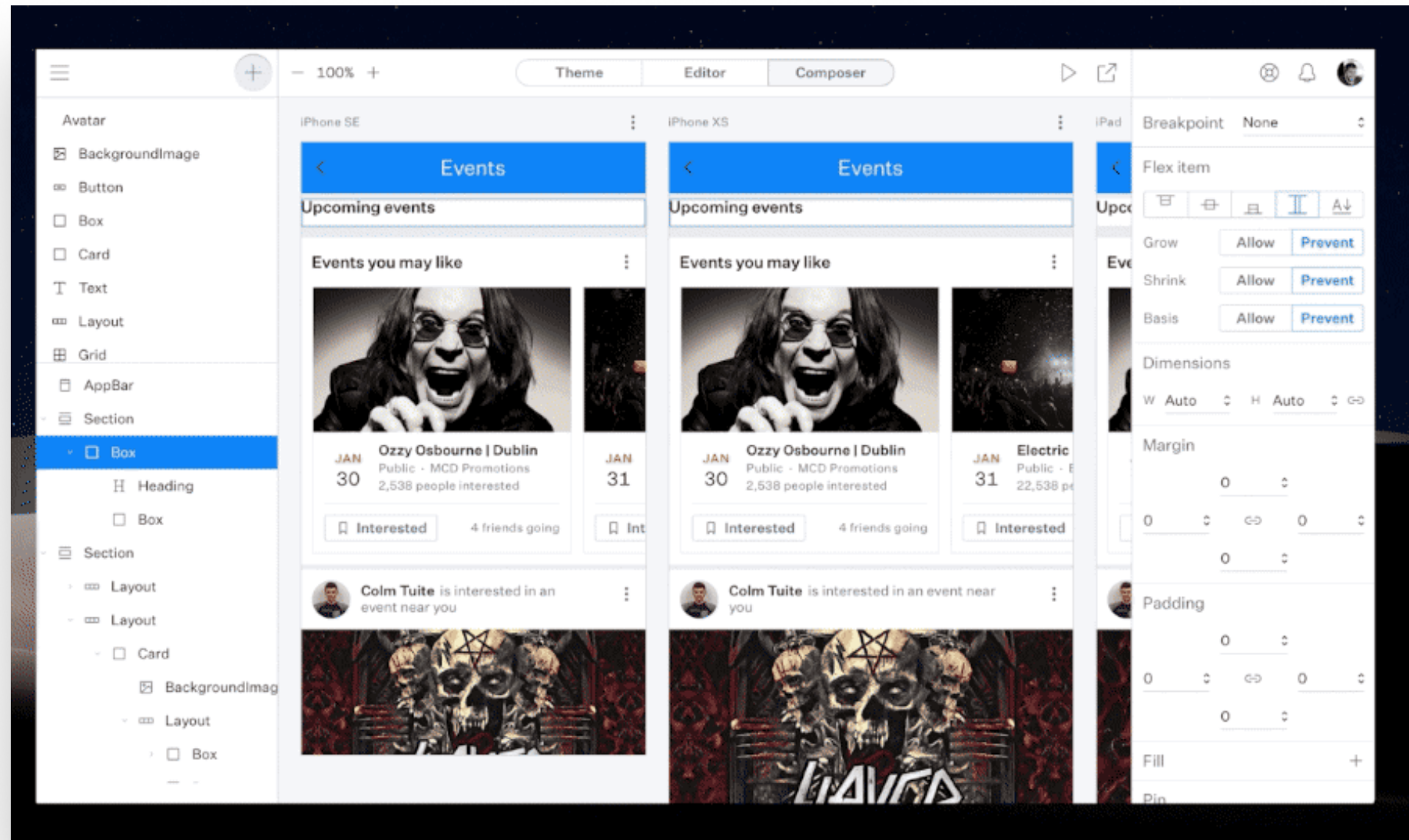
builderx.io



## Modulz



[modulz.app](https://modulz.app)





**The end...**

Maximise your design system's impact by aligning everyone around a single source of truth

## Merge

Design from coded components.  
The real source of truth.

## Document your design system, together.

Create beautiful living styleguides and document all your design system resources in one place

# Design System is the language

**Each Design System has  
its own language**

# What's the **english** of Design Systems?

# A common format for Design Systems



**Davo Galavotti**  
@pixelbeat



And designers, we are halfway on 2019: can we please make some noise and ask [@adobe](#), [@sketch](#), [@figmadesign](#), [@InVisionApp](#), [@framer](#), [@goabstract](#) and the rest of the pack to figure a way to make UNIVERSAL FILE FORMAT for Web Design files?

10:43 pm · 17 Jun 2019 · [Twitter Web Client](#)

---

4 Retweets   27 Likes





**Eelco Lempsink**  
@eelco



Replying to [@eelco](#), [@kaelig](#) and 2 others

Now, what I think is feasible short term, is a “lowest common denominator” format that would allow best effort transfers between design tools. Facebook has their Semaphore format, but it is pretty much internal only. Others, like Abstract or Zeplin could play a role too.

12:06 am · 21 Jun 2019 · [Tweetbot for iOS](#)

---

2 Likes



## Design System Utils

npm v1.5.0

minzipped size 1.17 kB

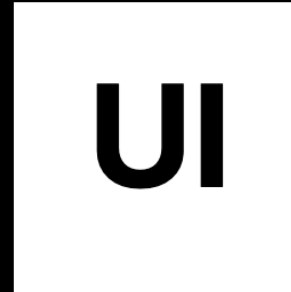
build passing

licence MIT

PRs welcome

Design System Utils is a micro framework that standardises your design-system tokens & provides helpful utility functions to access the information. It can be used with [styled-components](#), [emotion](#), [glamorous](#) or any other [CSS-in-JS framework](#).

Design System Utils



## System UI

### About

System UI is an open source organization that houses a [Theme Specification](#) for creating interoperable UI components. It is also the home for the [Theme UI](#) and [DesignQL](#) libraries that are built upon the foundation of this specification. The intent behind this specification is to help make UI components, libraries, and tools as interoperable as possible.

System UI



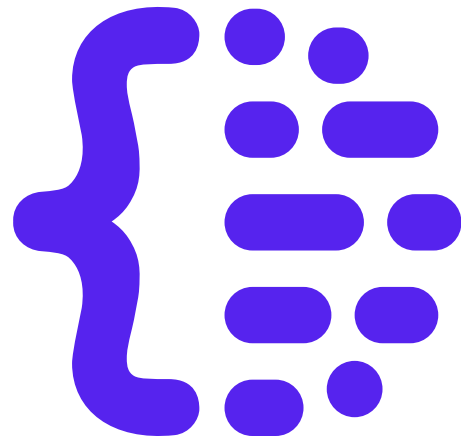
## Style Dictionary

*Style once, use everywhere.*

Style Dictionary is a build system that allows you to define styles once, in a way for any platform or language to consume. A single place to create and edit your styles, and a single command exports these rules to all the places you need them - iOS, Android, CSS, JS, HTML, sketch files, style documentation, or anything you can think of. It is available as a CLI through npm, but can also be used like any normal node module if you want to extend its functionality.

Style Dictionary

## Diez



diez.org



```
1 import {Color, Typograph, FontRegistry} from '@diez/engine'
2 import {Component, property} from '@diez/engine'
3 import {SimpleGradient} from './components/SimpleGradient'
4
5 class Palette extends Component {
6   @property pink = Color.rgba(255, 63, 112, 1)
7   @property orange = Color.rgba(255, 154, 58, 1)
8   @property blue = Color.rgba(120, 207, 253, 1)
9   @property purple = Color.rgba(86, 35, 238, 1)
10  @property white = Color.rgba(255, 255, 255, 1)
11  @property mauve = Color.rgba(164, 148, 211, 1)
12  @property whiteA40 = Color.rgba(255, 255, 255, 0.4)
13  @property black = Color.rgba(0, 0, 0, 1)
14  @property gradient = new SimpleGradient({
15    startColor: this.purple,
16    endColor: this.pink,
17    startPointX: 0,
18    startPointY: 0,
19    endPointX: 1,
20    endPointY: 1,
21  });
22 }
23
24 class Typographs extends Component {
25   @property headerTitle = new Typograph({
26     fontName: FontNames.RobotoBlack,
```

# Storybook CSF



[storybook.js.org](https://storybook.js.org)

## Component Story Format

Simple, portable, future-proof component examples



### Why a new format?

Imagine if developing a component in Storybook automatically unlocked the ability to test it with Jest, import it in Sketch designs, paste it into InVision prototypes, and visually test it in Chromatic. What if your component library was universally accessible inside all your favorite tools?

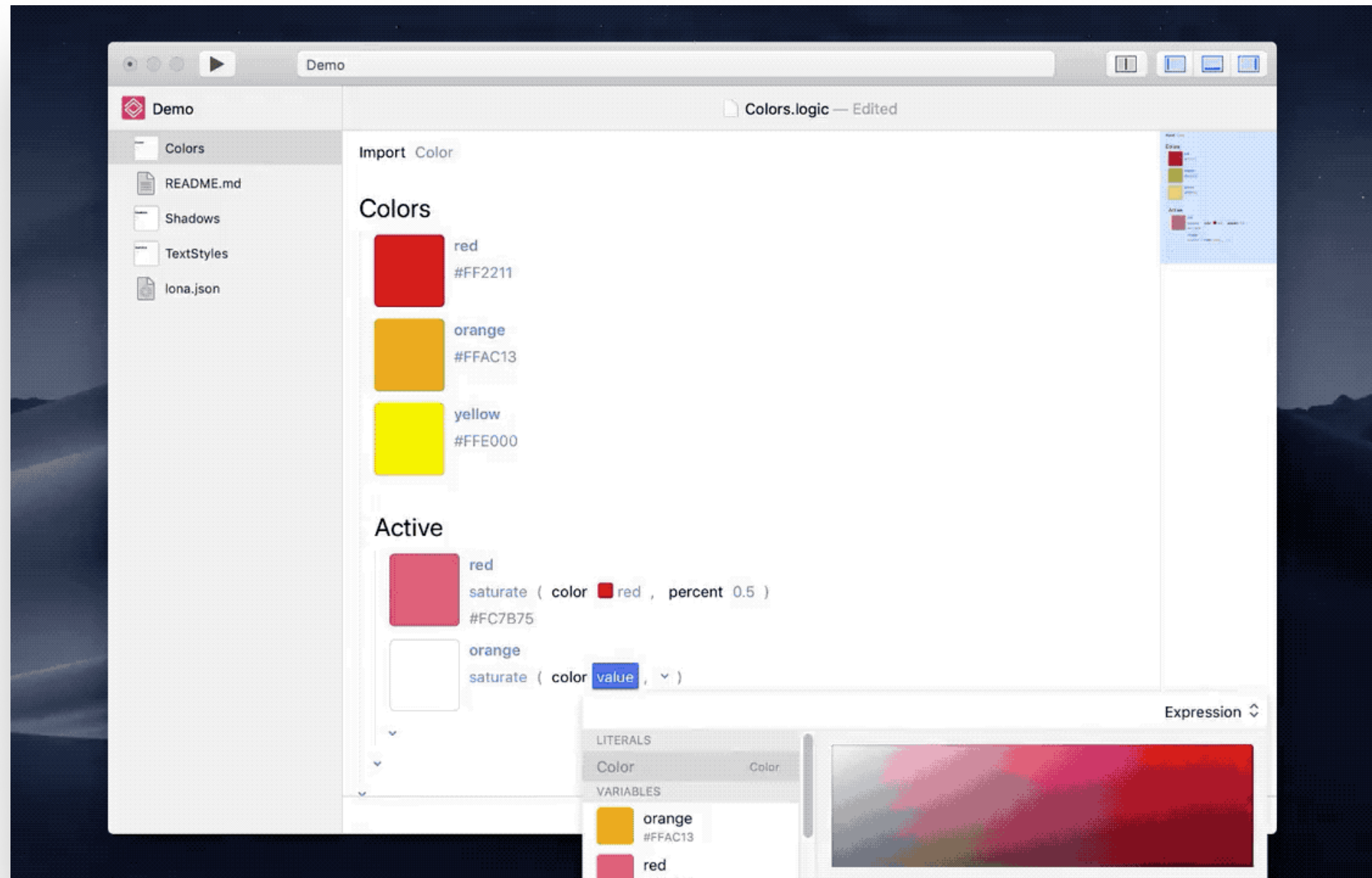
```
export default { title: 'atoms/Button' };  
  
export const text = () => <Button>Hello</Button>;  
export const emoji = () => <Button>😄😎👍💯 </Button>;
```



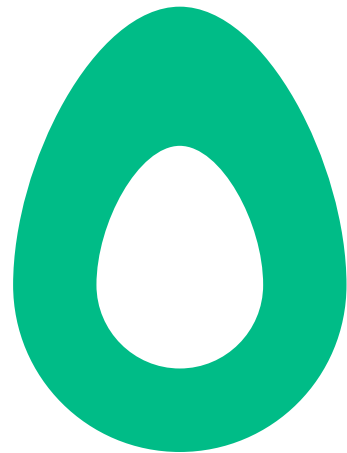
## Lona



[github.com/airbnb/Lona](https://github.com/airbnb/Lona)



# Avocode SDK



[avocode.com/sdk](https://avocode.com/sdk)

 OCTOPUS

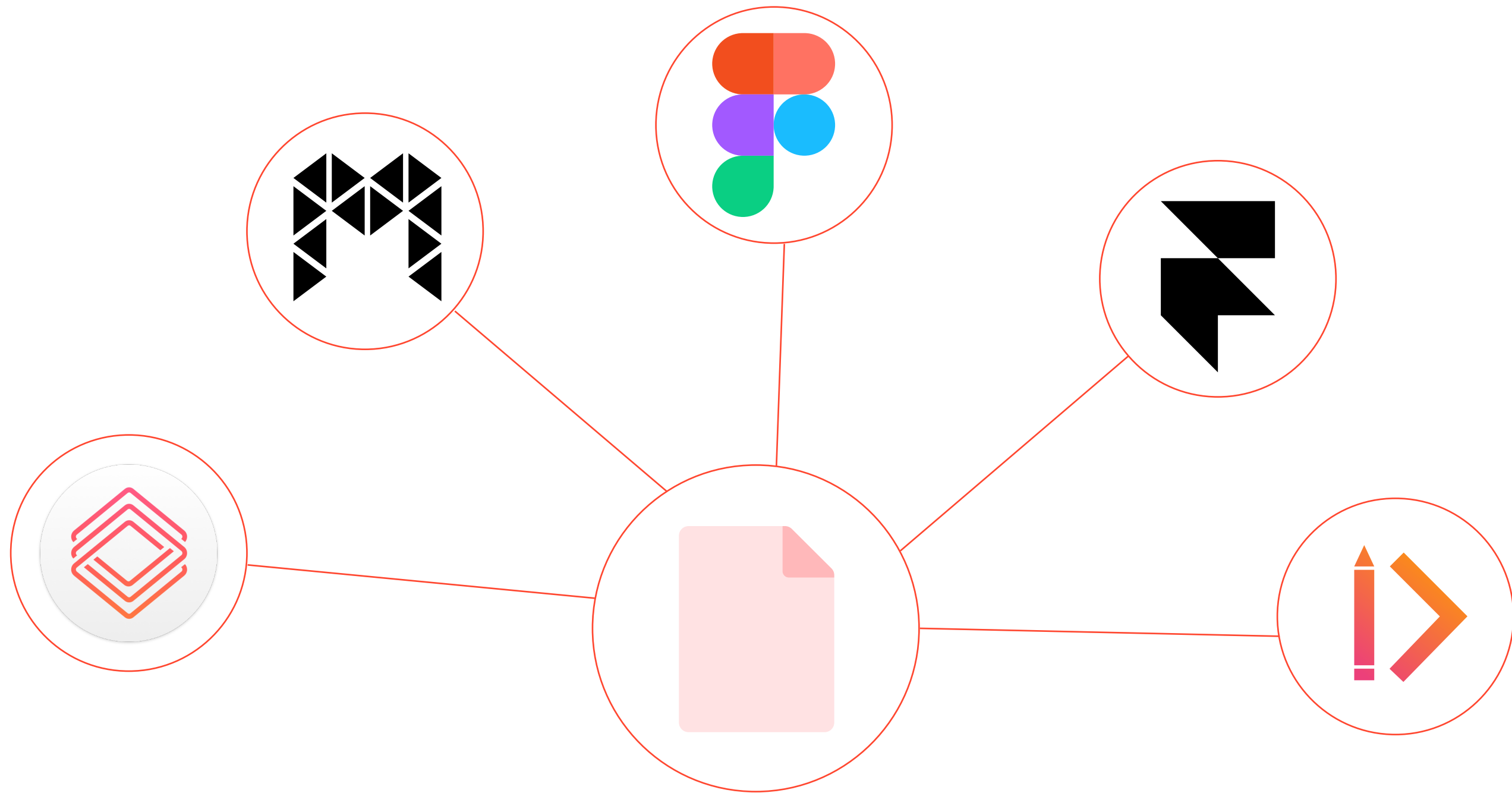
## Universal design format. Works everywhere.

Forget proprietary formats, forget converting between designs all the time.

Octopus is an universal design format that carries all representations of layers, effects, text, and layout, regardless of the original design format.

It is a JSON object that is easily readable and accessible, therefore can become the first open standard - something like the PDF or the Open Office format for design files.





**Design System becomes**  
**invisible to everyone**



# Main takeaways!

**Use the documentation  
as a **starting point****

**Add code to improve  
the design process**

**Think about the people  
using the Design System**

# Make the Design System **open** to everyone

**Make          Design**  
**open to everyone**

# Thank you!

[brps.me/dsl19](https://brps.me/dsl19)

@braposo