bit

Building Components in Harmony

Build with Bit

Debbie O'Brien

Head Devleloper Advocate at Bit

bit

Experts

mde

MVP Microsoft® Most Valuable Professional

AP20

@debs_obrien

What I will cover

- **Feature Ownership**

  How different teams manage different scopes

- **Design Systems**

  How the design team should be responsible for our design

- **Resuability**

  How we should build thinking about scaling and resuability

- **Thinking Components first**

  How we should focus on more than one possible end product

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Dad

Carpenter

@debs_obrien

Me

Developer

@debs_obrien

What’s the Problem?

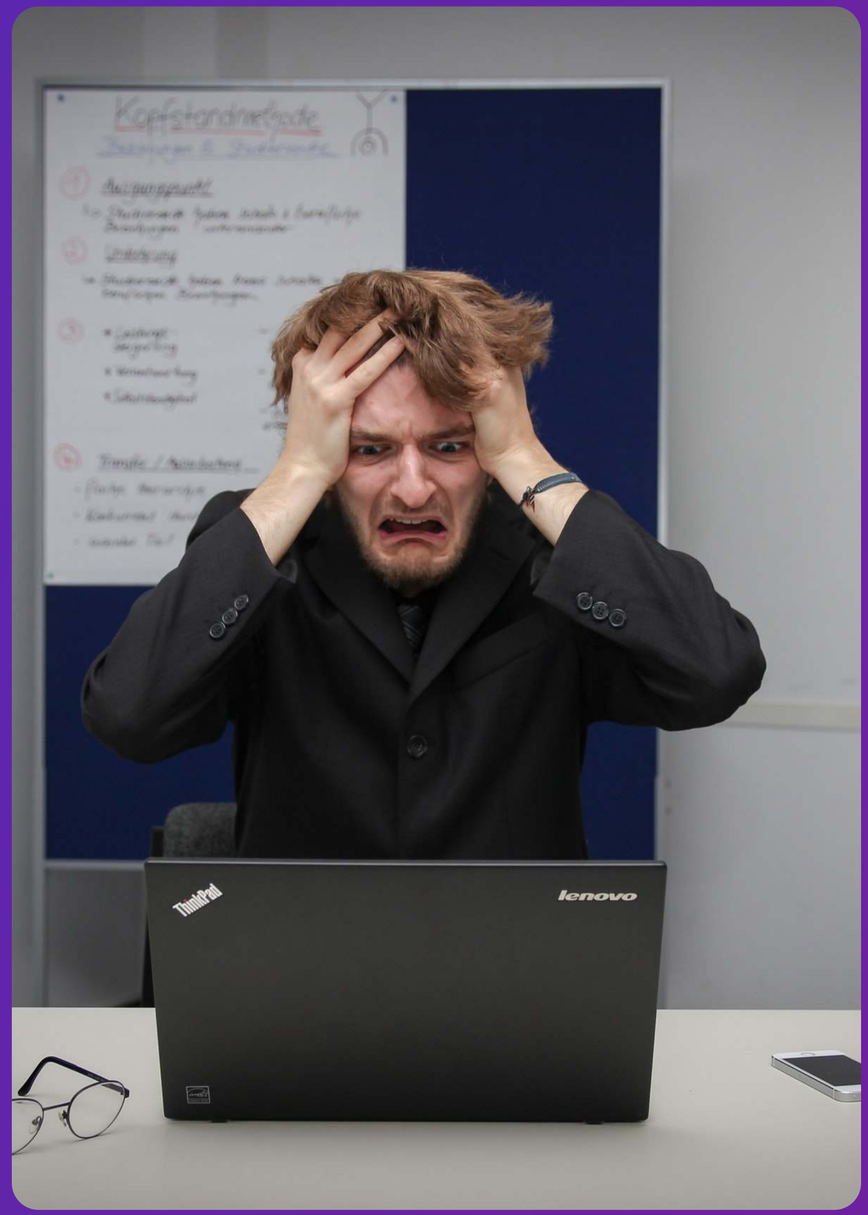
What’s the Problem?

Made to Measure

Not Scalable

Not Reusable

Not made with Components



What’s the Solution?


IKEA
Arredamenti
IKEA
STOP
IKEA
Carrello
BEKVÄM
cm 60x50, betulla
€ 39,95
IKEA
Perché lasciamo
montare i mobili a te?

What’s the Solution?

Not thinking towards one end product

Scalable

Reusable

Thinking in Components

What exactly is a Component?

What exactly is a Component?

A part of a larger whole

a piece

a bit

an element

a unit

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Primary

NOTE

A Component is

not just a React / Vue / Angular / Svelte component.

A component can be UI primative, services, micro frontends, backend services, middlewares, sdks, serverless functions, apps.....

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Why should Teams own Features?

Why should Teams own Features?

Helps build mastery and allows autonomy

Communication via APIs

Separation of concerns

Build together but stay independant

Catalog team

Sydney, Australia

Infra team

New York, NY

hotel-catalog

CATALOG
featured-hotels v1.0.8
Presents hotel cards for pre-selected hotels and content.

CATALOG
hotel-card v2.0.3
Hotel card shows the entire details for a hotel or a room.

CATALOG
card-content v1.7.2
Card content presents the detailed content for a hotel card.

base-components

Search

Input

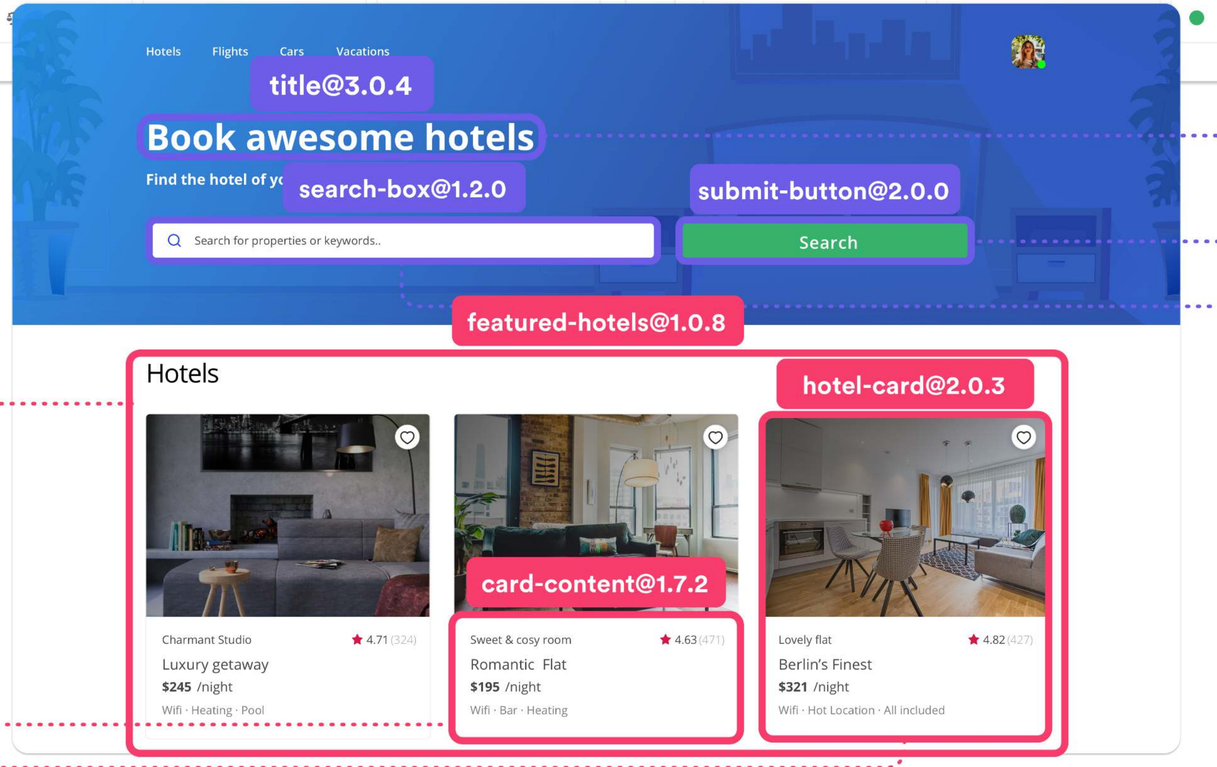
Book awesome hotels

BASE
submit-button v2.0.0
Allow users to take actions, and make choices, with a single tap.

BASE
search-box v1.2.0
Renders a search field that allows text input.

BASE
title v3.0.4
Presents your title and content as clearly and efficiently as possible.

98KB



BILLY / OXBERG

New

BESTÅ / EKET

Why should Components be Reusable?

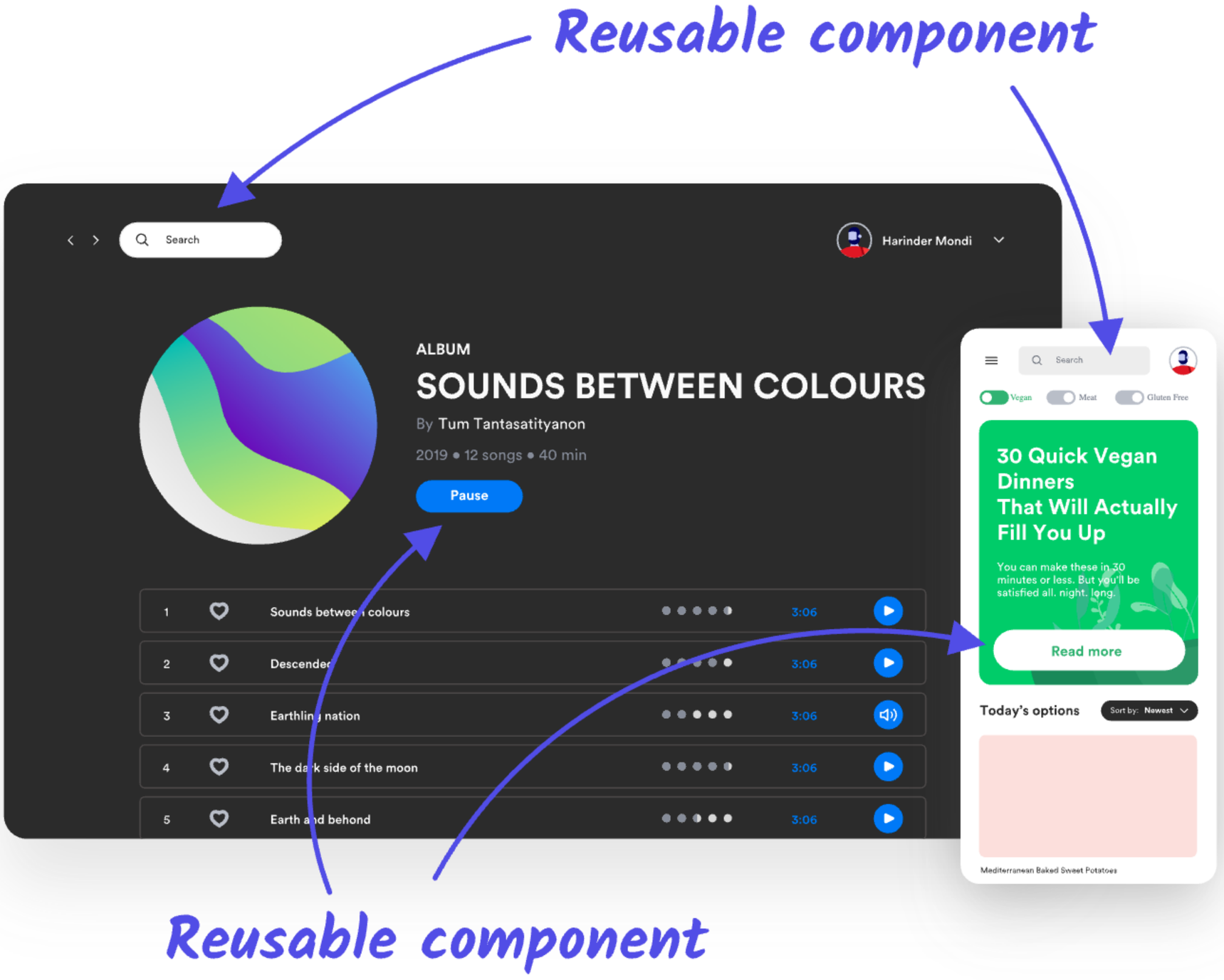
Why should Components be Reusable?

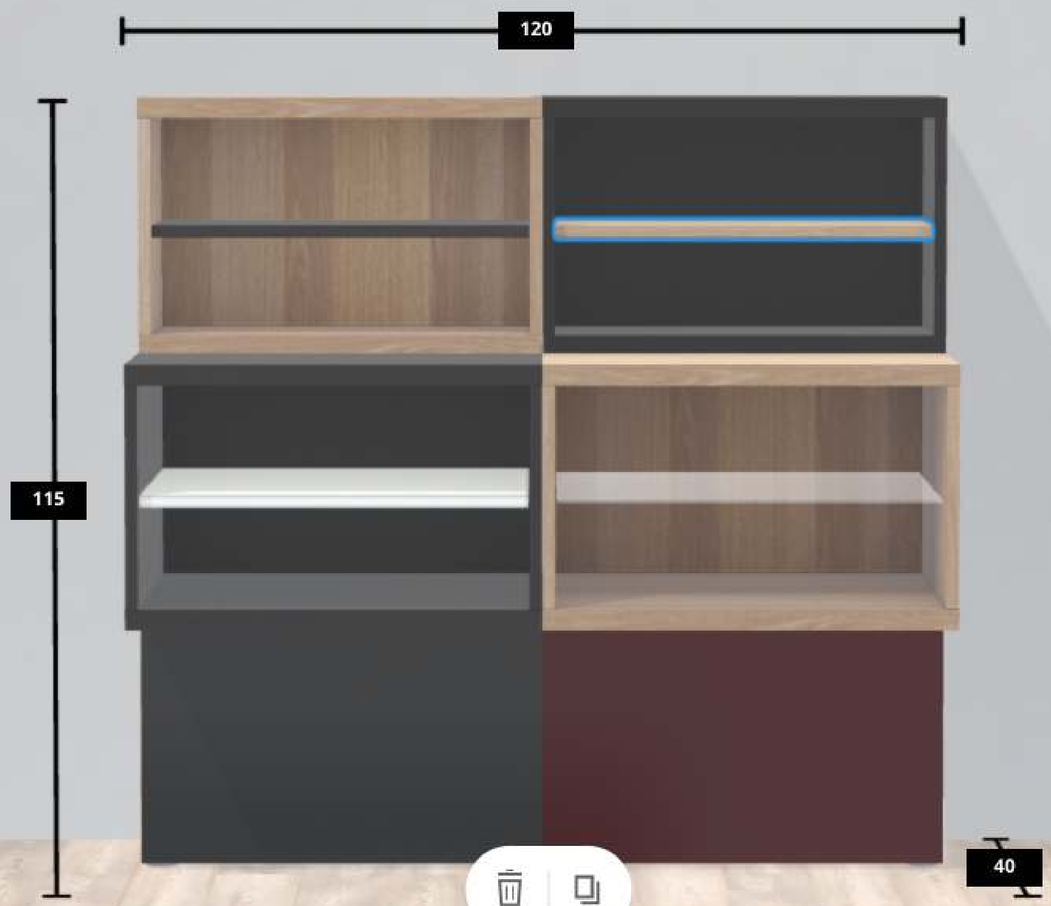
Reduce duplicated code

Easier maintenance

Faster development

Sharing is caring


Reusable component
Search
Harinder Mondi
ALBUM
SOUNDS BETWEEN COLOURS
By Tum Tantasatityanon
2019 • 12 songs • 40 min
Pause
1 Sounds betwee colours 3:06
2 Descende 3:06
3 Earthlin nation 3:06
4 The da k side of the moon 3:06
5 Earth a d behond 3:06
Search
Vegan
Meat
Gluten Free
30 Quick Vegan Dinners That Will Actually Fill You Up
You can make these in 30 minutes or less. But you'll be satisfied all. night. long.
Read more
Today's options
Sort by: Newest
Mediterranean Baked Sweet Potatoes
Reusable component



Change interior

Shelf

€ 5

€ 5

€ 5

Glass shelf

€ 6

Why should Components be Themable?

Why should Components be Themable?

Easier to reuse

One component many options

Easily change branding

Support multiple themes:

dark / light / high-contrast / multiple brands

submit-button@2.0.0

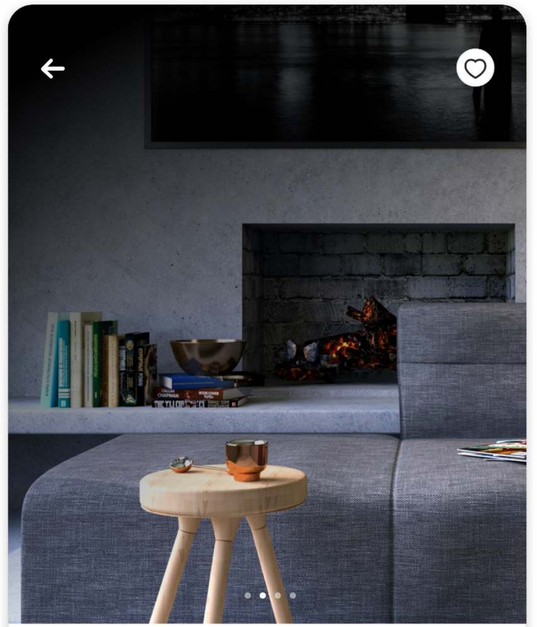
Book this hotel

submit-button@1.7.0

Book this hotel

submit-button@1.2.0

Book this hotel



Charmant Studio

★ 4.71 (324)

Luxury getaway

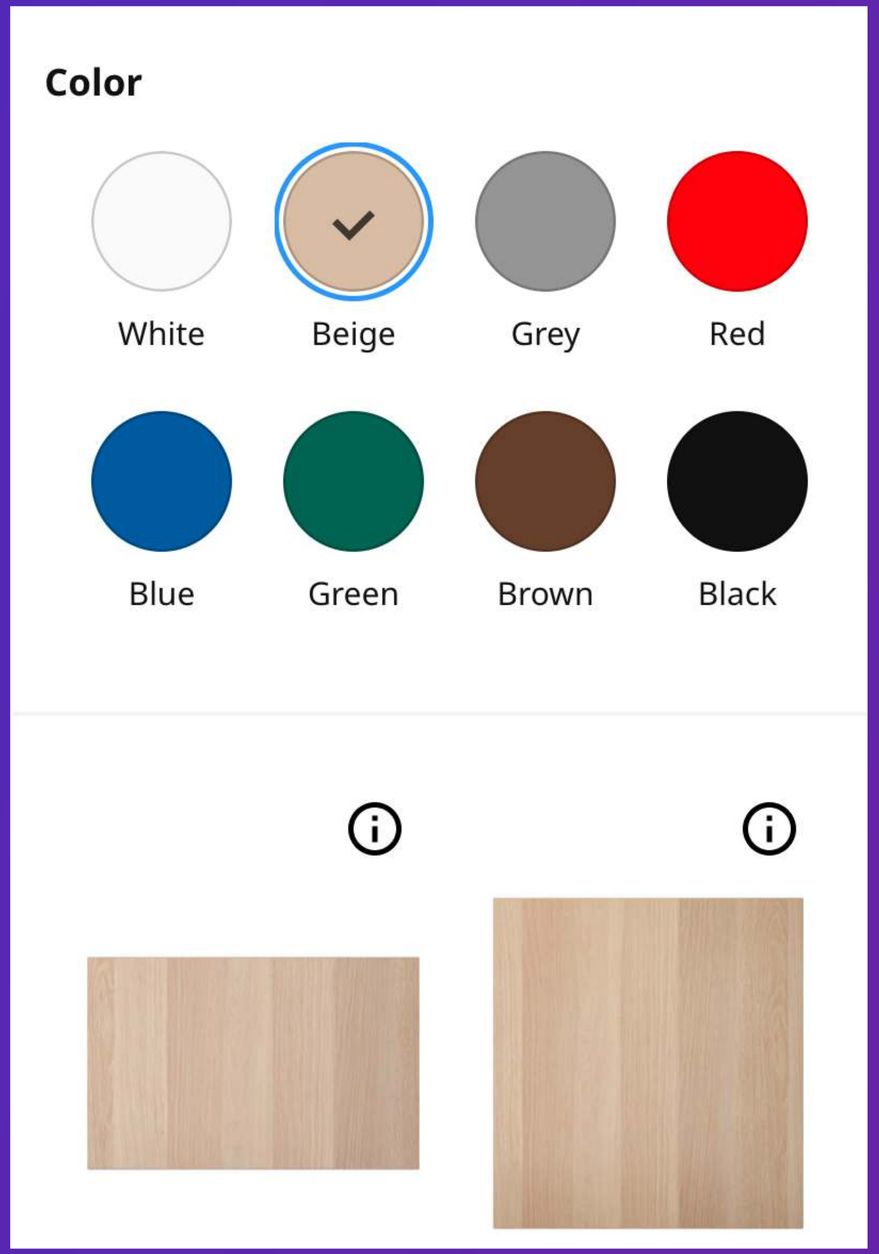
$245 /night

Wifi · Kitchen · Pool

The hotel is located in the city center close to popular attractions. It includes all luxury facilities suitable for couples and families

submit-button@2.0.0

Book this hotel



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How do we discover Components?

How do we discover Components?

Sharing components to the cloud

Naming our components correctly

Organising our components

Labeling our components

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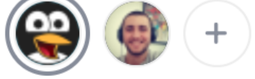

teambit/bit ⭐ 500k

MARKETING / COMMUNITY-LINKS

github-link v0.5.20

link to a Github repository

look it up!

ELEMENTS

link v0.5.20

concrete link component

Build together. Stay independent.

Create a truly scalable infrastructure for everyone

SECTIONS

independent-teams v0.5.20

home page collaboration section

ELEMENTS

x-button v0.5.20

close button component

Reliable and secure

SECTIONS / ENTERPRISE-OFFERING

reliability v0.5.20

security section in Enterprise page

Simple transparent plans

Compare our support plans below to quickly

SECTIONS / SUPPORT-PAGE

support-packages v0.5.20

support plans comparison table

We got you covered

We provide the support we would like to get as

SECTIONS / SUPPORT-PAGE

support-developers v0.5.20

support section

Develop modular applications with independent components

SECTIONS

develop-components v0.5.20

home page breaks down section

Exploring component reuse? Talk to world experts

We help the best

SECTIONS

talk-to-experts v0.5.20

home page call to action section

Get your enterprise-grade component cloud

SECTIONS

enterprise-section v0.5.20

home page cloud section

BESTÅ

TV bench, 180x40x38 cm

69 €

(260)

More variants

+5

BESTÅ

Frame, 120x40x64 cm

50 €

(89)

More variants

BESTÅ

Frame, 120x40x38 cm

40 €

(61)

More variants

How do we improve consumer's Dev Experience?

How do we imporve consumer’s dev experience?

Thinking about how the component will be used

Documenting our components

Creating compositions

Tests as a documentation feature

Live component playground

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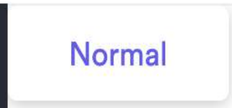
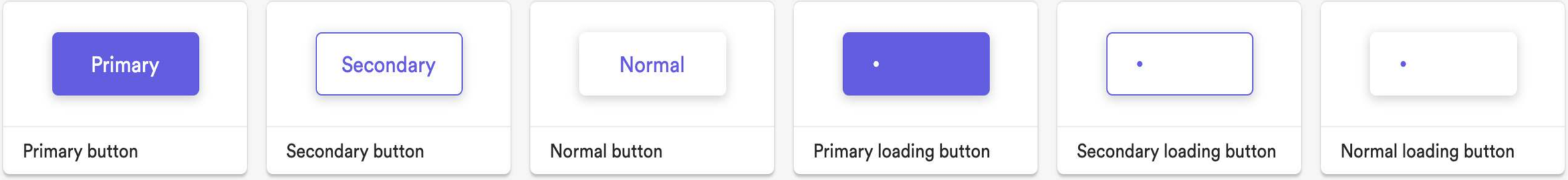
Normal button example:

```
<ThemeCompositions style={{ minHeight: 90 }}>
  <Button style={{ width: 120 }}>Normal</Button>
</ThemeCompositions>
```



Compositions



Properties

NAME	TYPE	DEFAULT	DESCRIPTION
elevation	'none' | 'low' | 'medium' | 'high'	'low'	style the button with shadow and click effect.
importance	'normal' | 'ghost' | 'cta' | 'muted'	'normal'	style variance ('cta', 'normal')

BESTÅ

Frame, white st

★★★★★ (8)

Colour

White stained o

Available t

Product size

Width: 60 cm
Depth: 40 cm
Height: 38 cm

Overview
Settings

COMPONENTS

enterprise-offering
hybrid-homepage
support

sections

enterprise-offering

advantage-cards
component-analytics
eco-system
experts-support
hero
integrations
powering-enterprise
reliability
sales-cta

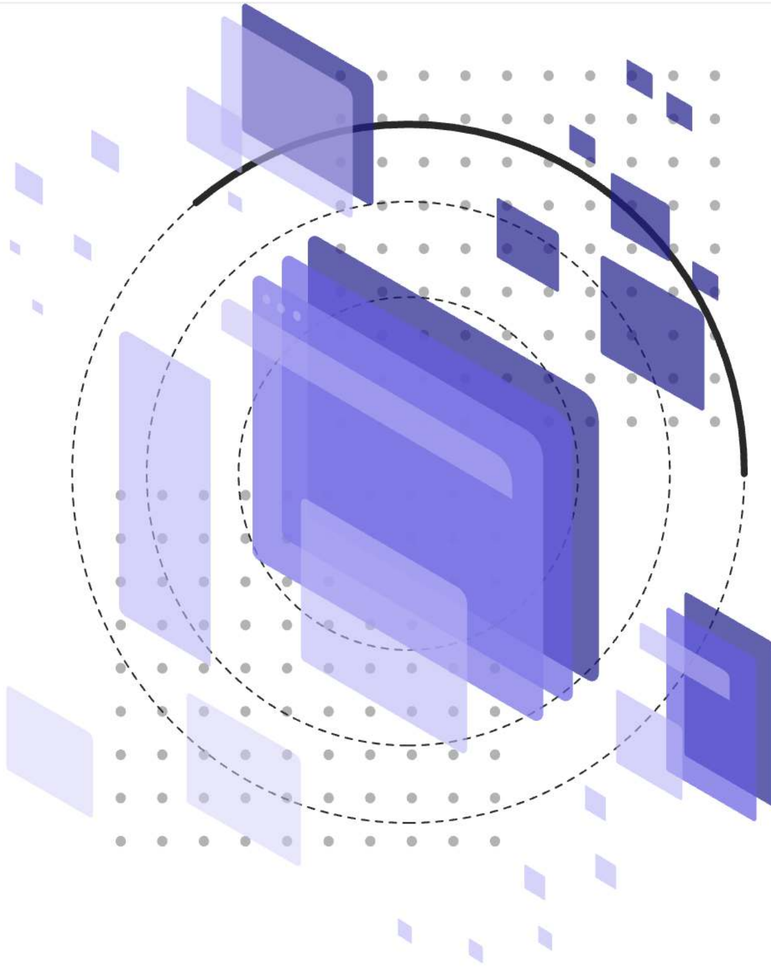
support-page

global-enterprise
hero
support-channels

The enterprise component platform

Let your components drive web application delivery at global scale. Enjoy world-class performance, security and support every step of the way.

Contact Sales Book Intro



Overview
Settings

COMPONENTS

enterprise-offering
hybrid-homepage
support

sections

enterprise-offering

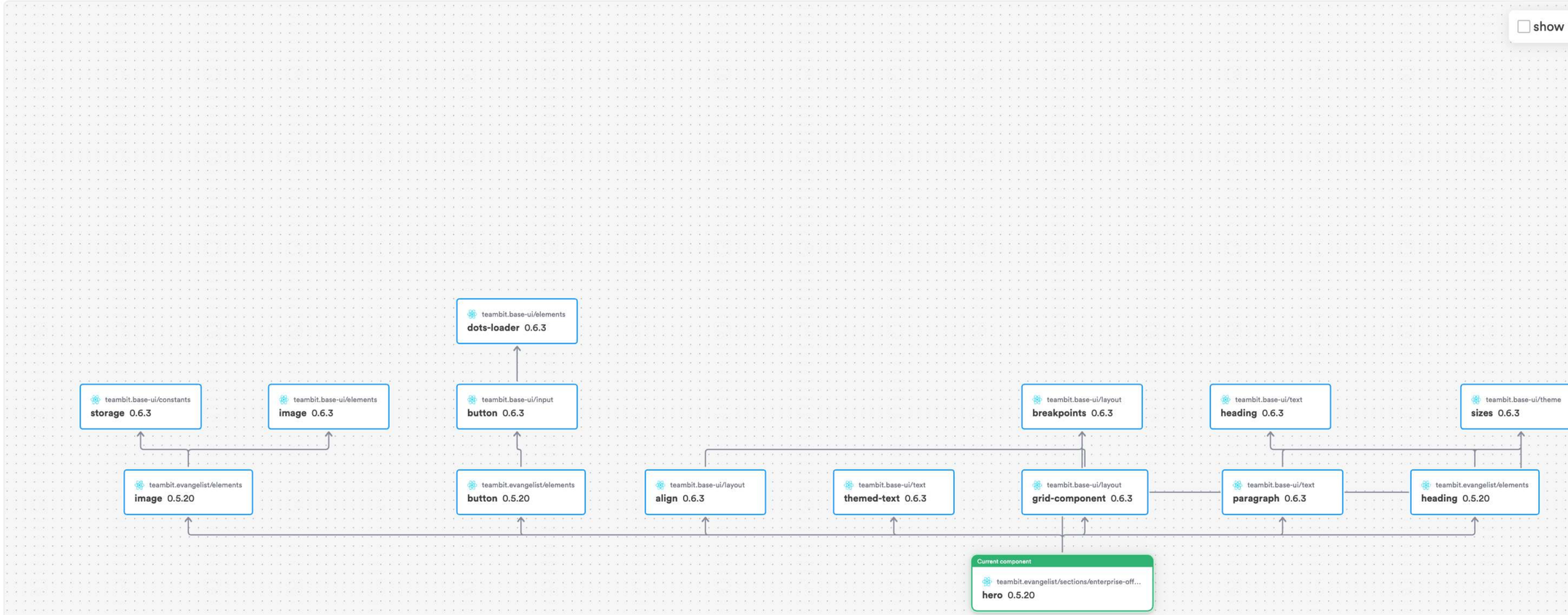
advantage-cards
component-analytics
eco-system
experts-support
hero
integrations
powering-enterprise
reliability
sales-cta

support-page

global-enterprise
hero
support-channels
support-cta
support-developers
support-packages

build-together

Dependencies



How should we reuse Components?

How should we reuse Components?

Think about components as services

Integrate components together to form concrete components

Share those concrete components for other teams

By not reinventing the wheel

title@3.0.4

Book awesome hotels

Find the hotel of your dreams.

search-box@1.2.0

Search for properties or keywords..

submit-button@2.0.0

Search

featured-hotels@1.0.8

Hotels

hotel-card@2.0.3

Charmant Studio ★ 4.71 (324)

Luxury getaway

$245 /night

Wifi · Heating · Pool

card-content@1.7.2

Sweet & cosy room ★ 4.63 (471)

Romantic Flat

$195 /night

Wifi · Bar · Heating

Lovely flat ★ 4.82 (427)

Berlin's Finest

$321 /night

Wifi · Hot Location · All included


devolo
MAGIC

How do we Trust our Components?

How do we trust our Components?

By creating tests

Making the tests easily available

Simulations

Dependent testing

Overview

Settings

COMPONENTS

content

bit-testimonials

links

css-components

fade-in-out

elements

button

heading

icon

Tests

button.spec.js

13.436 seconds 7 7

- should render
- should render secondary
- should pass classname
- should use variation html attribute

How do we think about Component Composition?

How do we think about Component Composition?

Props

State

Route

Styling

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A light implementation of a GraphQL react hook, using `graphql-request`.

```
const server = '/graphql';
const query = gql`
    query {
        countries { name }
    }
`;

export const Page = () => {
    const varibales = { cats: 'brown' };
    const { loading, data, error } = useGqlRequest(query, { variables, server });

    return ...;
}
```

could also pass server from context:

```
const server = '/graphql';

export const App = () => {
    <GqlServerProvider value="https://countries.trevorblades.com/">
        <Page/>
    </GqlServerProvider>
}
```

Compositions

Data:

{"countries":[{"name":"Andorra"},{"name":"United Arab Emirates"},{"name":"Afghanistan"},{"name":"Antigua and Barbuda"},{"name":"Anguilla"},{"name":"Albania"},{"name":"Armenia"},{"name":"

Preview

BLUM

Why Should we think in Components?

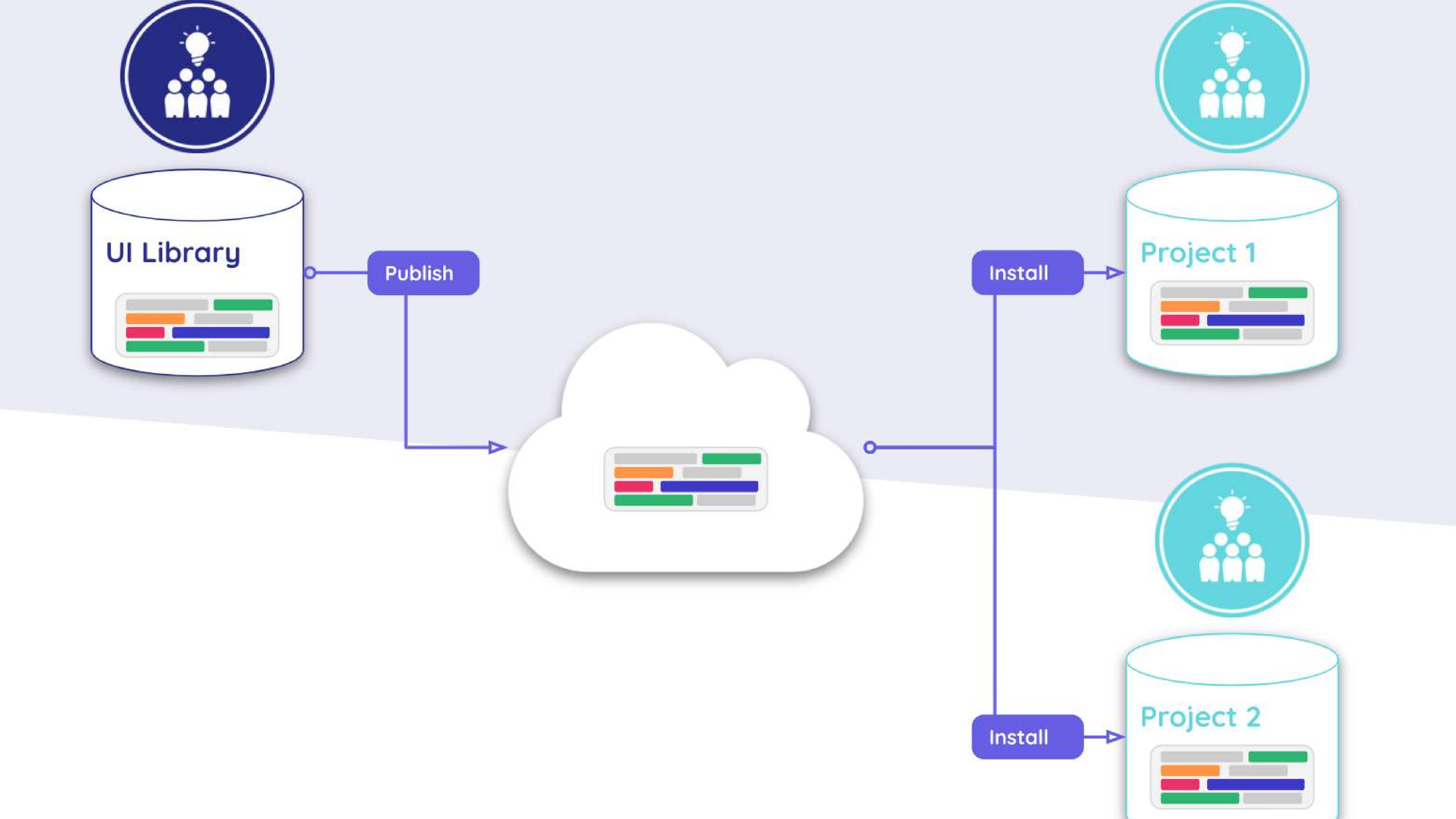
Why should we think in Components?

To build scalable products

Reuse components across various projects

Deliver faster in the long term

Because we want to develop in Harmony


UI Library
Publish
Install
Project 1
Install
Project 2

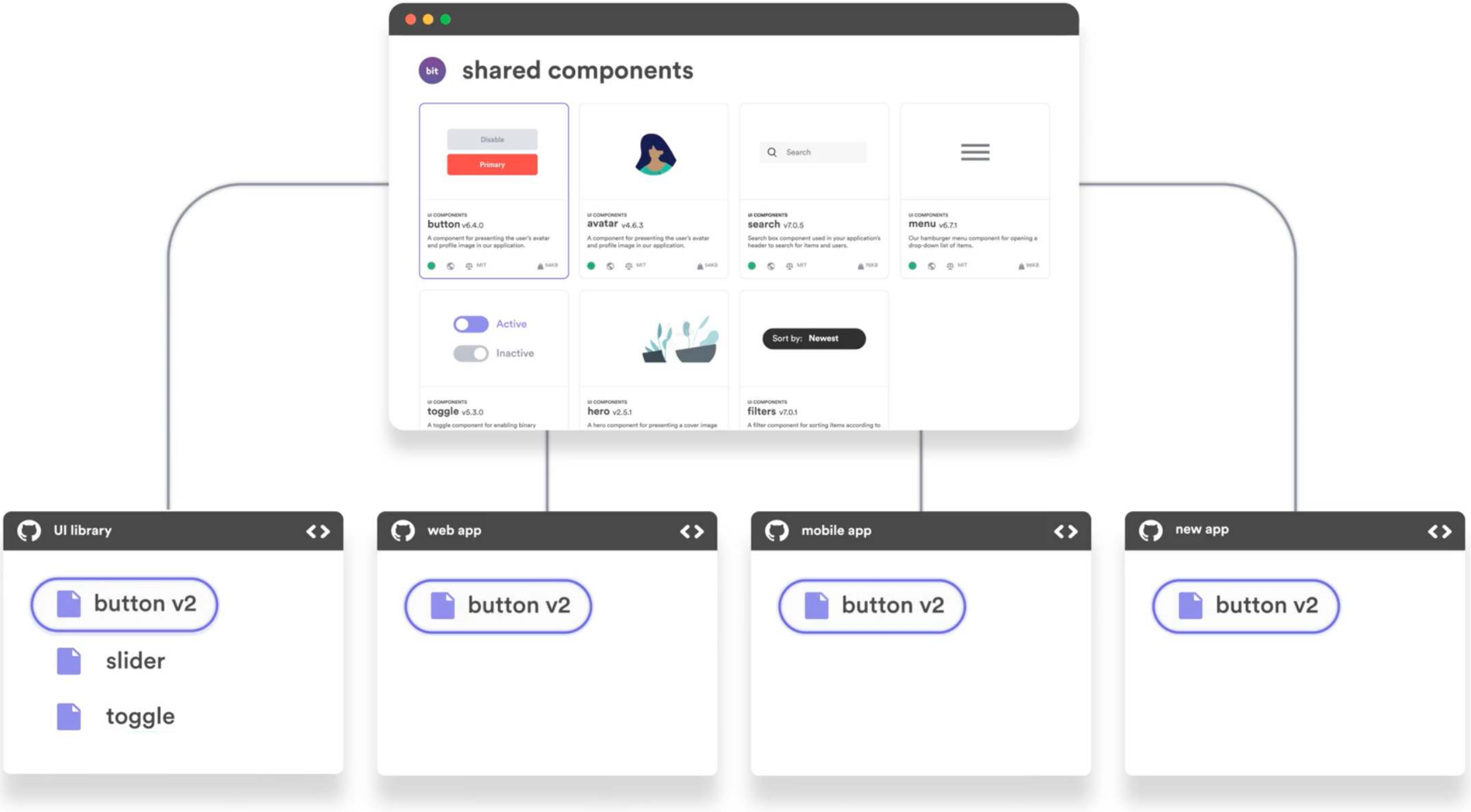
Open design

Design your own

bit

Welcome to Bit Harmony

Share Components across Apps

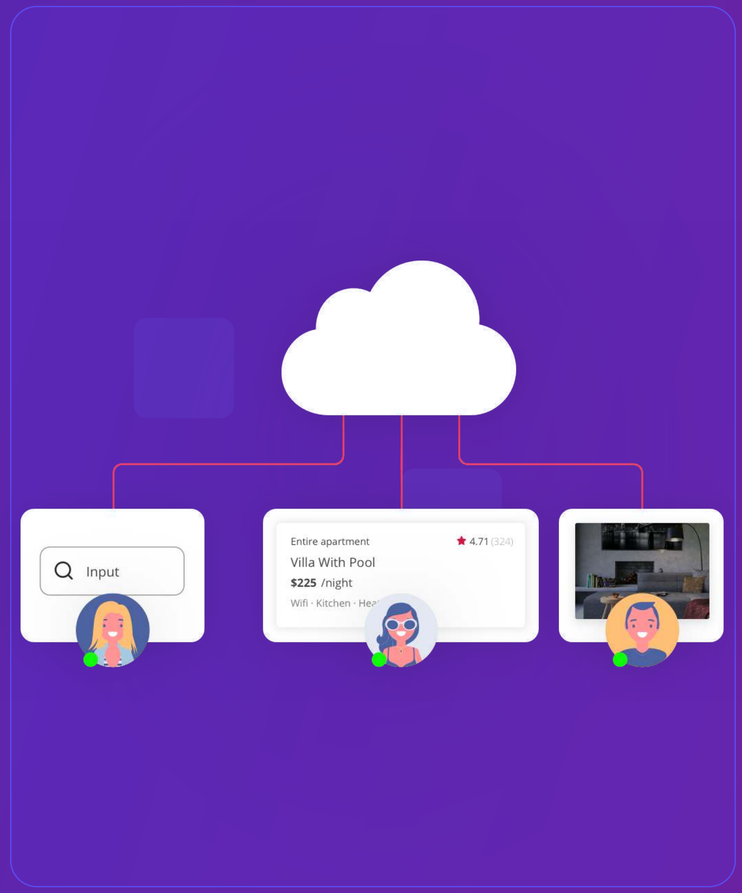

shared components
Disable
Primary
UI COMPONENTS
button v6.4.0
A component for presenting the user's avatar and profile image in our application.
MIT
UI COMPONENTS
avatar v4.6.3
A component for presenting the user's avatar and profile image in our application.
MIT
Search
UI COMPONENTS
search v7.0.5
Search box component used in your application's header to search for items and users.
MIT
UI COMPONENTS
menu v6.7.1
Our hamburger menu component for opening a drop-down list of items.
MIT
Active
Inactive
UI COMPONENTS
toggle v5.3.0
A toggle component for enabling binary
UI COMPONENTS
hero v2.5.1
A hero component for presenting a cover image
Sort by: Newest
UI COMPONENTS
filters v7.0.1
A filter component for sorting items according to
UI library
button v2
slider
toggle
web app
button v2
mobile app
button v2
new app
button v2

Share Frontend, Backend and Modules with Bit

bit

Are you ready for it?

Lets start building with Bit



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https://bit.dev

Thank you

Debbie O’Brien

debs_obrien

youtube.com/c/DebbieOBrien