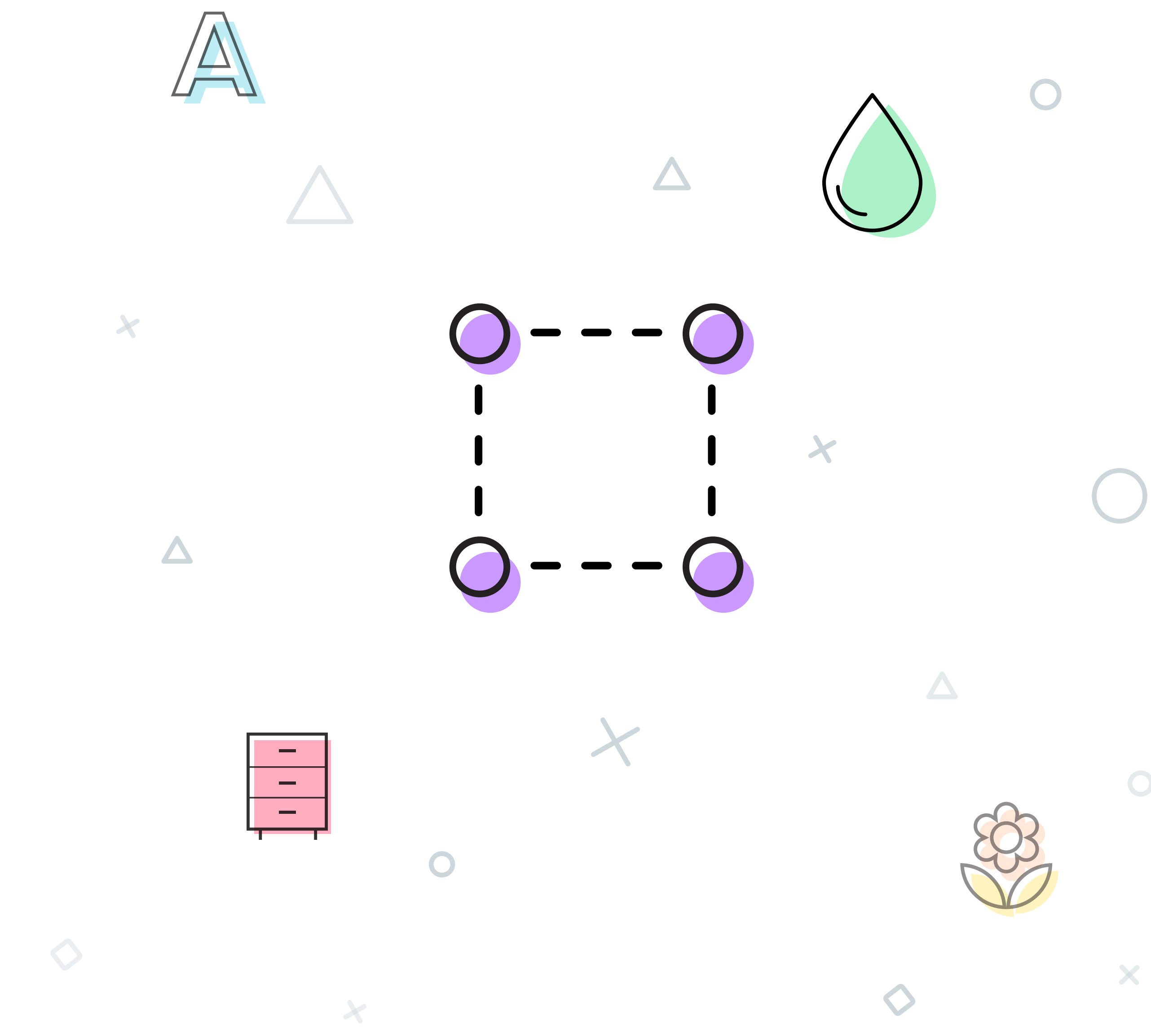
UXPin

Why Build a Design System?

The Pocket Guide for Product Teams



UXPin

Why Build a Design System?

The Pocket Guide for Product Teams

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Authors

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Since co-founding UXPin in 2010, he has helped build and lead product teams in the Poland and Silicon Valley office. Previously, he was a UX Manager at Grupa Nokaut, an enterprise ecommerce platform. He holds an M.A. in Psychology from the University of Gdansk.

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Jerry Cao is a content strategist at UXPin where he gets to put his overly active imagination to paper every day. In a past life, he developed content strategies for clients at Brafton and worked in traditional advertising at DDB San Francisco. In his spare time he enjoys playing electric guitar, watching foreign horror films, and expanding his knowledge of random facts. Follow me on Twitter

The Challenges Facing Product Teams Today

As a product team grows, its processes become more difficult to manage.

Without a standardized workflow or toolkit, the team's inefficiencies and inconsistencies will eventually work their way back into the product.

> *Software is often built by incredibly large teams of people. The challenge to create coherent experiences multiplies exponentially as more people are added to the mix. Over time, no matter how consistent or small a team is, different people will contribute new solutions and styles, causing experiences to diverge.*
>
> *Building a Visual Language*, Karri Saarinen,
> Principal Designer and creator of Airbnb design system

Based on working with thousands of customers around the world, we've seen four patterns emerge through the years.

1. **Inconsistencies across products and platforms**

   UX inconsistencies reduces the user's efficiency, which devalues the product.

   Especially common in enterprise products that span different technology stacks, devices, and user groups, product inconsistency is nearly impossible to resolve until the company's workflows are first addressed.

2. **Lack of centralized assets leads to version control issues**

   Because different design teams use different tools that don't always integrate, nobody can truly guarantee that the right assets are all being used in projects at any given time.

   If the tools are desktop-based, version control issues become even more of a pain. Designers must follow a strict naming convention, otherwise the wrong assets will eventually make it to development.

3. **Widening knowledge gaps between product teams**

   Without a "golden source" of assets and best practices, different teams work off different guidelines and assumptions. Over time, product inconsistency is inevitable.

4. **Inefficient processes lead to repetitive or wasted work**

   Without a common toolkit for design and development, one-off solutions and repetitive work drain a team's efficiency.

> Iteration cycles planned for 1-2 weeks may require 2-3x the time because designers find themselves creating common elements and pages from scratch. The inefficiency multiplies as designers redline those assets for handoff and developers code up new solutions.

Conclusion

All of the above pain points are interconnected.

To improve product consistency and team efficiency, it helps to consolidate assets and workflows between designers and developers. Otherwise, the ongoing pain of unscalable design remains the reality.

> *When I joined Spotify's design team in 2012, the level of inconsistency and fragmentation shocked me. Up-close, the treatment of type, colour, imagery, layout, IA, and interactions just didn't seem to align anywhere. We concluded the fragmentation in the product was just reflecting the fragmentation in the team, that designers spread across so many different projects, timezones and competing timetables, just didn't stand a chance.*
>
> *Design Doesn't Scale*, Stanley Wood, Design Director at Spotify

Enter the Design System

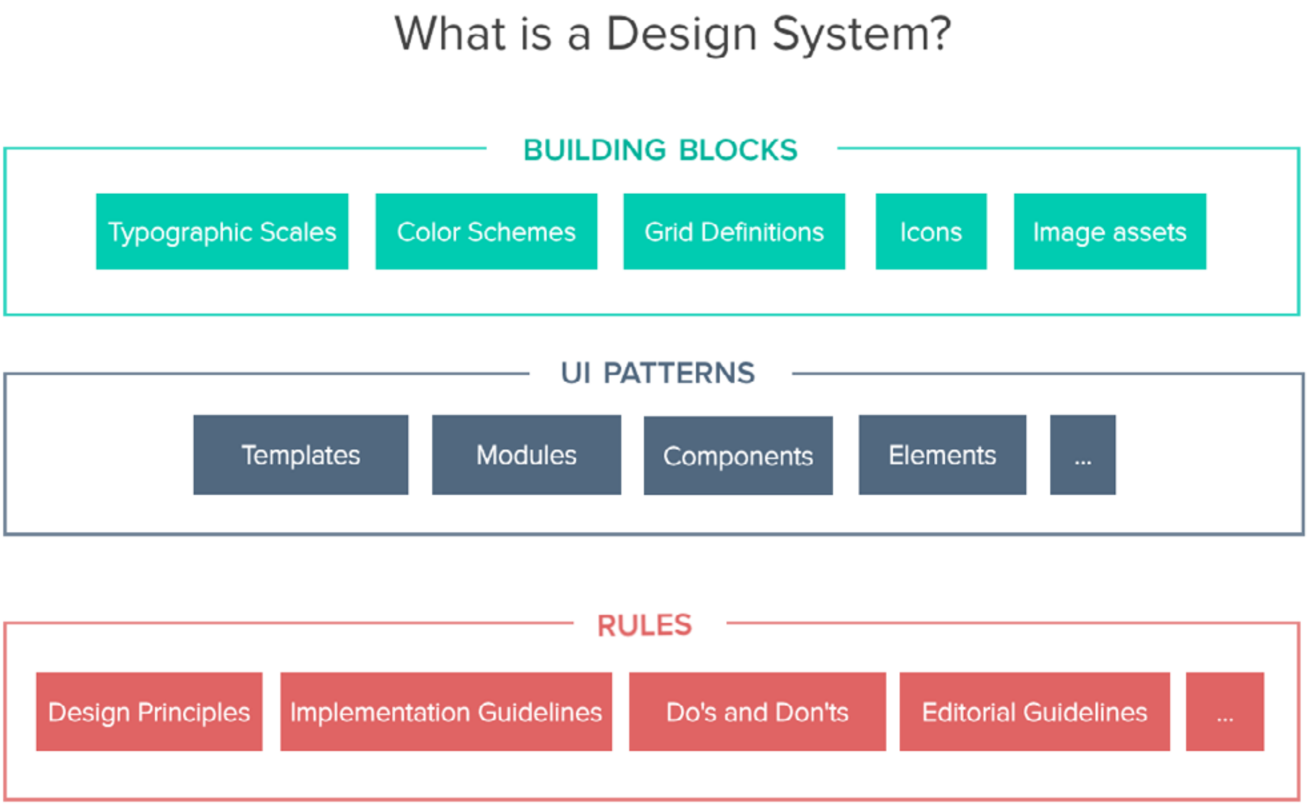
Popularized by companies like Salesforce and Airbnb, design systems give product teams a reusable, component-based approach to product development.

> *A design system can create value on at least two levels. At the team level, it can create a more streamlined, predictable process that reduces design and engineering time. At the UX level it helps deliver consistency and predictability in the interface, and to raise the quality of the experience overall when designers and engineers are freed up to think about higher-order tasks.*
>
> *Selling Design Systems At Your Company*,
> Nick Stamas, Creative Lead at WeWork

The Single Source of Truth

A design system is more than just a style guide or pattern library – it's the blueprint for product development.

All the design principles, visual assets, and patterns are thoroughly documented. All code references are included for each piece of design. As a result, design can scale right alongside development.



What is a Design System?

BUILDING BLOCKS

Typographic Scales | Color Schemes | Grid Definitions | Icons | Image assets

UI PATTERNS

Templates | Modules | Components | Elements | ...

RULES

Design Principles | Implementation Guidelines | Do's and Don'ts | Editorial Guidelines | ...

The ROI of Design Systems

1. **Increased velocity and time to market**
   A component-based toolkit accessible in one place allows for a more chunked-out Agile process, speeding up releases without compromising quality.

2. **Increased product value**

   Reusable components build upon each other, which creates a consistent look, feel, and behavior to the product. As consistency increases, so too does user efficiency.

3. **Increased collaboration and knowledge sharing**

   Because the shared design system includes approved assets and conventions, designers and developers are more autonomous without closing off into silos.

4. **Less time and money wasted**

   Because designers and developers aren't caught up in redundant questions or repetitive work, they're freed up for projects that deliver more business value.

> *An estimated $1.5MM+ in annual savings or 21.25% time saved for a typical product development annual budget (based on on-shore/offshore team of 100 resources)*
>
> *What Is a Design System and What Are It's Benefits?*
>
> Projekt 202

Building the Design System

Here's the simple truth: you can't innovate on products without first innovating the way you build them.

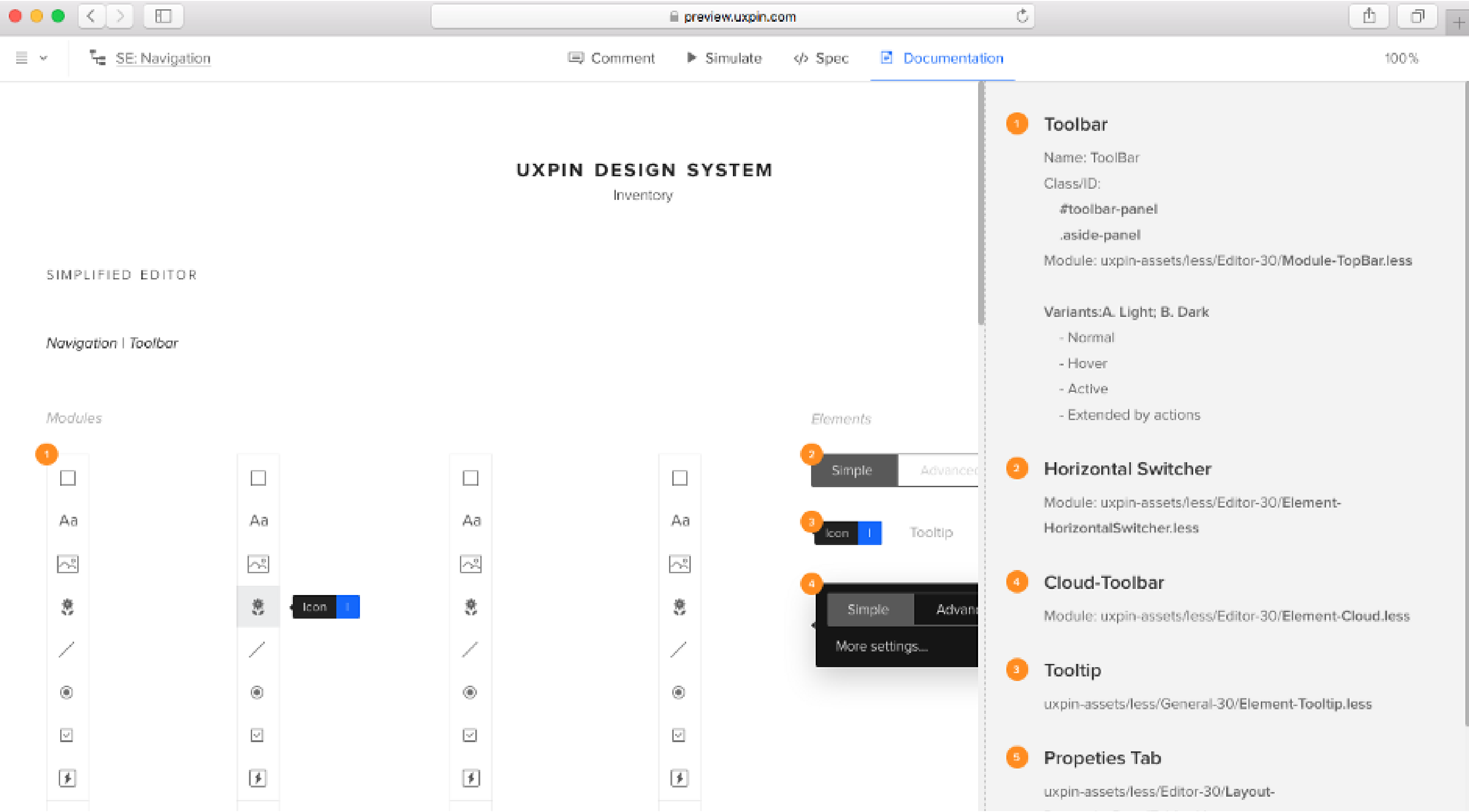
The Way We Build, Karri Saarinen,
Principal Designer and creator of Airbnb design system

1. **Create your interface inventory**

   To quickly identify current inconsistencies, start by creating an inventory of everything in your product UI: color palette, text styles, and UI patterns. The inventory is your strongest tool for selling the need for a design system.

   1. Review the interface and code and list all the colors and text-styles you can find.

   2. Take screenshots of UI patterns or copy patterns from your projects. Place all the screenshots in one place.



1 Toolbar

Name: ToolBar

Class/ID:

#toolbar-panel

.aside-panel

Module: uxpin-assets/less/Editor-30/Module-TopBar.less

Variants:A. Light; B. Dark

- Normal
- Hover
- Active
- Extended by actions

2 Horizontal Switcher

Module: uxpin-assets/less/Editor-30/Element-HorizontalSwitcher.less

4 Cloud-Toolbar

Module: uxpin-assets/less/Editor-30/Element-Cloud.less

3 Tooltip

uxpin-assets/less/General-30/Element-Tooltip.less

5 Propeties Tab

uxpin-assets/less/Editor-30/Layout-

3. Categorize your patterns by their purpose (e.g. buttons, form-fields, navigation etc).
4. Mark inconsistencies between the patterns and create a presentation for your team.

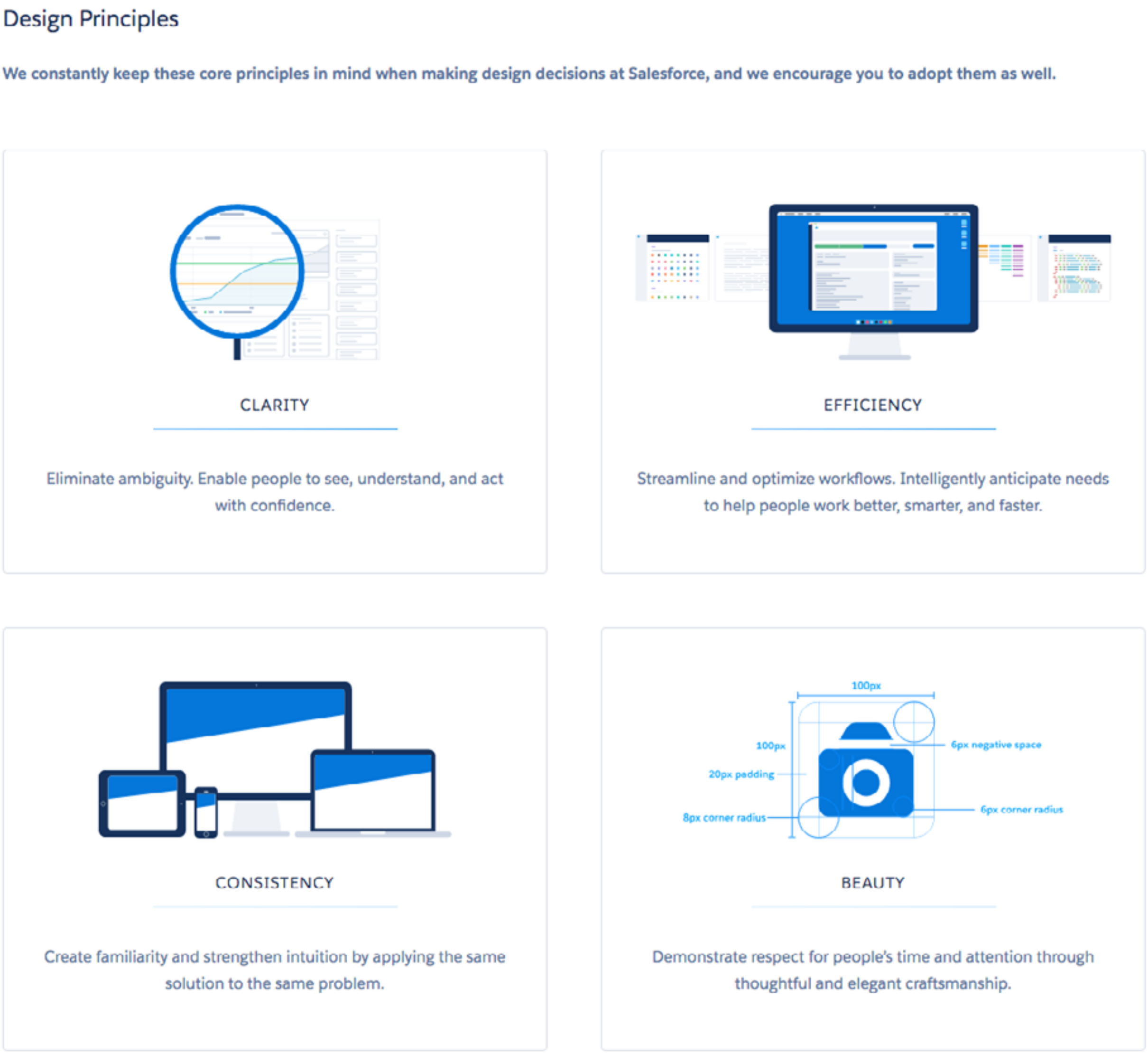
2. Get buy-in from the team

As you present the inconsistencies reflected in your interface inventory, emphasize the ROI of the design system.

Engineers respond well to the source control, improved modularity, and increased autonomy. Business stakeholders respond well to the faster time to market, increased product value, and less resources wasted.

3. Define your design principles

Before you build your new system, create a set of general principles for a coherent experience. What universal values should designers to keep in mind?



Design Principles

We constantly keep these core principles in mind when making design decisions at Salesforce, and we encourage you to adopt them as well.

CLARITY

Eliminate ambiguity. Enable people to see, understand, and act with confidence.

EFFICIENCY

Streamline and optimize workflows. Intelligently anticipate needs to help people work better, smarter, and faster.

CONSISTENCY

Create familiarity and strengthen intuition by applying the same solution to the same problem.

BEAUTY

Demonstrate respect for people's time and attention through thoughtful and elegant craftsmanship.

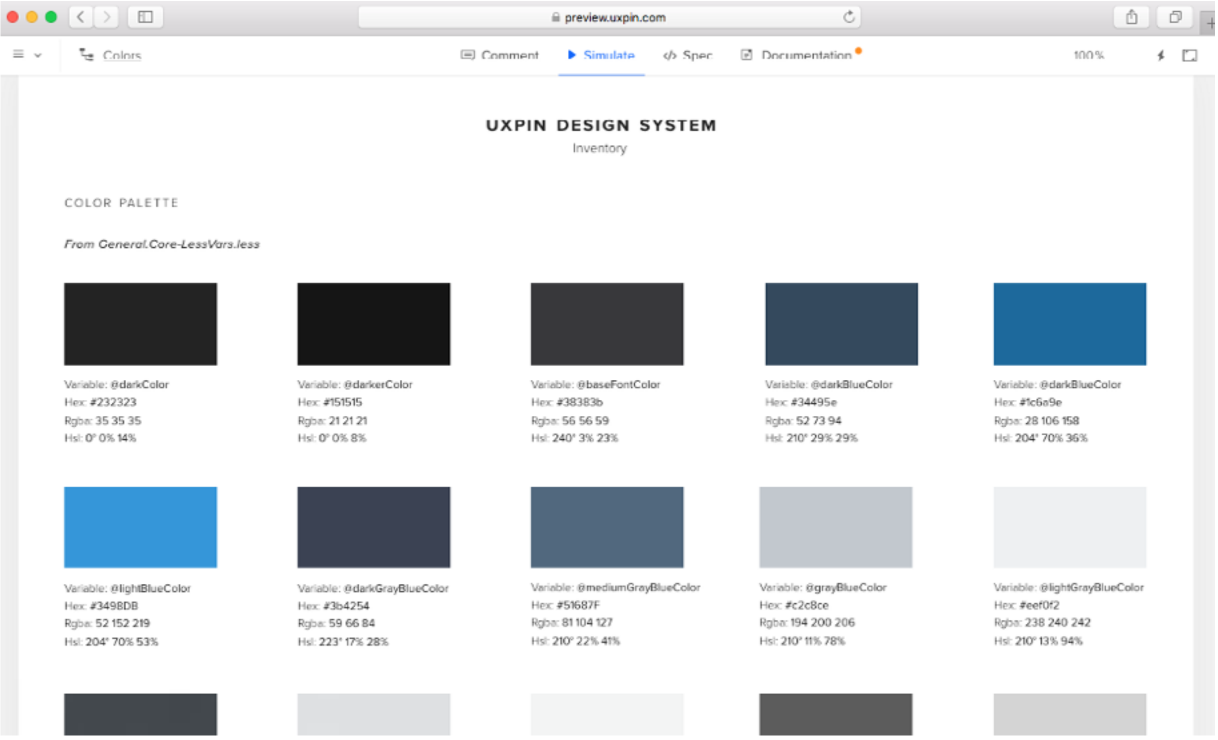
Photo credit: The design principles behind Salesforce Lightning

Use your principles as a review heuristic for every new pattern proposed for the design system and every new project.

4. Unify your visual design

Think about the most fundamental and repetitive patterns in your interface.

Colors, text-styles, icons will probably come to mind first. Perhaps also some interactive patterns (hover on clickable elements), border visual properties, or maybe animations? Discuss with the team to decide which version of these elements will be canonical. Then, document them as part of the system.



UXPIN DESIGN SYSTEM
Inventory

COLOR PALETTE

From General.Core-LessVars.less

Variable: @darkColor
Hex: #232323
Rgba: 35 35 35
Hsl: 0° 0% 14%

Variable: @darkerColor
Hex: #151515
Rgba: 21 21 21
Hsl: 0° 0% 8%

Variable: @baseFontColor
Hex: #38383b
Rgba: 56 56 59
Hsl: 240° 3% 23%

Variable: @darkBlueColor
Hex: #34495e
Rgba: 52 73 94
Hsl: 210° 29% 29%

Variable: @darkBlueColor
Hex: #1c6a9e
Rgba: 28 106 158
Hsl: 204° 70% 36%

Variable: @lightBlueColor
Hex: #3498DB
Rgba: 52 152 219
Hsl: 204° 70% 53%

Variable: @darkGrayBlueColor
Hex: #3b4254
Rgba: 59 66 84
Hsl: 223° 17% 28%

Variable: @mediumGrayBlueColor
Hex: #51687F
Rgba: 81 104 127
Hsl: 210° 22% 41%

Variable: @grayBlueColor
Hex: #c2c8ce
Rgba: 194 200 206
Hsl: 210° 11% 78%

Variable: @lightGrayBlueColor
Hex: #eef0f2
Rgba: 238 240 242
Hsl: 210° 13% 94%

Photo credit: Our internal design system created in UXPin.

5. Create your interactive component library

Once you have the foundation well-defined, start adding your approved interface patterns to the shared library. Keep them updated and encourage the team to use them in every subsequent project - your efficiency and consistency will improve drastically.

Finally, plan a process of suggesting new patterns to make sure that everyone in the product team has a say in the evolution of the design system.

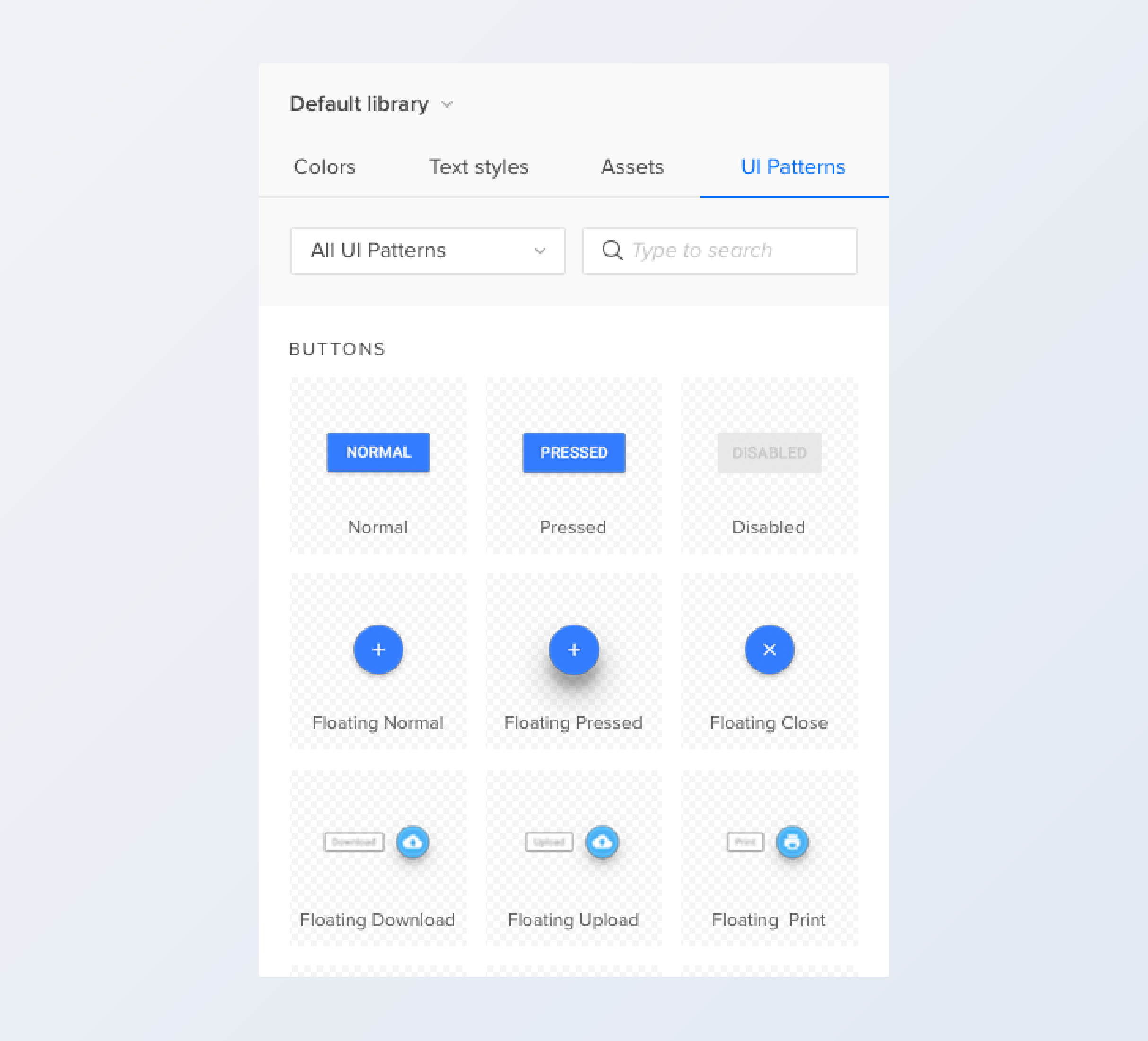


Photo credit: An interactive design systems library in UXPin

Design Systems in UXPin

UXPin

One platform for consistent design and development.

PayPal Sapient adidas HBO Microsoft

DESIGN SYSTEMS

Design Language

Sync Sketch with UXPin for a consistent design language: fonts, colors, icons, assets, and more.

UI Patterns

Scale designs consistently with Symbols and interactive components.

Automated Documentation

Documentation syncs everywhere and travels with library elements.

✓ Modular design and development

Scale quickly with design system libraries.

✓ One source of truth for everyone

Close your knowledge gaps. Formalize your design and code conventions.

✓ Painless documentation and developer handoff

Eliminate busywork. Generate style guides, specs, and documentation.

Tracy Dendy
HBO

> “My productivity and developer productivity have both increased. They love that they can collaborate and move quickly to a powerful experience.

To book a demo, call +1 (855) 223-9114 or email us at sales@uxpin.com

Recommended Resources

Nathan Curtis

Design Systems Leaders and Managers

The Principles of Designing Systems

What Will Your Design Systems Deliver?

Contributions to Design Systems

Component QA in Design Systems

Patterns ≠ Components

Light & Dark Color Systems

Reference Designs for Systems

Tokens in Design Systems

Buttons in Design Systems

Color in Design Systems

Picking Parts, Product, and People: A Team Activity to Start a Design System

Right-Sizing the Rectangle: Grappling With Hierarchy in Design Systems

A Design System Isn't a Project, It's a Product Serving Products

Reduce, Reuse, and Recycle

A Design System's Reach

The Component-Cut Up Workshop

Balancing Platforms in a Design System

Brad Frost

Atomic Design: The Online Guide

Dan Mall

Researching Design Systems

Selling Design Systems

Cooking With Design Systems

WeWork

Selling a Design System at Your Company

The Plasma Design System

Salesforce

Living Design Systems

The Lightning Design System is the Next Generation of Living Style Guides

Introducing Design System Ops

React JS and the Lightning Design System

Airbnb

Design Ops at Airbnb

Building a Visual Language

The Way We Build

Spotify

Design Doesn’t Scale

GE

The Predix Design System

Intuit

Intuit Design System Overview

Bottomline Technologies

Creating and Scaling Enterprise Design Systems

Beautiful Seams: Creating a Coherent Experience Across Products

Other

How to Construct a Design System

Design Systems in 2016

The Current State of Design Systems

Design Systems and Postel's Law

How Designers Can Use Unit Testing to Build Resilient and Happy Design Systems

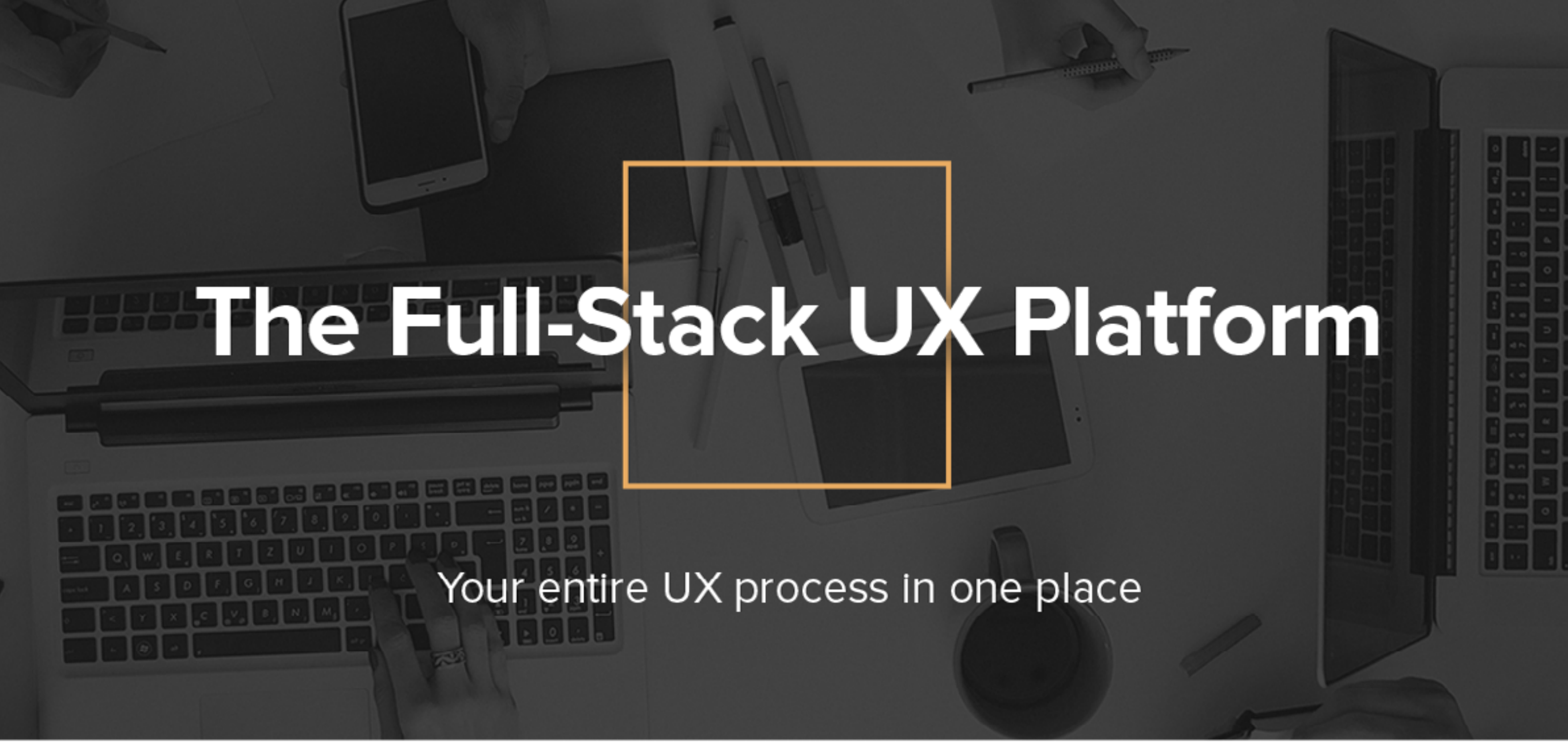
What is Design Operations and Why Should You Care?

Component Workshops: Our One-Two Punch for Kicking Off a New Design System

Object-Oriented UX

The Most Exciting Design Systems Are Boring

The Full-Stack Design System



The Full-Stack UX Platform

Your entire UX process in one place

✓ **Design:** Create lifelike prototypes quickly with Photoshop and Sketch integration.

✓ **Iterate:** Built-in version control improves efficiency and eliminates confusion.

✓ **Document:** Cleanly annotate your designs. Insert custom code snippets that travel with elements.

✓ **Collaborate:** Get feedback and co-design on any project anywhere.

✓ **Scale:** Automate consistency and documentation with design systems (syncs with Sketch).

✓ **Implement:** Auto-generate style guides, assets, and specs for developers.

Try UXPin now