

YSDN 4003 - Advanced Topics in Interactivity

# Design System

Design System

# Term Definition

## Term Definition

Recently, the words “design system” has become very popular across multiple design company. The definition can be very different depending on people and companies

According to the book Design Systems done by Smashing magazine, design system mean a set of connected patterns and shared practices, coherently organized to serve the purposes of a digital product.

-  
**Design Systems (Smashing eBooks)**, Alla Kholmatova, <https://www.amazon.ca/Design-Systems-Smashing-eBooks-Kholmatova-ebook/dp/B076H49W1G>

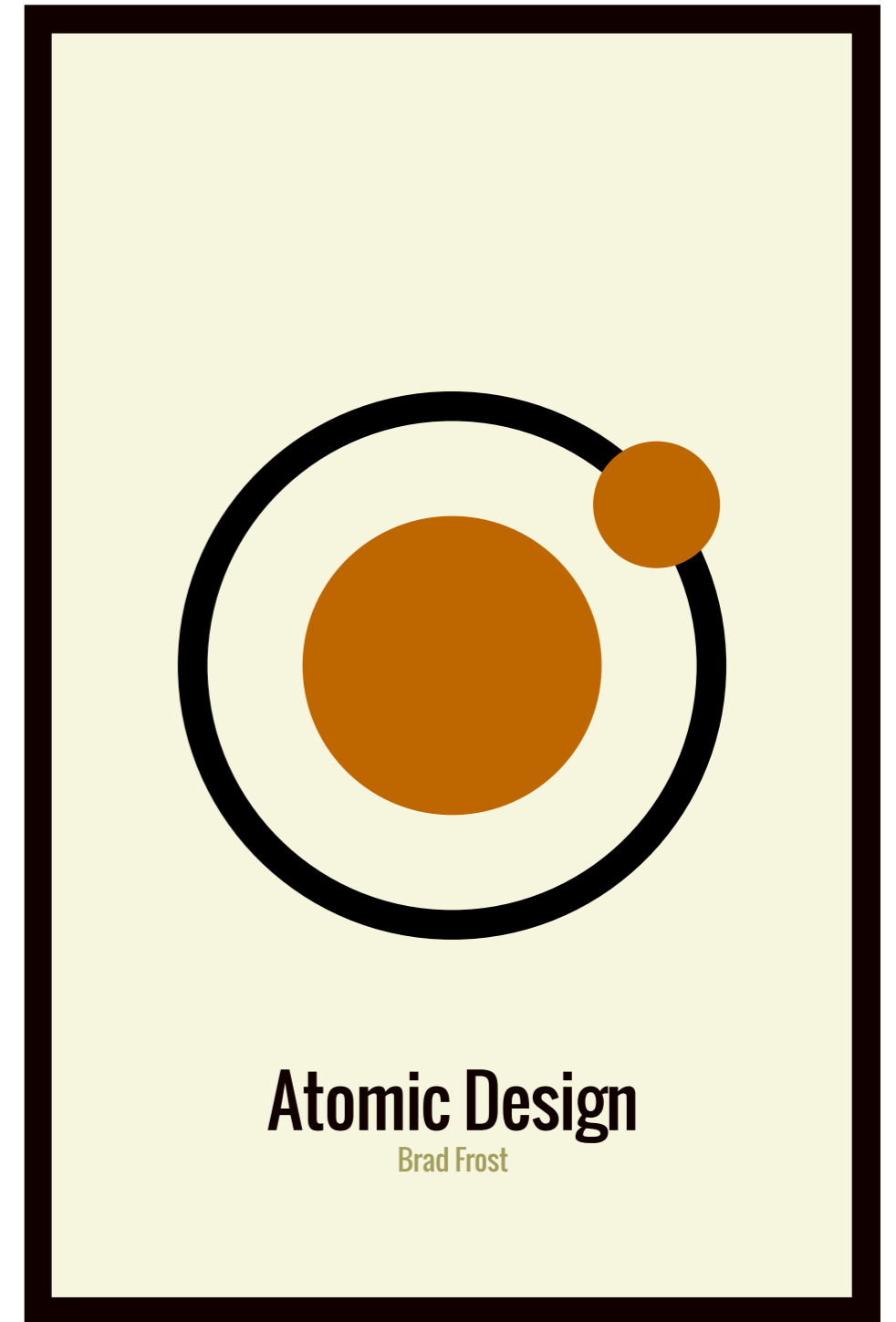
---

Design System  
**Structure**

## Design System

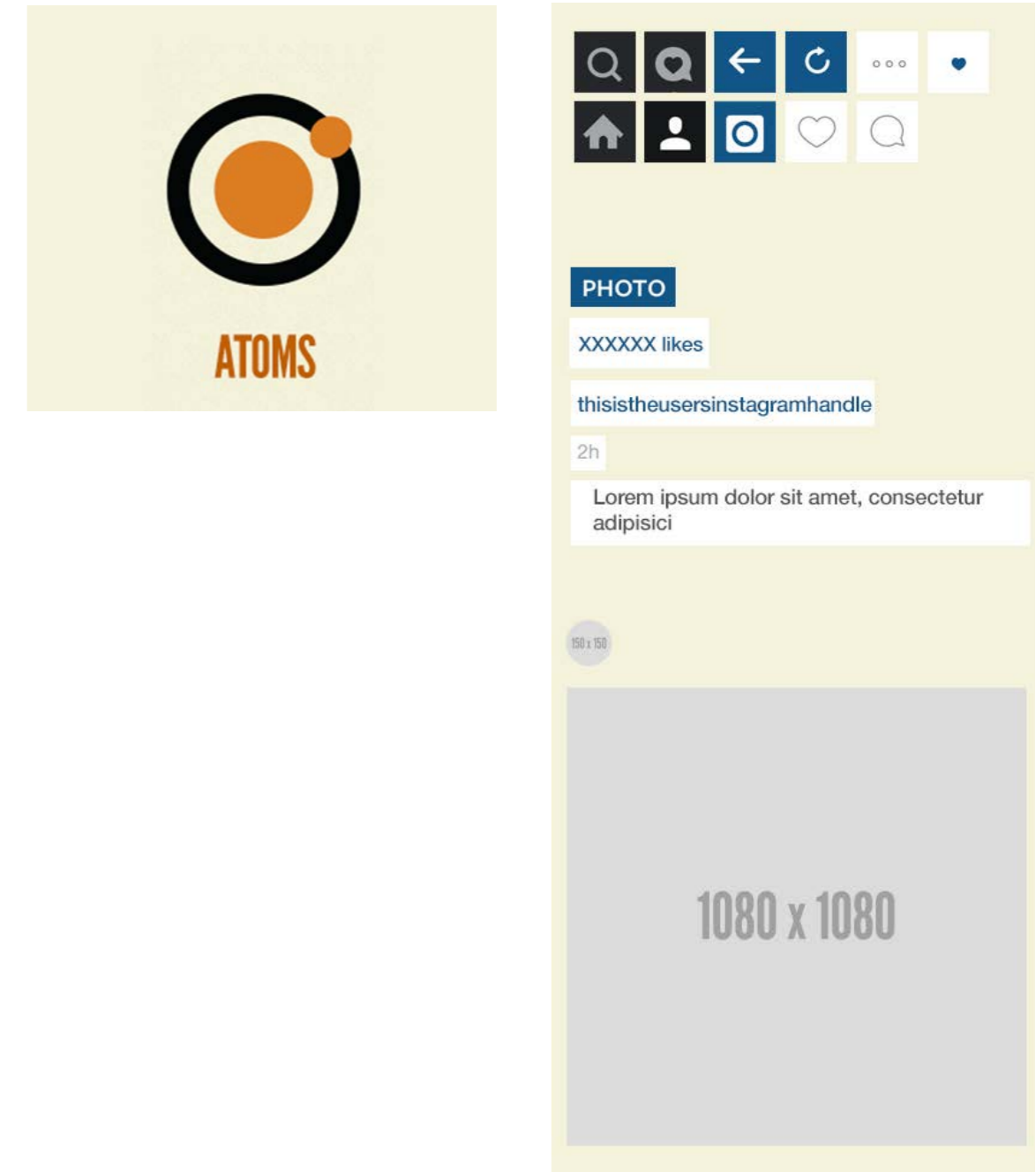
According Brad Frost, a design system is constitute of *Atoms, Molecules, Organisms, Templates, Pages*

- Atomic Design by Brad Frost, <http://atomicdesign.bradfrost.com/>



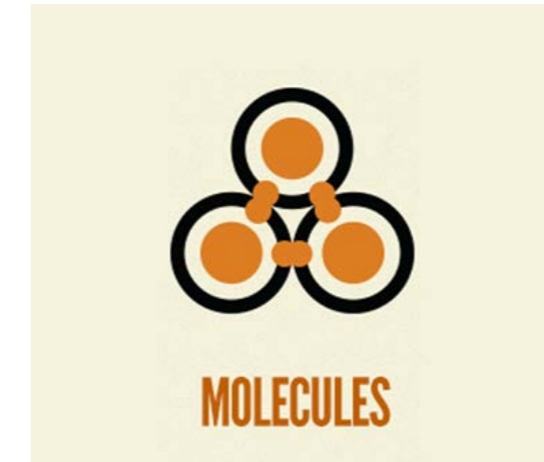
## Atoms

This screen of Instagram's UI consists of a handful of icons, some text-level elements, and two image types: the primary image and the user's avatar image.



## Molecules

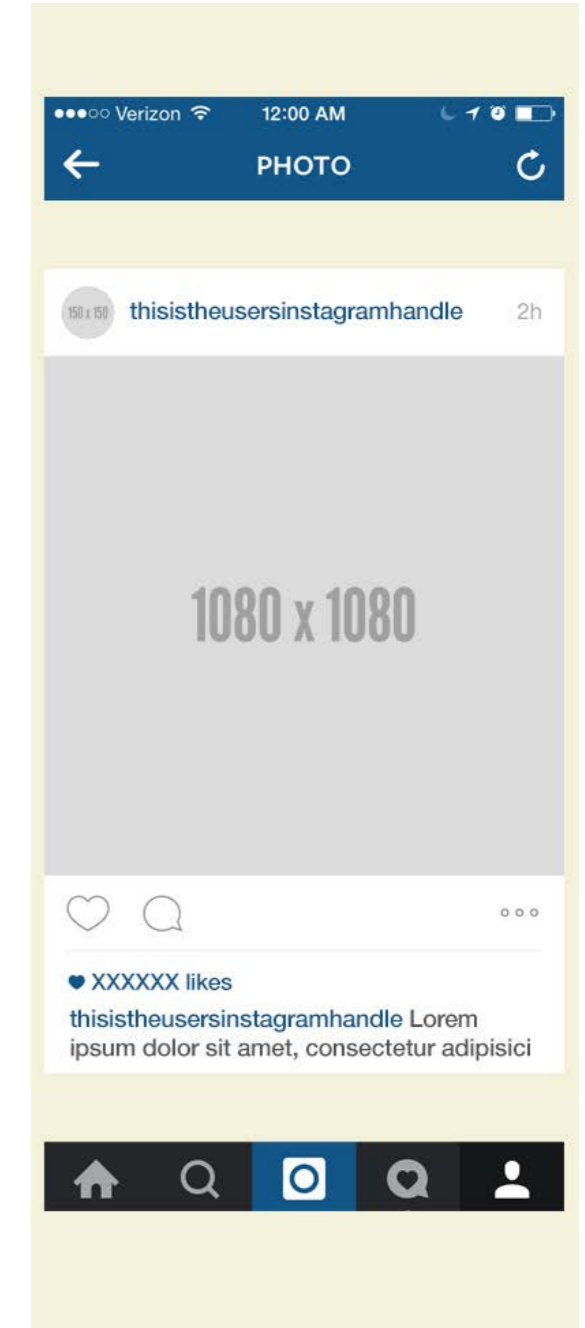
Several icons form simple utilitarian components like the bottom navigation bar and the photo actions bar where users can like or comment on a photo. Also, simple combinations of text and/or images form relatively simple components.



- Atomic Design by Brad Frost, <http://atomicdesign.bradfrost.com/>

## Organisms

Here we can see the photo organism take shape, which consists of the user's information, time stamp, the photo itself, actions around that photo, and information about the photo including like count and caption.



- Atomic Design by Brad Frost, <http://atomicdesign.bradfrost.com/>



# Organisms

This organism becomes the cornerstone of the entire Instagram experience as it is stacked repeatedly in a never-ending stream of user-generated photos.



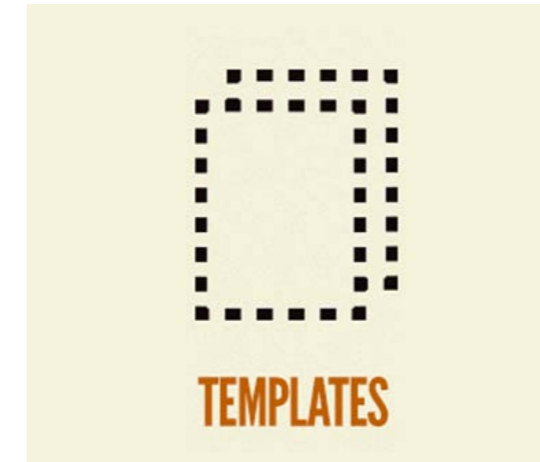
- Atomic Design by Brad Frost, <http://atomicdesign.bradfrost.com/>

## Templates

We get to see our components come together in the context of a layout. Also, it's here where we see the exposed content skeleton of the Instagram experience, highlighting dynamic content such as the user's handle, avatar, photo, like count, and caption.

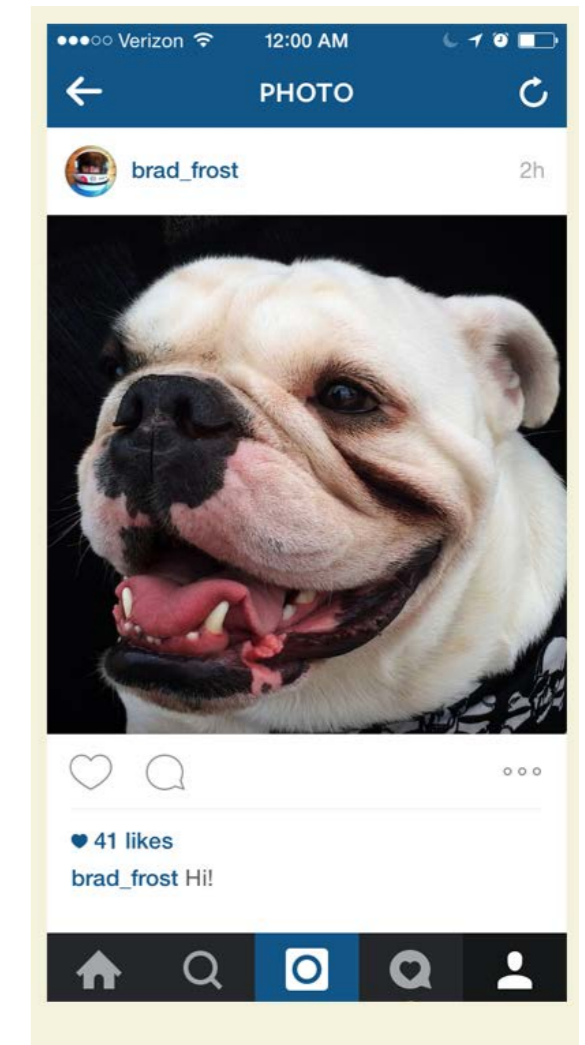
-

Atomic Design by Brad Frost, <http://atomicdesign.bradfrost.com/>



## Pages

And finally we see the final product, complete with real content poured into it, which helps ensure the underlying design system comes together to form a beautiful and functional UI.



- Atomic Design by Brad Frost, <http://atomicdesign.bradfrost.com/>

Design System

# Take Away

## Take Away

Interfaces are built on combinations of smaller components

Reduces repetitive tasks

Ensures consistency across project(s)

Design System  
**Examples**



Design System

Grid System

Color

Typography

Form Elements

Navigation

Tables

Lists

Slats

Stats/Data

Feedback

Dialogs

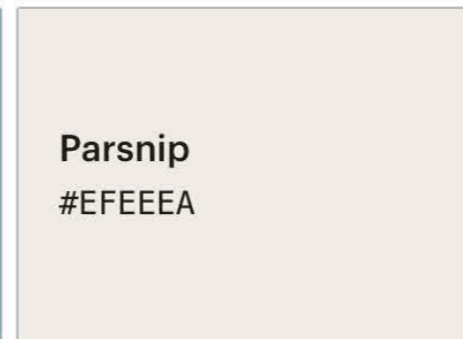
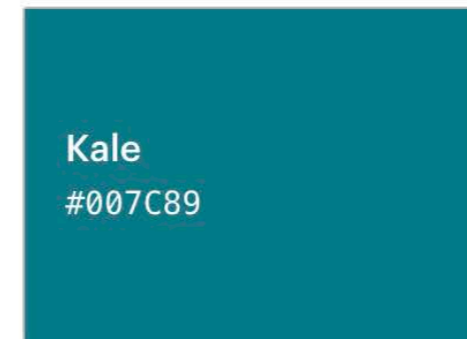
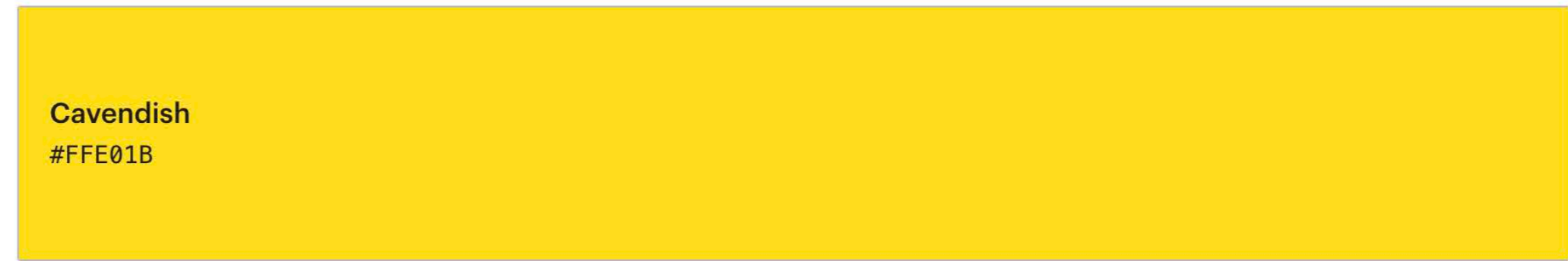
Freddicons

Helper Classes

# Color

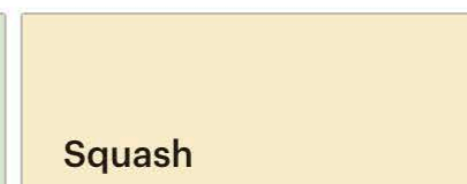
## Palette

Hex RGB Less



**Design Systems (Smashing eBooks)**, Alla Khoimatova, <https://www.amazon.ca/Design-Systems-Smashing-eBooks-Khoimatova-ebook/dp/>

## Feedback



We're hiring

Overview

Design

Color Scheme

Typography

Animation

Border Radius

Box Shadow

Layout

Icons COMING SOON

Components

Utility

Advanced Topics in Interactivity

## Font sizes

The font scale consists of 9 different font sizes. The default size applied to the `body` is Medium.

The quick brown fox jumps over the lazy dog

46px — Extra extra extra extra large

The quick brown fox jumps over the lazy dog

38px — Extra extra extra large

The quick brown fox jumps over the lazy dog

28px — Extra extra large

The quick brown fox jumps over the lazy dog

20px — Extra large

The quick brown fox jumps over the lazy dog

18px — Large

The quick brown fox jumps over the lazy dog

16px — Medium

The quick brown fox jumps over the lazy dog

Design Systems (Smashing eBooks), Alla Khoimatova, <https://www.amazon.ca/Design-Systems-Smashing-eBooks-Khoimatova-ebook/dp/>



Design Kit →

GitHub Repos →

# CARBON DESIGN SYSTEM

Explore the system

- **Design Systems (Smashing eBooks)**, Alla Khoimatova, <https://www.amazon.ca/Design-Systems-Smashing-eBooks-Khoimatova-ebook/dp/>



## Getting Started

Onboarding for designers and developers who are using the system for the first time.



## Guidelines

Guidance on usage and application for basic design elements.

Design Systems



TYPOGRAPHY

Type scale

Additional emphasis

Display styles

Emphasis styles

Font stack

Resources



ILLUSTRATIONS



SOUNDS



ICONS



INTERACTION STATES



SPACING



DATA VISUALIZATIONS

# Typography

Shopify admin provides a constrained, purposeful set of typographic styles. These styles map as much as possible to functional roles so you know when each can be used.

By consistently tying typographic styles to appropriate functions in the interface, we create a clear visual pattern for merchants to follow while they're interacting with our product.

## Type scale

The typographic scale is designed to keep the number of separate styles to the minimum that works for the Shopify admin.



Design Systems (Smashing eBooks), Alla Kholmatova, <https://www.amazon.ca/Design-Systems-Smashing-eBooks-Kholmatova-ebook/dp/>

# Make commerce better for everyone.



- Accordion
- Activity Timeline
- Alert
- App Launcher
- Avatar
- Badges
- Brand Band
- Breadcrumbs
- Builder Header
- Button Groups
- Button Icons
- Buttons**
- Cards
- Carousel
- Chat
- Checkbox
- Checkbox Button
- Checkbox Button Group
- Checkbox Toggle
- Color Picker
- Combobox

Buttons are clickable items used to perform an action.

Buttons should be used in situations where users might need to:

- submit a form
- begin a new task
- trigger a new UI element to appear on the page
- specify a new or next step in a process

```

<button class="slds-button">Button Base</button>
<button class="slds-button slds-button_neutral">Button Neutral</button>
<button class="slds-button slds-button_brand">Button Brand</button>
<button class="slds-button slds-button_outline-brand">Button Outline Brand</button>
<button class="slds-button slds-button_destructive">Button Destructive</button>
    
```

## SECTIONS

### Button vs. Link

Accessibility

### Variations

- Base
- Neutral
- Brand
- Outline Brand
- Inverse
- Destructive
- Text Destructive
- Success

### Disabled

### With Icons

- Left Icon
- Right Icon

### Stateful

- Not Selected
- Selected and Focused
- Selected with Hover State

## Button vs. Link #

Design Systems (Smashing eBooks), Alla Kholmatova, <https://www.amazon.ca/Design-Systems-Smashing-eBooks-Kholmatova-ebook/dp/>

The HTML elements for buttons and links describe a very specific type of action that is going to be taken when they are used. It is important you know when to use which, as the distinction matters:

- Use a **link** when you're **navigating to another place**, such as: a "view all" page, "Jane Chen" profile, a page "skip link" etc.
- Use **buttons** when you are **performing an action**, such as: "submit" "merge" "create new" "upload" etc.