BUILDING SCALABLE

Design Systems

Laura Van Doore
@lauravandoore

Designing & building
software is complex.
@lauravandoore

Why is design struggling to scale?

- **Growing design teams**
  Organisations are investing more in design
- **Infinitely more complex design problems**
  Software needs to become more sophisticated to keep up with the demands & desires of our users.
- **Distributed teams**
  Agile delivery models encouraging cross functional teams.

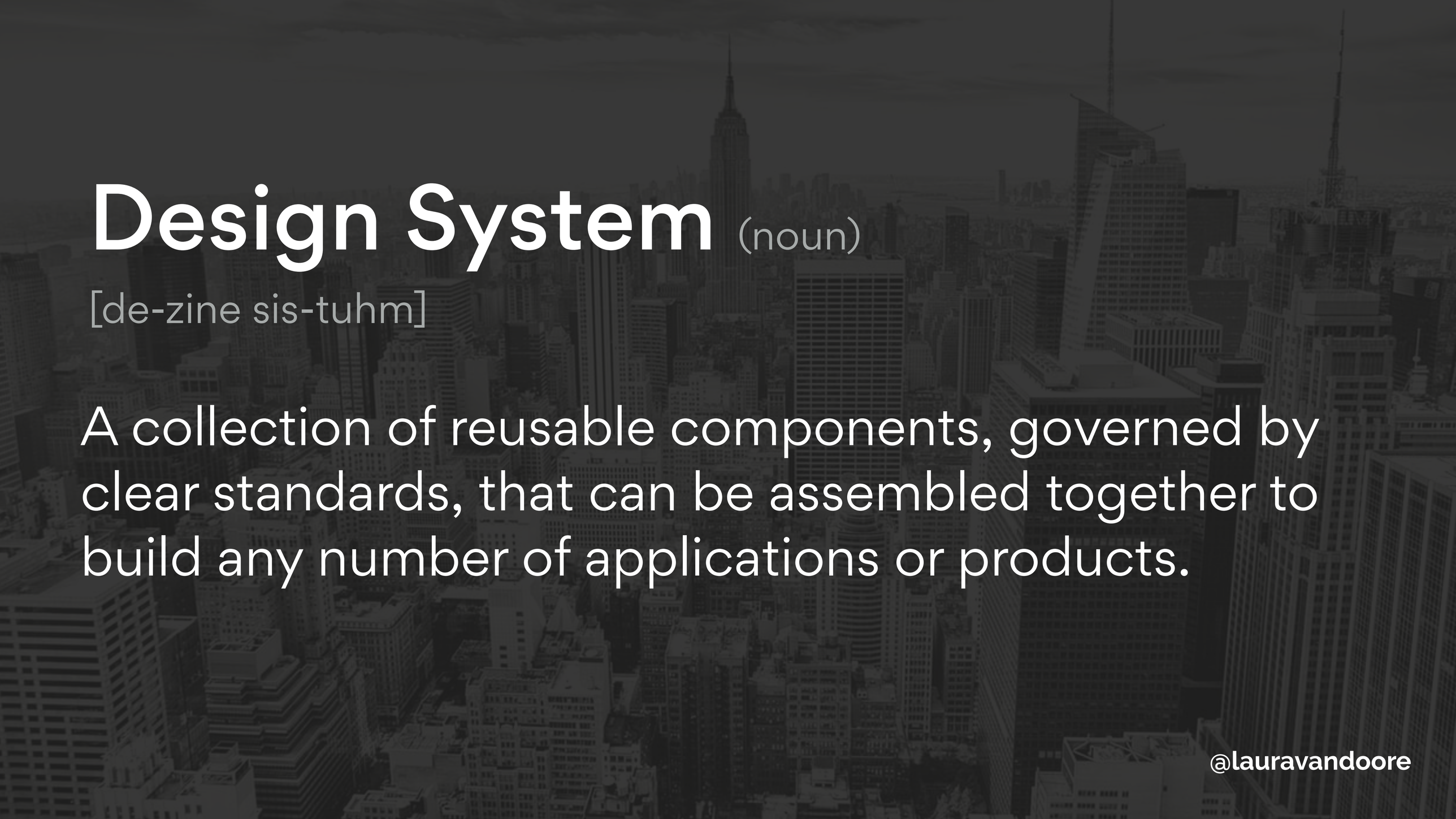
Maintaining design debt is starting to feel like this:

“A fractured process makes for a fractured user experience.”
- NATE FORTIN

So how can we **design the process** in order to deliver **better products & user experience**?

Answer:

A **DESIGN SYSTEM**



Design System (noun)

[de-zine sis-tuhm]

A collection of reusable components, governed by clear standards, that can be assembled together to build any number of applications or products.

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Design System

- Design Principles
- Live Code & Implementation info
- UX & Accessibility Metrics
- Animation Timing & Easing
- Voice & tone Guidelines
- Style Guide & Design Resources
- UX Personas

Style Guide

- Typography
- Colour Palettes
- Component Styling
- Grids
- Static Code Samples

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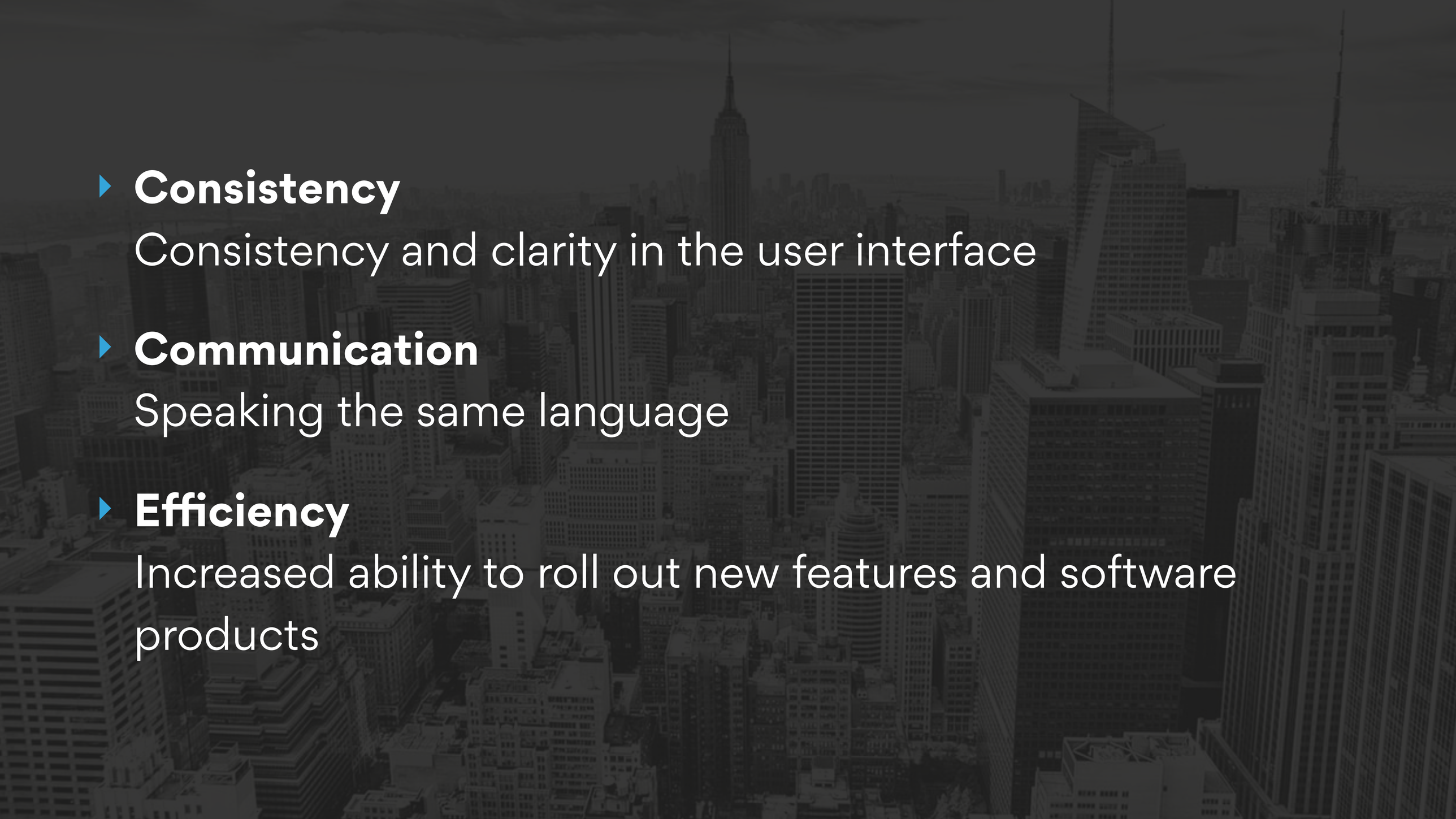
Benefits of Design Systems



- **Consistency**
  Consistency and clarity in the user interface
- **Communication**
  Speaking the same language
- **Efficiency**
  Increased ability to roll out new features and software products

- **Maintainability**
  Both in code base, testing and design assets
- **Scalability**
  A solid architecture you can expand into new products
- **Baked in Accessibility**
- **Facilitates speedy onboarding for new designers and engineers**

So ...
How popular are Design Systems?

According to InVision
86%
of Product Design teams have a Design System

BEST IN CLASS
A quick look at the best design systems being used around the world.
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Atlassian Design

Design, develop, and deliver

Use Atlassian's end-to-end design language to
create straightforward and beautiful experiences.

B Brand

Foundations, including personality, writing style, color, and type.

M Marketing

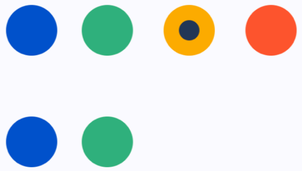
How color, type, and illustration are used in marketing.

P Product

Foundations, components, and patterns for building applications.

B A double rainbow!

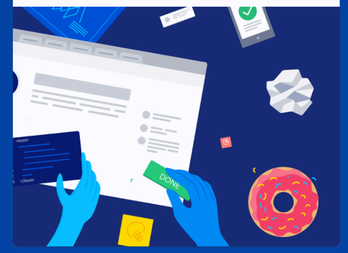
We use color in meaningful ways in all expressions of our brand.



M Atlassian logos

ATLASSIAN

Why prototyping is a must



B Atlassian personality

A reflection of our culture, values, and promise to customers - our personality is on display in everything we build.

M Our illustrations

A Atlaskit

The tools to build experiences in the Atlassian Design style.

Server products

Atlassian Design

Marketing

Product

Brand

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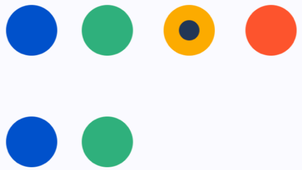

Atlassian logos

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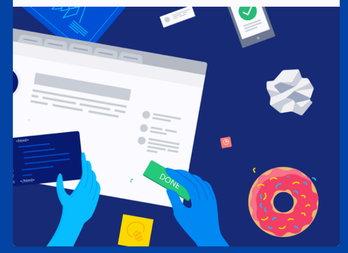

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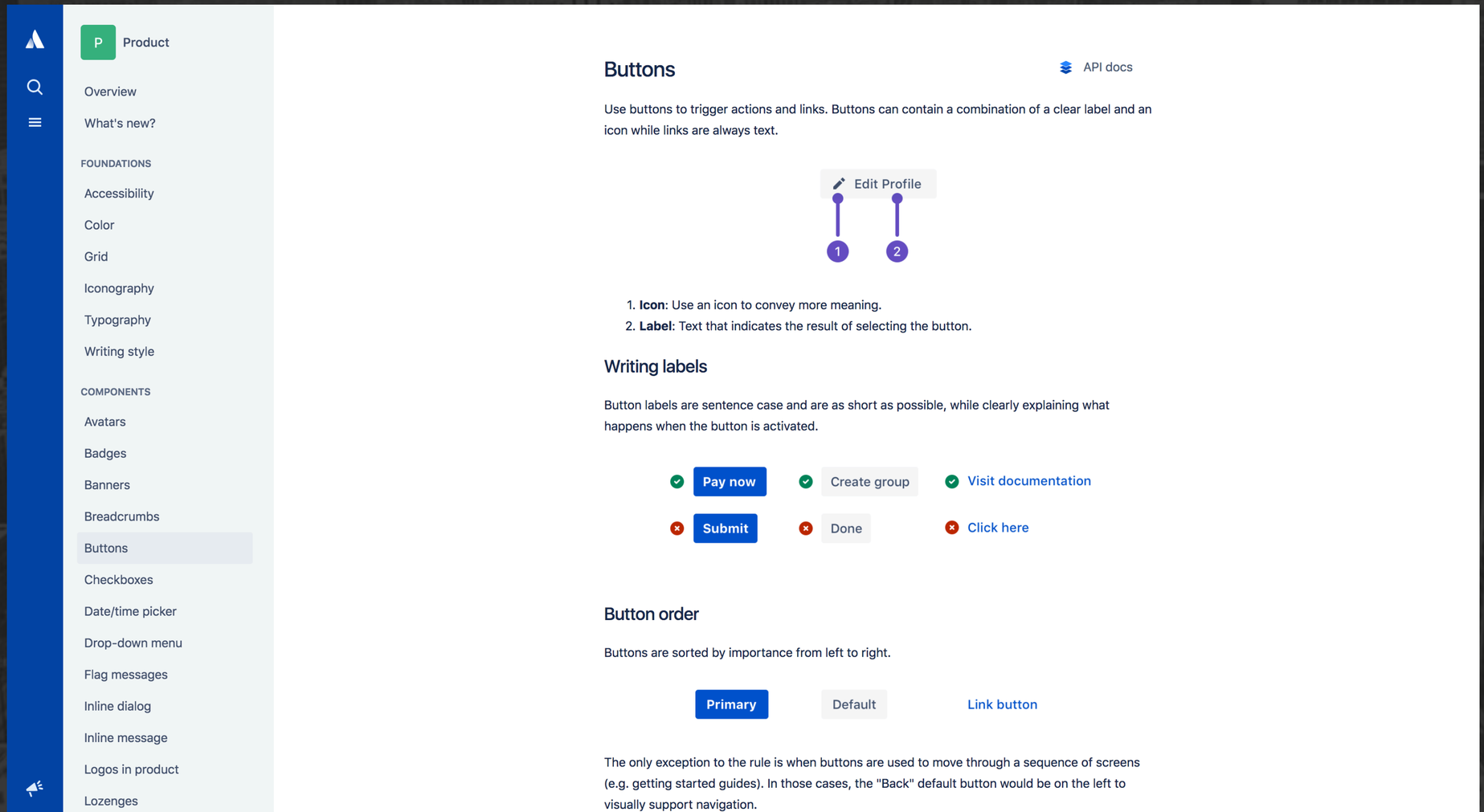


Shopify Polaris

Guides

Check out these practical guides to help you understand how to design for the Shopify platform using Polaris.

Guiding principles

Crafting the Shopify admin

Salesforce Lightning Design

IBM Carbon

Carbon Design System
Search
Getting Started
What's New
Guidelines
Style
Components
Data Visualization
Utilities
Component Status
Resources
Design Kit
Vanilla Repo
React Repo
CARBON DESIGN SYSTEM
Explore the system
Getting Started
Onboarding for designers and developers who are using Carbon for the first time.
Style
Guidance on usage and application for basic design elements.
Components
A library of all Carbon components, comprised of code, usage and style guidelines.
Resources
A helpful list of tools, links and downloads that will improve a Carbon user's workflow.

Meetup Swarm

Design Content Brand Components

Designing for social transformation

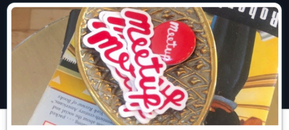
The Swarm Design System is a living ecosystem to help our teams craft online experiences to bring people together offline

Get started

Design

Guidelines for product design at Meetup. Includes our design team's processes and principles as well as visual design details

Start designing



Brand

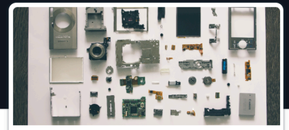
Information about the Meetup brand including our mission, voice and tone, and brand assets.

Learn more

Content

Guidelines on the tone of voice to personify the brand and personality of Meetup, while keeping the product easy to navigate and understand.

Review guidelines



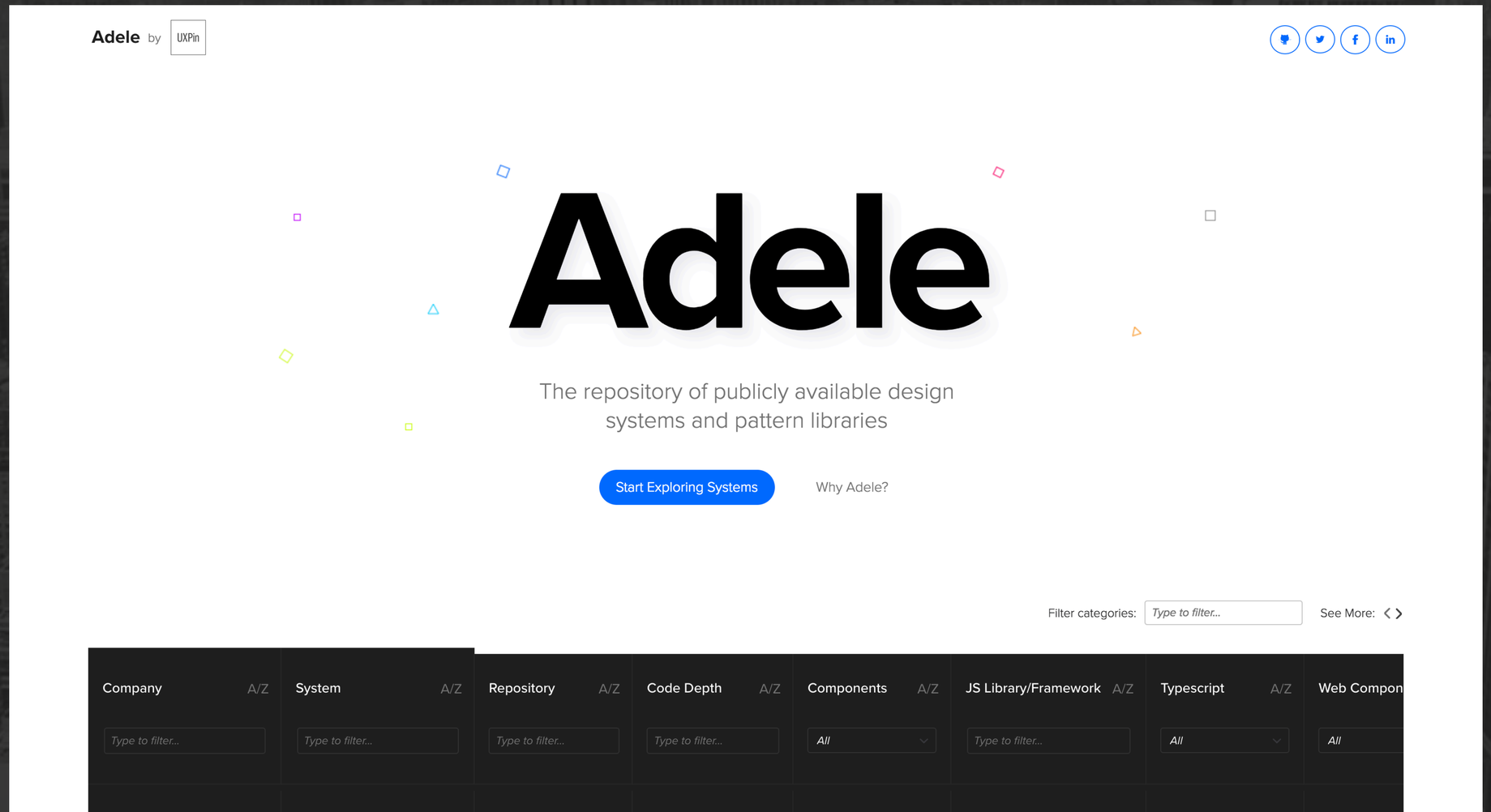
Web Components

A set of UI components ready for use by designers and engineers to quickly ship new products and features.

Get components

Adele

Design System Repository



A QUICK PREVIEW
Design Systems at Fathom
@lauravandoore

FATHOM

- Principles
- **Foundations**
  - Colour Palette
  - Typography
  - Grid
- Components
- Development

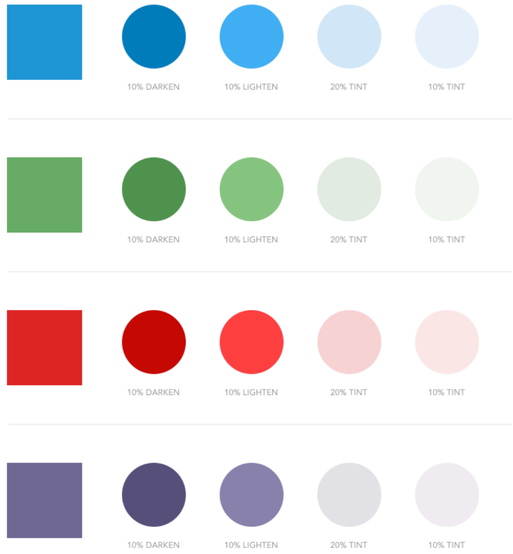
Foundations

The core baselines of the Fathom style system. Here you'll find everything you need to configure the foundation of the Fathom Design System across the application.

Colour Palette

CORE PALETTE

COLOUR VARIANTS



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The core baselines of the Fathom style system. Here you'll find everyt
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Typography

HEADING 1 .JUMBO
Avenir Heavy • 46px
H1.jumbo

Monthly Performance Report

HEADING 1
Avenir Medium • 38px
#000000

Revenue Analysis & Profitability

HEADING 2
Avenir Medium • 28px
#000000

Overview and Actions

HEADING 3
Avenir Medium • 20px
#8D8D8D

Last 6 months vs budget

HEADING 3 .LIGHT
Avenir Light • 20px
#8D8D8D

Profitability & other insights

HEADING 3 .UPPER
Avenir Heavy • 14px
#8D8D8D

TITLE STYLE FOR KEY NUMBERS

BODY COPY
Avenir Next Regular • 17px
Line Height - 24px

Add comments, observations, recommendations or any other text to tell a story or call out important information. Add comments, observations, recommendations or any other text to tell a story or call out important information.

KEY NUMBERS .LARGE
Avenir Medium • 40px
#333333

$394,242

KEY NUMBERS .MEDIUM
Avenir Medium • 30px
#333333

$394,242

KEY NUMBERS .SMALL
Avenir Medium • 25px
#333333

$394,242

FATHOM

- Principles
- **Foundations**
  - Colour Palette
  - Typography
  - Grid
- Components
- Development

Components

The core baselines of the Fathom style system. Here you'll find everything you need to configure the foundation of the Fathom Design System across the application.

Buttons

BUTTON SIZES

Small Button	Medium Button	Large Button
Small Button	Medium Button	Large Button
Small Button	Medium Button	Large Button
Small Button	Medium Button	Large Button
Small Button	Medium Button	Large Button

ICON BUTTONS

Small Button · Medium Button · Large Button

Left icon · Button right icon

VARIATIONS

Rounded Button · Ghost Button

BUTTON GROUPS

Month	Quarter	Year
Month	Quarter	Year

Inputs & Forms

Double Icon
Symbols/Buttons/Large/

Overrides

icons/cloud-download
icons/cloud-download

color
Colours/White

Icon (Right)
Icon/Arrow (Dropdown)

Text
.../Bold/Left Aligned

↳ Value
Download

↳ Color
Colours/Blue

- *None*
- ✓ Colours/Blue
- Colours/Dark
- Colours/Green
- Colours/Grey-Darkest
- Colours/Grey-Darkest
- Colours/Grey-Light
- Colours/Grey-Lightest
- Colours/Grey-Mid

PLUGINS & WORKFLOWS
Sketch Essentials
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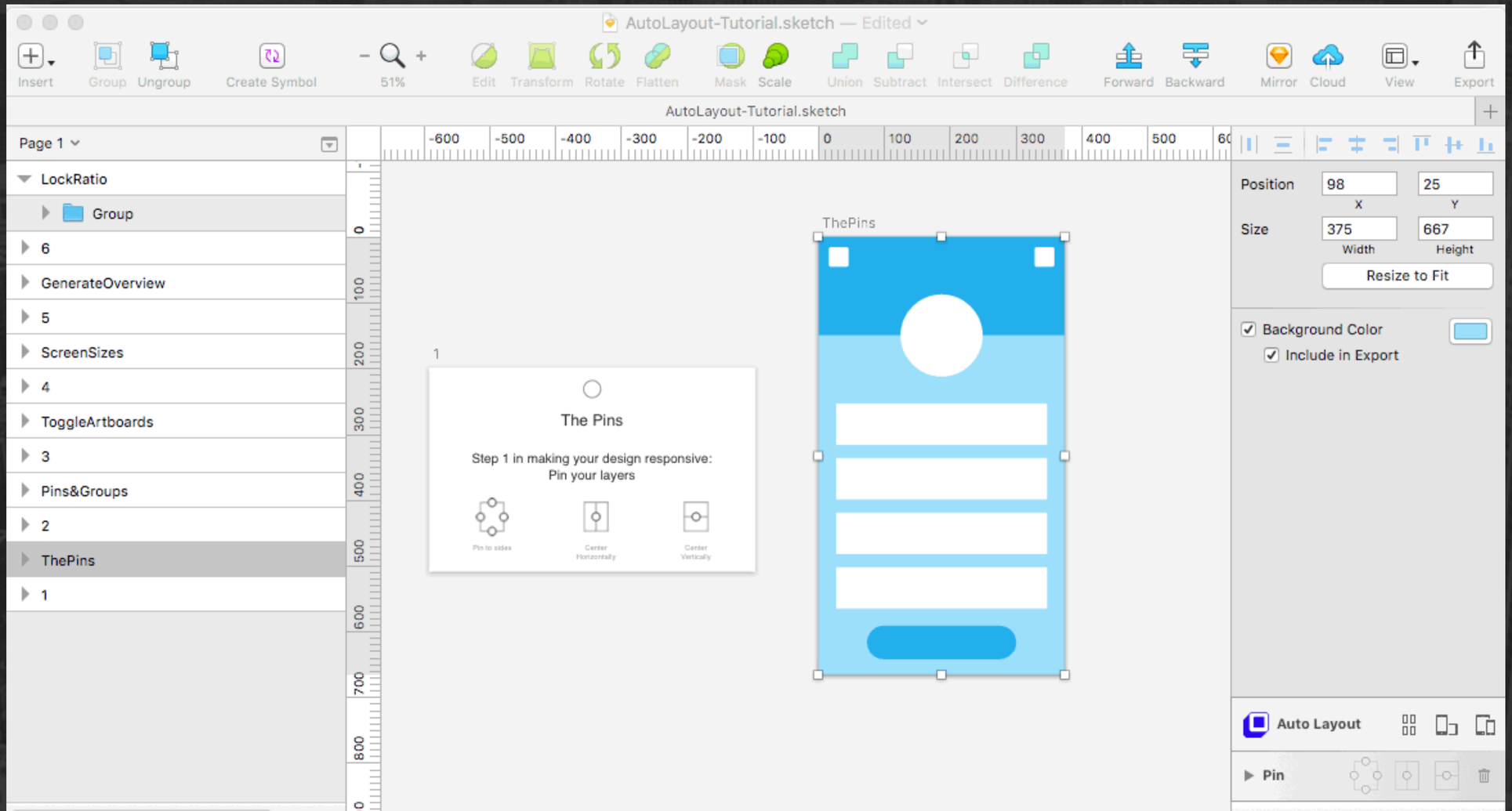
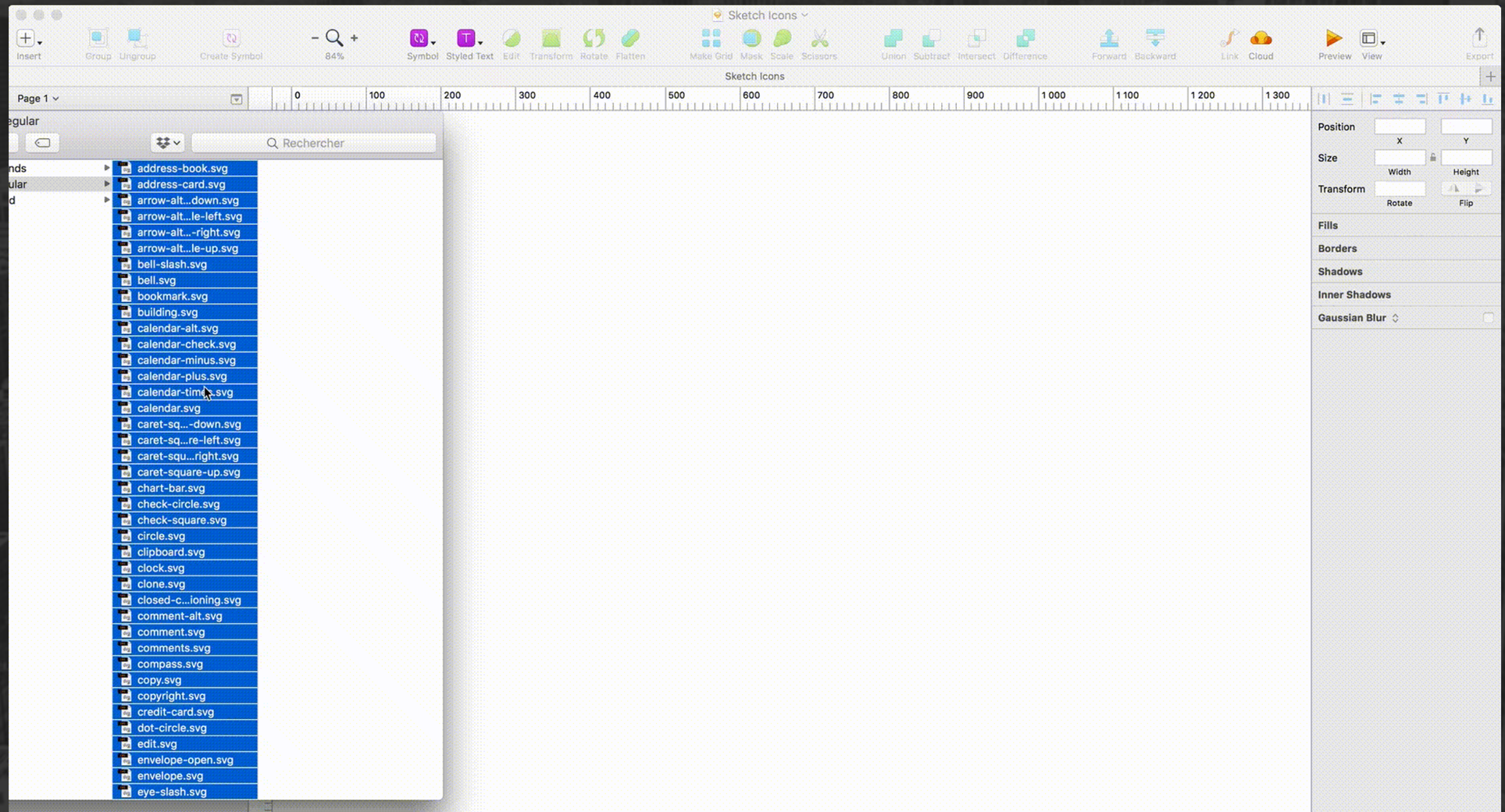
Auto Layout

Responsive Design in Sketch



Sketch Icons

Use your icon font seamlessly in Sketch



Style Libraries

Push & Pull layer styles from your Design System

Sketch Style Libraries

A lightweight plugin that lets you sync layer & text styles with a Sketch Library, so your project is always in sync.

👌 Keep your whole design system in your library, and not just the symbols

👌 No export/import via separate "style files" or another cloud service

👌 Also merges duplicate styles, and deletes the ones you don't want anymore

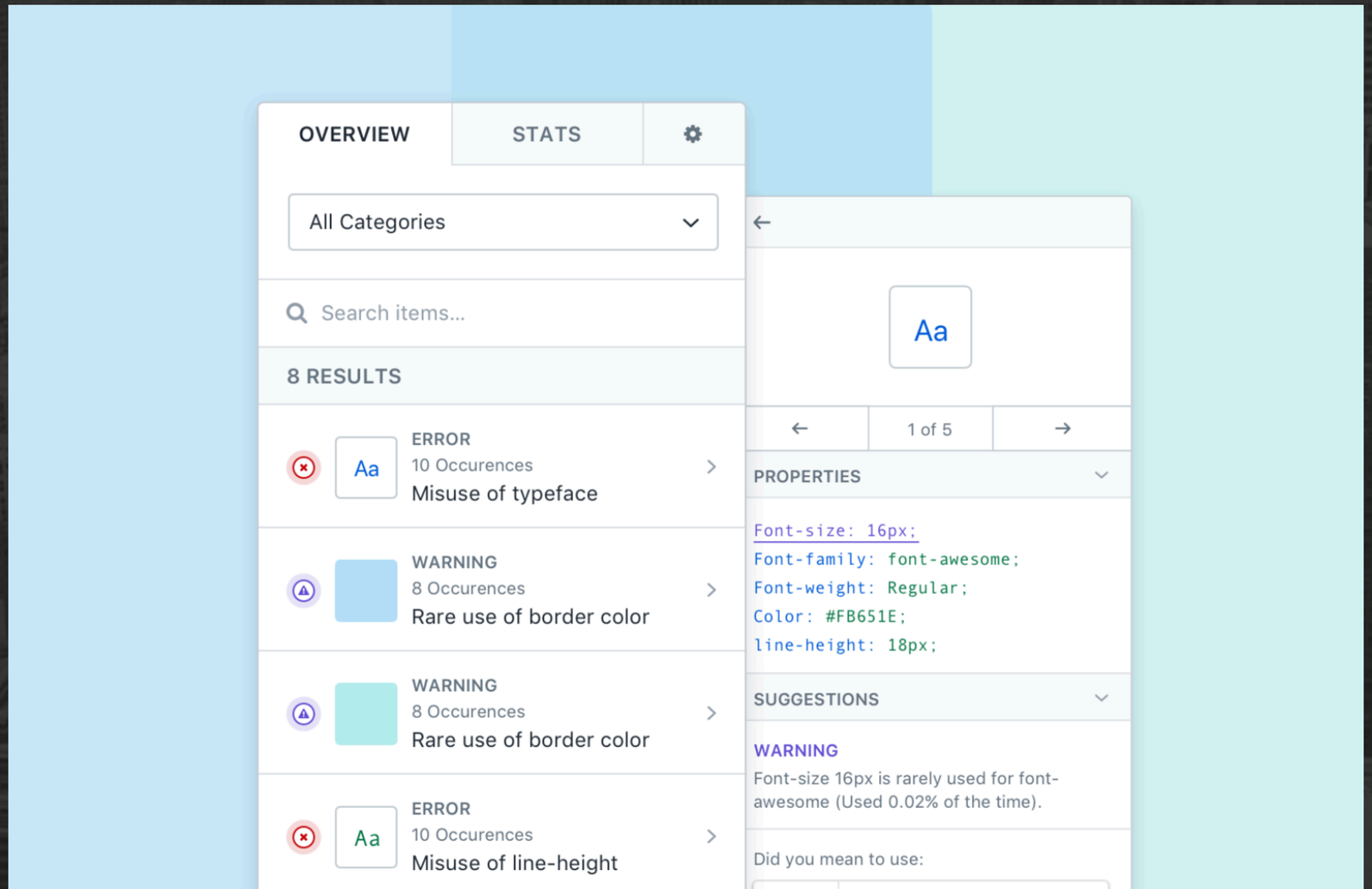
Usage

1. Install plugin
2. Plugins -> 🔗 Sync styles with library -> Fetch from... *or* Push to...
3. Pick a library
4. Profit

Installing

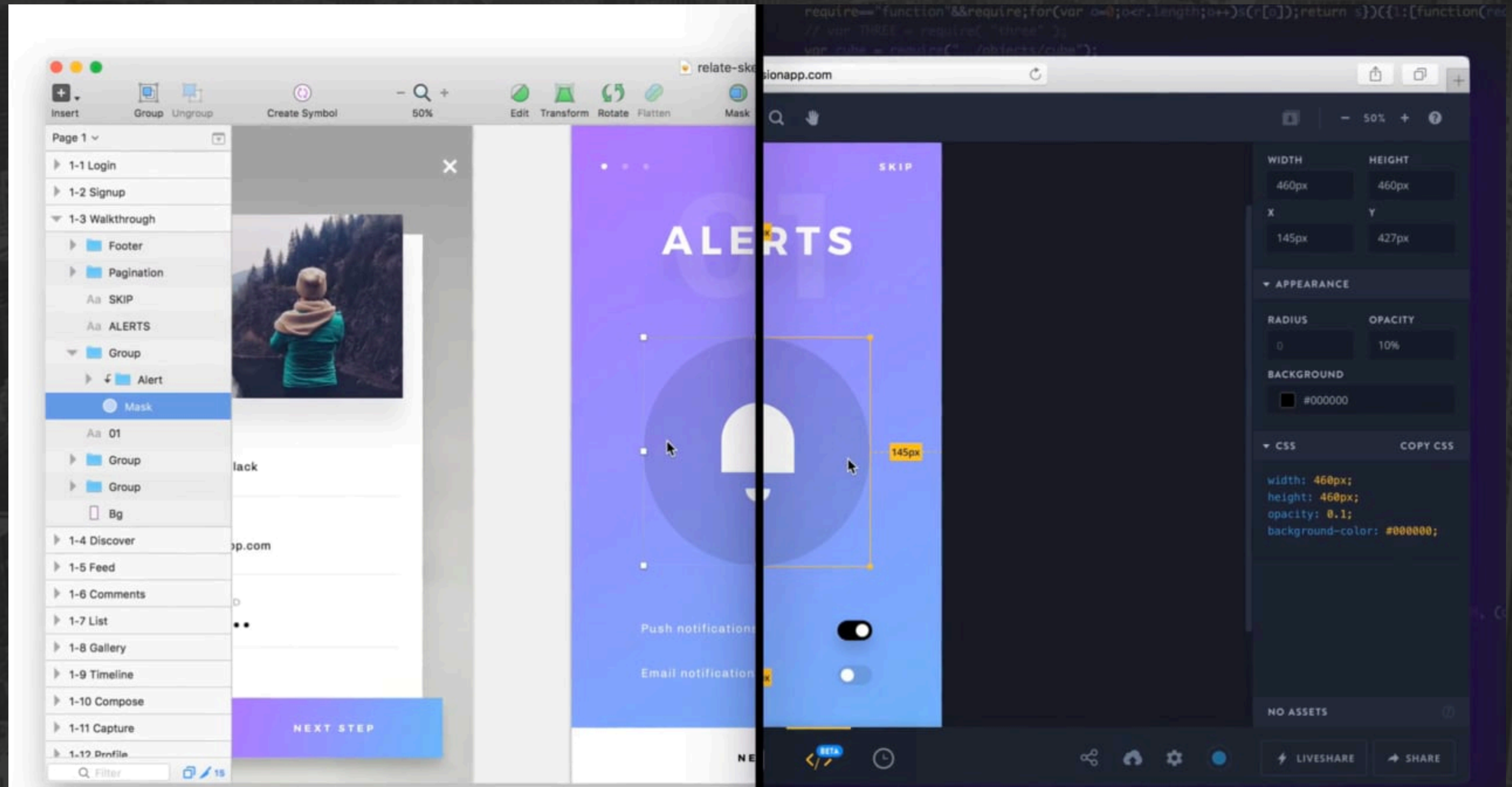
Toybox Roller

Find & fix design inconsistencies in Sketch



InVision Inspect

For getting your Design System from Sketch to code



Sketch Library ≠ Design System
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A Sketch Library is just one small part
of a successful Design System.

Design Systems
are a team sport
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The best Design Systems
are a **shared asset** between
design & development.

Getting started
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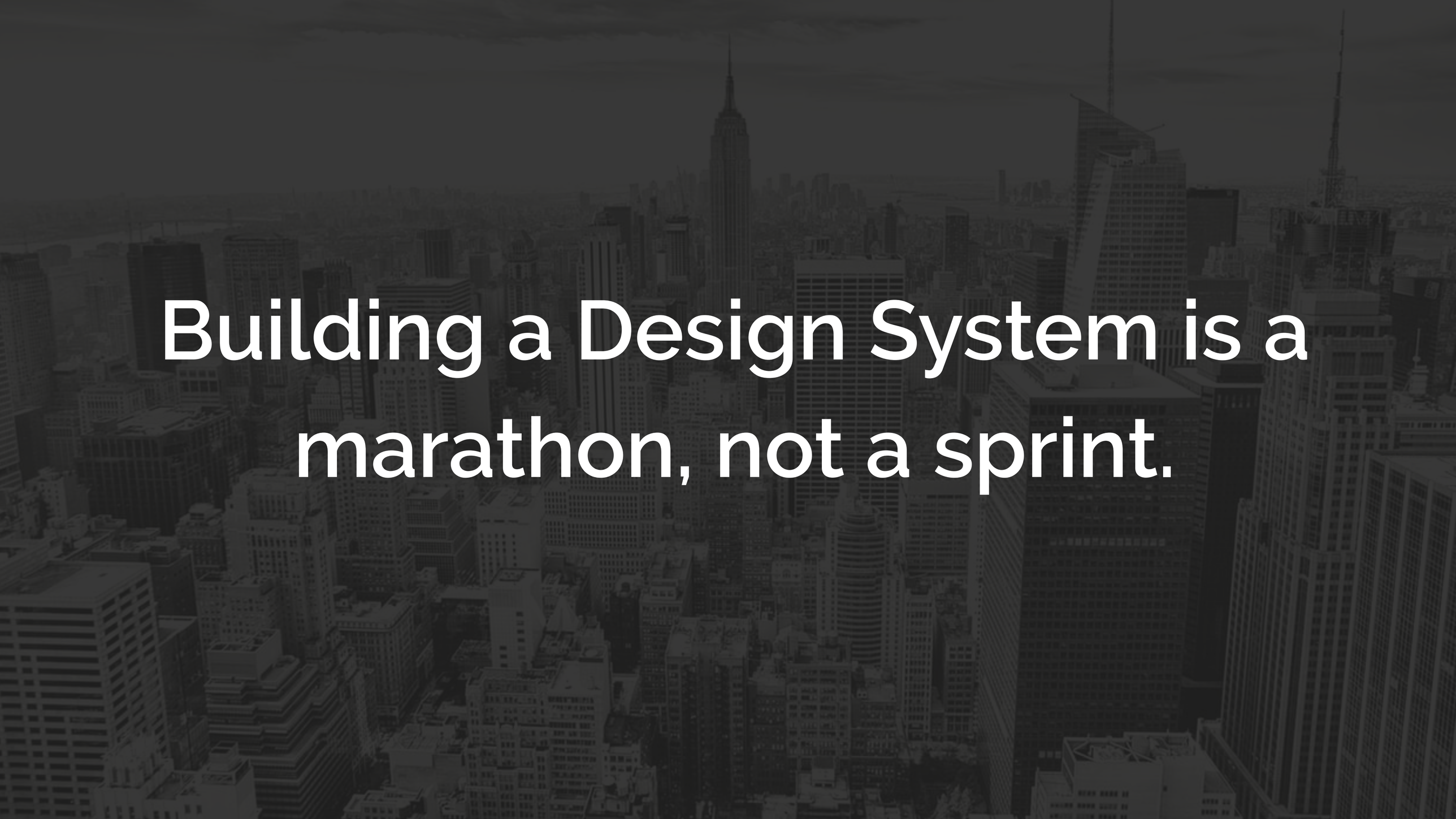
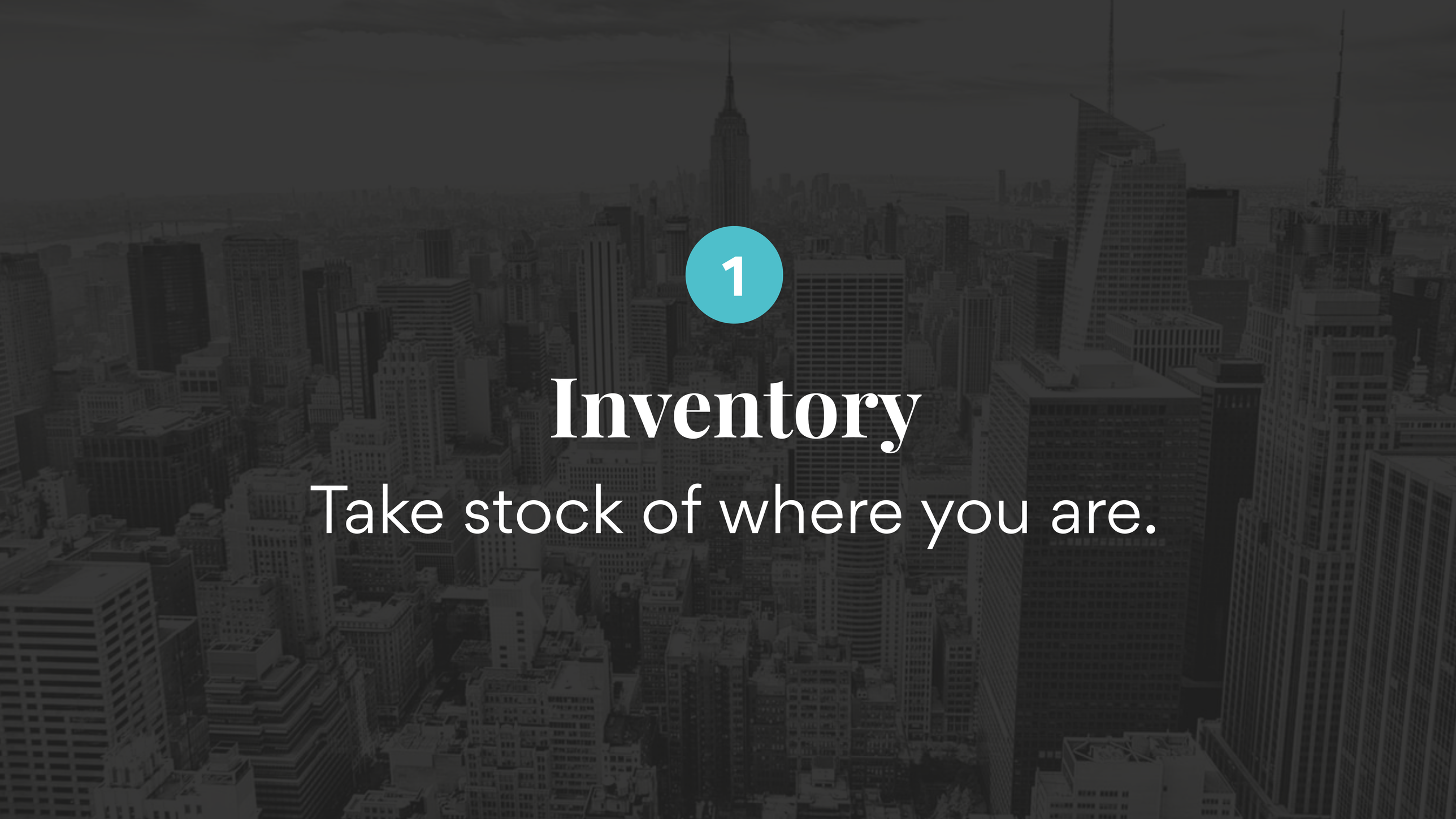

Building a Design System is a marathon, not a sprint.

EXPECTATION
vs
REALITY

Don’t think of it like a project.

Approach it like a product.
With a roadmap, objectives & many different groups of users.



1

Inventory

Take stock of where you are.

It might look something like this ...

Find patterns & create order out of the chaos ...

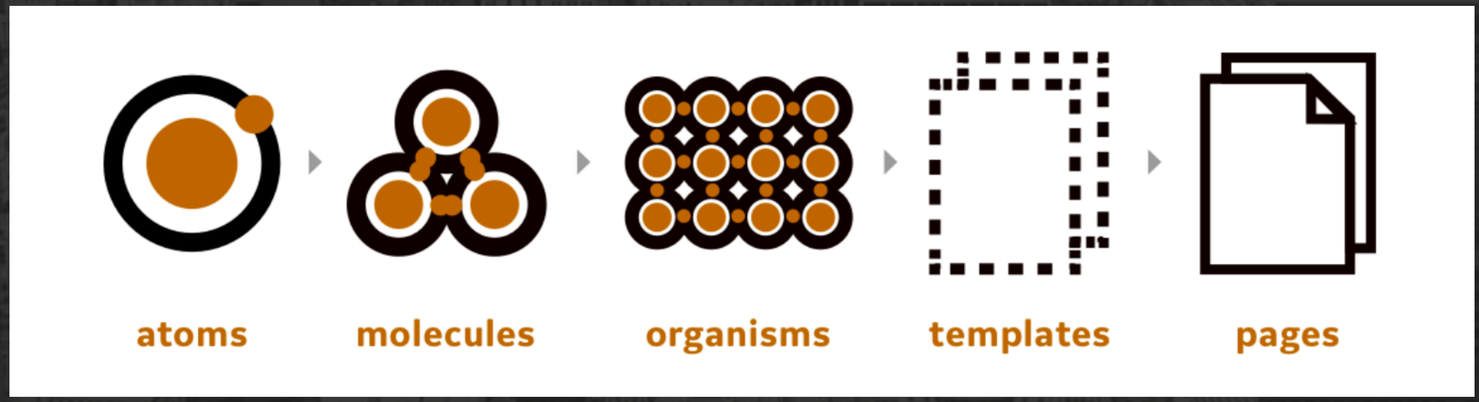
2

Structure

Define a structure for your Design System

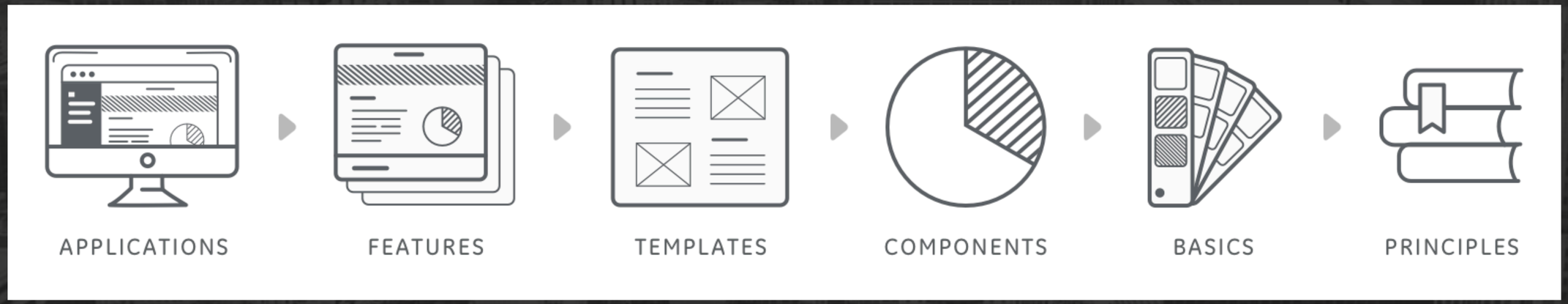
Define a new structure

Atoms & Molocules?



Define a new structure

GE Predix System



3

Standardise

Also known as “Getting to one”

ROLLING OUT YOUR OWN
Design System
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#1
Chip Away
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#1 Chip Away

The design system is something that is only worked on in spare time, or when designers/engineers are between projects.

Cost Risk Speed Quality

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#2
Hibernation
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#2 Hibernation

Getting a core team of designers & engineers working on the Design System full-time. Possibly allows the time for designers/engineers to come up with the best implementation.

Cost Risk Speed Quality

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#3
Piggyback
@lauravandoore

#2 Piggyback

Plan to get the bulk of the Design System implemented as a part of another project. Balances out the cost better, as you see the returns immediately.

↓ Cost ↑ Risk — Speed — Quality

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Rollout strategies

1. Chip Away
2. Hibernation
3. Piggyback

EXTENDING & MAINTAINING
Design Systems
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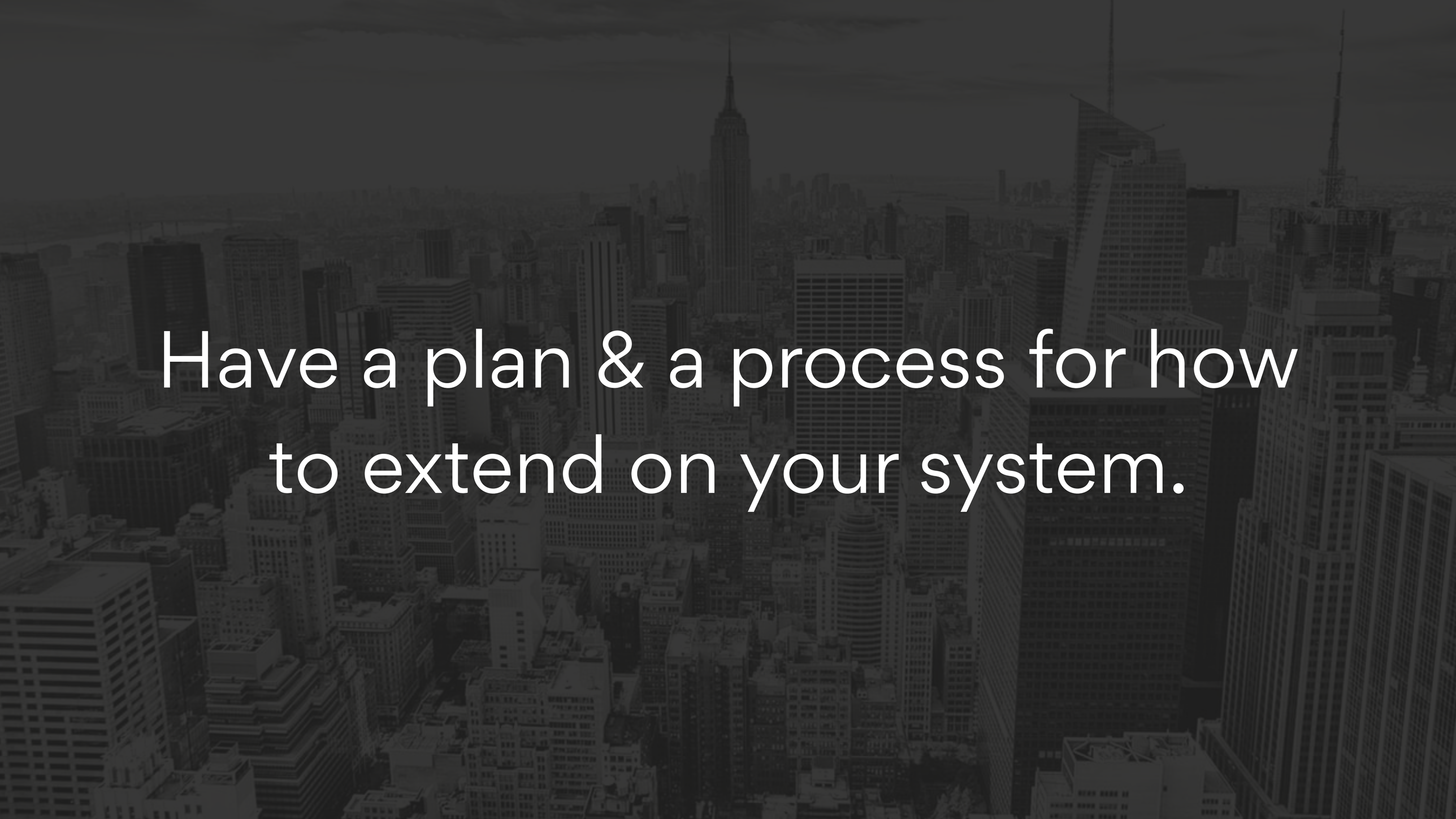
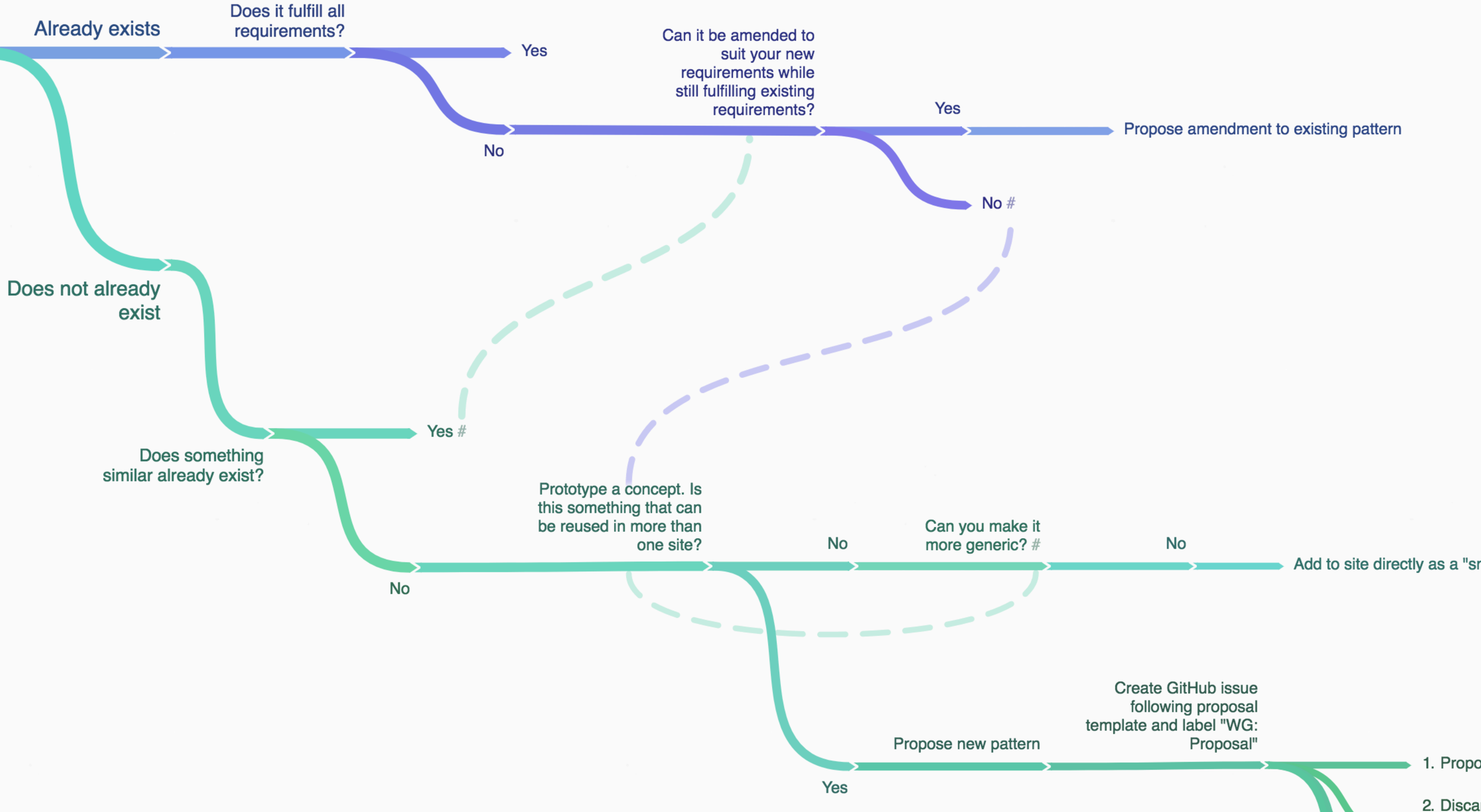
Just like Design, a Design System
is **never finished**.


Have a plan & a process for how
to extend on your system.


Already exists
Does it fulfill all requirements?
Yes
No
Can it be amended to suit your new requirements while still fulfilling existing requirements?
Yes
Propose amendment to existing pattern
No #
Does not already exist
Yes #
Does something similar already exist?
No
Prototype a concept. Is this something that can be reused in more than one site?
No
Can you make it more generic? #
No
Add to site directly as a "sr
Yes
Propose new pattern
Create GitHub issue following proposal template and label "WG: Proposal"
1. Propo
2. Disca

Don’t forget to take stock
@lauravandoore

Thanks

Laura Van Doore
@lauravandoore