# Design Tokens and CSS

Systemising the design of your components

Horse Design Systems
@horse_designsys
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It just feels like everyone is screaming the words “Design System” and won’t stop
8:42 am - 1 May 2019
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22
134
881

# Design Tokens and CSS

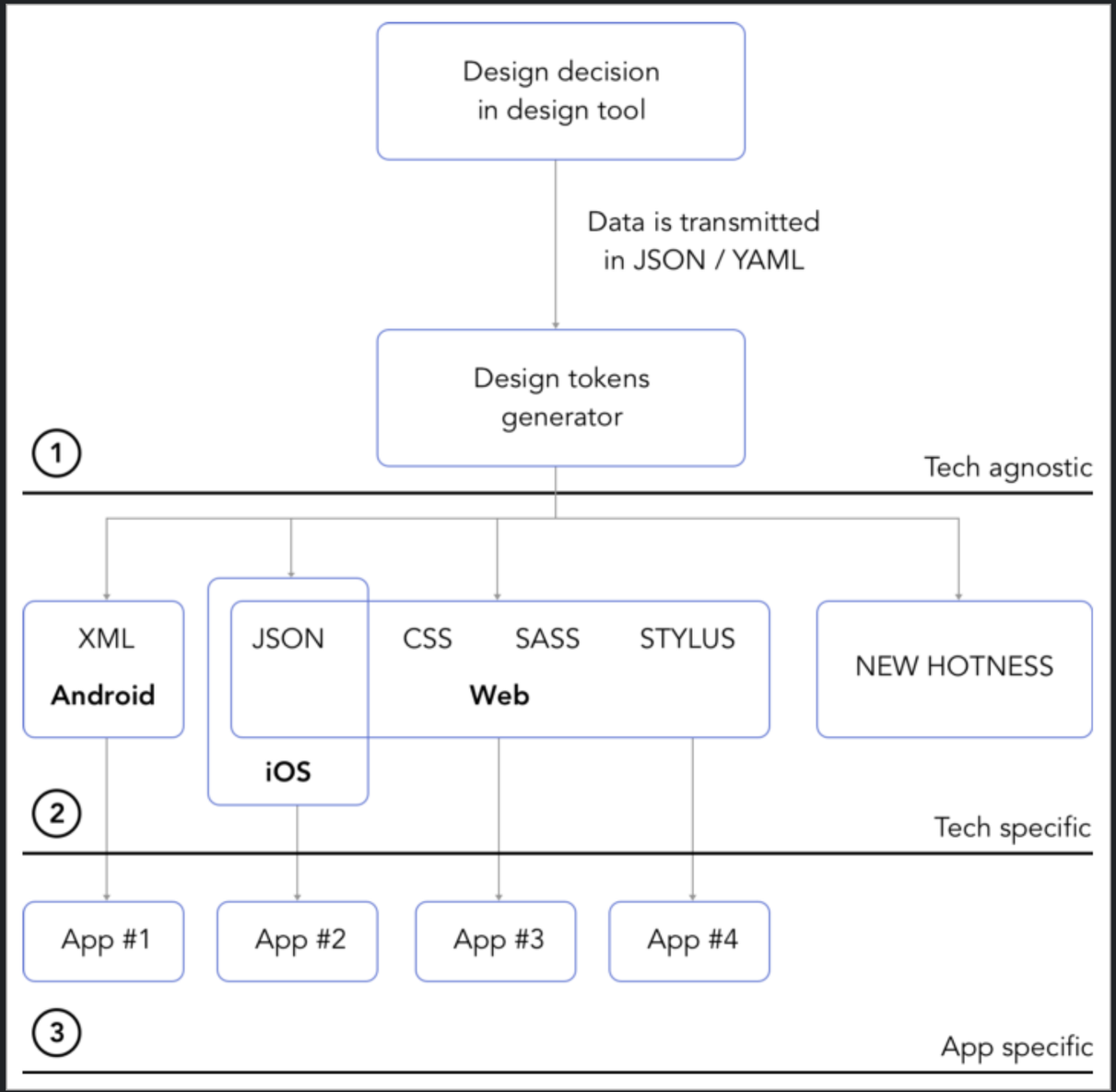
Systemising the design of your components

Horse Design Systems
@horse_designsys
Aren’t these just SASS Variables?
CSS-Tricks @css
Design tokens aren't a new concept, but they're gaining steam as a way to maintain consistency across multiple platforms. css-tricks.com/what-are-desig…
11:49 am - 3 Apr 2019
6 Likes
1
6

Design Tokens are the visual atoms of the design system – specifically, they are named entities that store visual design attributes.

We use them in place of hard–coded values in order to maintain a scalable and consistent visual system.

— Jina | @jina


Design decision
in design tool
Data is transmitted
in JSON / YAML
Design tokens
generator
1
Tech agnostic
XML
Android
JSON
iOS
CSS
SASS
STYLUS
Web
NEW HOTNESS
2
Tech specific
App #1
App #2
App #3
App #4
3
App specific

Danny
@dbanksDesign
Follow
Design tokens are just spicy variables.
5:02 pm - 30 Apr 2019
4 Retweets 23 Likes
1
4
23

Whatever works best for that team wins.

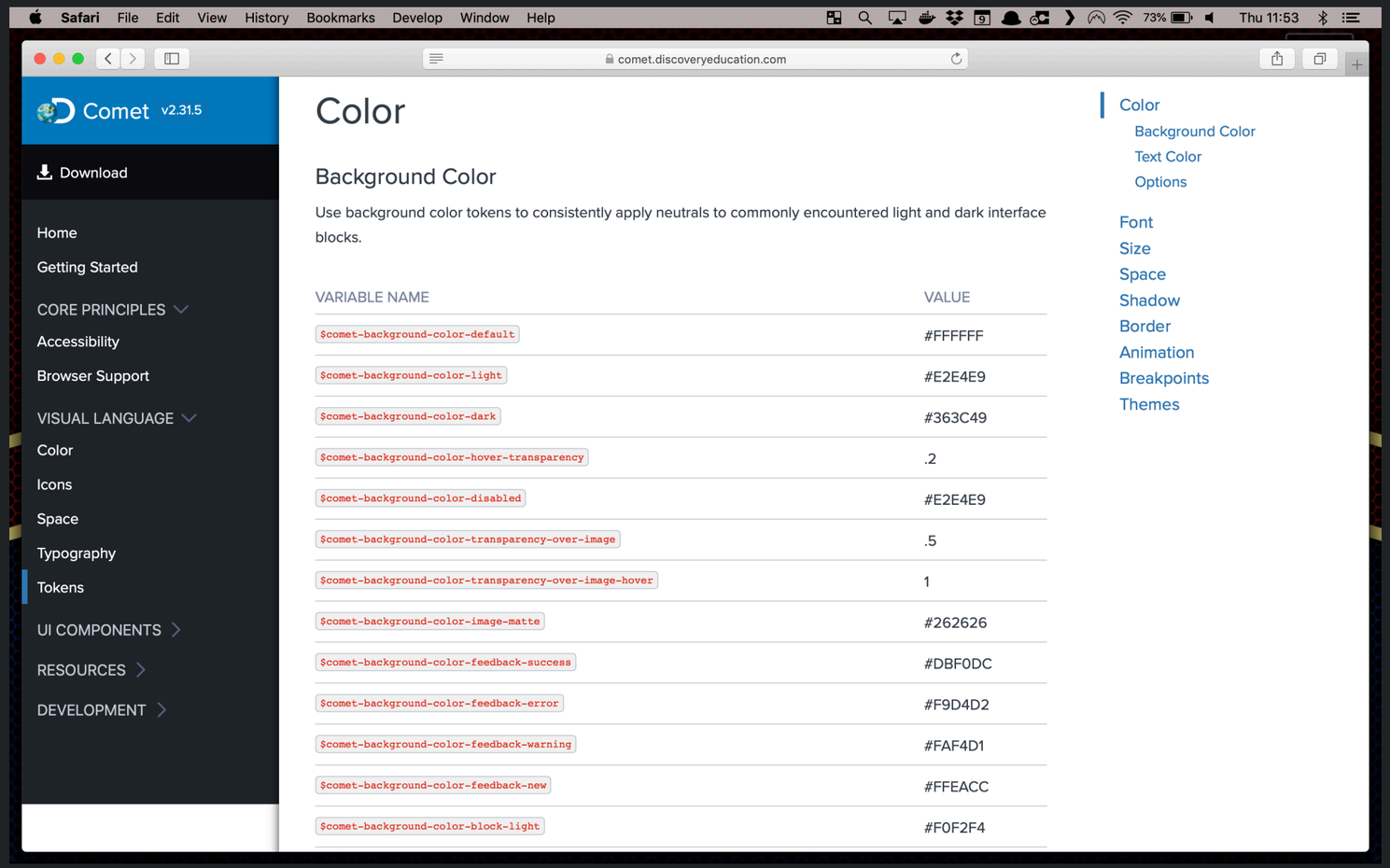
Variables, Super Variable, Constants, Design Tokens, Style Parameters, Style Dictionary, Primitives, Subatomic Particles, Style Expressions.

— Jina | @jina

# The What

**Sizing | Fonts Families | Font Styles | Font Weights | Font Sizes | Line Heights | Border Styles | Border Colors | Border Radius | Horizontal Rule Colors | Background Colors | Gradients | Background Gradients | Box Shadows | Text Colors | Text Shadows | Time | Media Queries | Z Index | Icons**

# Colour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Browser Support
VISUAL LANGUAGE
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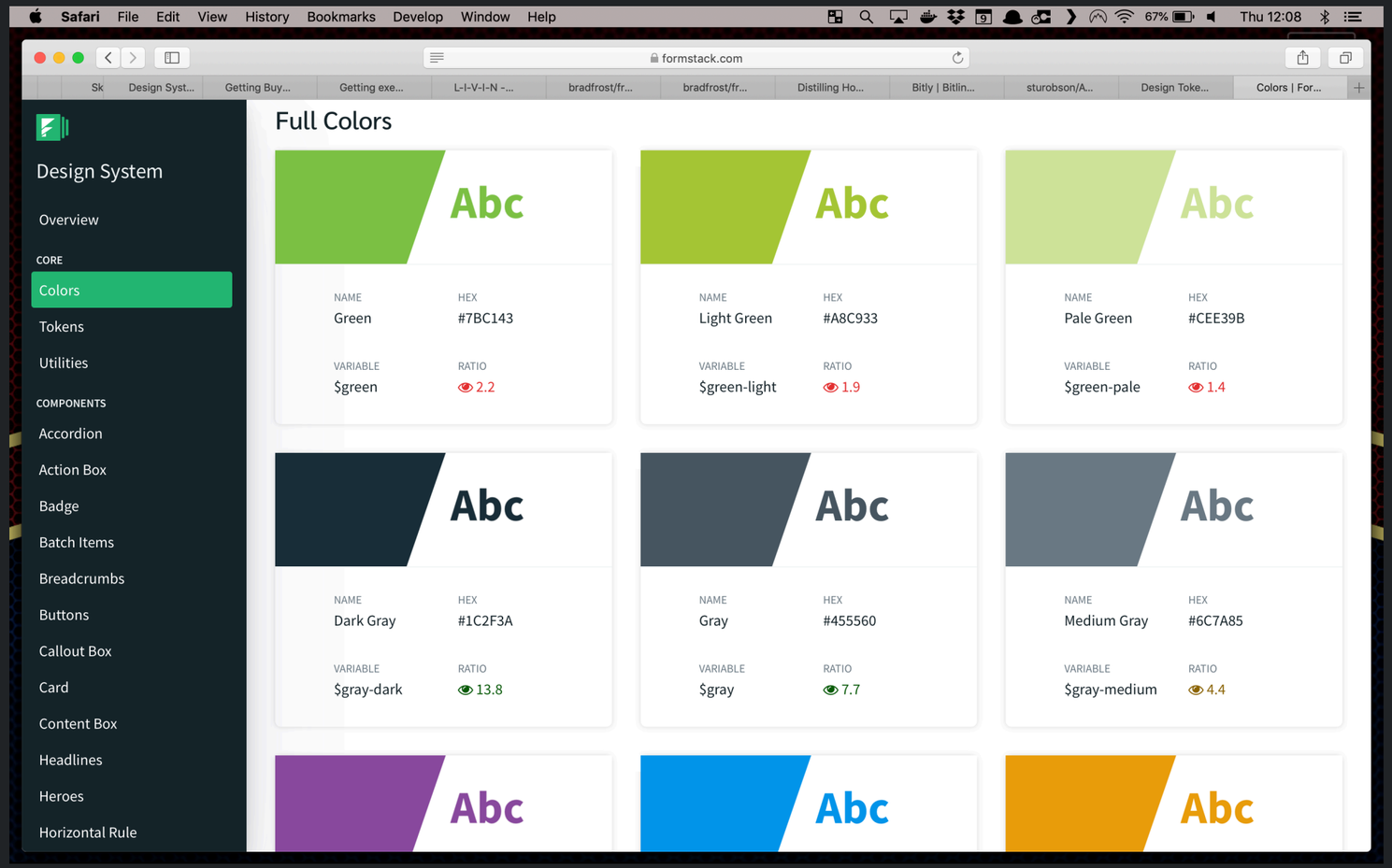
Color
Background Color
Use background color tokens to consistently apply neutrals to commonly encountered light and dark interface blocks.
VARIABLE NAME
VALUE
$comet-background-color-default #FFFFFF
$comet-background-color-light #E2E4E9
$comet-background-color-dark #363C49
$comet-background-color-hover-transparency .2
$comet-background-color-disabled #E2E4E9
$comet-background-color-transparency-over-image .5
$comet-background-color-transparency-over-image-hover 1
$comet-background-color-image-matte #262626
$comet-background-color-feedback-success #DBF0DC
$comet-background-color-feedback-error #F9D4D2
$comet-background-color-feedback-warning #FAF4D1
$comet-background-color-feedback-new #FFEACC
$comet-background-color-block-light #F0F2F4
Color
Background Color
Text Color
Options
Font
Size
Space
Shadow
Border
Animation
Breakpoints
Themes

# Colour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formstack.com
Design System
Overview
CORE
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Tokens
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COMPONENTS
Accordion
Action Box
Badge
Batch Items
Breadcrumbs
Buttons
Callout Box
Card
Content Box
Headlines
Heroes
Horizontal Rule
Full Colors
Abc
NAME Green
HEX #7BC143
VARIABLE $green
RATIO 2.2
NAME Light Green
HEX #A8C933
VARIABLE $green-light
RATIO 1.9
NAME Pale Green
HEX #CEE39B
VARIABLE $green-pale
RATIO 1.4
NAME Dark Gray
HEX #1C2F3A
VARIABLE $gray-dark
RATIO 13.8
NAME Gray
HEX #455560
VARIABLE $gray
RATIO 7.7
NAME Medium Gray
HEX #6C7A85
VARIABLE $gray-medium
RATIO 4.4

# Typography

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Find Token

Format: Sass

## Font

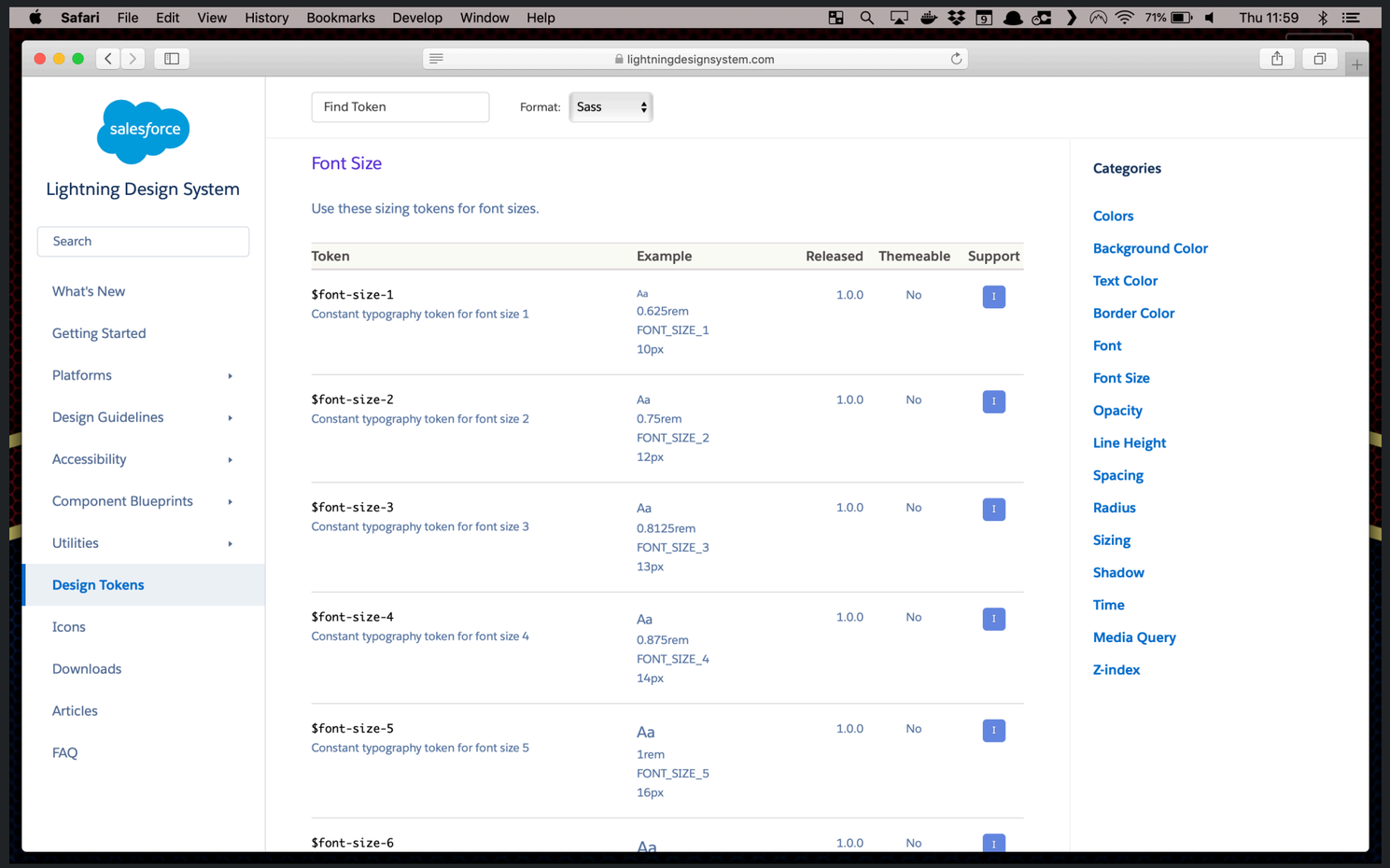
Use these font weights to change how thin or heavy the weight is for our font.

| Token | Example | Released | Themeable | Support |
|---|---|---|---|---|
| `$font-family`<br>Default font-family for Salesforce applications | Aa<br>'Salesforce Sans', Arial, sans-serif<br>SANS_SERIF | 1.0.0 | No | GA |
| `$font-family-heading` | Aa<br>'Salesforce Sans', Arial, sans-serif<br>SANS_SERIF | 1.0.0 | No | I |
| `$font-family-monospace` | Aa<br>Consolas, Menlo, Monaco, Courier, monospace<br>MONOSPACE | 1.0.0 | No | I |
| `$font-weight-bold`<br>Used sparingly for emphasized text within regular body copy. | Aa<br>700<br>FONT_WEIGHT_BOLD | 1.0.0 | No | GA |
| `$font-weight-light` | Aa | 1.0.0 | No | GA |

Categories

- Colors
- Background Color
- Text Color
- Border Color
- Font
- Font Size
- Opacity
- Line Height
- Spacing
- Radius
- Sizing
- Shadow
- Time
- Media Query
- Z-index

# Typography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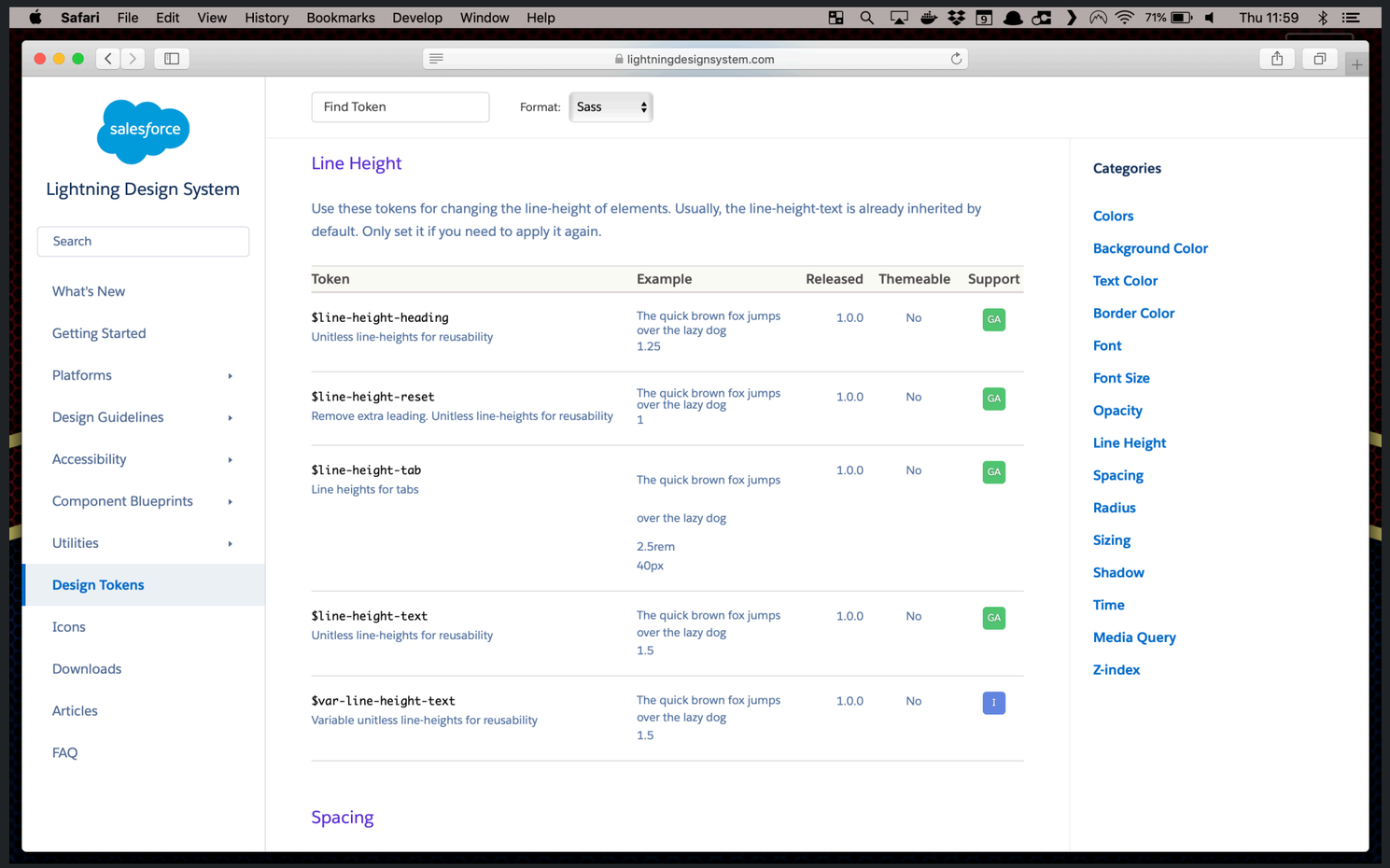
Find Token
Format: Sass
Font Size
Use these sizing tokens for font sizes.
Token
Example
Released
Themeable
Support
$font-size-1
Constant typography token for font size 1
Aa 0.625rem FONT_SIZE_1 10px
1.0.0
No
$font-size-2
Constant typography token for font size 2
Aa 0.75rem FONT_SIZE_2 12px
1.0.0
No
$font-size-3
Constant typography token for font size 3
Aa 0.8125rem FONT_SIZE_3 13px
1.0.0
No
$font-size-4
Constant typography token for font size 4
Aa 0.875rem FONT_SIZE_4 14px
1.0.0
No
$font-size-5
Constant typography token for font size 5
Aa 1rem FONT_SIZE_5 16px
1.0.0
No
$font-size-6
Aa
1.0.0
No
Categories
Colors
Background Color
Text Color
Border Color
Font
Font Size
Opacity
Line Height
Spacing
Radius
Sizing
Shadow
Time
Media Query
Z-index

# Typography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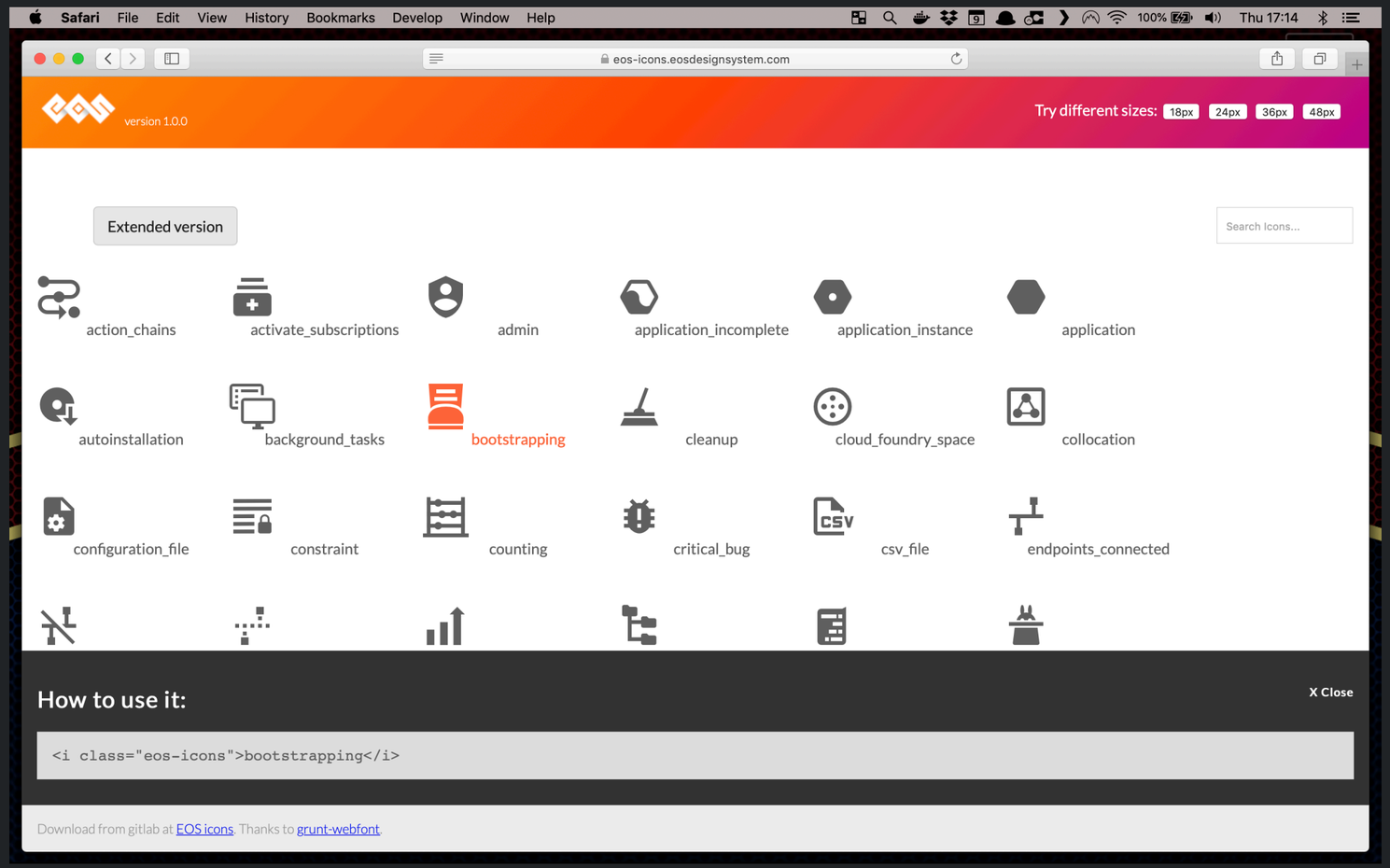
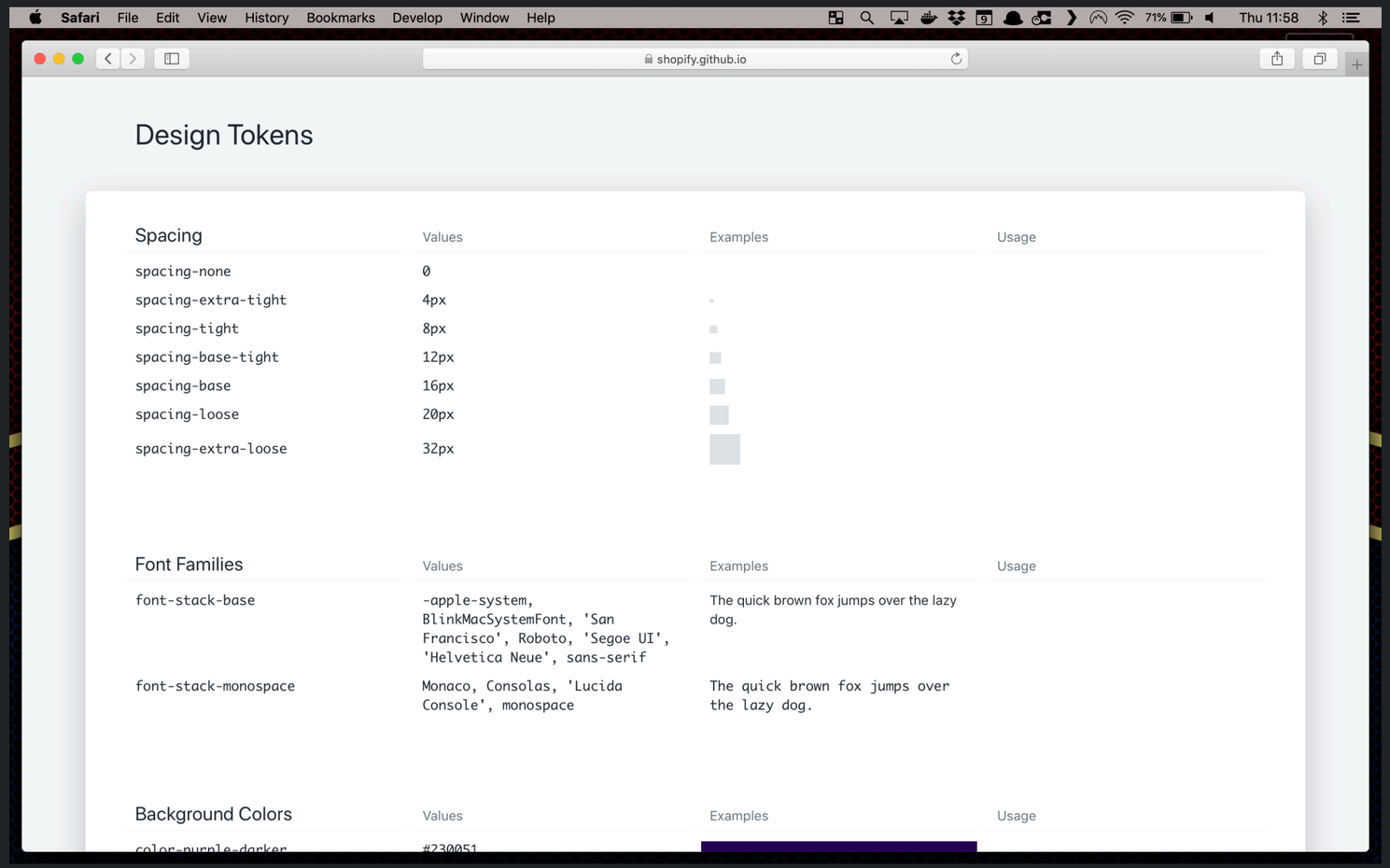
Format: Sass
Line Height
Use these tokens for changing the line-height of elements. Usually, the line-height-text is already inherited by default. Only set it if you need to apply it again.
Token
Example
Released
Themeable
Support
$line-height-heading
Unitless line-heights for reusability
The quick brown fox jumps over the lazy dog 1.25
1.0.0
No
GA
$line-height-reset
Remove extra leading. Unitless line-heights for reusability
The quick brown fox jumps over the lazy dog 1
1.0.0
No
GA
$line-height-tab
Line heights for tabs
The quick brown fox jumps over the lazy dog 2.5rem 40px
1.0.0
No
GA
$line-height-text
Unitless line-heights for reusability
The quick brown fox jumps over the lazy dog 1.5
1.0.0
No
GA
$var-line-height-text
Variable unitless line-heights for reusability
The quick brown fox jumps over the lazy dog 1.5
1.0.0
No
I
Spacing
Categories
Colors
Background Color
Text Color
Border Color
Font
Font Size
Opacity
Line Height
Spacing
Radius
Sizing
Shadow
Time
Media Query
Z-index

# Iconography



# Spacing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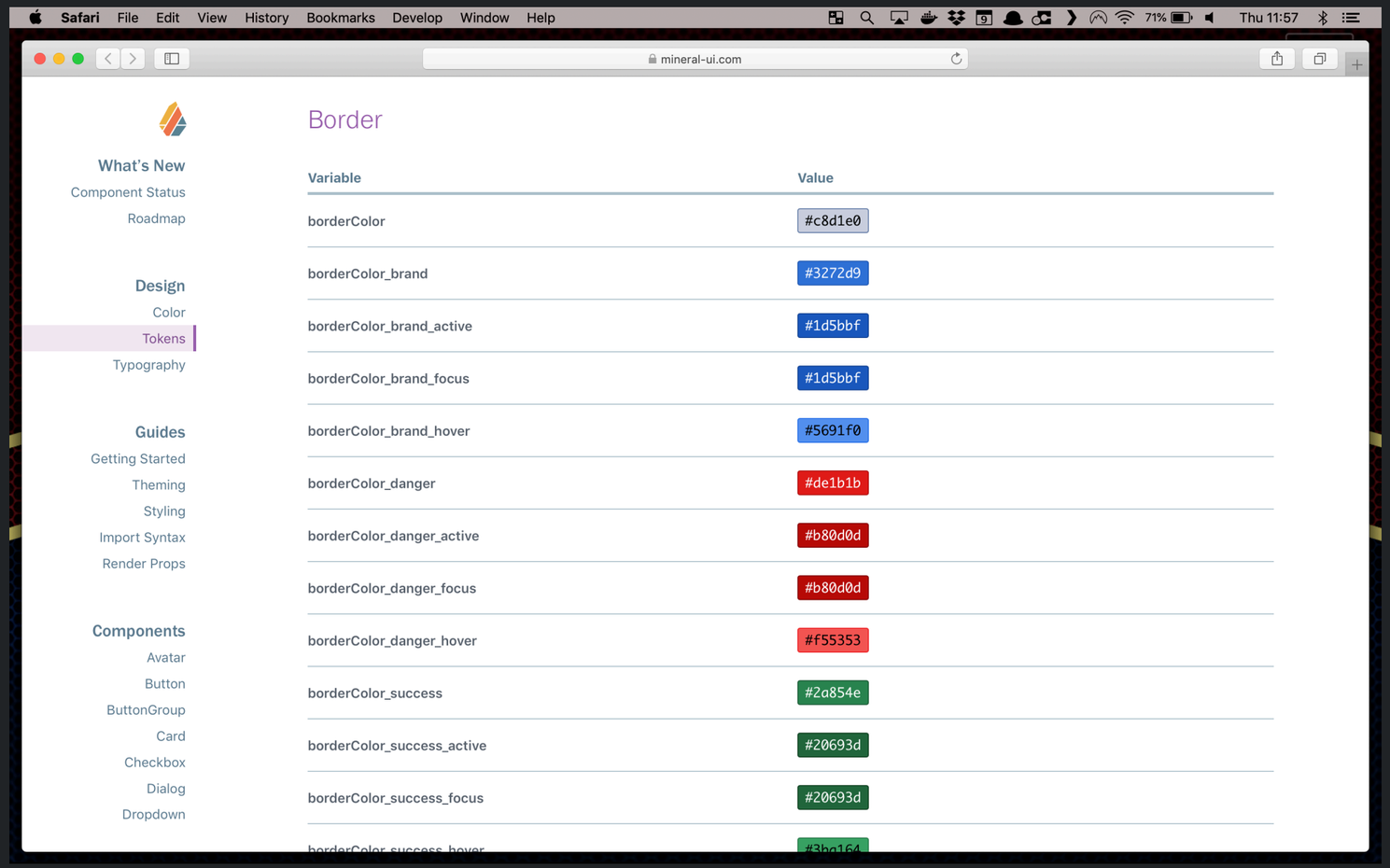
Thu 11:58
shopify.github.io
Design Tokens
Spacing
Values
Examples
Usage
spacing-none
0
spacing-extra-tight
4px
spacing-tight
8px
spacing-base-tight
12px
spacing-base
16px
spacing-loose
20px
spacing-extra-loose
32px
Font Families
Values
Examples
Usage
font-stack-base
-apple-system, BlinkMacSystemFont, 'San Francisco', Roboto, 'Segoe UI', 'Helvetica Neue', sans-serif
The quick brown fox jumps over the lazy dog.
font-stack-monospace
Monaco, Consolas, 'Lucida Console', monospace
The quick brown fox jumps over the lazy dog.
Background Colors
Values
Examples
Usage

# Borders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mineral-ui.com
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Import Syntax
Render Props
Components
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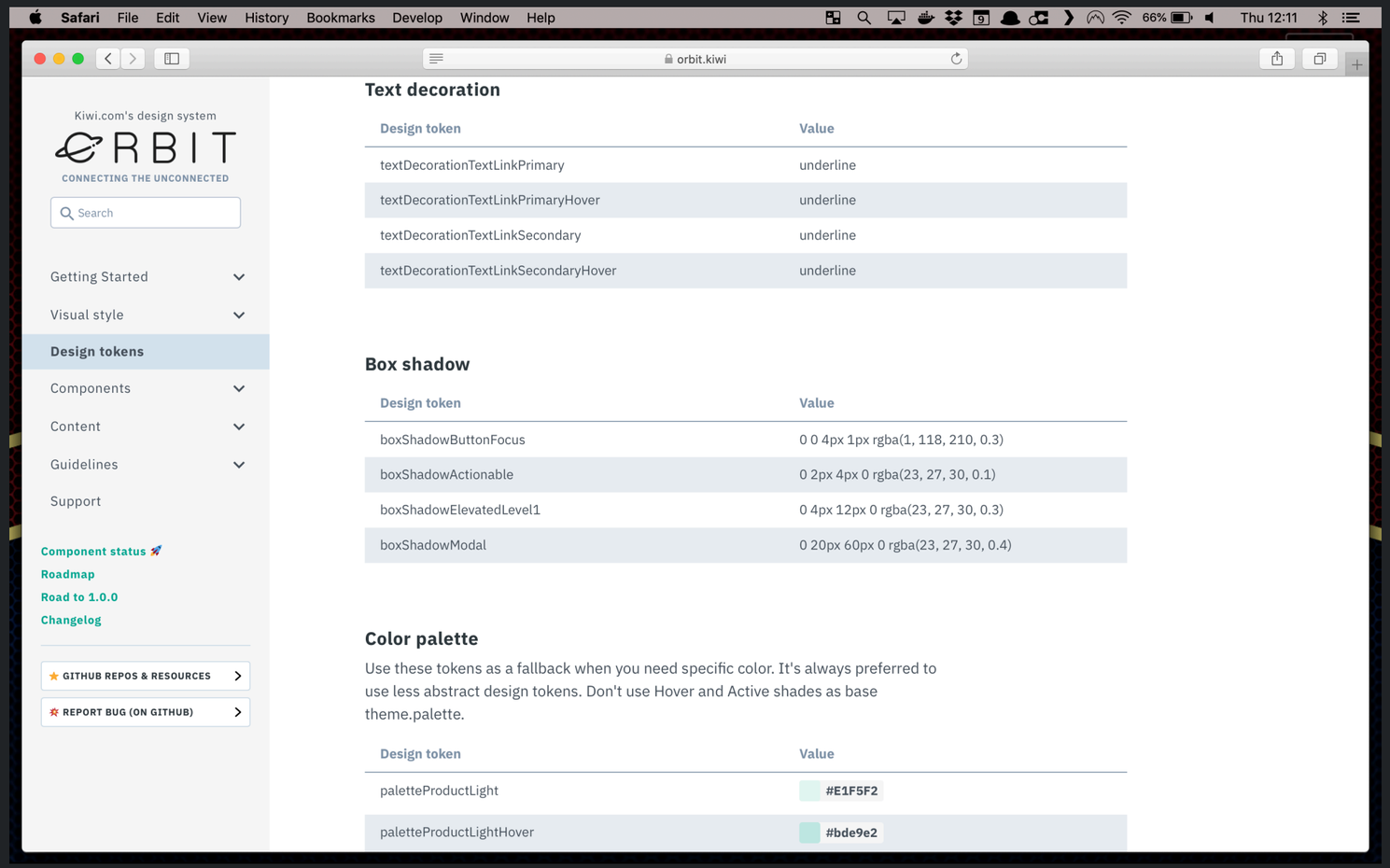
Button
ButtonGroup
Card
Checkbox
Dialog
Dropdown
Border
Variable
Value
borderColor #c8d1e0
borderColor_brand #3272d9
borderColor_brand_active #1d5bbf
borderColor_brand_focus #1d5bbf
borderColor_brand_hover #5691f0
borderColor_danger #de1b1b
borderColor_danger_active #b80d0d
borderColor_danger_focus #b80d0d
borderColor_danger_hover #f55353
borderColor_success #2a854e
borderColor_success_active #20693d
borderColor_success_focus #20693d

# Shadows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66% Thu 12:11
orbit.kiwi
Kiwi.com's design system
ORBIT
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Design tokens
Components
Content
Guidelines
Support
Component status
Roadmap
Road to 1.0.0
Changelog
GITHUB REPOS & RESOURCES
REPORT BUG (ON GITHUB)
Text decoration
Design token | Value
textDecorationTextLinkPrimary | underline
textDecorationTextLinkPrimaryHover | underline
textDecorationTextLinkSecondary | underline
textDecorationTextLinkSecondaryHover | underline
Box shadow
Design token | Value
boxShadowButtonFocus | 0 0 4px 1px rgba(1, 118, 210, 0.3)
boxShadowActionable | 0 2px 4px 0 rgba(23, 27, 30, 0.1)
boxShadowElevatedLevel1 | 0 4px 12px 0 rgba(23, 27, 30, 0.3)
boxShadowModal | 0 20px 60px 0 rgba(23, 27, 30, 0.4)
Color palette
Use these tokens as a fallback when you need specific color. It's always preferred to use less abstract design tokens. Don't use Hover and Active shades as base theme.palette.
Design token | Value
paletteProductLight | #E1F5F2
paletteProductLightHover | #bde9e2

# Time

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Find Token

Format: Sass

## Time

Use timing tokens for animation durations.

| Token | Example | Released | Themeable | Support |
|---|---|---|---|---|
| $duration-immediately<br>0.05 seconds, 3 frames | 0.05s<br>DURATION_IMMEDIATELY | 1.0.0 | No | GA |
| $duration-instantly<br>0 seconds, 0 frames | 0s<br>DURATION_INSTANTLY | 1.0.0 | No | GA |
| $duration-paused<br>3.2 seconds, 192 frames | 3.2s<br>DURATION_PAUSED | 1.0.0 | No | GA |
| $duration-promptly<br>0.2 seconds, 12 frames | 0.2s<br>DURATION_PROMPTLY | 1.0.0 | No | GA |
| $duration-quickly<br>0.1 seconds, 6 frames | 0.1s<br>DURATION_QUICKLY | 1.0.0 | No | GA |
| $duration-slowly<br>0.4 seconds, 24 frames | 0.4s<br>DURATION_SLOWLY | 1.0.0 | No | GA |

## Media Query

Use media query tokens to set media query width ranges.

| Token | Example | Released | Themeable | Support |
|---|---|---|---|---|

Categories

- Colors
- Background Color
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- Font Size
- Opacity
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- Spacing
- Radius
- Sizing
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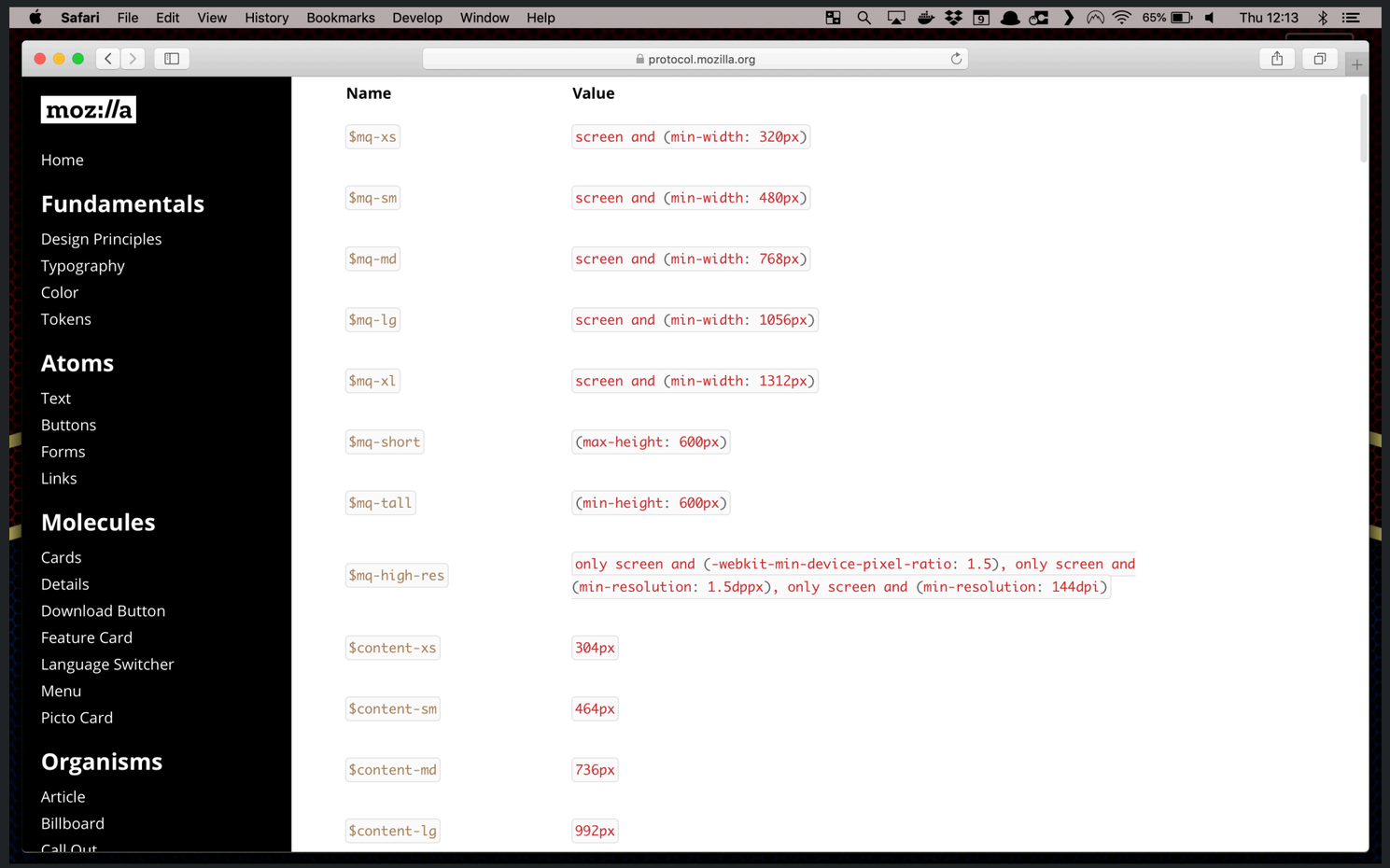
- Z-index

# Breakpoints




| Name | Value |
|---|---|
| $mq-xs | screen and (min-width: 320px) |
| $mq-sm | screen and (min-width: 480px) |
| $mq-md | screen and (min-width: 768px) |
| $mq-lg | screen and (min-width: 1056px) |
| $mq-xl | screen and (min-width: 1312px) |
| $mq-short | (max-height: 600px) |
| $mq-tall | (min-height: 600px) |
| $mq-high-res | only screen and (-webkit-min-device-pixel-ratio: 1.5), only screen and (min-resolution: 1.5dppx), only screen and (min-resolution: 144dpi) |
| $content-xs | 304px |
| $content-sm | 464px |
| $content-md | 736px |
| $content-lg | 992px |

# The How

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github.com

# Theo

build passing npm v8.1.2

Theo is an abstraction for transforming and formatting Design Tokens.

> **Looking for the gulp plugin?**
>
> As of Theo v6, the gulp plugin is distributed as a separate package: gulp-theo.

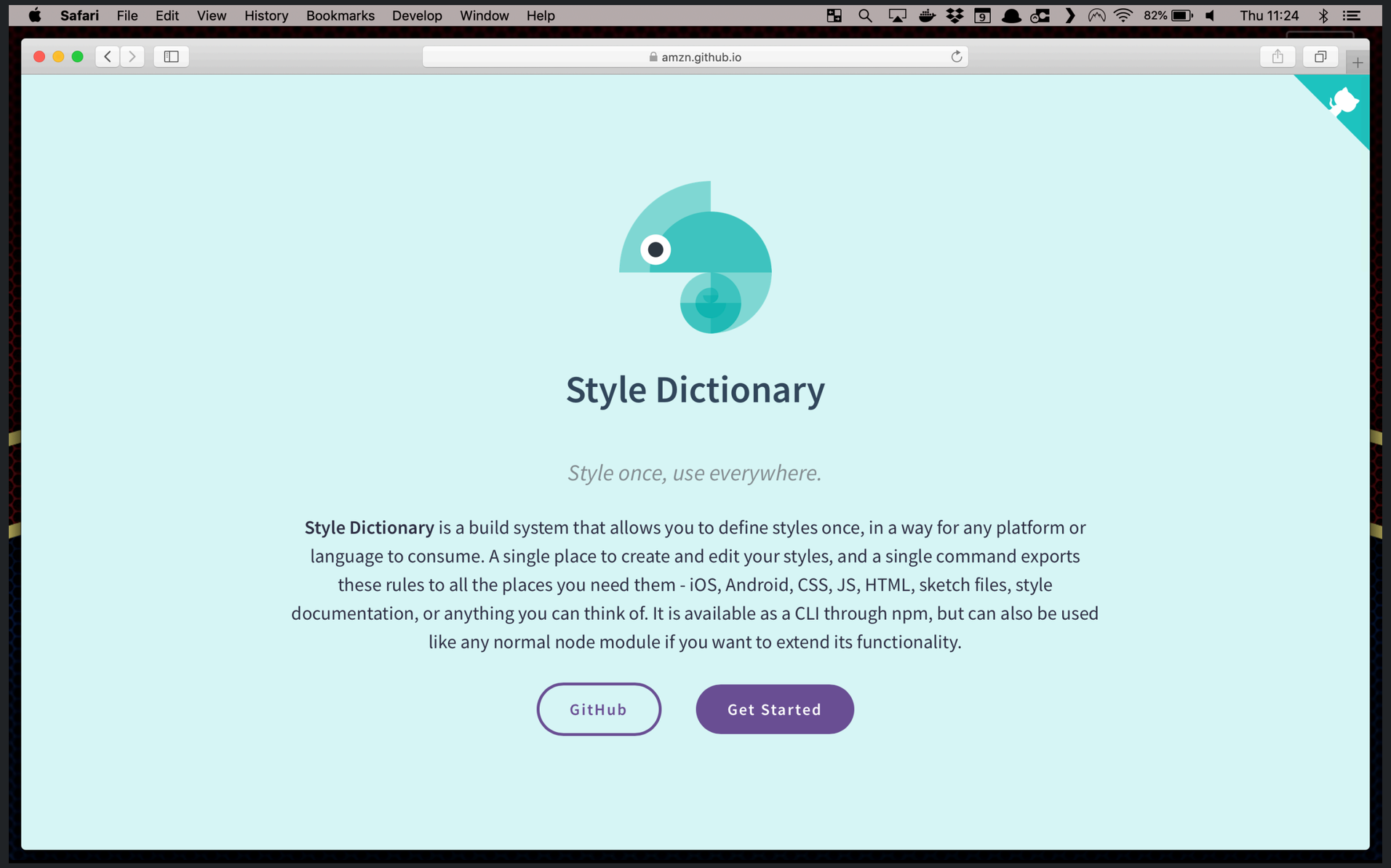
## Example

```yaml
# buttons.yml
props:
  button_background:
    value: "{!primary_color}"
imports:
  - ./aliases.yml
global:
  type: color
  category: buttons
```

```yaml
# aliases.yml
aliases:
  primary_color:
    value: "#0070d2"
```

```
const theo = require("theo");

theo
  .convert({
    transform: {
      type: "web",
      file: "buttons.yml"
```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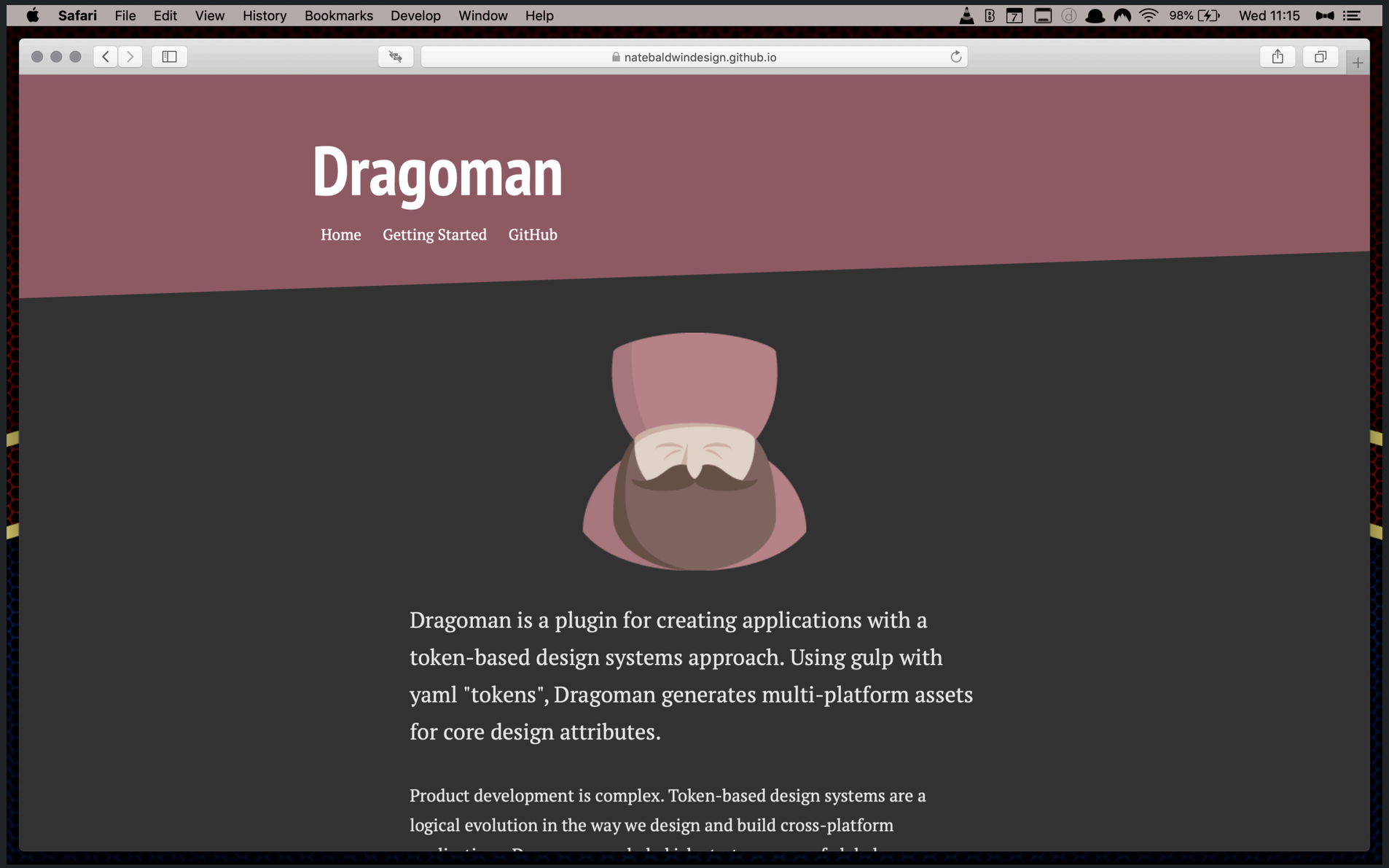
amzn.github.io
Style Dictionary
Style once, use everywhere.
Style Dictionary is a build system that allows you to define styles once, in a way for any platform or language to consume. A single place to create and edit your styles, and a single command exports these rules to all the places you need them - 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.
GitHub
Get Started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natebaldwindesign.github.io
Dragoman
Home Getting Started GitHub
Dragoman is a plugin for creating applications with a token-based design systems approach. Using gulp with yaml "tokens", Dragoman generates multi-platform assets for core design attributes.
Product development is complex. Token-based design systems are a logical evolution in the way we design and build cross-platform

github.com

# Chromatic

A tool to help manage design systems by generating platform-specific files from a source file describing design tokens.

## Expressive Design Tokens

Tokens can contain rich expressions in a natural syntax, including arithmetic operations, units ( `12px` ), function ( `rgb()` , `mix()` , `saturate()` ...) and references to other tokens.

```
tokens:
    primary-hue: '210deg'
    primary: 'hsl({primary-hue}, 100%, 40%)'
    primary-dark: 'darken({primary}, 20%)'

    line-height: '18pt + 5px'
```

## Themes

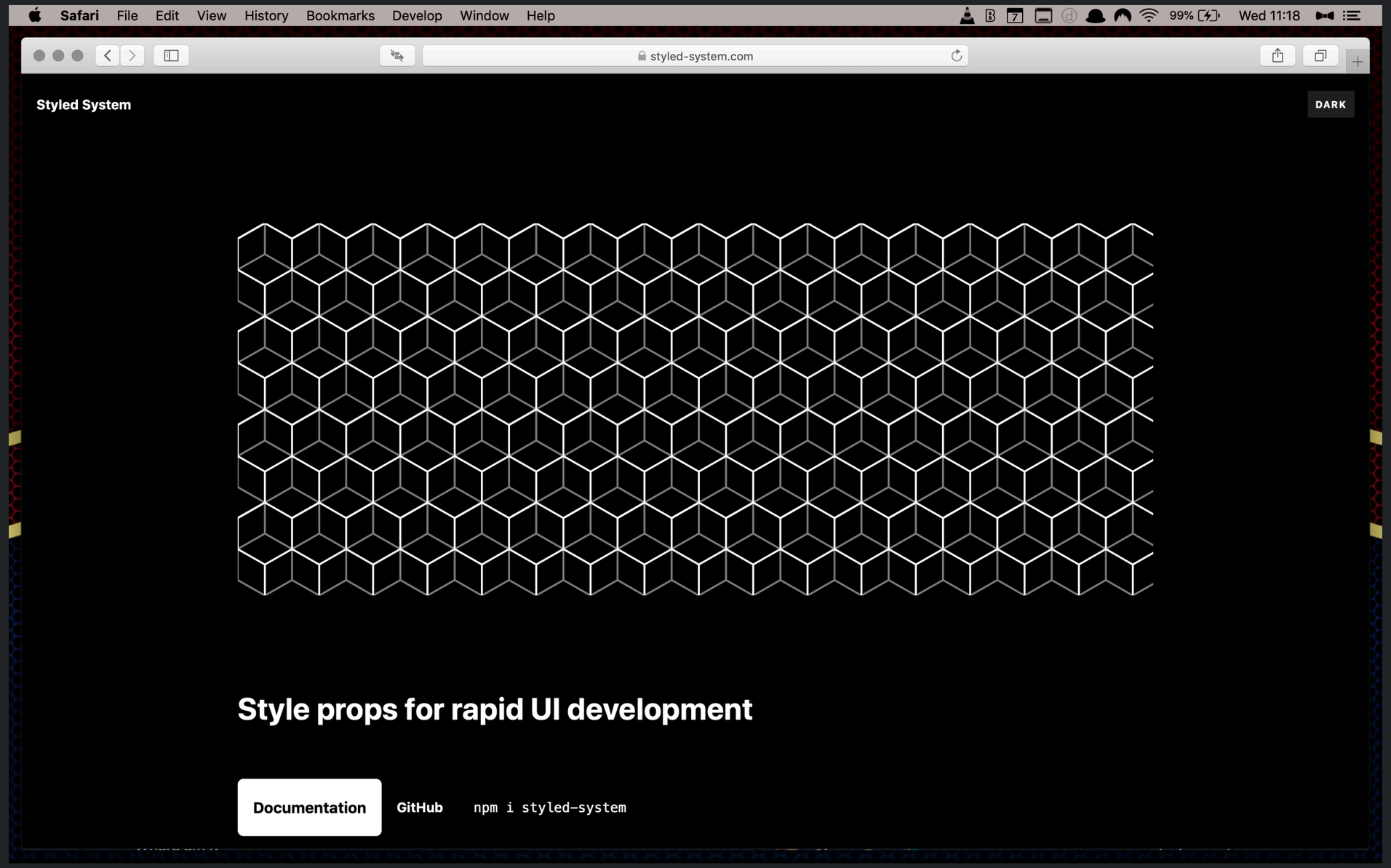
Each token can have a theme variant, such as dark/light, or compact/cozy layouts. The necessary output artifacts are generated automatically.

```
tokens:
    cta-button-background:
        value:
            dark: '#004082'
            light: '#0066ce'
```

## Zero-conf

Get going quickly. A simple **token file** written YAML or JSON file is all you need.

But Chromatic is also customizable when you need to. You can write or modify the format of the output files to suit your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styled-system.com
Styled System
DARK
Style props for rapid UI development
Documentation
GitHub
npm i styled-system

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github.com

# 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.

## Install

```
yarn add design-system-utils

# or

npm install --save design-system-utils
```

### Size

```
$ size-limit

  build/cjs.js
  Package size: 814 B
  Size limit:   1 KB

  es/index.js
  Package size: 806 B
  Size limit:   1 KB

  With all dependencies, minified and gzipped
```

diez.org

Diez

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# What is Diez?

Diez is a free & open-source developer toolkit for expressing visual styles that can be shared across codebases, native platforms, and teams.

**Diez comes in three parts:**

## 1. Design language framework

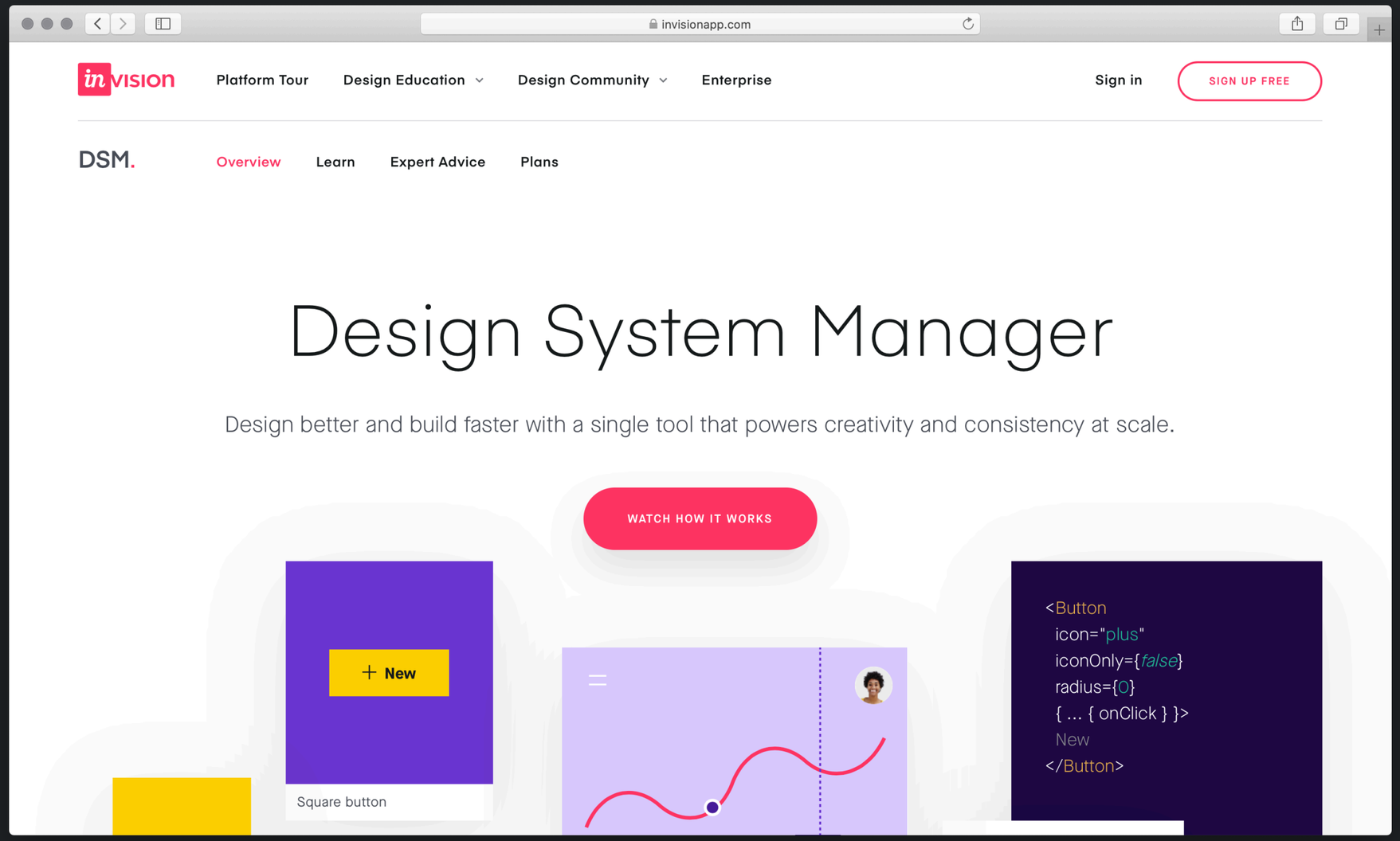
```
const palette = {
  violet: Color.hex('#5623EE'),
  mauve: Color.hex('#A494D3'),
  gray500: Color.hex('#8E86AA'),
  gray600: Color.hex('#79738F')
}
```

Palette

Violet Mauve Gray500 Gray600

Use TypeScript to compose **design tokens** into **scalable** and **extensible** collections of styles, themes, and visual guidelines. Your brand identity fits right here — as code.

From colors to typography, drop shadows to border radii, gradients to usage guidelines, logos to icons: if you can imagine it, you can express it in Diez.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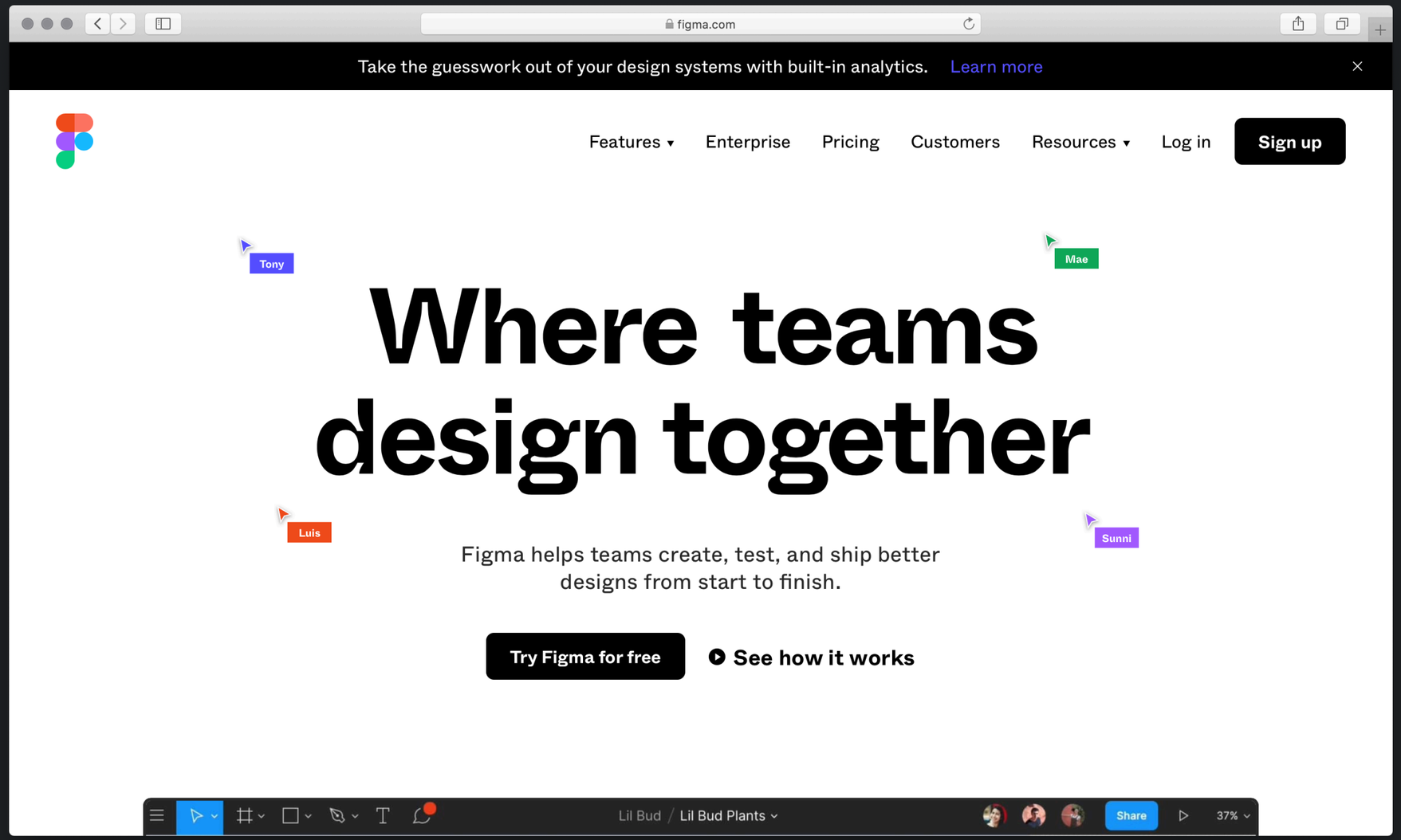
Design Community
Enterprise
Sign in
SIGN UP FREE
DSM.
Overview
Learn
Expert Advice
Plans
Design System Manager
Design better and build faster with a single tool that powers creativity and consistency at scale.
WATCH HOW IT WORKS
+ New
Square button
<Button
icon="plus"
iconOnly={false}
radius={0}
{ ... { onClick } }>
New
</Button>


figma.com
Take the guesswork out of your design systems with built-in analytics. Learn more
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Enterprise
Pricing
Customers
Resources
Log in
Sign up
Tony
Mae
Where teams design together
Luis
Sunni
Figma helps teams create, test, and ship better designs from start to finish.
Try Figma for free
See how it works
Lil Bud / Lil Bud Plants
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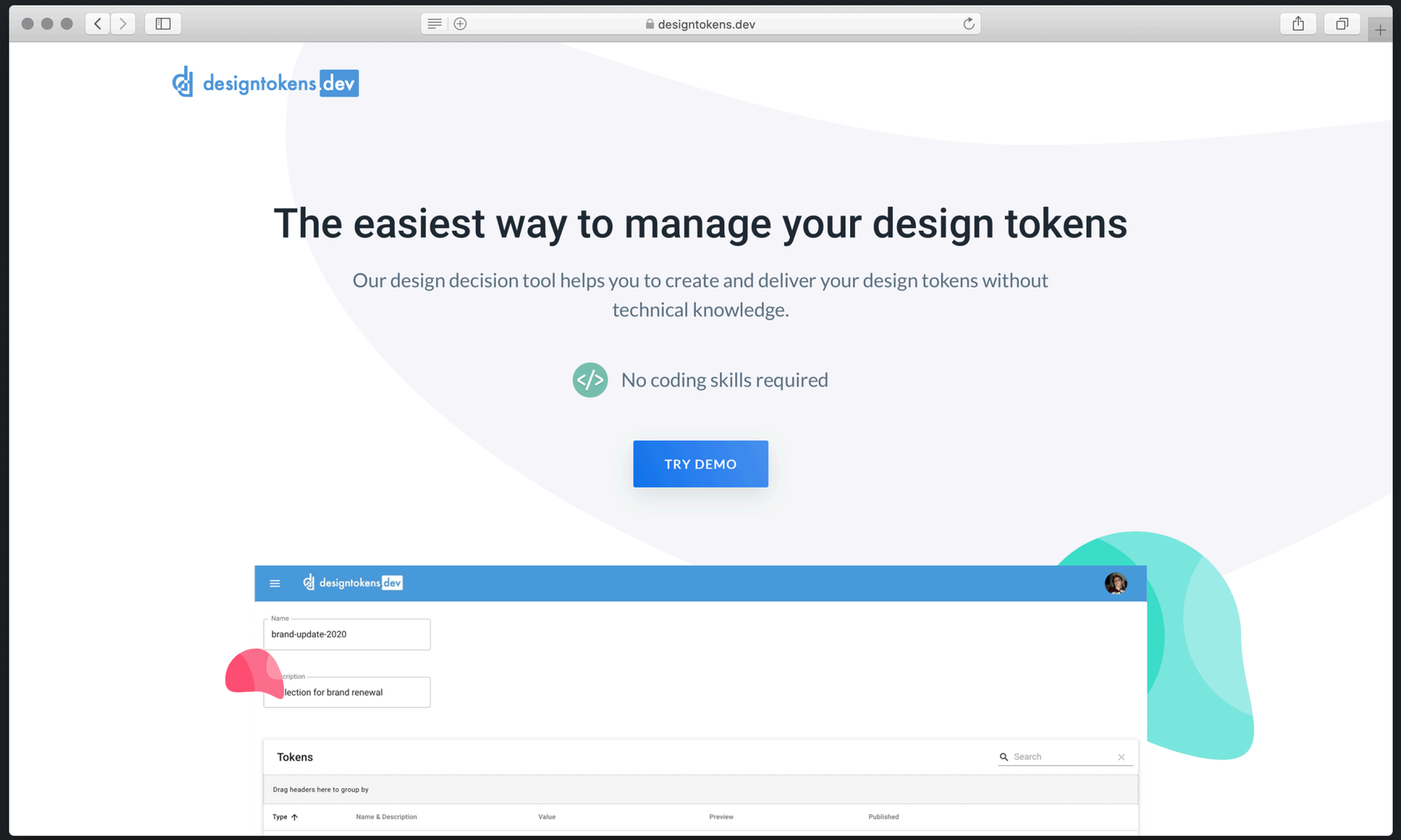
designtokens.dev
designtokens.dev
The easiest way to manage your design tokens
Our design decision tool helps you to create and deliver your design tokens without technical knowledge.
No coding skills required
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designtokens.dev
Name
brand-update-2020
lection for brand renewal
Tokens
Search
Drag headers here to group by
Type
Name & Description
Value
Preview
Published

app.designtokens.dev

designtokens.dev

# colours

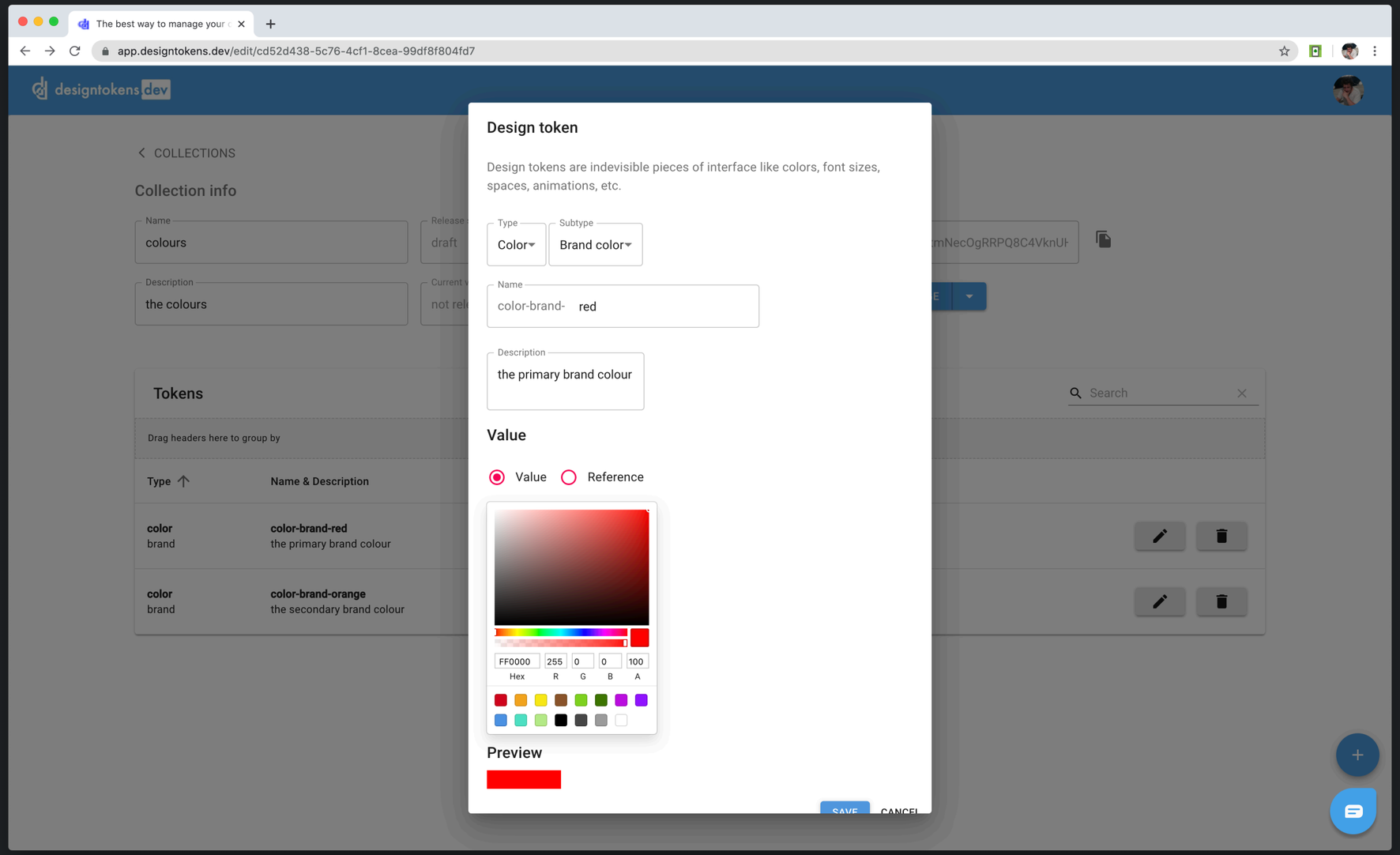
the colours

## Tokens

Search

Drag headers here to group by

| Type | Name & Description | Value | Preview | Published |
|---|---|---|---|---|
| **color**<br>brand | **color-brand-red**<br>the primary brand colour | #FF0000 | | Not yet published |
| **color**<br>brand | **color-brand-orange**<br>the secondary brand colour | #F5A623 | | Not yet published |


The best way to manage your
app.designtokens.dev/edit/cd52d438-5c76-4cf1-8cea-99df8f804fd7
designtokens.dev
COLLECTIONS
Collection info
Name
colours
Release
draft
Description
the colours
Tokens
Search
Drag headers here to group by
Type
Name & Description
color
brand
color-brand-red
the primary brand colour
color
brand
color-brand-orange
the secondary brand colour
Design token
Design tokens are indevisible pieces of interface like colors, font sizes, spaces, animations, etc.
Type
Color
Subtype
Brand color
Name
color-brand- red
Description
the primary brand colour
Value
Value
Reference
FF0000
255
0
0
100
Hex
R
G
B
A
Preview
SAVE
CANCEL

# The Why

# Consistency

# Consistency
# Maintainability

# Consistency
# Maintainability
# Scalability

**A Design Sytems Horse, of course.**
@horse_designsys

every discussion of design systems ultimately becomes a discussion about buttons

10:52 PM · Sep 14, 2019 · Twitter for iPhone

**39** Retweets **116** Likes

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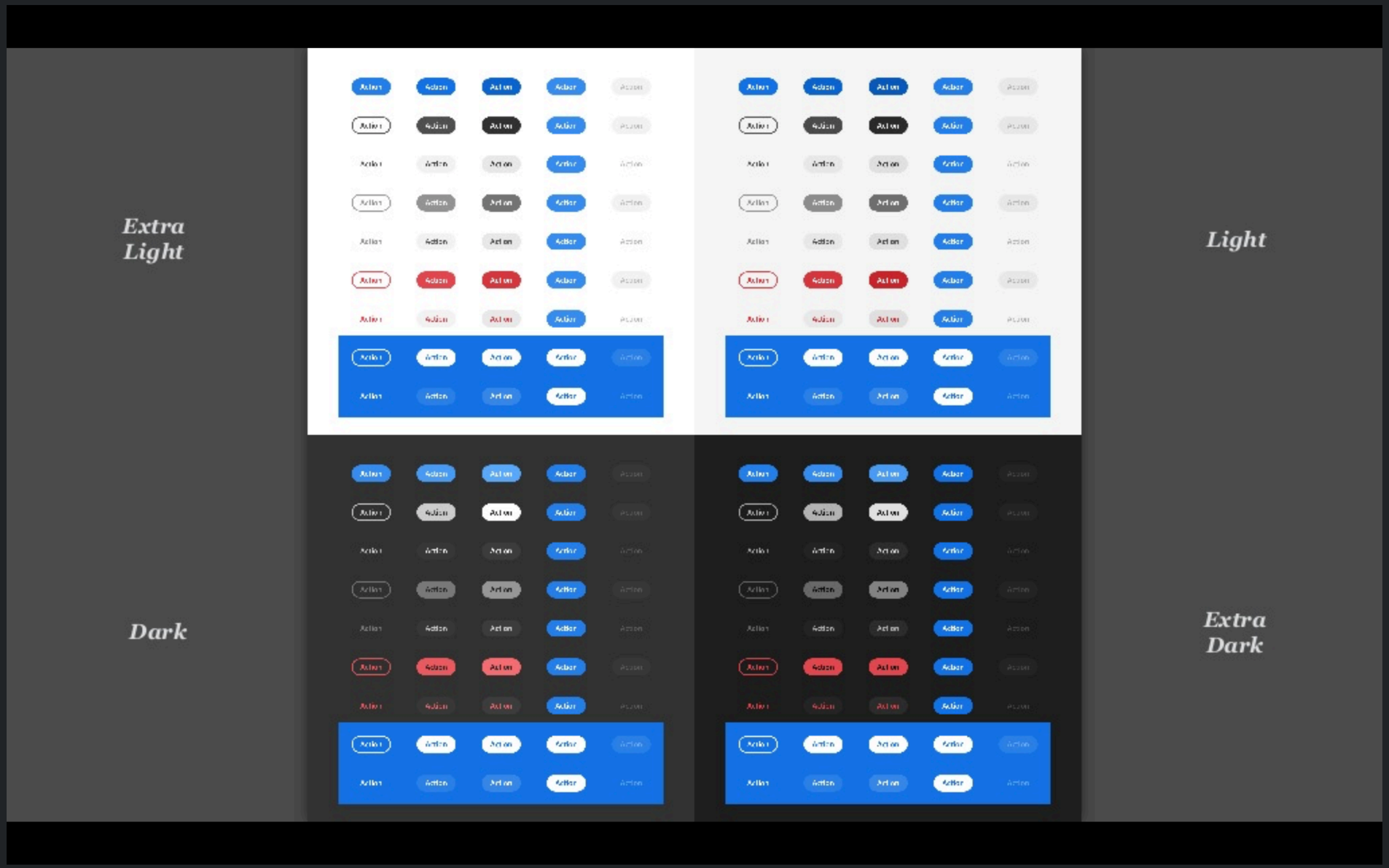
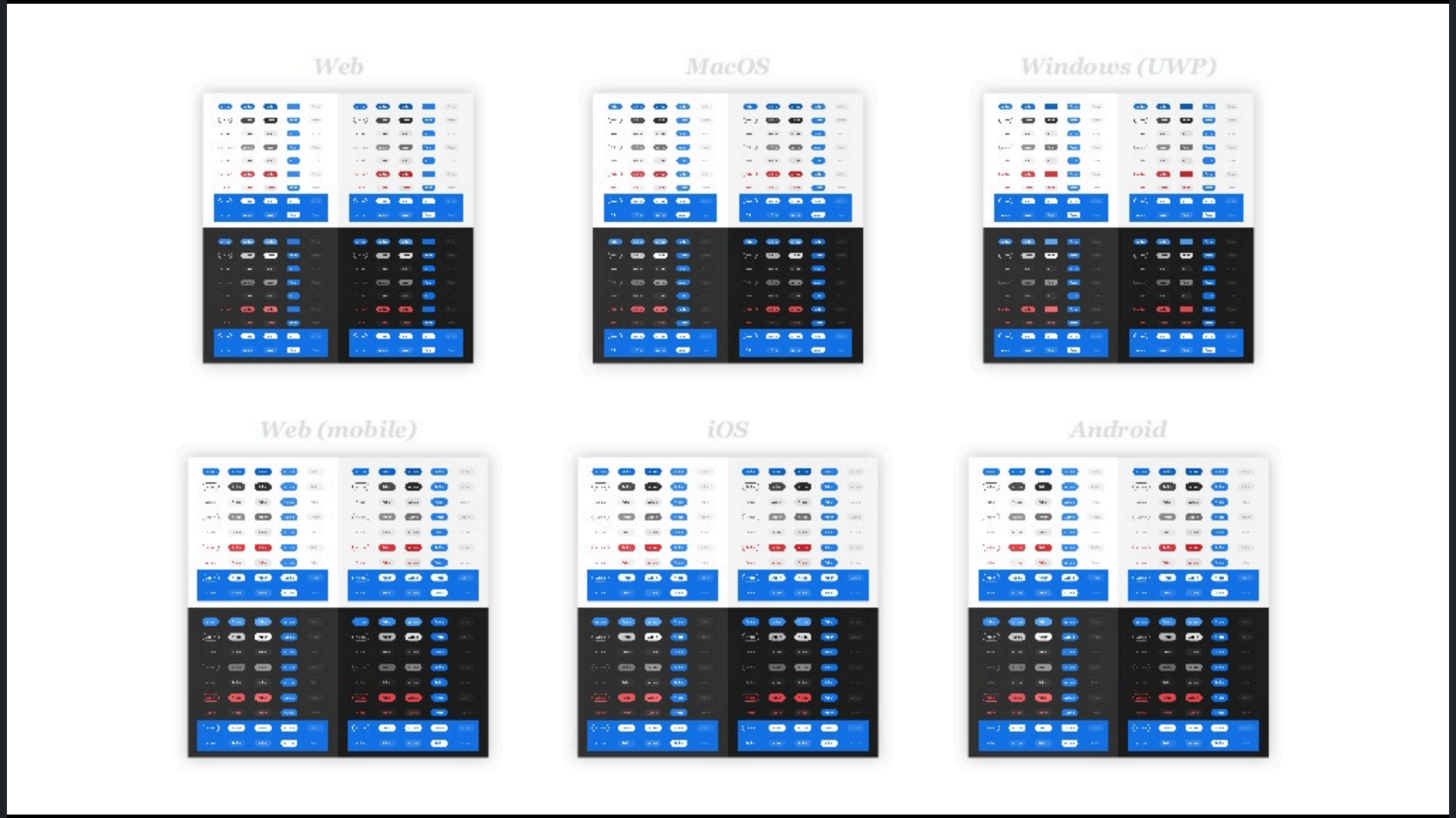
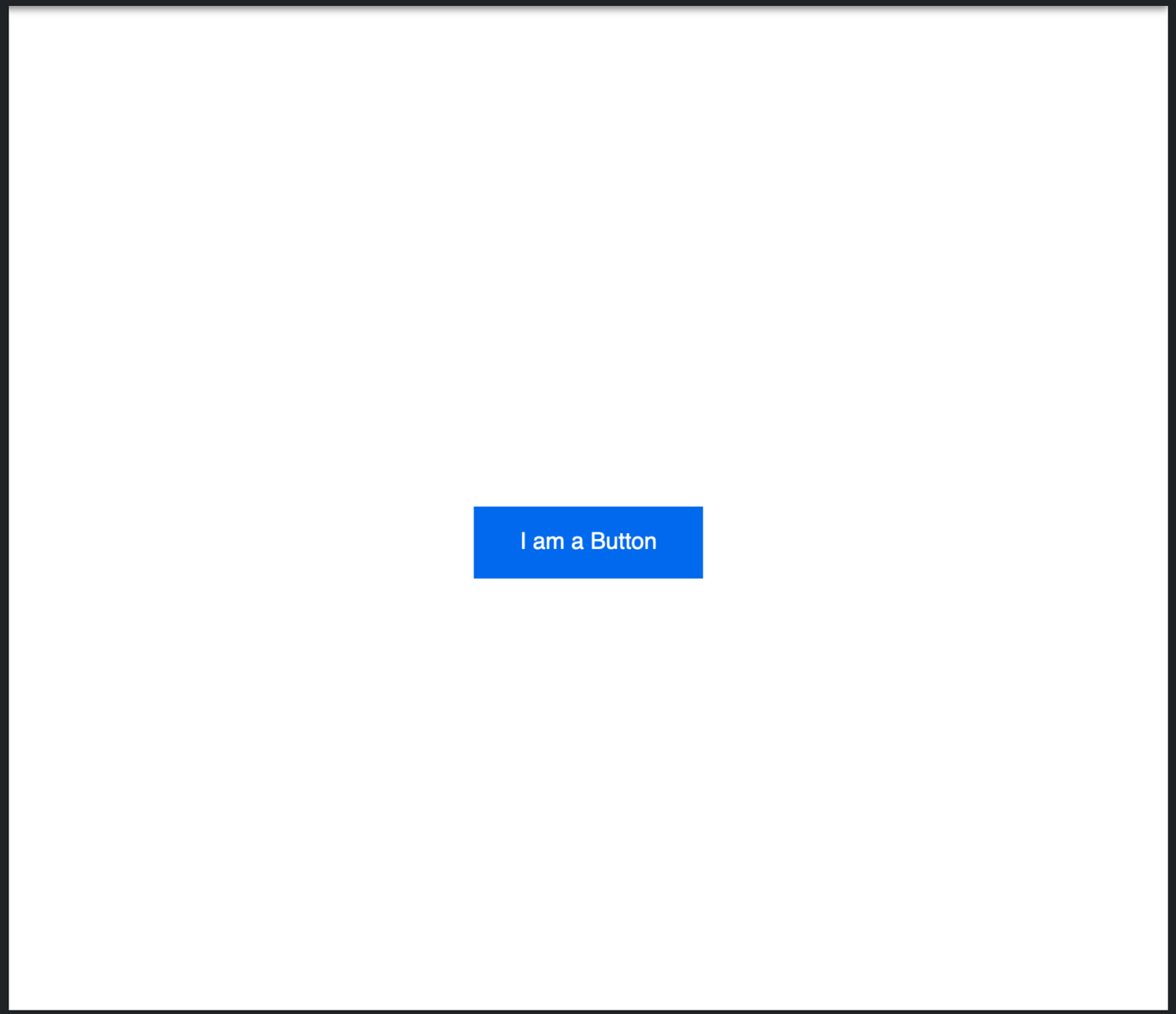
Raise Capital
Mitigate Risk
Go International
Learn More
Sign on to PINACLE®
What is PNC Purchase Payback
How PNC Purchase Payback Works
Get Connected
GET RATES
Enroll Mobile Device
Get Started
Sign On
Next Step
Learn More
Add Reminder
Search Transactions
Export All
Print Spend
Print Reserve
Check Rates
Savings History
Customize Your Pig
Add
Sign On
Apply Now
Continue
Search
Go
CLEAR
SUBMIT
Rate Virtual Wallet
Share Your Story
Sign On
+ Add transaction
Show Bars
GO
Set Payday
Try Again
Sign Up for V.me
Learn More
Learn More

I am a Button


Extra Light
Light
Dark
Extra Dark


Web
MacOS
Windows (UWP)
Web (mobile)
iOS
Android


I am a Button

# Variants

- Typography
- Palette
- Borders
- Shadow
- Spacing

- Interaction: hover, focus, active states

# Typography

- font family
- font size
- font weight
- text transform

# Colour

- text colour
- background colour

# Borders

- border colour
- border style
- border width
- border radius

# Spacing

- padding top
- padding bottom
- padding left
- padding right

- margin top
- margin bottom
- margin left
- margin right

# Interactive States

- hover text colour
- hover background colour
- hover box shadow

- focus text colour
- focus background colour
- focus box shadow
- focus border colour
- focus border width

# Timing

- transition duration
- transition property
- transition timing function

"

When there's an update to our brand colors or typography, tokens can help streamline the redesign process.

— Maya King | @HiMaya

# Let's live code.

duetds.com

Duet

LocalTapiola | Turva

Search documentation

- Getting Started
- Guidelines
- Tutorials
- Design Tokens
  - Color
  - Font
  - Font Size
  - Border Radius
  - Box Shadow
  - Space
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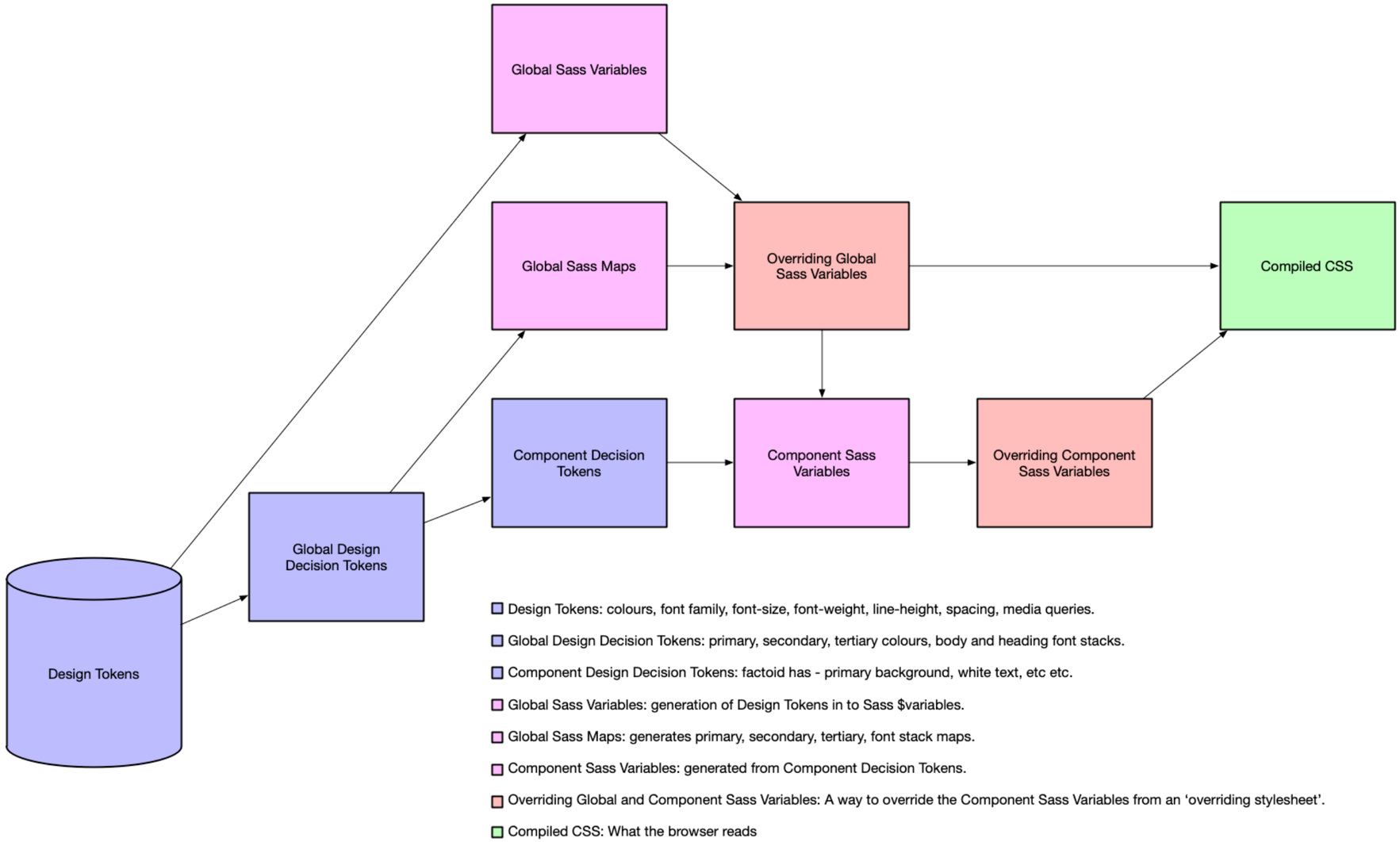
# Color

For consistency, we use the below defined color palette throughout our interface. Keep in mind that green, red and orange are only used in special cases like form validation and messaging.

| Example | Description | Token | Contrast | Status |
|---|---|---|---|---|
| #004d80<br>rgb(0, 77, 128) | **Primary Blue Dark**<br>Dark version of primary blue that is accessible with white. Most commonly used to indicate hover and active states of an item with primary blue background. | `$color-primary-dark`<br>`var(--color-primary-dark)` | 8.85:1 ✓ | ✓ |
| #0077b3<br>rgb(0, 119, 179) | **Primary Blue**<br>Primary digital blue that is accessible with white. Used as primary button background color, selected state background color, and as link text color. | `$color-primary`<br>`var(--color-primary)` | 4.9:1 ✓ | ✓ |
| #cde5f1<br>rgb(205, 229, 241) | **Primary Blue Light**<br>Light blue that is 20% tint of the primary blue. Accessible when secondary blue is used as the text color. Used for date hovers and in-between date ranges. | `$color-primary-light`<br>`var(--color-primary-light)` | 1.31:1 ✗ | ✓ |
| #e6f2f8<br>rgb(230, 242, 248) | **Primary Blue Lighter**<br>Light blue that is 10% tint of the primary blue. Accessible when secondary blue is used as the text color. Used for the dark end of background gradients. | `$color-primary-lighter`<br>`var(--color-primary-lighter)` | 1.14:1 ✗ | ✓ |
| #f3f9fc<br>rgb(243, 249, 252) | **Primary Blue Lightest**<br>Light blue that is 5% tint of the primary blue. Accessible when secondary blue is used as the text color. Commonly used to indicate a hover state of item with white background. | `$color-primary-lightest`<br>`var(--color-primary-lightest)` | 1.06:1 ✗ | ✓ |


Global Sass Variables
Global Sass Maps
Overriding Global Sass Variables
Compiled CSS
Component Decision Tokens
Component Sass Variables
Overriding Component Sass Variables
Global Design Decision Tokens
Design Tokens
Design Tokens: colours, font family, font-size, font-weight, line-height, spacing, media queries.
Global Design Decision Tokens: primary, secondary, tertiary colours, body and heading font stacks.
Component Design Decision Tokens: factoid has - primary background, white text, etc etc.
Global Sass Variables: generation of Design Tokens in to Sass $variables.
Global Sass Maps: generates primary, secondary, tertiary, font stack maps.
Component Sass Variables: generated from Component Decision Tokens.
Overriding Global and Component Sass Variables: A way to override the Component Sass Variables from an 'overriding stylesheet'.
Compiled CSS: What the browser reads

smashingmagazine.com

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Topics

ABOUT THE AUTHOR

Mike is an independent web developer from Australia who has worked on some of Australia's largest websites as well as some of the smallest community … More about Michael Riethmuller …

may 14, 2018 • 9 comments

# A Strategy Guide To CSS Custom Properties

QUICK SUMMARY » *Dynamic properties provide opportunities for new creative ideas, but also the potential to add complexity to CSS. To get the most out of them, we might need a strategy for how we write and structure CSS with custom properties.*

25 min read
CSS, Guides
Share on Twitter or LinkedIn

**CSS Custom Properties (sometimes known as 'CSS** variables') are now supported in all modern browsers, and people are starting to use them in production. This is great, but they're different from variables in preprocessors, and I've already seen many examples of people using them without considering what advantages they offer.

Custom properties have a huge potential to change how we write and structure

**Stu Robson**
@StuRobson

so for us it's working like this:

Sass variables are being used as a sort of CSS constant property. A value that won't change but still stops us having 100+ shades of blue.

Then CSS custom properties for anything that could be updated via page / pattern 'theming' or JS.

1:14 PM · Jan 12, 2018 · Tweetbot for Mac

There’s always this internal struggle in design systems, how flexible you want to be versus how consistent you wanna be, and what constraints you want to introduce.

— Sarah Federman | @SarahFederman

Safari File Edit View History Bookmarks Develop Window Help 100% Wed 13:06

github.com

# stylelint-declaration-strict-value

build passing

A stylelint plugin that enforces either variables ( `$sass` , `@less` , `var(--cssnext)` ), functions or custom CSS keywords ( `inherit` , `none` , etc.) for property's values.

## Installation

```
npm install stylelint-declaration-strict-value
```

## Usage

### Usage

Add it to your stylelint config `plugins` array, then add `"declaration-strict-value"` to your rules, specifying the property for which you want to check the usage of variables, functions or keywords.

Like so:

```
// .stylelintrc
{
  "plugins": [
    "stylelint-declaration-strict-value"
  ],
  "rules": {
    // ...
    "scale-unlimited/declaration-strict-value": "color",
    // ...
  }
}
```

"

By making tokens available to all digital teams, we can enable them to create custom experiences that are aligned to current visual standards when a component does not (or will not) exist in the design system.

— Maya King | @HiMaya

Safari File Edit View History Bookmarks Develop Window Help 92% Wed 10:57

alwaystwisted.com

Always Twisted

# Creating Utility Classes with Design Tokens using Sass

22 July 2019

At the start of a Design System, there's a chance that things can move pretty fast.

There may be more than one or two people working on creating components (if you're lucky). You might want to prototype things quickly with "throwaway code". When it matures there may be certain use cases where you need a slight adjustment here and there for a particular component to work, or you may not be able to include the components you need as you would hope to.

After creating a set of Design Tokens for my clients Design System I looked at how best we can quickly create some additional utility classes for the various "exceptions to the rule" mentioned above. We needed something that would work automatically, programatically, and with as little human interaction as possible once it was set up.

Brave File Edit View History Bookmarks People Window Help 100% Wed 13:52

sassmeister.com

Sassmeister File View Share Options

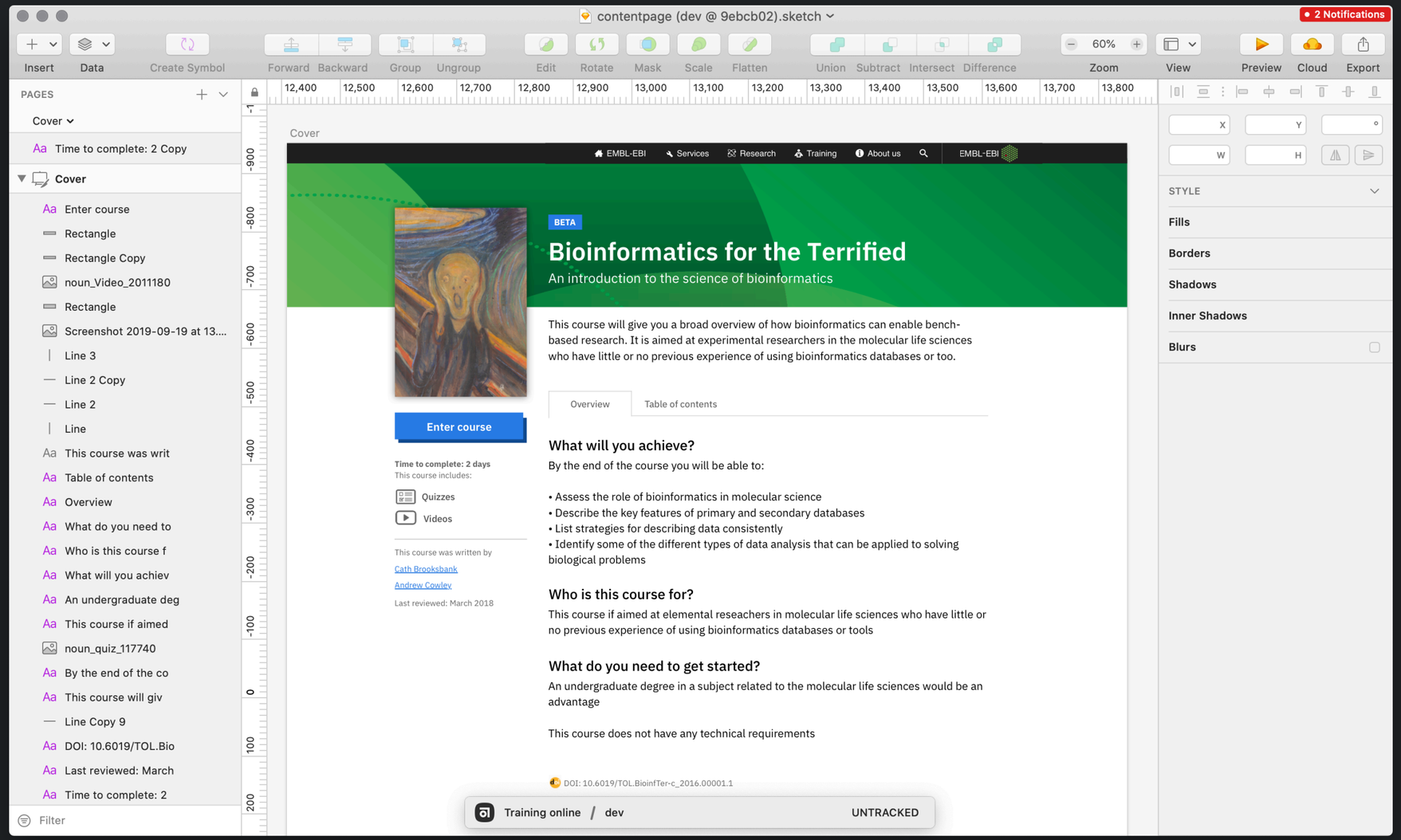
libsass v3.5.4

```sass
/* Colour Utitilty Class Generator */

$vf-colors-map: (
  green-400: #66bb6a,
);

@mixin color-modifiers($property: 'color') {

  @each $name, $hex in $vf-colors-map {

    &--#{$name} {
      #{$property}: $hex;
    }
  }
}

.u-color__text {
  @include color-modifiers();
}
.u-color__background {
  @include color-modifiers(background-color);
}
.u-color__border {
  @include color-modifiers(border-color);
}


/* typographic utility class generator */

$ds-font-map: (
  body--1: (
    font-size: 19px,
    font-weight: 400,
    line-height: 1.63
  ),
  heading--1: (
    font-size: 24px,
    font-weight: 500,
```

CSS Compiled in 0.002s

```css
/* Colour Utitilty Class Generator */
.u-color__text--green-400 {
  color: #66bb6a;
}

.u-color__background--green-400 {
  background-color: #66bb6a;
}

.u-color__border--green-400 {
  border-color: #66bb6a;
}

/* typographic utility class generator */
.u-type__body--1 {
  font-size: 19px;
  font-weight: 400;
  line-height: 1.63;
}

.u-type__heading--1 {
  font-size: 24px;
  font-weight: 500;
  line-height: 1.333;
}

/* Spacing Utility Class Generator */
.u-margin-4 {
  margin: 16px;
}

.u-margin__bottom-4 {
  margin-bottom: 16px;
}

.u-margin__top-4 {
  margin-top: 16px;
}
```

Gist by sturobson About SassMeister


contentpage (dev @ 9ebcb02).sketch
2 Notifications
Insert
Data
Create Symbol
Forward
Backward
Group
Ungroup
Edit
Rotate
Mask
Scale
Flatten
Union
Subtract
Intersect
Difference
60%
Zoom
View
Preview
Cloud
Export
PAGES
Cover
Time to complete: 2 Copy
Cover
Enter course
Rectangle
Rectangle Copy
noun_Video_2011180
Rectangle
Screenshot 2019-09-19 at 13....
Line 3
Line 2 Copy
Line 2
Line
This course was writ
Table of contents
Overview
What do you need to
Who is this course f
What will you achiev
An undergraduate deg
This course if aimed
noun_quiz_117740
By the end of the co
This course will giv
Line Copy 9
DOI: 10.6019/TOL.Bio
Last reviewed: March
Time to complete: 2
Filter
EMBL-EBI
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EMBL-EBI
BETA
Bioinformatics for the Terrified
An introduction to the science of bioinformatics
This course will give you a broad overview of how bioinformatics can enable bench-based research. It is aimed at experimental researchers in the molecular life sciences who have little or no previous experience of using bioinformatics databases or too.
Overview
Table of contents
Enter course
Time to complete: 2 days
This course includes:
Quizzes
Videos
This course was written by
Cath Brooksbank
Andrew Cowley
Last reviewed: March 2018
What will you achieve?
By the end of the course you will be able to:
• Assess the role of bioinformatics in molecular science
• Describe the key features of primary and secondary databases
• List strategies for describing data consistently
• Identify some of the different types of data analysis that can be applied to solving biological problems
Who is this course for?
This course if aimed at elemental reseachers in molecular life sciences who have little or no previous experience of using bioinformatics databases or tools
What do you need to get started?
An undergraduate degree in a subject related to the molecular life sciences would be an advantage
This course does not have any technical requirements
DOI: 10.6019/TOL.BioinfTer-c_2016.00001.1
Training online / dev
UNTRACKED
STYLE
Fills
Borders
Shadows
Inner Shadows
Blurs

Enter Course

Time to complete: 2 days

This course includes:

Activities

Quizzes

Videos

This course was written by

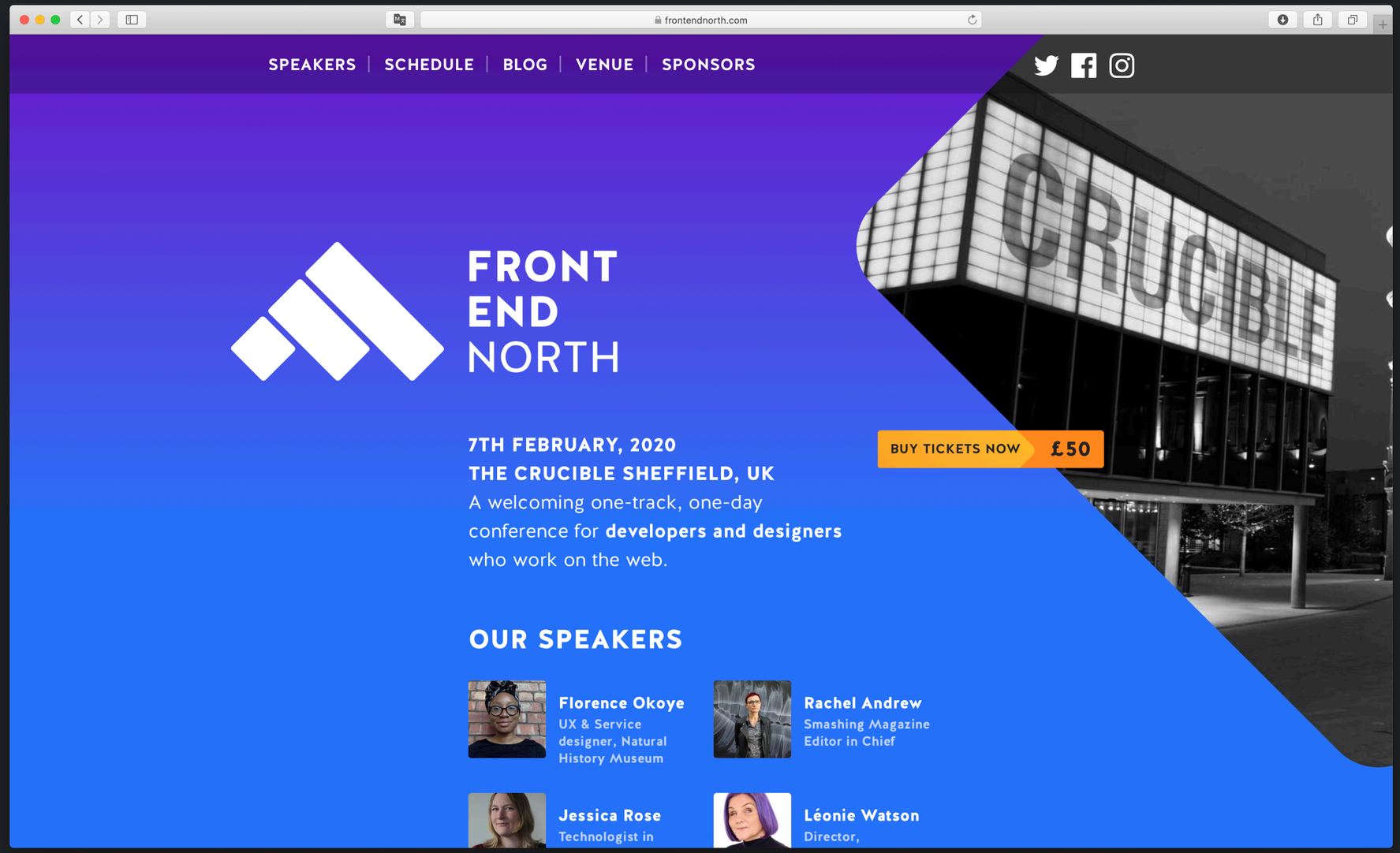
Cath Brooksbank

Andrew Cowley

Last reviewed: March 2018

```
<div class="embl-training__sidebar">

  <figure class="vf-figure">
    <img class="vf-figure__image" src="/assets/vf-figure/assets/training-cover.png" alt="">
  </figure>

  <button class="vf-button vf-button--primary vf-button--sm">Enter Course</button>
  <p class="vf-u-type__text-body--4 vf-u-text-color--grey--dark vf-u-margin--0">Time to complete: 2 days</p>
  <p class="vf-u-type__text-body--6 vf-u-text-color--grey--light vf-u-margin--0 vf-u-margin__bottom--sm">This course includes:</p>

  <ul class="vf-list vf-list--compact vf-u-margin__bottom--sm | training-sidebar-links">
    <li class="vf-list__item vf-u-margin--0">
      <a href="#Quizzes" class="vf-link vf-link--secondary vf-u-type__text-body--4 vf-u-margin--0">
        <svg xmlns="http://www.w3.org/2000/svg" viewBox="0 0 24 24">↔</svg>
        Quizzes</a>
    </li>
    <li class="vf-list__item vf-u-margin--0">
      <a href="#Videos" class="vf-link vf-link--secondary vf-u-type__text-body--4 vf-u-margin--0">
        <svg xmlns="http://www.w3.org/2000/svg" viewBox="0 0 24 24">↔</svg>
        Videos</a>
    </li>
  </ul>

  <hr class="vf-divider vf-u-margin__bottom--sm">

  <p class="vf-u-type__text-body--6 vf-u-text-color--grey--light vf-u-margin--0 vf-u-margin__bottom--xs">This course was written
by</p>
  <ul class="vf-list vf-list--compact vf-u-margin__bottom--sm">
    <li class="vf-list__item vf-u-margin--0">
      <a href="#Cath" class="vf-link vf-link--primary vf-u-type__text-body--6 vf-u-margin--0">Cath Brooksbank</a>
    </li>
    <li class="vf-list__item vf-u-margin--0">
      <a href="#Andrew" class="vf-link vf-link--primary vf-u-type__text-body--6 vf-u-margin--0">Andrew Cowley</a>
    </li>
  </ul>
  <p class="vf-u-type__text-body--6 vf-u-text-color--grey--light vf-u-margin--0 vf-u-margin__bottom--sm">Last reviewed: March
```

# Be Where The Authors Are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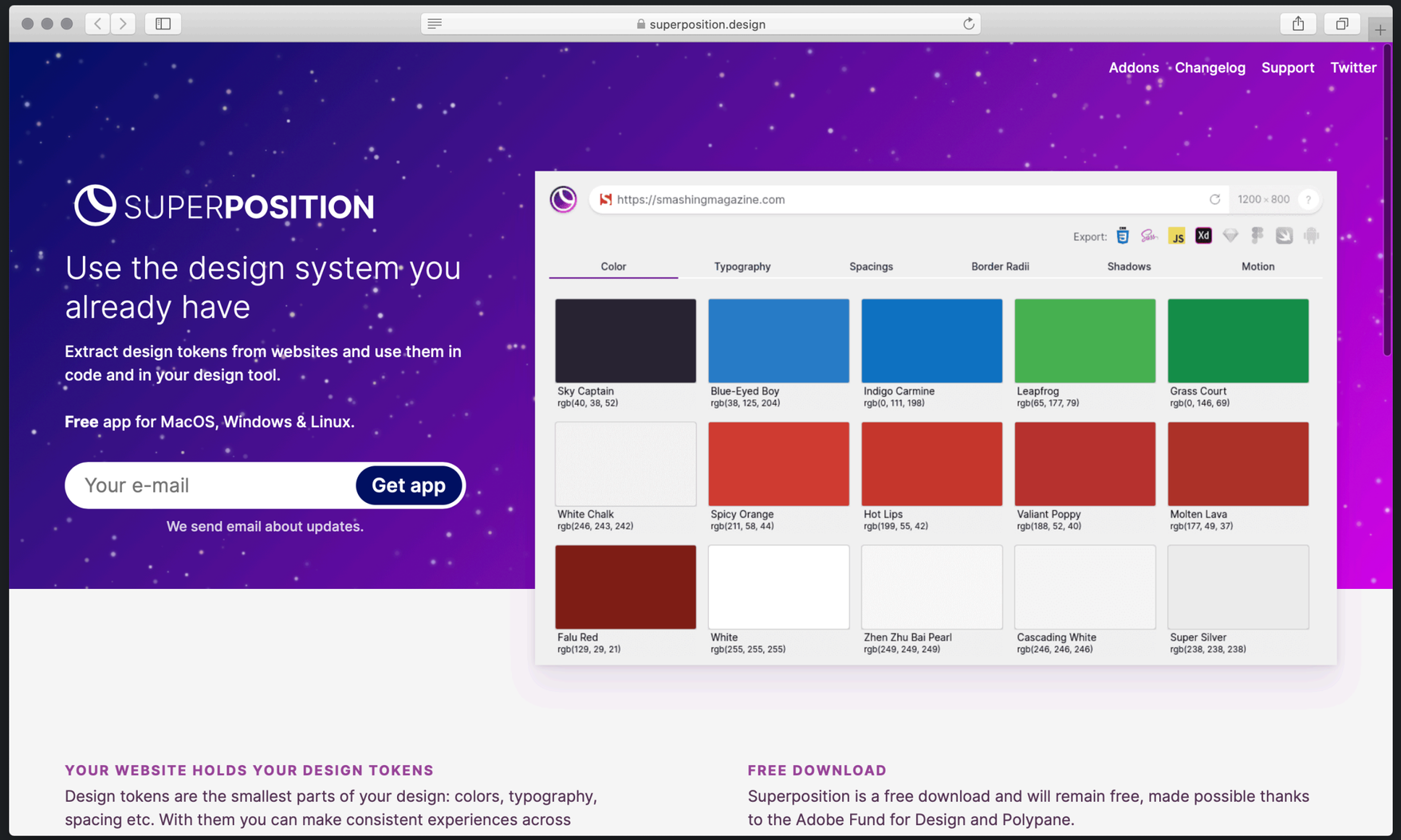
Rachel Andrew
Smashing Magazine Editor in Chief
Jessica Rose
Technologist in
Léonie Watson
Director,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Addons
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Twitter
SUPERPOSITION
Use the design system you already have
Extract design tokens from websites and use them in code and in your design tool.
Free app for MacOS, Windows & Linux.
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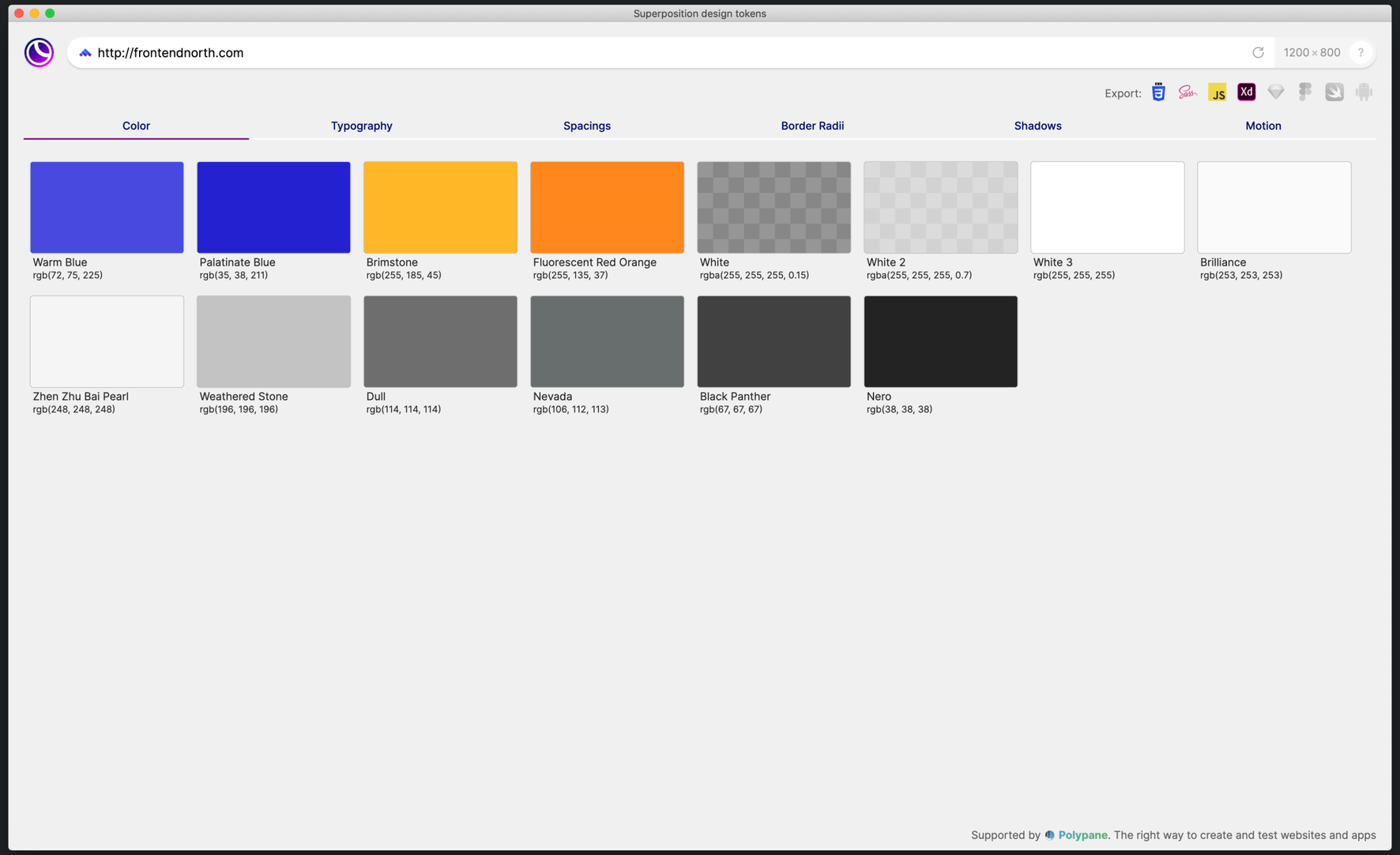
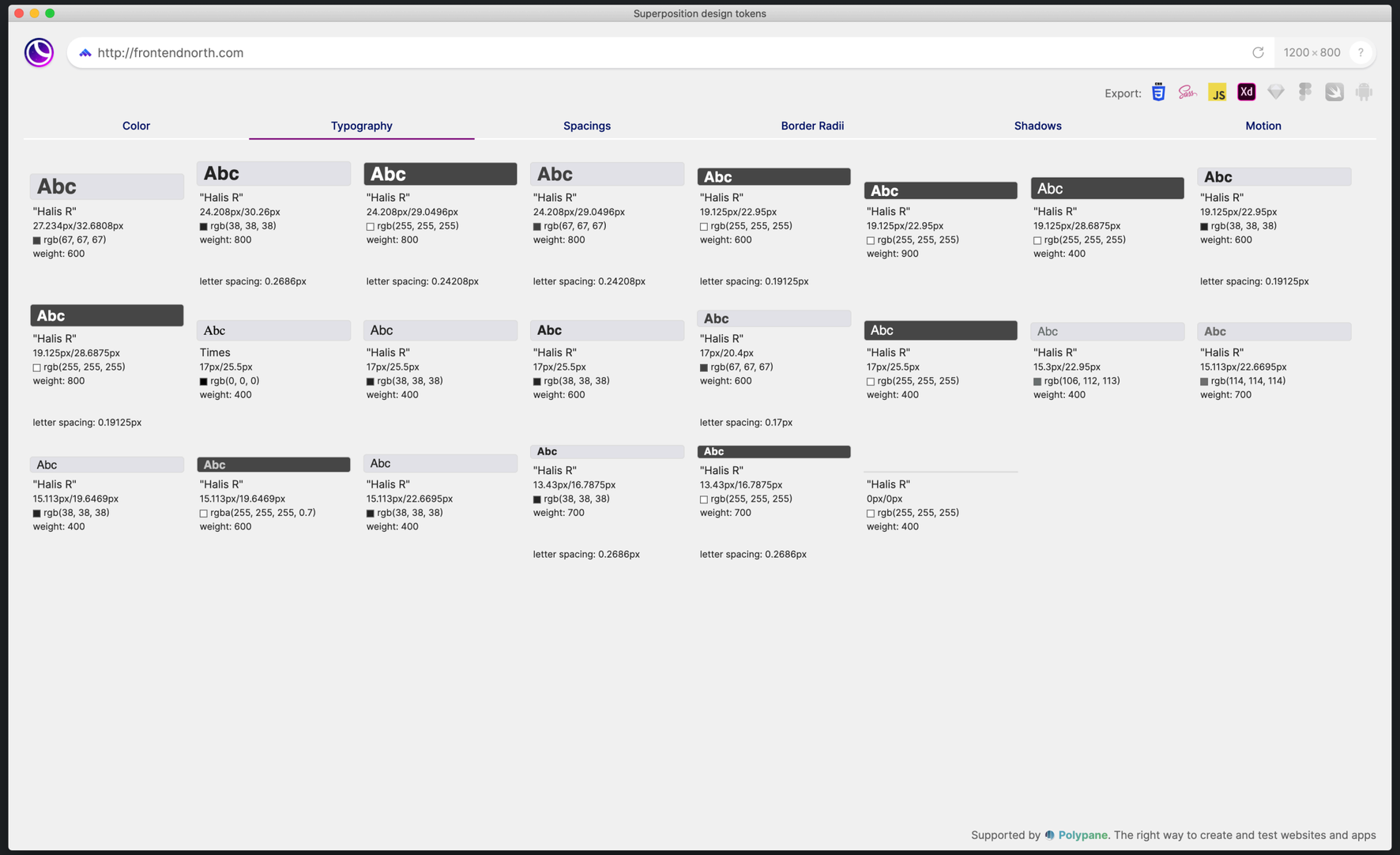
Get app
We send email about updates.
https://smashingmagazine.com
1200 × 800
Export:
Color
Typography
Spacings
Border Radii
Shadows
Motion
Sky Captain rgb(40, 38, 52)
Blue-Eyed Boy rgb(38, 125, 204)
Indigo Carmine rgb(0, 111, 198)
Leapfrog rgb(65, 177, 79)
Grass Court rgb(0, 146, 69)
White Chalk rgb(246, 243, 242)
Spicy Orange rgb(211, 58, 44)
Hot Lips rgb(199, 55, 42)
Valiant Poppy rgb(188, 52, 40)
Molten Lava rgb(177, 49, 37)
Falu Red rgb(129, 29, 21)
White rgb(255, 255, 255)
Zhen Zhu Bai Pearl rgb(249, 249, 249)
Cascading White rgb(246, 246, 246)
Super Silver rgb(238, 238, 238)
YOUR WEBSITE HOLDS YOUR DESIGN TOKENS
Design tokens are the smallest parts of your design: colors, typography, spacing etc. With them you can make consistent experiences across
FREE DOWNLOAD
Superposition is a free download and will remain free, made possible thanks to the Adobe Fund for Design and Polypane.


Superposition design tokens
http://frontendnorth.com
1200 × 800
Export:
Color
Typography
Spacings
Border Radii
Shadows
Motion
Warm Blue
rgb(72, 75, 225)
Palatinate Blue
rgb(35, 38, 211)
Brimstone
rgb(255, 185, 45)
Fluorescent Red Orange
rgb(255, 135, 37)
White
rgba(255, 255, 255, 0.15)
White 2
rgba(255, 255, 255, 0.7)
White 3
rgb(255, 255, 255)
Brilliance
rgb(253, 253, 253)
Zhen Zhu Bai Pearl
rgb(248, 248, 248)
Weathered Stone
rgb(196, 196, 196)
Dull
rgb(114, 114, 114)
Nevada
rgb(106, 112, 113)
Black Panther
rgb(67, 67, 67)
Nero
rgb(38, 38, 38)
Supported by Polypane. The right way to create and test websites and apps


Superposition design tokens
http://frontendnorth.com
1200 × 800
Export:
Color
Typography
Spacings
Border Radii
Shadows
Motion
Abc
"Halis R"
27.234px/32.6808px
rgb(67, 67, 67)
weight: 600
Abc
"Halis R"
24.208px/30.26px
rgb(38, 38, 38)
weight: 800
letter spacing: 0.2686px
Abc
"Halis R"
24.208px/29.0496px
rgb(255, 255, 255)
weight: 800
letter spacing: 0.24208px
Abc
"Halis R"
24.208px/29.0496px
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weight: 800
letter spacing: 0.24208px
Abc
"Halis R"
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rgb(255, 255, 255)
weight: 600
letter spacing: 0.19125px
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Abc
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weight: 600
letter spacing: 0.19125px
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rgb(255, 255, 255)
weight: 800
letter spacing: 0.19125px
Abc
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17px/25.5px
rgb(0, 0, 0)
weight: 400
Abc
"Halis R"
17px/25.5px
rgb(38, 38, 38)
weight: 400
Abc
"Halis R"
17px/25.5px
rgb(38, 38, 38)
weight: 600
Abc
"Halis R"
17px/20.4px
rgb(67, 67, 67)
weight: 600
letter spacing: 0.17px
Abc
"Halis R"
17px/25.5px
rgb(255, 255, 255)
weight: 400
Abc
"Halis R"
15.3px/22.95px
rgb(106, 112, 113)
weight: 400
Abc
"Halis R"
15.113px/22.6695px
rgb(114, 114, 114)
weight: 700
Abc
"Halis R"
15.113px/19.6469px
rgb(38, 38, 38)
weight: 400
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"Halis R"
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rgba(255, 255, 255, 0.7)
weight: 600
Abc
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15.113px/22.6695px
rgb(38, 38, 38)
weight: 400
Abc
"Halis R"
13.43px/16.7875px
rgb(38, 38, 38)
weight: 700
letter spacing: 0.2686px
Abc
"Halis R"
13.43px/16.7875px
rgb(255, 255, 255)
weight: 700
letter spacing: 0.2686px
"Halis R"
0px/0px
rgb(255, 255, 255)
weight: 400
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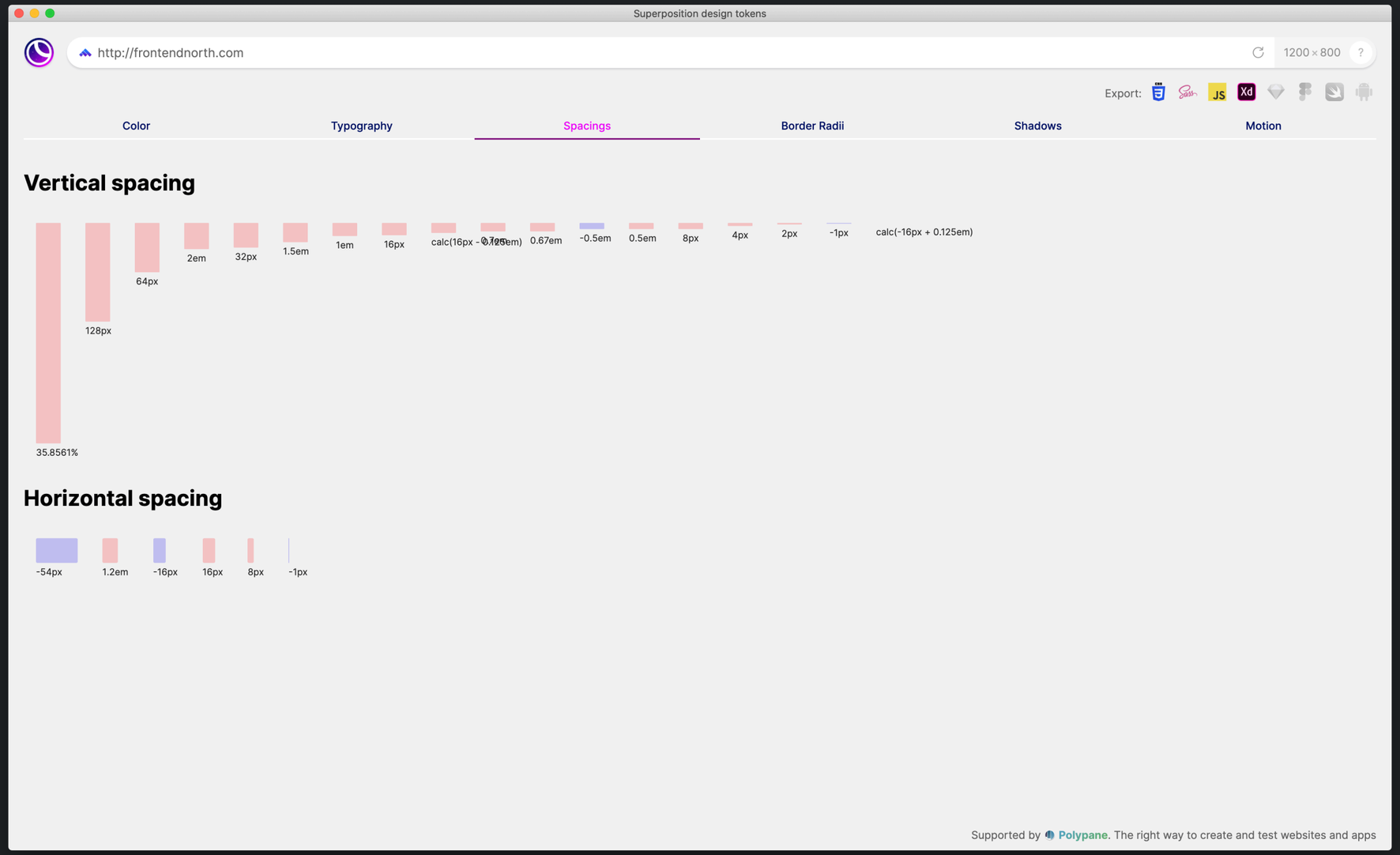

Superposition design tokens
http://frontendnorth.com
1200 × 800
Export:
Color
Typography
Spacings
Border Radii
Shadows
Motion
Vertical spacing
35.8561%
128px
64px
2em
32px
1.5em
1em
16px
calc(16px - 0.125em)
0.67em
-0.5em
0.5em
8px
4px
2px
-1px
calc(-16px + 0.125em)
Horizontal spacing
-54px
1.2em
-16px
16px
8px
-1px
Supported by Polypane. The right way to create and test websites and apps

Superposition design tokens

http://frontendnorth.com

1200 × 800

Export:

Color

Typo

Warm Blue
rgb(72, 75, 225)

Palatinate Blue
rgb(35, 38, 211)

Zhen Zhu Bai Pearl
rgb(248, 248, 248)

Weathered Stone
rgb(196, 196, 196)

## Export CSS

Copy to clipboard

- [x] Colors
- [x] Typography
- [x] Spacings
- [x] Border Radii
- [x] Shadows
- [x] Motion

```
:root {
  /* colors */
  --color-warm-blue: rgb(72, 75, 225);
  --color-palatinate-blue: rgb(35, 38, 211);
  --color-brimstone: rgb(255, 185, 45);
  --color-fluorescent-red-orange: rgb(255, 135, 37);
  --color-white: rgba(255, 255, 255, 0.15);
  --color-white-2: rgba(255, 255, 255, 0.7);
  --color-white-3: rgb(255, 255, 255);
  --color-brilliance: rgb(253, 253, 253);
  --color-zhen-zhu-bai-pearl: rgb(248, 248, 248);
  --color-weathered-stone: rgb(196, 196, 196);
  --color-dull: rgb(114, 114, 114);
  --color-nevada: rgb(106, 112, 113);
  --color-black-panther: rgb(67, 67, 67);
  --color-nero: rgb(38, 38, 38);

  /* typography */
  --font-1: normal normal 600 27.234px/32.6808px "Halis R", "Open sans", sans-serif;
  --font-2: normal normal 800 24.208px/30.26px "Halis R", "Open sans", sans-serif;
  --font-3: normal normal 800 24.208px/29.0496px "Halis R", "Open sans", sans-serif;
  --font-4: normal normal 800 24.208px/29.0496px "Halis R", "Open sans", sans-serif;
  --font-5: normal normal 600 19.125px/22.95px "Halis R", "Open sans", sans-serif;
  --font-6: normal normal 900 19.125px/22.95px "Halis R", "Open sans", sans-serif;
  --font-7: normal normal 400 19.125px/28.6875px "Halis R", "Open sans", sans-serif;
```

Motion

Brilliance
rgb(253, 253, 253)

Supported by Polypane. The right way to create and test websites and apps

Superposition design tokens

http://frontendnorth.com

1200 × 800

Export:

Color (14) | Typography (22) | Motion (3) | Assets (13)

Warm Blue
rgb(72, 75, 225)

Palatinate Blue
rgb(35, 38, 211)

Zhen Zhu Bai Pearl
rgb(248, 248, 248)

Weathered Stone
rgb(196, 196, 196)

hite 3
(255, 255, 255)

Brilliance
rgb(253, 253, 253)

## Export JavaScript

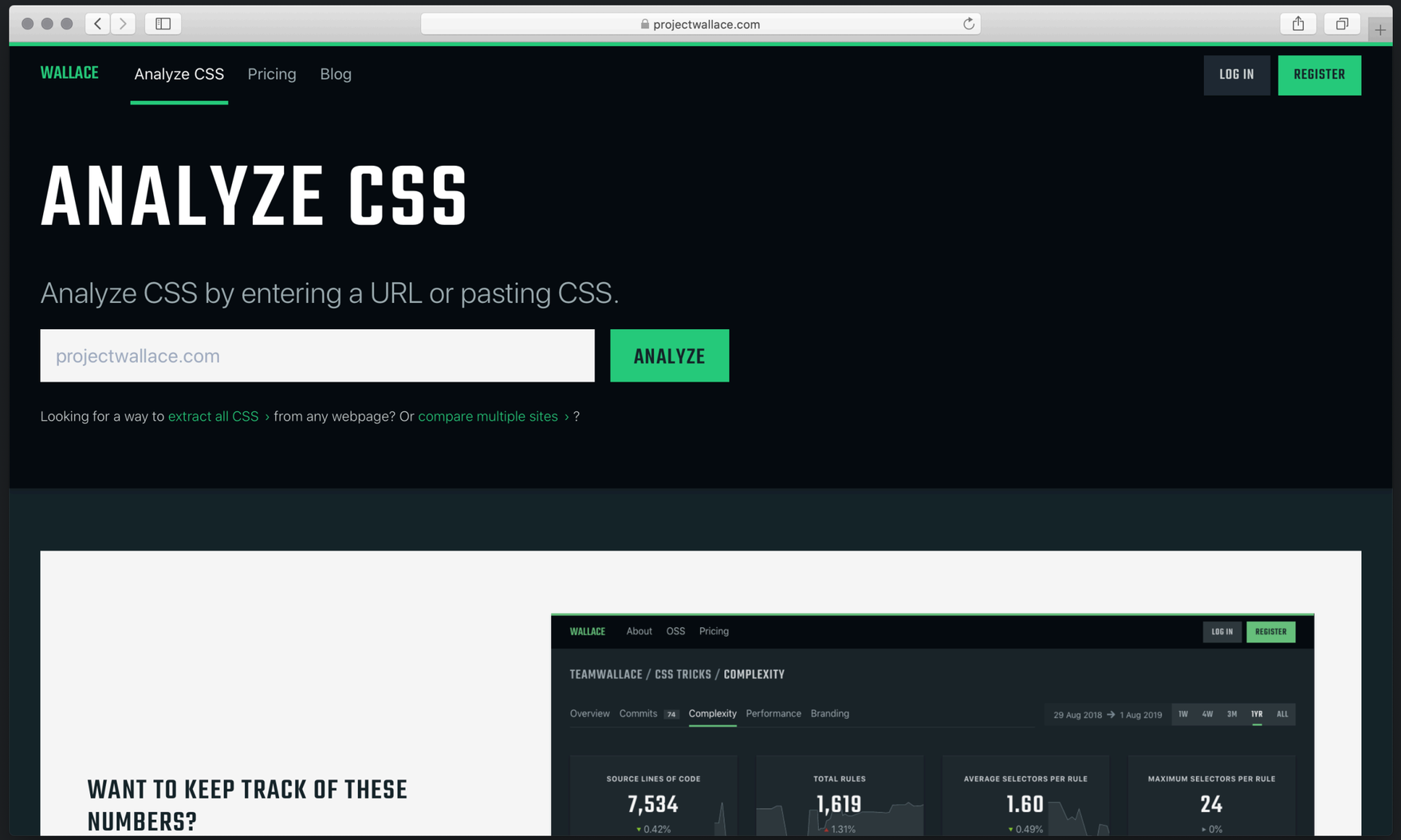
Copy to clipbord

- [x] Colors
- [x] Typography
- [x] Spacings
- [x] Border Radii
- [x] Shadows
- [x] Motion

```javascript
// colors
const colorWarmBlue = "rgb(72, 75, 225)";
const colorPalatinateBlue = "rgb(35, 38, 211)";
const colorBrimstone = "rgb(255, 185, 45)";
const colorFluorescentRedOrange = "rgb(255, 135, 37)";
const colorWhite = "rgba(255, 255, 255, 0.15)";
const colorWhite2 = "rgba(255, 255, 255, 0.7)";
const colorWhite3 = "rgb(255, 255, 255)";
const colorBrilliance = "rgb(253, 253, 253)";
const colorZhenZhuBaiPearl = "rgb(248, 248, 248)";
const colorWeatheredStone = "rgb(196, 196, 196)";
const colorDull = "rgb(114, 114, 114)";
const colorNevada = "rgb(106, 112, 113)";
const colorBlackPanther = "rgb(67, 67, 67)";
const colorNero = "rgb(38, 38, 38)";

// typography
const font1 = `normal normal 600 27.234px/32.6808px "Halis R", "Open sans", sans-serif`;
const font2 = `normal normal 800 24.208px/30.26px "Halis R", "Open sans", sans-serif`;
const font3 = `normal normal 800 24.208px/29.0496px "Halis R", "Open sans", sans-serif`;
const font4 = `normal normal 800 24.208px/29.0496px "Halis R", "Open sans", sans-serif`;
const font5 = `normal normal 600 19.125px/22.95px "Halis R", "Open sans", sans-serif`;
const font6 = `normal normal 900 19.125px/22.95px "Halis R", "Open sans", sans-serif`;
const font7 = `normal normal 400 19.125px/28.6875px "Halis R", "Open sans", sans-serif`;
const font8 = `normal normal 600 19.125px/22.95px "Halis R", "Open sans", sans-serif`;
```

Supported by Polypane. The right way to create and test websites and apps


projectwallace.com
WALLACE
Analyze CSS
Pricing
Blog
LOG IN
REGISTER
ANALYZE CSS
Analyze CSS by entering a URL or pasting CSS.
projectwallace.com
ANALYZE
Looking for a way to extract all CSS › from any webpage? Or compare multiple sites › ?
WANT TO KEEP TRACK OF THESE NUMBERS?
WALLACE
About
OSS
Pricing
LOG IN
REGISTER
TEAMWALLACE / CSS TRICKS / COMPLEXITY
Overview
Commits 74
Complexity
Performance
Branding
29 Aug 2018 → 1 Aug 2019
1W
4W
3M
1YR
ALL
SOURCE LINES OF CODE
7,534
0.42%
TOTAL RULES
1,619
1.31%
AVERAGE SELECTORS PER RULE
1.60
0.49%
MAXIMUM SELECTORS PER RULE
24
0%

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github.com

# google-spreadsheets-theo

Import design tokens from a Google Spreadsheet to a format digestable by Theo.

## Quick start

This example shows how to manage color tokens using Google Spreadsheets and Theo.

The end result is available in the `./example` directory.

A ready-to-use demo project (more detailed and published to npm), is available at https://github.com/kaelig/google-spreadsheets-theo-demo.

### 1. Create a Google Spreadsheet to store the design tokens

Paste this table in a new Google spreadsheet, and populate it with the project or company's design tokens:

| name | value | type | category | comment |
|---|---|---|---|---|
| color-primary | red | color | background-color | Primary color for use on all main actions |
| color-secondary | #ff00ff | color | background-color | |
| color-tertiary | green | color | background-color | |

It should look something like this example Google Spreadsheet.

### 2. Publish the spreadsheet to the web

`google-spreadsheets-theo` is only able to access the contents of the spreadsheet if it's publicly published to the web.

1. In the **File** menu, select **Publish to the web...**
2. Click the **Publish** button (leave the default options)

# Let's live code.

github.com

# Awesome-Design-Tokens

## Live Sites

A list of company design systems Design Tokens section

- Salesforce Lightning Design System
- Formstack
- Comet (Discovery Education
- Kalo
- Hex (Bitnami
- Mineral UI

## Github Repos

A list of repos that contain a companies Design Tokens

- Salesforce
- Open Table
- Kiwi.com
- Mozilla Protocal Design System
- Bloomberg
- Firefox Photon
- Shopify Polaris
- Infor Design
- Envato Foundation
- Backpack
- BuildIt Gravity Particles
- Cedar Design System Tokens

w3.org

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Home / Design Tokens Community Group

# DESIGN TOKENS COMMUNITY GROUP

The Design Tokens Community Group's goal is to provide standards upon which products and design tools can rely for sharing stylistic pieces of a design system at scale.

*Note: Community Groups are proposed and run by the community. Although W3C hosts these conversations, the groups do not necessarily represent the views of the W3C Membership or staff.*

## No Reports Yet Published

Chairs, when logged in, may publish draft and final reports. Please see report requirements.

PUBLISH REPORTS

## Call for specification editors

Kaelig Deloumeau-Prigent | Posted on: January 23, 2020

Dear group members, today we're excited to start our first call for editors 🎉

One of the DTCG's main goals is to produce a specification.

The specification is broken into multiple modules:

- Format (the language and its grammar)
- Colors
- Spacing
- Easing
- (more to come!)

## Tools for this group

- Mailing List
- IRC
- GitHub repository
- @DesignTokens on Twitter
- RSS
- Contact This Group

## Get involved

Anyone may join this Community Group. All participants in this group have signed the W3C Community Contributor License Agreement.

JOIN OR LEAVE THIS GROUP

Jina Anne

Kaelig Deloumeau-Prigent

Chairs

## Participants (84)

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# Design Systems Slack

A community for design systems practitioners.

## Enter your email to join.

Enter Your Email Address Join

## Code of Conduct

### Table of contents


- Welcome
  - Admins
- What we strive for
- Unacceptable behavior
  - Harassment includes
- Reporting
- Consequences
- Message retention
- Privacy
- Credits and license

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ISSUE 81 *29th April 2019*

## Thanks

Hey,

I hope you enjoy this latest newsletter. There are some new and old links in there. You should see my RSS feed - I think I've about 60 articles to go through and add as needed.

Design Systems are so hot right now!

A while ago I setup a little Patreon account to help towards the costs of running this

# Design Tokens and CSS

Systemising the design of your components