



Agile Design Systems

Agile Alliance – August 7, 2019



OddBird Web Consulting

Custom Apps, Design Systems, Refactors - since 2008



ODDBIRD

OddBird siblings (Jonny, Carl, and Miriam) in 1994

moz://a

SRAM®

ORCAS

Sass

django

«S» Susy



Search

Getting Started

Platforms ▾

Guidelines ▾

Components ▾

Design Tokens

Icons

Downloads

Articles

FAQ

Feedback

Lightning Design System

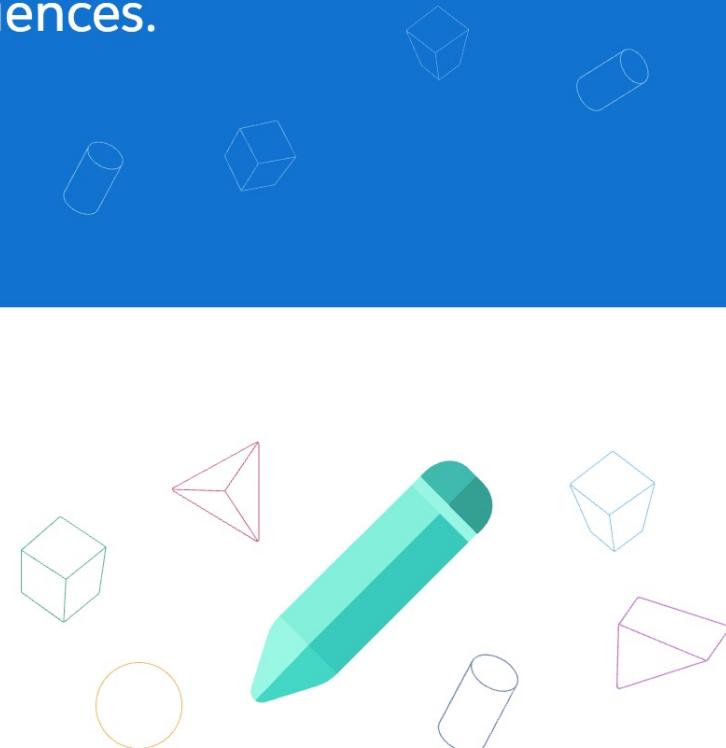
Create the world's best enterprise app experiences.

Get Started

Current release: [Winter '17 \(SLDS 2.1.4\)](#) | [Archives](#)

Style with Ease

With the Lightning Design System you can build custom applications with a look and feel that is consistent with Salesforce core features – without reverse engineering our styles! Simply download our platform-agnostic CSS framework and get started today.



Design with Expertise

Utilize our detailed guidelines to confidently design excellent apps that fit right into the Salesforce ecosystem. With the Design System, you get access to all of the Salesforce design interaction design patterns that

 Design Eleme...

Design Elements

UI Components

JS Components

Widgets

CSS Utilities

DESIGN

- Design Palette >
- UI Colours >
- Destination Next Colors >
- Typography >

ICONS

- Destination >
- Interests >
- Interface >
- Need to Know >
- Weather >

Colour Palette

[Find closest color](#)

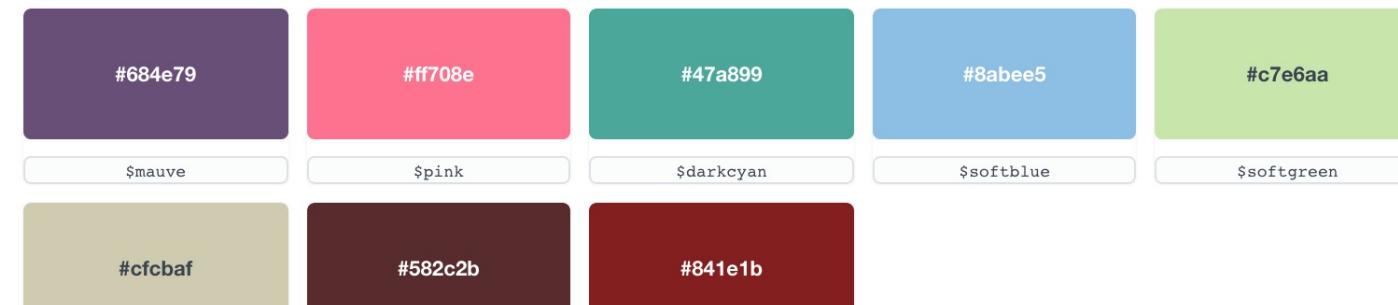
GRAY PALETTE



PRIMARY PALETTE



SECONDARY PALETTE



[Grid System](#)[Typography](#)[Form Elements](#)[Navigation](#)[Tables](#)[Lists](#)[Slats](#)[Stats/Data](#)[Feedback](#)[Dialogs](#)[Freddicons](#)[Helper Classes](#)

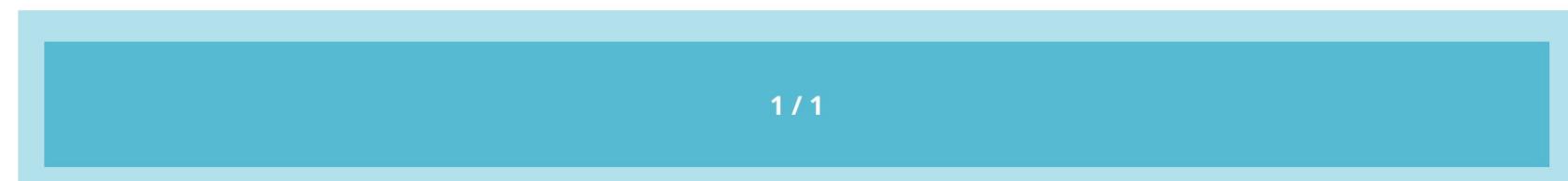
Grid System

[Grid sizes](#)[Grid gutter](#)[Mixed grids](#)[Responsive columns](#)[Nested grids](#)

Our grid system is composed of 8 flexible columns with a gutter between columns of 30px. We apply border-box so that the border and padding is included in the width of the grid columns.

Grid sizes

Size 1 of 1



Size 1 of 2



Size 1 of 3



SIZE PREVIEWS

rhythm, gutter	1.4rem	
gutter-plus	2.1rem	
double-gutter	2.8rem	
flex-gutter	calc(0.7rem + 2.5vw)	
spacer	calc(4.2rem + 2.5vw)	
gutter-minus	1.05rem	
shim	0.7rem	
half-shim	0.35rem	
quarter-shim	0.175rem	

MI

**New York City
Transit Authority**

**Graphics
Standards Manual**

Graphics Standards Manual
1970

N

5

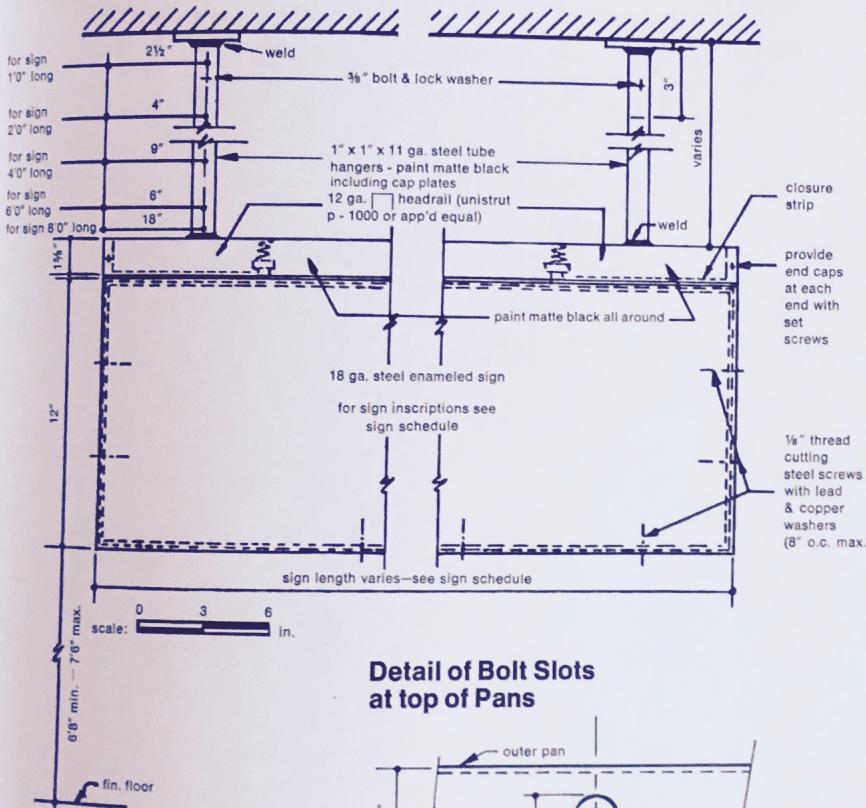
6

7

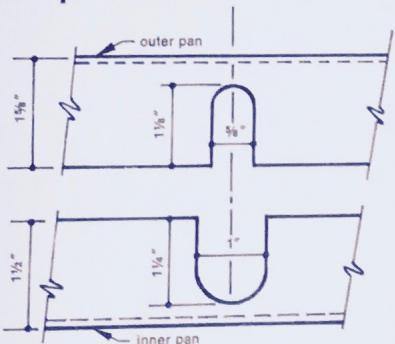
8

**(Typical)
Steel Enamelled Sign Details (Type "D" Hanging Sign)**

Elevation



**Detail of Bolt Slots
at top of Pans**



Nerd



Nerd



-＼(ツ)／-

Design Systems

Style Guides + **Tool** Kits + **Component** Libraries + ???

Single Source of Truth

Potentially Cross-Application

even cross-platform...

Getting started[Introduction](#)[Download](#)[Contents](#)[Browsers & devices](#)[JavaScript](#)[Theming](#)[Build tools](#)[Webpack](#)[Accessibility](#)**Layout**[Content](#)[Components](#)[Utilities](#)[Extend](#)[Migration](#)[About](#)

Introduction

Get started with Bootstrap, the world's most popular framework for building responsive, mobile-first sites, with BootstrapCDN and a template starter page.

Quick start

Looking to quickly add Bootstrap to your project? Use BootstrapCDN, provided for free by the folks at StackPath. Using a package manager or need to download the source files? [Head to the downloads page](#).

CSS

Copy-paste the stylesheet `<link>` into your `<head>` before all other stylesheets to load our CSS.

```
<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css" integrity="sha384-Copy
```

JS

Many of our components require the use of JavaScript to function. Specifically, they require [jQuery](#), [Popper.js](#), and our own JavaScript plugins. Place the following `<script>`s near the end of your pages, right before the closing `</body>` tag, to enable them. jQuery must come first, then Popper.js, and then our JavaScript plugins.

We use [jQuery's slim build](#), but the full version is also supported.

```
<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-q8i/X+965Dz00rT7abK41JSStQIAqVgRVzbzo5sCopy
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js" integrity="sha384-U02eT0CpHqdSJ0Copy
<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js" integrity="sha384-JjSmVgyd0p3pXB1rF
```

Curious which components explicitly require jQuery, our JS, and Popper.js? Click the show components link below. If you're at all unsure about the general page structure, keep reading for an example page template.

- [Quick start](#)
- [CSS](#)
- [JS](#)
- [Starter template](#)
- [Important globals](#)
- [HTML5 doctype](#)
- [Responsive meta tag](#)
- [Box-sizing](#)
- [Reboot](#)
- [Community](#)

[GO TO SECTION](#)[Writing Goals and Principles](#)

Voice and Tone

[Writing About People](#)[Grammar and Mechanics](#)[Content Types](#)[Web Elements](#)[Writing Blog Posts](#)[Writing Technical Content](#)[Writing Legal Content](#)[Writing Email Newsletters](#)[Writing for Social Media](#)[Writing for Accessibility](#)[Writing for Translation](#)[Creating Structured Content](#)[Copyright and Trademarks](#)[Word List](#)[TL;DR](#)[RESOURCES >](#)

Voice and Tone

One way we write empowering content is by being aware of our voice and our tone. This section explains the difference between voice and tone, and lays out the elements of each as they apply to MailChimp. To learn more about how we adapt our tone for different situations, check out our [Voice and Tone guide](#).

What's the difference between voice and tone? Think of it this way: You have the same voice all the time, but your tone changes. You might use one tone when you're out to dinner with your closest friends, and a different tone when you're in a meeting with your boss.

Your tone also changes depending on the emotional state of the person you're addressing. You wouldn't want to use the same tone of voice with someone who's scared or upset as you would with someone who's laughing.

The same is true for MailChimp. Our voice doesn't change much from day to day, but our tone changes all the time.

Voice

MailChimp's voice is human. It's familiar, friendly, and straightforward. Our priority is explaining our products and helping our users get their work done so they can get on with their lives. We want to educate people without patronizing or confusing them.

One way to think of our voice is to compare what it is to what it isn't.



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Color

Data Entry

Displaying Data

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Loading

Markup and Style

Messaging

Localization

Motion

Navigation

Typography

Voice and Tone

Components

Design Tokens

Icons



Motion

Key Principles



TIMING

A “grid of time” creates consistent rhythm. Animation is defined as multiples of a base grid.



ELEVATION

Utilizing the Z-axis to support spatial organization aids in creating a visual hierarchy we refer to as “atmosphere”.

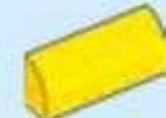


EFFECTS

Attributes are animated over time to create a vocabulary of effects.

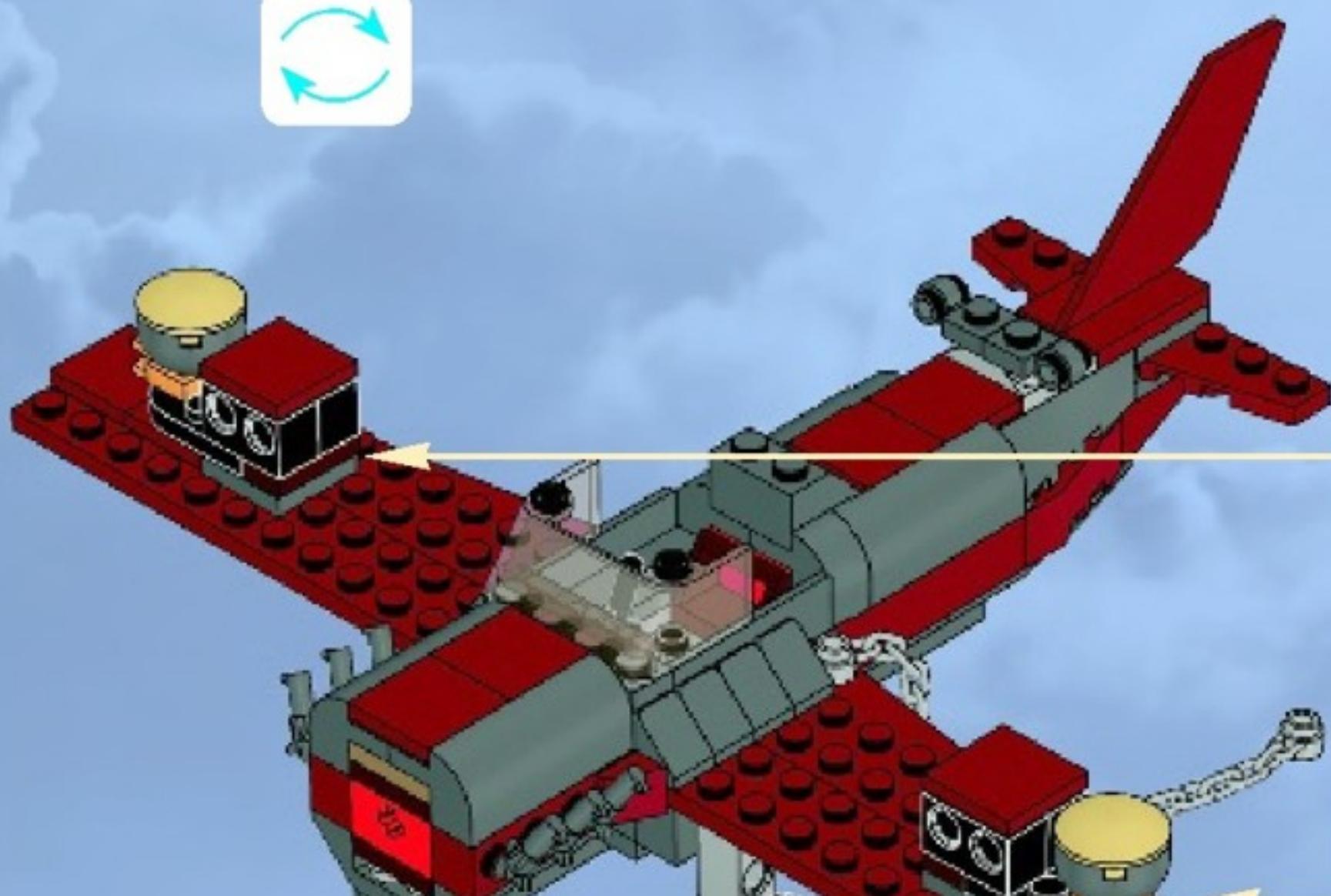
Type of Animation



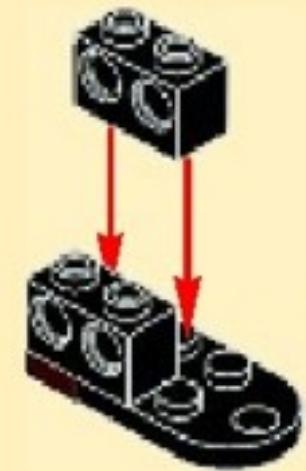




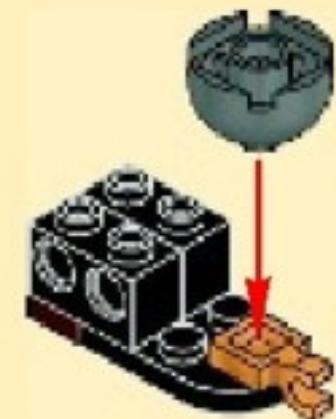
34



2

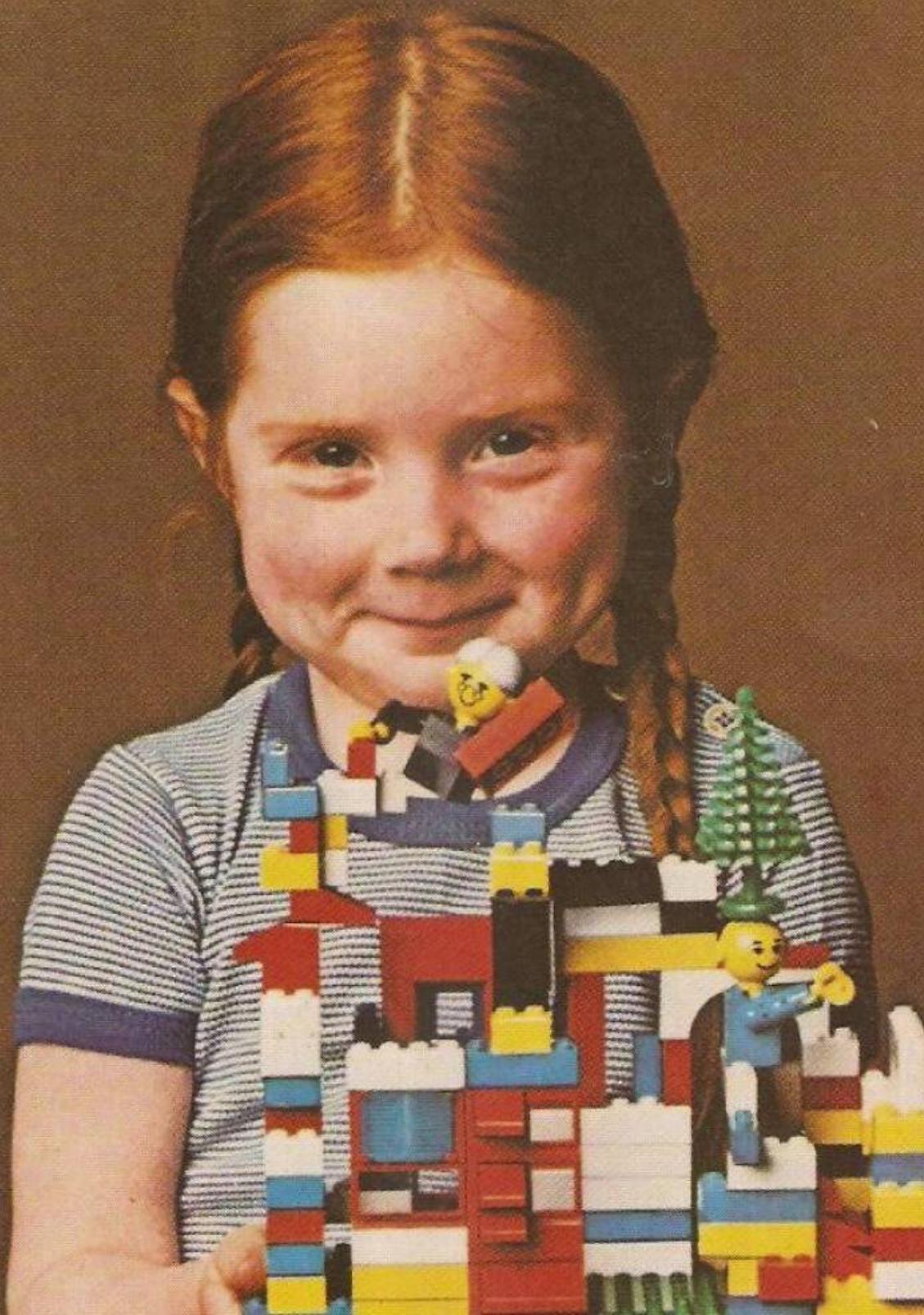


3



4







Design Systems = Integration

Design & Code & Process & Tools & ... & ???



Icons

Component Overview

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Touch

Activity Timeline

App Launcher

Badges

Breadcrumbs

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Button Groups

Cards

Data Tables

Datepickers

Docked Composer

Docked Utility Bar

Feeds

Files

File Selector

Icons provide visual context and enhance usability.

Looking for the icons? Go to Resources › Icons.

VARIANTS & STATES

Base

Standard

Utility

Action

Doctype

Custom

Icon Colors

Background Colors

Sizes

DOCUMENTATION

[Lightning Components Developer Guide](#)

Base



```
<span class="slds-icon_container slds-icon-standard-account" title="description of icon when needed">
  <svg aria-hidden="true" class="slds-icon">
    <use xlink:href="/assets/icons/standard-sprite/svg/symbols.svg#account"></use>
  </svg>
  <span class="slds-assistive-text">Description of icon</span>
</span>
```

- For **action** icons, add the `.slds-icon_container--circle` class to the container (`.slds-icon_container`), which changes the background shape to a circle.
- Doctype** icons have no background color.
- Standard** and **Custom** icons have a rounded square shape and use a class on the container for the background color.
- Utility** icons have no background color.

Icon Colors

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- Utility icons have no background color.

Icon Colors

VARIANTS & STATES

Base

Standard

Utility

Action

DocType

Custom

Icon Colors

Background Colors

Sizes

DOCUMENTATION

You are not MailForce or InstaFace

(unless you are)

Similar Problems

Unique Constraints

(Team Size)

(Team Structure)

(Internal *vs.* Consulting)

(Web **vs. OS-Specific)**

(Is it 1970?)



Web Consulting

Designers + Developers + ???

***“How do you sell it to clients
(or the boss)?***

(We Don't)

*“Since OddBird thinks about handoff from the beginning, **maintenance has been super easy.** For example, **100% unit test coverage was a given.** I never had to ask for it.*

—Sara Taillon, CTO at ORCAS

***“If it doesn’t have tests, it’s
legacy code***

—Carl Meyer

***“If it’s not documented, it
doesn’t exist***

—Me

***“If it’s not accessible, it doesn’t
exist***

—Also Me

Accessibility is a Basic Human Right

UN Convention on the Rights of Persons with Disabilities

**Perceivable, Operable,
Understandable, Robust**

Accessibility is For Everyone

long-term, temporary, situational, or robotic...

The Web is...
Accessible by Design

The Web...

Has a Mission

“

Web for all.

Web on everything.

—World Wide Web Consortium, 1994

WORLD WIDE WEB

The WorldWideWeb (W3) is a wide-area hypermedia[1] information retrieval initiative aiming to give universal access to a large universe of documents.

Everything there is online about W3 is linked directly or indirectly to this document, including an executive summary[2] of the project, Mailing lists[3] , Policy[4] , November's W3 news[5] , Frequently Asked Questions[6] .

What's out there?[7]Pointers to the world's online information, subjects[8] , W3 servers[9], etc.

Help[10] on the browser you are using

Software Products[11] A list of W3 project components and their current state. (e.g. Line Mode[12] ,X11 Viola[13] , NeXTStep[14] , Servers[15] , Tools[16] , Mail robot[17] , Library[18])

Technical[19] Details of protocols, formats, program internals etc



```
SI-System Information, Advanced Edition, PC-Cape 1987, 1988, Peter Norton  
Computer Name: IBM-PC  
Operating System: DOS 3.00  
Boot-up in 100% stated  
Main Processor: Intel 8088  
Co-Processor: None  
Video Display Adapter: Hercules (CGA)  
Current Video Mode: Text, 80 x 25 Characters  
Installed Disk Drives: 3, 4, 5, 6
```

800 segments, 64K 8-bits of memory:
48 K-bits used by DOS and resident programs
572 K-bits available for application programs
No search for active memory finds:
48 K-bits main memory (at hex 0000-0FFF)
32 K-bits display memory (at hex 2000-3FFF)
ROM-BIOS extensions are found at hex paragraph 0000

Computing Index (CIX), relative to 1985/87: 1.0
Disk Index (DIX), relative to 1985/87: Not computed. No device specified.
Performance Index (PPI), relative to 1985/87: Not computed.
C/N:













The Web is...

Contextual by Design

The Web is...
Resilient by Design

The Web is...

Customizable by Design

The Web Model

Is User-Controlled By Design

HTML/CSS are **Declarative**

Too Many **Variables**

“The fact we can control a paper page is really a limitation of that medium.

—John Allsopp, [A Dao of Web Design](#) (April 07, 2000)

Accessible = User Friendly

Use Built-In Tools

```
<button>  
  Do a thing.  
</button>
```

Fakes Are Not Robust

```
<div  
  onclick="DoThing();"  
  onkeypress="DoThing();"  
  tabindex="0"  
  role="button">  
  Do a thing.  
</div>
```

Provide Accessible Patterns

Document Accessible Uses

1. ~~Why~~ Design Systems?

2. Pattern Audit

3. Start **Small**

4. Define The **API**

5. **Integrated** Agile Process

Existing Apps:

What Do We Have?

cssstats.com

24 Unique Colors

Aa
#fff

Aa
#999

Aa
#525252

Aa
#0092db

Aa
#e96900

Aa
#ae81ff

Aa
#2973b7

Aa
#42b983

Aa
#a6e22e

Aa
#b3b3b3

Aa
#7f8c8d

Aa
#34495e

Aa
#aaa

Aa
#666

Aa
#1c90f3

Aa
#2c3e50

Aa
#ccc

Aa
#3a5169

Aa
#000

Aa
#2c815b

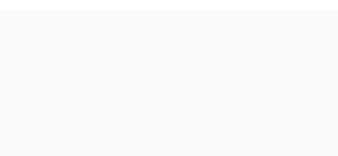
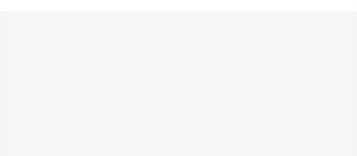
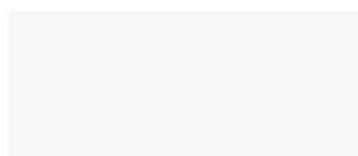
Aa
#333

Aa
#0064e1

Aa
inherit

Aa
#555

8 Unique Background Colors



Font Size 2.4em

Font Size 2em

Font Size 1.5em

Font Size 1.33333333em

Font Size 1.2em

Font Size 1.05em

Font Size inherit

Font Size 16px

Font Size 1em

Font Size 15px

Font Size 0.9em

Font Size .9em

Font Size 0.9rem

Font Size 14px

Font Size 0.85em

Take Screenshots

Organize into Groups

[SIGN ON](#)

go

[Maximize Cash Flow](#)[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](#)[Add Reminder](#)[Search Transactions](#)[Export All](#)[Print Spend](#)[Print Reserve](#)[Learn More >>](#)[Savings History](#)[Customize Your Pig](#)[Add](#)[Sign On >](#)[Continue](#)[Search >](#)[Go](#)[CLEAR](#)[SUBMIT](#)[Apply Now >](#)[+ Add transaction](#)[Show Bars](#)[GO >](#)[Rate Virtual Wallet](#)[Share Your Story](#)[Sign On >](#)[Set Payday](#)[Try Again](#)[Sign Up for V.me](#)[Learn More >](#)[Learn More >>](#)



Image from [From Pages to Patterns](#) by Charlotte Jackson

All Apps:

What Do We Need?

1. ~~Why Design Systems?~~
2. ~~Pattern Audit~~
3. Start **Small**
4. Define The **API**
5. **Integrated** Agile Process

Up-To-Date > Comprehensive

Start small, get it right, and expand...

Design Tokens

Abstract: broad reach, low specificity

Color Tokens

COLOR PREVIEWS



text-default

#3e3e3c

rgb(62, 62, 60)

hsl(60, 2%, 24%)



text-warning

#ffb75d

rgb(255, 183, 93)

hsl(33, 100%, 68%)

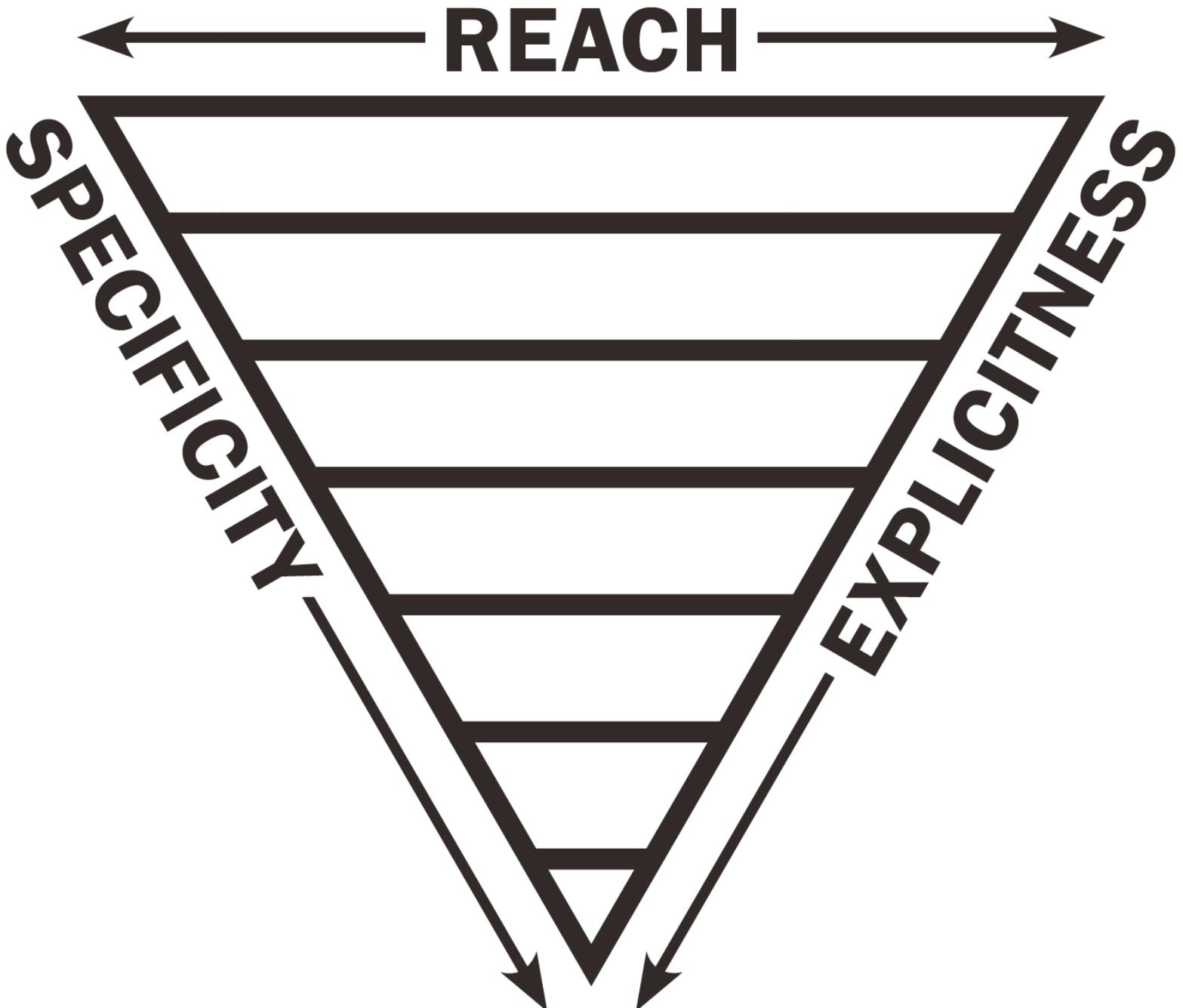


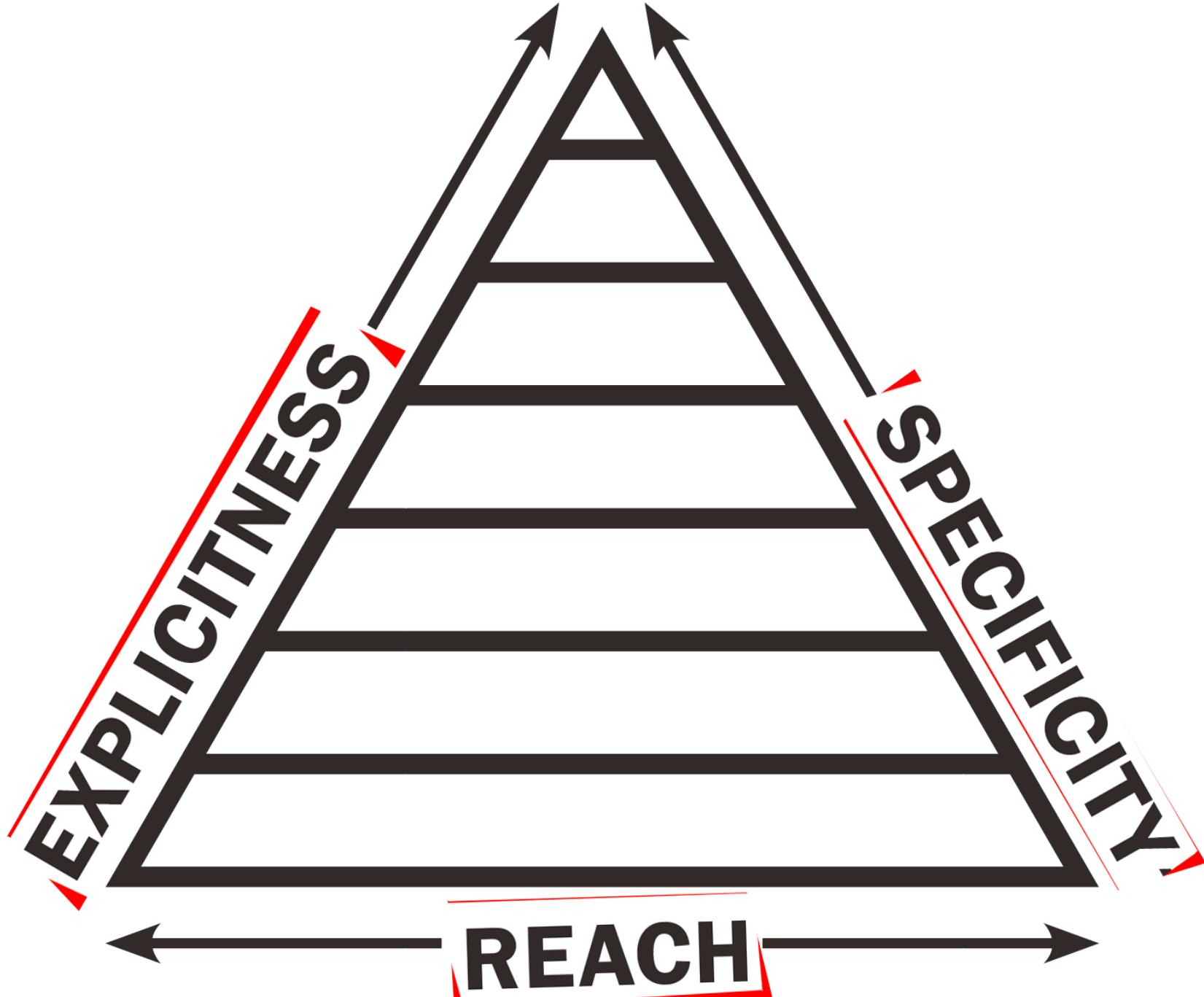
text-error

#c23934

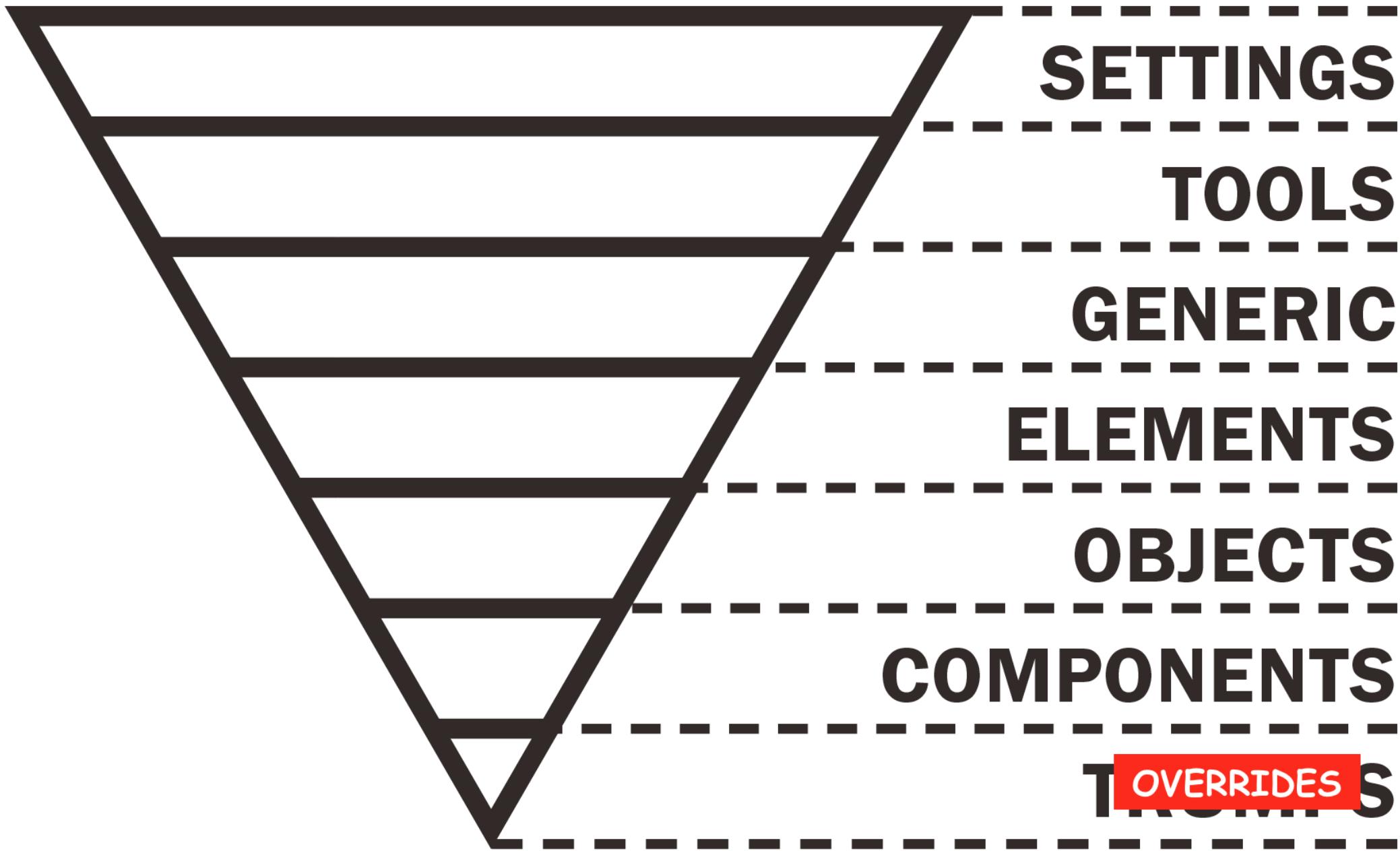
rgb(194, 57, 52)

hsl(2, 58%, 48%)





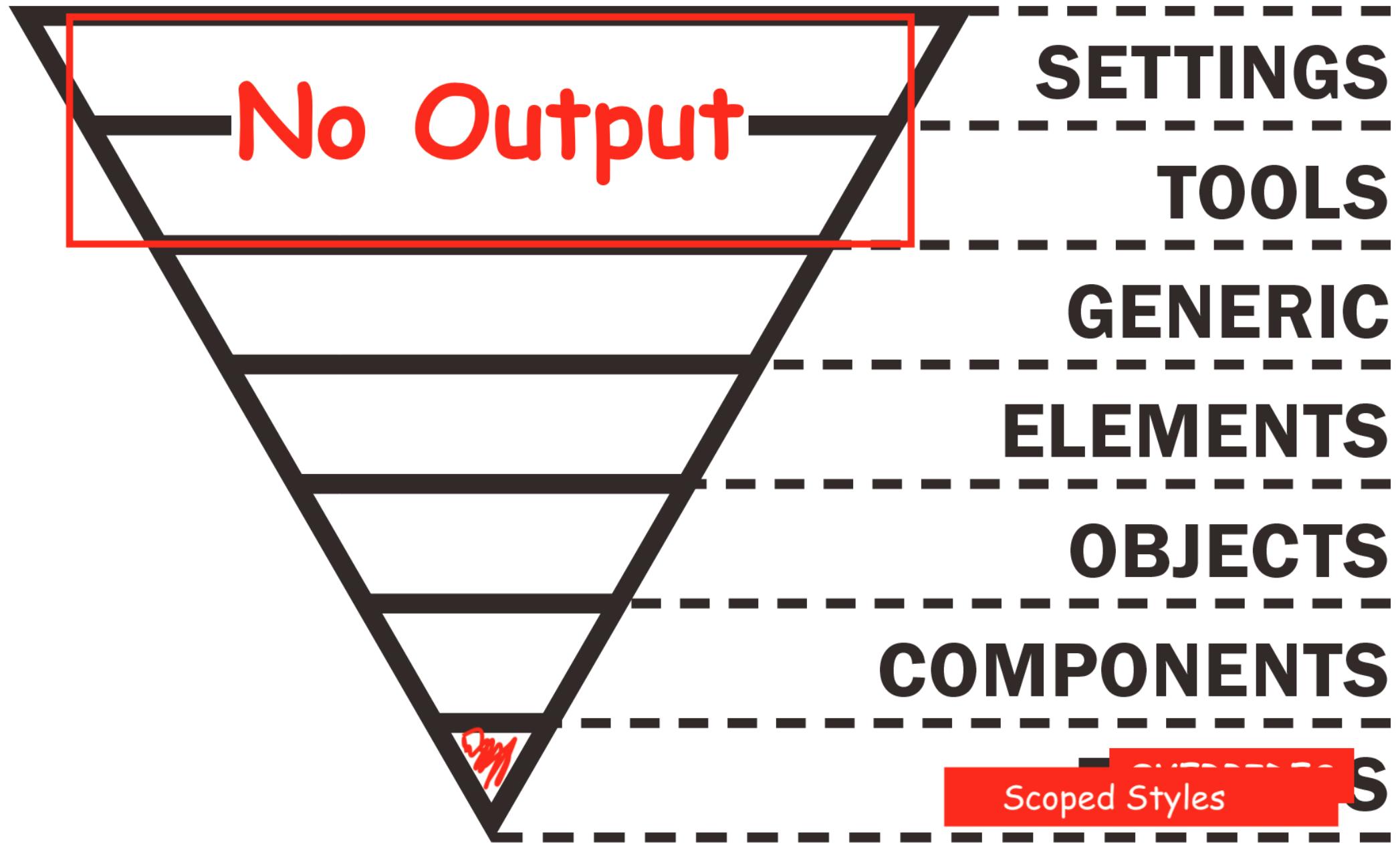
Normal Triangle by Maslow **Miriam**



Cascading Style Sheets

Invented to create **re-usable patterns**

```
.warning { color: red; }
```



Sass Variables

```
$color-text-default: rgb(62, 62, 60);  
$color-text-warning: rgb(255, 183, 93);  
$color-text-error: rgb(194, 57, 52);
```

```
.example {  
  background: $color-text-error;  
}
```



Not Meaningfully Organized



Encourages One-Offs



Difficult to Automate

YAML & Theo

```
props:  
  text_default:  
    value: "rgb(62, 62, 60)"  
  text_warning:  
    value: "rgb(255, 183, 93)"  
  text_error:  
    value: "rgb(194, 57, 52)"  
  
global:  
  type: "color"  
  category: "brand-colors"
```

```
aliases:  
  vermilion:  
    value: "7, 83%"  
props:  
  color_vermillion:  
    value: "hsla({!vermillion}, 53%, 1)"  
  color_vermillion_dark:  
    value: "hsla({!vermillion}, 43%, 1)"
```

👍 Easier to **Export** from YAML

👎 Not A Style Language

Sass Maps

```
$text-colors: (  
  'default': rgb(62, 62, 60),  
  'warning': rgb(255, 183, 93),  
  'error': rgb(194, 57, 52),  
) ;
```

```
.example {  
  background: color('error');  
}
```

The Map Problem

```
$colors: (  
  'brand-blue': hsl(195, 85%, 35%),  
  'gray': desaturate(map-get($colors, 'brand-blue'), 80%),  
);
```

[ERROR] Undefined variable: "\$colors".

Map Self-Reference

```
$colors: (  
  '_brand-pink': hsl(330, 85%, 68%),  
  'escher': '#_brand-pink',  
  'godel': '#escher',  
  'bach': '#godel',  
  'kevin bacon': '#bach' ('lighten': 20%)  
);
```

color('kevin bacon')

Code is Communication

```
code {  
background: #d4e0e4;  
border: #92b1bc;  
color: #13323c;  
}
```

```
code {  
background: mix($brand, #fff, 80%);  
border: mix($brand, #fff, 50%);  
color: mix($brand, #000, 50%);  
}
```

Code Patterns Add Meaning

```
code {  
background: color('callout');  
border: color('border');  
color: contrast('callout');  
}
```

 **Meaningful Relationships!**

 **Encourages Patterns**

 **Functional Adjustments**

 **Requires Additional Tooling**

Even More Layers

Global Settings » **Theme** Defaults » **Component** Details

```
$brand-colors: (
  '_brand-blue': hsl(195, 85%, 35%),
  '_brand-pink': hsl(330, 85%, 48%),
);
```

```
$theme-colors: (
  'text': ...,
  'border': ...,
  // ...
);
```

```
$button-colors: (
  'button-text': ...,
  'button-border': ...,
  // ...
);
```

CSS Custom Properties

```
:root {  
  --color-text-default: rgb(62, 62, 60);  
  --color-text-warning: rgb(255, 183, 93);  
  --color-text-error: rgb(194, 57, 52);  
}  
  
.example {  
  background: var(--color-text-error);  
}
```

👍 **Browser Native**

👍 **Live Themes**

👍 **Cascading is Awesome**

👎 Not Meaningfully Organized

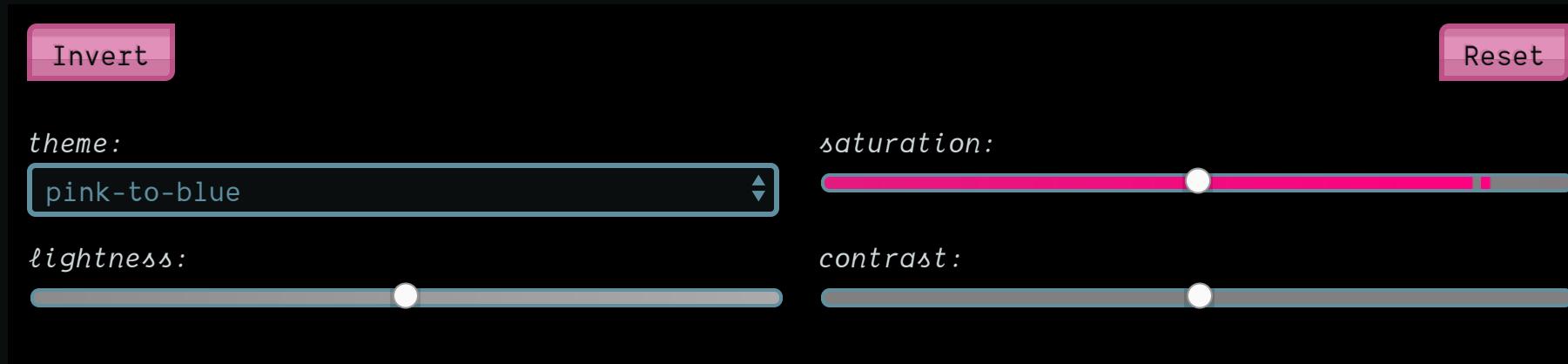
👎 Encourages One-Offs

👎 Difficult to Automate(?)

-＼(ツ)／-

Worth Some Effort?

Custom Property Color Palettes



Initial Light/Dark Based on User-OS (Firefox/Safari). Each theme comes with different levels of customization. Sass is only used to simplify the range-selector prefixes, and JS is only used to set custom properties. This is what a link looks like.

```
data-colors='invert' and now a link looks like this.
```

prime



accent



Know The Trade-Offs

adjust to **your** needs...

1. ~~Why~~ Design Systems?
2. ~~Pattern Audit~~
3. ~~Start Small~~
4. Define The API
5. ~~Integrated~~ Agile Process



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  </svg>
  <span class="slds-assistive-text">Description of icon</span>
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- For **action** icons, add the `.slds-icon_container--circle` class to the container (`.slds-icon_container`), which changes the background shape to a circle.
- Doctype** icons have no background color.
- Standard** and **Custom** icons have a rounded square shape and use a class on the container for the background color.
- Utility** icons have no background color.

Icon Colors

SLDS Docs ⇒ **HTML & CSS**

Copy & Paste

**class="slds-icon slds-icon-text-warning slds-icon--
x-small"**

Related Classes ⇒ Data Attributes

icon **color** and **size** classes

data-slds-icon-color=""

.slds-icon-text-default | .slds-icon-text-warning | .slds-icon-text-error

HTML Template Logic is Great

pre-processors for your markup!

Example: Vue

```
<icon :image="isSuccess ? 'checkmark' : 'x'">
```

Components Provide Meaning

```
<my-icon name="gear" />
```

SLDS React ⇒ **Component Library**

Install the package on npm...

✓ type

✓ purpose

-＼(ツ)／-

JS

CSS

HTML

button

modal

nav

button

modal

nav

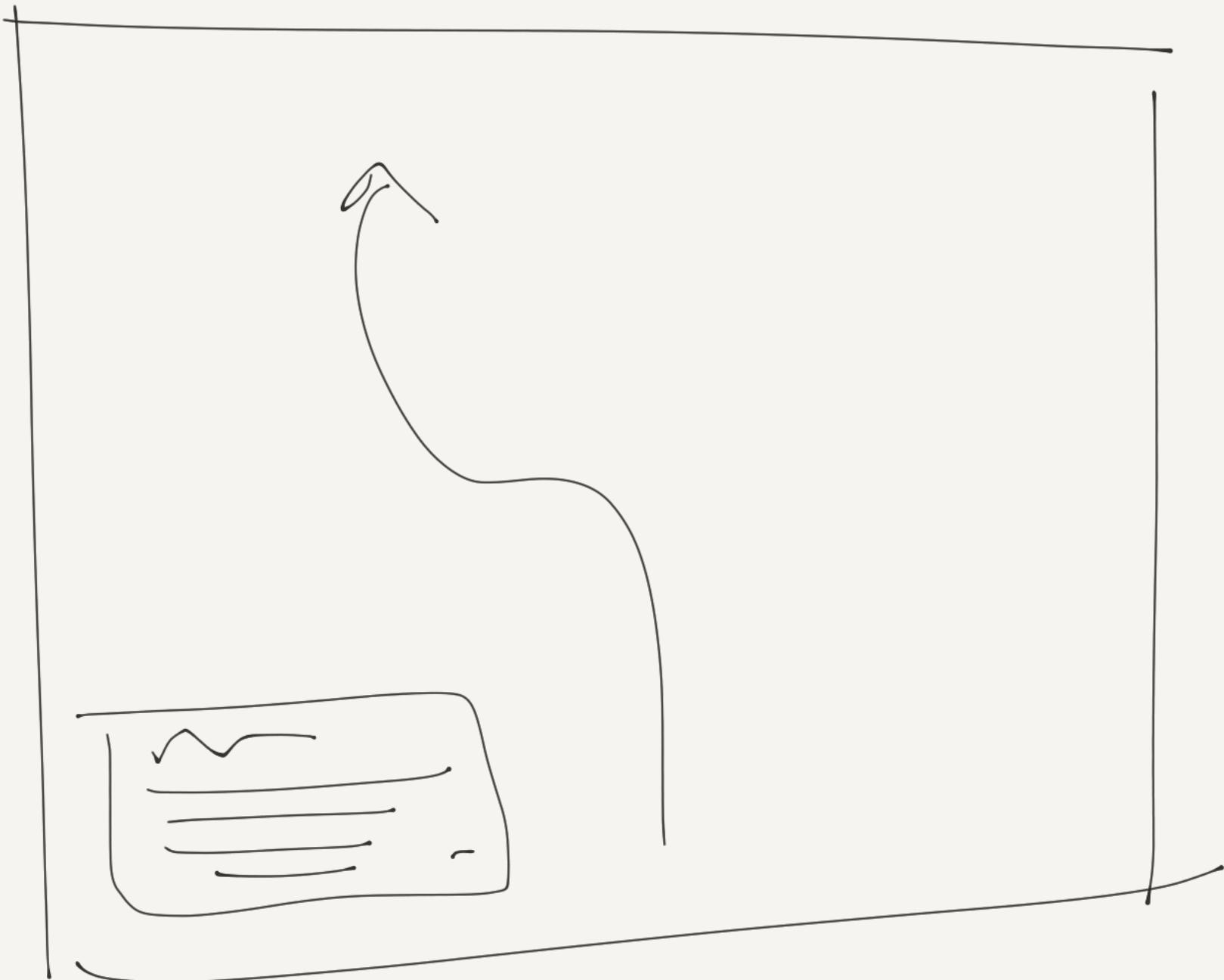
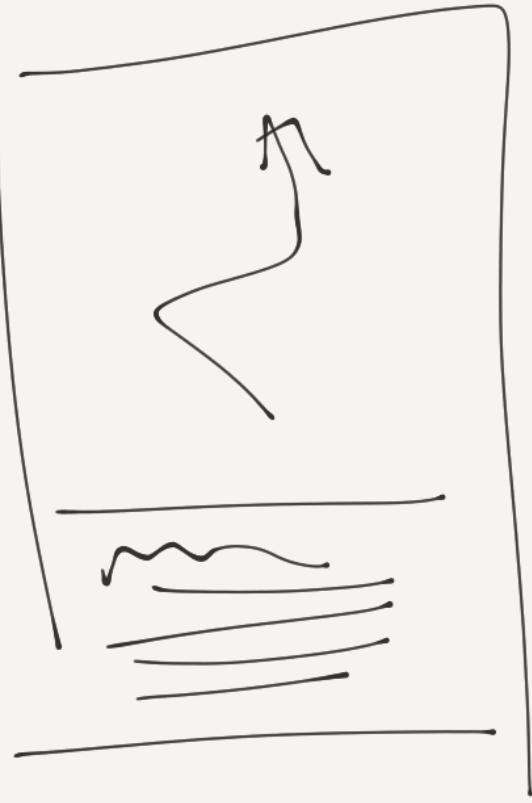
1. ~~Why~~ Design Systems?
2. ~~Pattern Audit~~
3. ~~Start Small~~
4. ~~Define The API~~
5. **Integrated Agile Process**

“Less Theory, More Practice”

Less **Mockups**, More **Code**

Ugly Helps Communicate

Isolate variables to focus on what's important



Jefferson High v

Web 1920 - 45

The screenshot shows the tegy web interface with a sidebar on the left and a main form area on the right.

Left Sidebar:

- Organization:** Chicago K-8 School, Cluster Options Exercise, Core Block Options, McAuliffe Middle School - Humanities Pilot 3/4, Organizational Prototyping...
- Projects:** Iterating Like Mad (highlighted in green), 3:30 SWITC... (disabled), Expanded Time Experiences, Ways to Think About Thirds, Copy - Variations of a Theme, Something Else, X Another Scenario, Yay Scenario.
- Scenarios:** Edit Project button.

Main Form Area:

- Title:** Organizational Prototyping -- Iteration Structures - Aligned
- Description:** (Empty text area)
- Buttons:** Duplicate, Export, ID: IZQq0ZJ | Modified Sept 13, 2017, Delete Project.

Web 1920 - 53

Web 1920 - 55

The screenshot shows the tegy web interface with a sidebar on the left and a main form area on the right.

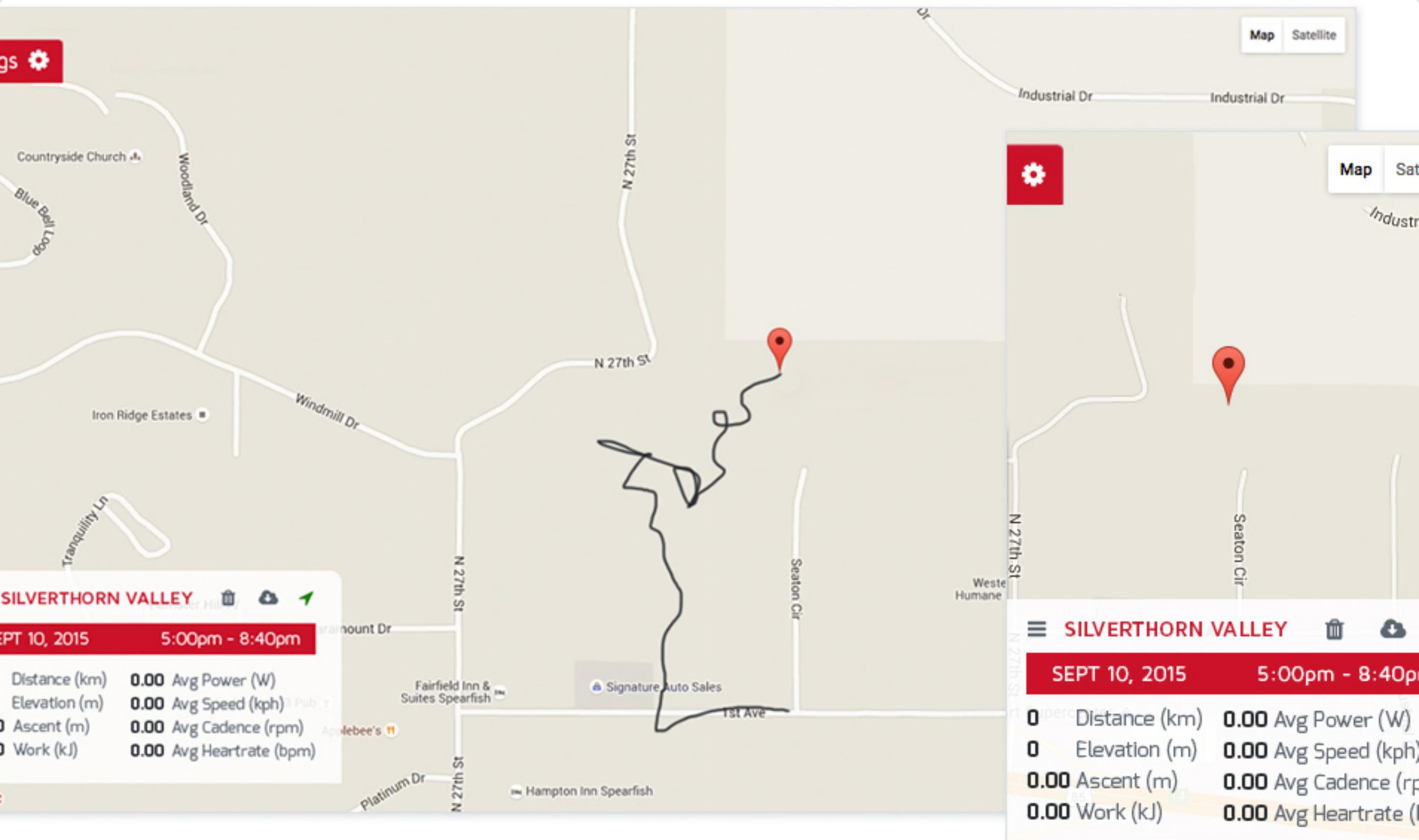
Left Sidebar:

- Organization:** Chicago K-8 School, Cluster Options Exercise, Core Block Options, McAuliffe Middle School - Humanities Pilot 3/4, Organizational Prototyping...
- Projects:** Iterating Like Mad (highlighted in green), 3:30 SWITC... (disabled), Expanded Time Experiences, Ways to Think About Thirds, Copy - Variations of a Theme, Something Else, X Another Scenario, Yay Scenario.
- Scenarios:** Edit Scenario button.

Main Form Area:

- Title:** Organizational Prototyping -- Iteration Structures - Aligned
- Description:** (Empty text area)
- Buttons:** Duplicate, Export, ID: IZQq0ZJ | Modified Sept 13, 2017, Delete Project.

Web 1920 - 48





Activities

Friends



Activities

Friends



« Back To List

Friends

Roads Satellite

S Satellite Terrain

e | Terrain

Map

No connection... 0% Miriam Suzanne

Roads Satellite Terrain

Cottage Ln

Lunds & Byerlys Hwy 7 Minnetonka

Minnetonka Mills Rd

Play It Again Sports

Perkins Restaurant & Bakery

Walgreens

Brentwood Park Townhomes

Starbucks

Eisenhower Elementary School

Grace Homes

Minnesota 7 Service Rd

Wayside Rd W

Hall

Service Dr

21st Ave N

N 4th St

Hilltop Park

LA Fitness

Hitching Post Motorsports

Jet's Pizza

17th Ave N

19th Ave N

18th Ave N

3rd St N

16th Ave N

14th Ave N

13th Ave N

12th Ave N

11th Ave N

N 4th St

10th Ave N

9th Ave N

8th Ave N

7th Ave N

6th Ave N

2nd St N

1st St N

10th Ave N

9th Ave N

8th Ave N

7th Ave N

6th Ave N

5th Ave N

4th Ave N

3rd St N

2nd St N

17th Ave N

16th Ave N

15th Ave N

14th Ave N

13th Ave N

12th Ave N

11th Ave N

10th Ave N

9th Ave N

8th Ave N

7th Ave N

6th Ave N

5th St N

4th St N

3rd St N

2nd St N

1st St N

17th Ave S

15th Ave S

14th Ave S

13th Ave S

12th Ave S

11th Ave S

10th Ave S

9th Ave S

8th Ave S

7th Ave S

6th Ave S

Mainstreet

Central Park

Maetzold Field

Hopkins Library

U.S. Bank Branch

LTD Brewing Co

Pub 819

Chipotle Mexican Grill

Stages Theatre Company

Mann Hopkins Cinema 6

Wells Fargo Bank

US Post Office

« back to list

Stacy Kvernmo
LIVE - 4:34pm 1.88mi / 9m 49s

Speed	Average	Current
Speed	14.3 mph	8.0 mph
Cadence	70 rpm	26 rpm
Power	217 W	57 W
Total		
Ascent	411 ft	

No connection... 0% Miriam Suzanne

Roads Satellite

18

Grace Homes

Minnesota 7 Service Rd

Wayside Rd W

Hall

Service Dr

21st Ave N

N 4th St

Hilltop Park

LA Fitness

Hitching Post Motorsports

Jet's Pizza

17th Ave N

19th Ave N

18th Ave N

3rd St N

16th Ave N

14th Ave N

13th Ave N

12th Ave N

11th Ave N

N 4th St

10th Ave N

9th Ave N

8th Ave N

7th Ave N

6th Ave N

5th Ave N

4th Ave N

3rd St N

2nd St N

17th Ave N

16th Ave N

15th Ave N

14th Ave N

13th Ave N

12th Ave N

11th Ave N

10th Ave N

9th Ave N

8th Ave N

7th Ave N

6th Ave N

5th St N

4th St N

3rd St N

2nd St N

1st St N

17th Ave S

15th Ave S

14th Ave S

13th Ave S

12th Ave S

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Chipotle Mexican Grill

Stages Theatre Company

Mann Hopkins Cinema 6

Wells Fargo Bank

US Post Office

No connection... 0% Miriam Suzanne

Roads Satellite

13th Ave N

12th Ave N

11th Ave N

10th Ave N

9th Ave N

8th Ave N

7th Ave N

6th Ave N

5th Ave N

4th Ave N

3rd St N

2nd St N

17th Ave N

16th Ave N

15th Ave N

14th Ave N

13th Ave N

12th Ave N

11th Ave N

10th Ave N

9th Ave N

8th Ave N

7th Ave N

6th Ave N

5th St N

4th St N

3rd St N

2nd St N

1st St N

17th Ave S

15th Ave S

14th Ave S

13th Ave S

12th Ave S

11th Ave S

10th Ave S

9th Ave S

8th Ave S

7th Ave S

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Chipotle Mexican Grill

Stages Theatre Company

Mann Hopkins Cinema 6

Wells Fargo Bank

US Post Office

« back to list

Stacy Kvernmo
Jan 4, 2017 - 4:34pm 1.88mi / 9m 49s

Average	Max
Speed	14.3 mph
Cadence	70 rpm
Power	217 W
Total	
Ascent	411 ft

Average 14.3 mph
Max 39.2 mph
Cadence 70 rpm
Power 217 W
Total
Ascent 411 ft

Activities Friends

No connection...

Roads **Satellite** **Terrain**

Stacy Kvernmo
Jan 4, 2017 - 4:34pm **1.88mi / 9m 52s**

	Average	Max
Speed	14.3 mph	39.2 mph
Cadence	70 rpm	112 rpm
Power	217 W	564 W

	Total
Ascent	411 ft

Activities Friends

Iterate on Features/Epics

sketch » wire-frame » html markup » back-end » **design**

Test, Test, Test

Tight Feedback Loop

“Move Fast & Fix Things”

Everyone is **responsible & collaborating**

Make Patterns & Documentation

The Lazy Option

Automate from Structured Code



OddBird's **Herman** is based on SassDoc syntax

```
// SLDS Colors
// -----
/// These are the colors we stole from SLDS system,
/// in order to create a demo.
/// @group color
/// @colors
$lds-colors: (
  'text-default': rgb(62, 62, 60),
  'text-warning': rgb(255, 183, 93),
  'text-error': rgb(194, 57, 52),
);
```

/// @colors

\$slds-colors

SCSS

```
$slds-colors: (  
  'text-default': rgb(62, 62, 60),  
  'text-warning': rgb(255, 183, 93),  
  'text-error': rgb(194, 57, 52),  
);
```

These are the colors we stole from SLDS system, in order to create a demo.

COLOR PREVIEWS

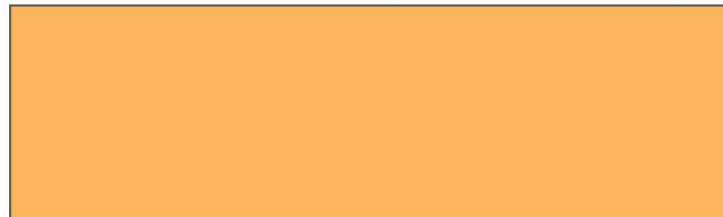


text-default

#3e3e3c

rgb(62, 62, 60)

hsl(60, 2%, 24%)

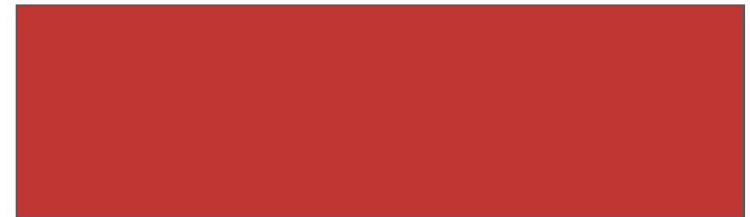


text-warning

#ffb75d

rgb(255, 183, 93)

hsl(33, 100%, 68%)



text-error

#c23934

rgb(194, 57, 52)

hsl(2, 58%, 48%)

/// @sizes

SIZE PREVIEWS

rhythm, gutter	1.4rem	
gutter-plus	2.1rem	
double-gutter	2.8rem	
flex-gutter	calc(0.7rem + 2.5vw)	
spacer	calc(4.2rem + 2.5vw)	
gutter-minus	1.05rem	
shim	0.7rem	
half-shim	0.35rem	
quarter-shim	0.175rem	

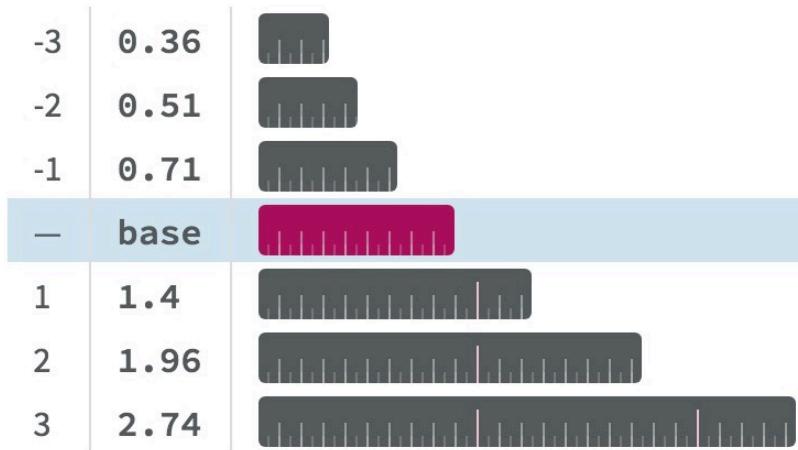
/// @sizes {ruler}

SIZE PREVIEWS

rhythm, gutter	1.4rem	
gutter-plus	2.1rem	
double-gutter	2.8rem	
flex-gutter	calc(0.7rem + 2.5vw)	
spacer	calc(4.2rem + 2.5vw)	
gutter-minus	1.05rem	
shim	0.7rem	
half-shim	0.35rem	
quarter-shim	0.175rem	

/// @ratios

RATIO: line-height (1.4)



/// @icons templates/icons/

ICON PREVIEWS: templates/icons/



arrow-right.svg



bar-chart.svg



brush.svg



checkbox-selected.svg



checkbox.svg



checkmark-circle.svg



chrome.svg



close.svg



copy.svg



download.svg



drag.svg



email.svg



exit.svg



eye-slash.svg



eye.svg



file.svg



firefox.svg



folder.svg



gear.svg



group.svg

Herman Components

```
/// Navigation items, with inactive and active states.  
/// @group nav  
/// @example njk  
///   {% import 'nav.macros.njk' as nav %}  
///   {{ nav.bar(active="dashboard", items=[...]) }}  
.nav-bar {  
  /* ... */  
}
```

EXAMPLE

njk

```
{% import 'nav.macros.njk' as nav %}  
{{ nav.bar(active='Dashboard', items=[  
  {name: 'Dashboard', component: 'Dashboard', href: '/'},  
  {name: 'Posts', component: 'Posts', href: '/posts'},  
  {name: 'Users', component: 'Users', href: '/users'},  
  {name: 'Settings', component: 'Settings', href: '/settings'}]) }}
```

html - compiled

```
<div class="nav-bar">  
  <a href="/" class="nav-item nav-active">Dashboard</a>  
  <a href="/posts" class="nav-item">Posts</a>  
  <a href="/users" class="nav-item">Users</a>  
  <a href="/settings" class="nav-item">Settings</a>  
</div>
```

[Dashboard](#) [Posts](#) [Users](#) [Settings](#)

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Sass-First Breaks Down...

Only Nunjucks For Now...

VueDS (with Theo)

V U E D S

An open source tool for building
Design Systems with Vue.js

Vue Design System provides you and your team a set of organized tools, patterns & practices. It works as the foundation for your application development.

[Download \(v1.3.1\)](#)

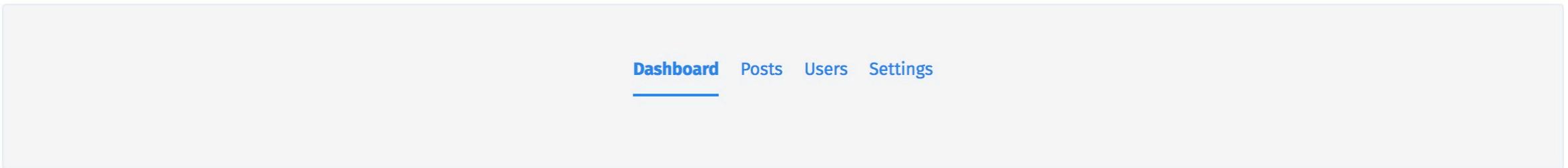
[Docs](#)

VueDS Components

```
<docs>
  jsx
  <nav-bar active="Dashboard" :navItems="[ ... ]"/>
  `

</docs>
```

Prop name	Type	Default	Description
type	string	nav	The html element name used for the nav bar.
active	string	Required	State which tab is active when initiated (using name of the component).
navItems	array	Required	Menu items to be displayed on the nav bar.



```
<nav-bar active="Dashboard" :navItems="[  
  {name: 'Dashboard', component: 'Dashboard', href: '/'},  
  {name: 'Posts', component: 'Posts', href: '/posts'},  
  {name: 'Users', component: 'Users', href: '/users'},  
  {name: 'Settings', component: 'Settings', href: '/settings'}  
 ]"/>
```

I Want Both :)

please...

Design System as Artifact

Code is a **Single Source of Truth**

1. ~~Why Design Systems?~~
2. ~~Pattern Audit~~
3. ~~Start Small~~
4. ~~Define The API~~
5. ~~Integrated Agile Process~~

Up-To-Date > Comprehensive

Start small, make it easy, and expand...

Meaningful & Structured Code

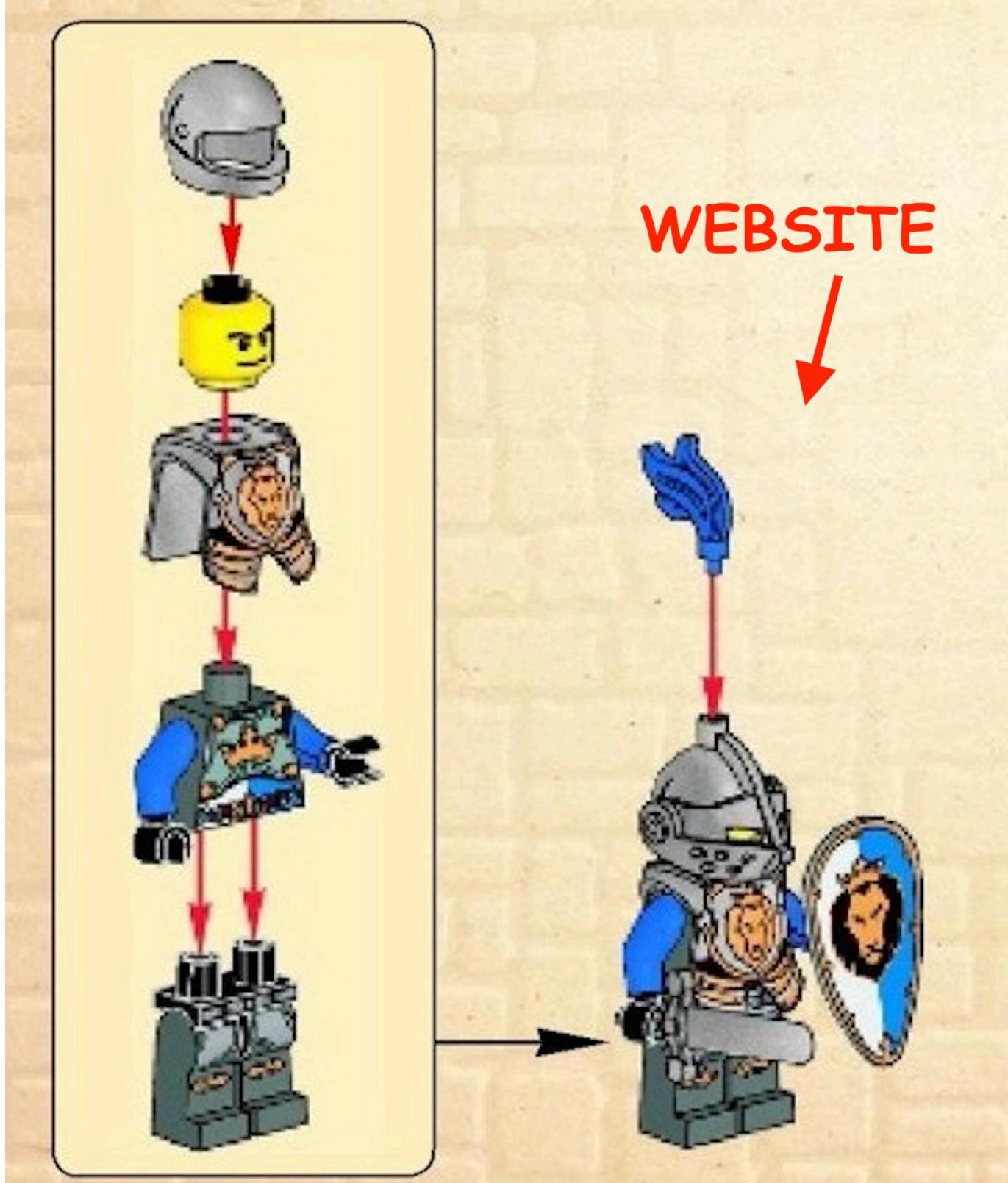
Readable by **Humans & Machines**

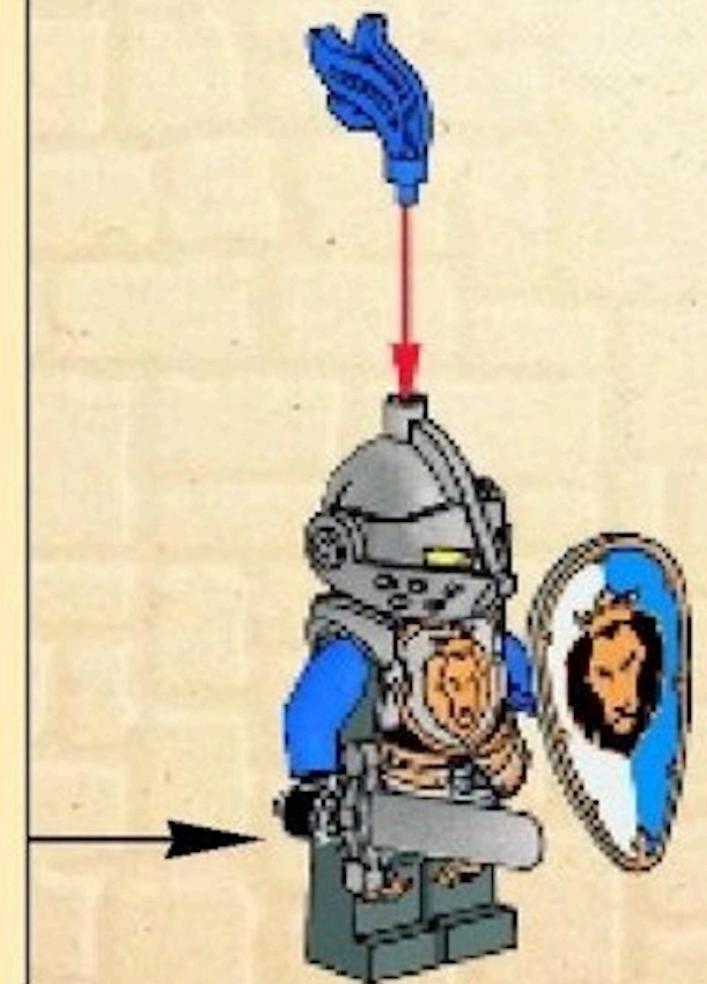
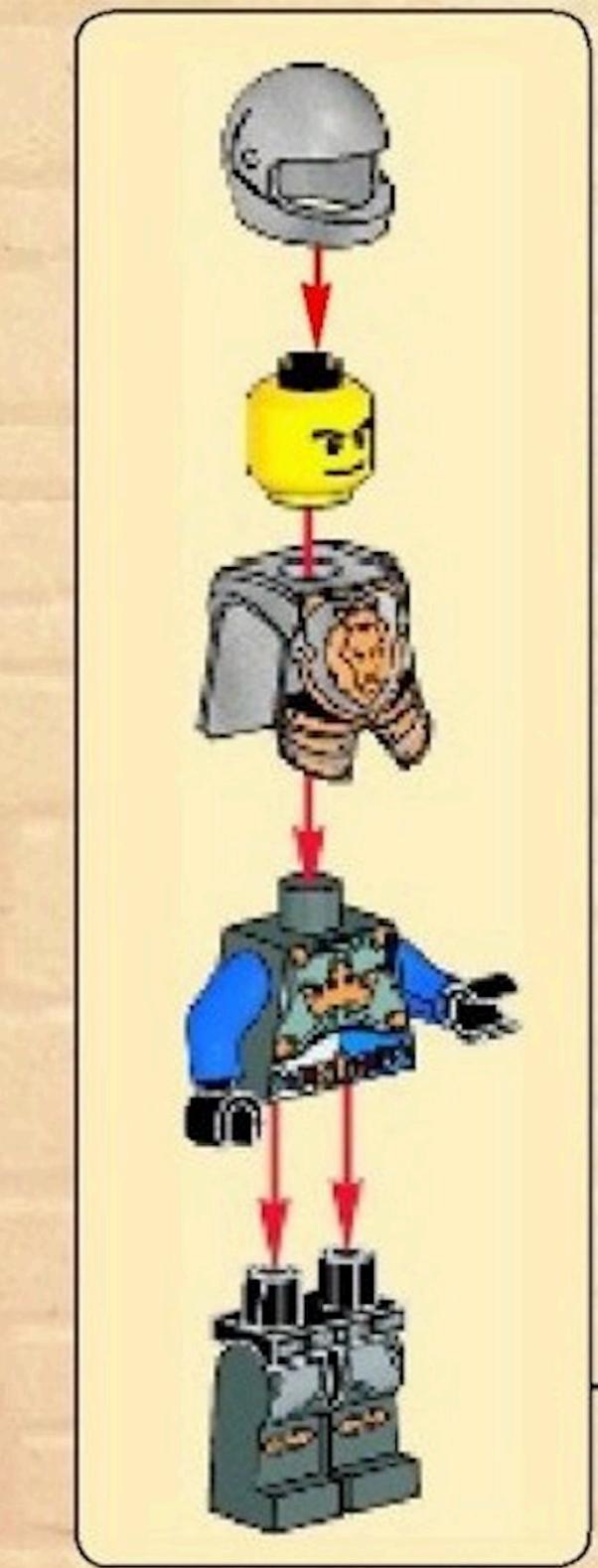
Inline Documentation

Helps the human factors...

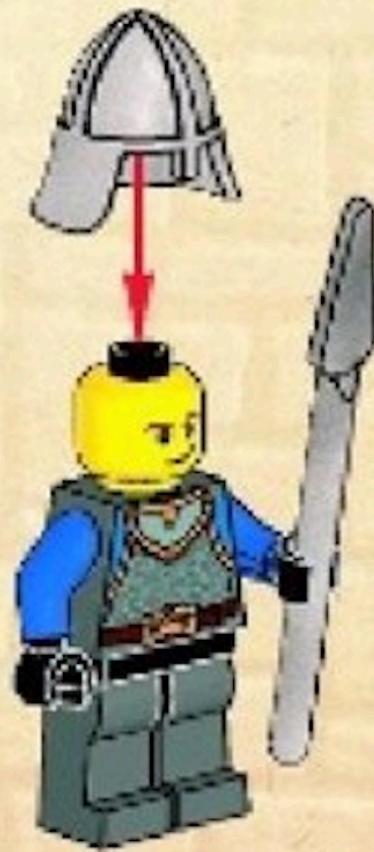
Agile & Integrated Process

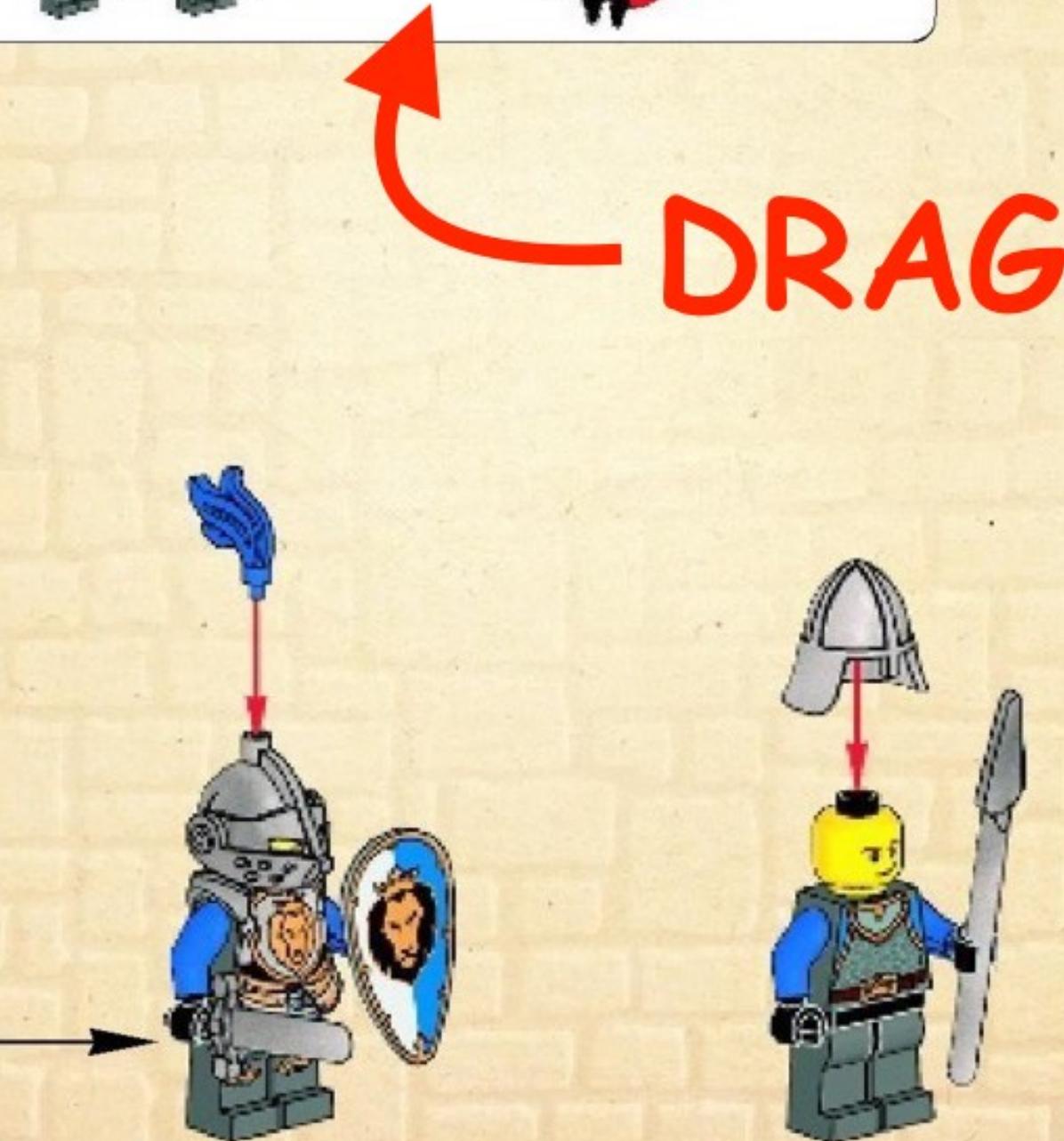
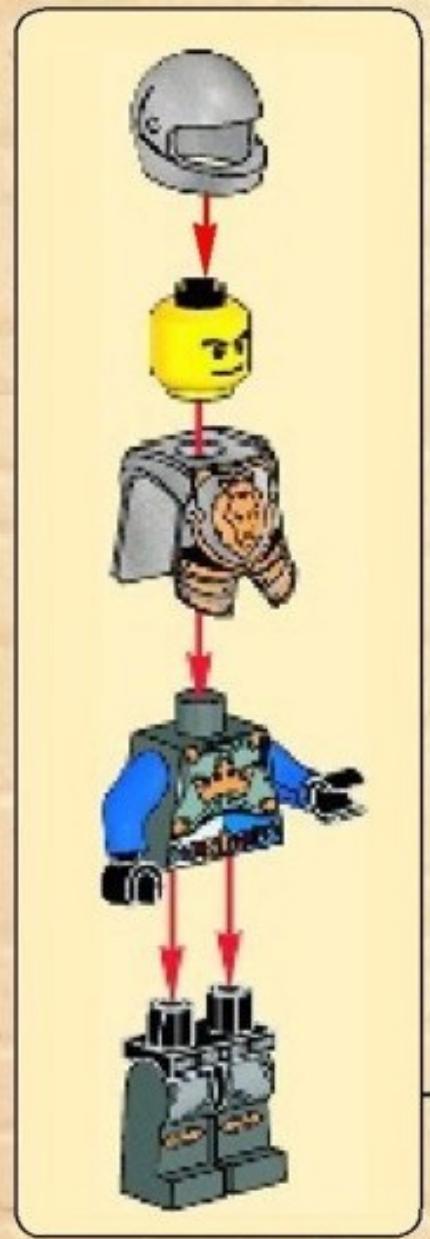
Everyone shares a single-source...





HELMET





DRAGON!!!



Thank you!

[Download the checklist »](#)