



THAT CONFERENCE



BREAKING UP TO MAKE UP: The UI Component Library Journey

Melissa Smith | THAT Conference 2018
Repo on Github: [melismae/that-conference-starter](https://github.com/melismae/that-conference-starter)

1.

What are they?

Background | Design Systems | Examples

2.

How can I build my own?

Storybook | React Cosmos | React Styleguidist

**CHALLENGE
THE WAY YOU
DEVELOP**



WHO ARE YOU

**A funny thing happened
on the way to the
conference.**

Things that keep me up at night

- Componentization and reusability
- Separating out concerns
- How to move quickly while maintaining a consistent user experience
- How to communicate and document components
- My dog snoring





Image: <https://www.voodoodoughnut.com/>

Email changed my life.

**This sounds hyperbolic,
but it's kind of not.**

```
<!DOCTYPE html PUBLIC "-//W3C//DTD  
XHTML 1.0 Transitional //EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-  
transitional.dtd">
```



<https://alistapart.com/article/from-pages-to-patterns-an-exercise-for-everyone>



“

[This exercise] creates the same starting point for everyone, and encourages a shared language and pattern thinking across the team—all of which help lay the foundations of an effective pattern library.

From Pages to Patterns: An Exercise for Everyone
by Charlotte Jackson in A List Apart.

<https://alistapart.com/article/from-pages-to-patterns-an-exercise-for-everyone>

Hero 1

product

product

button

Hero 1

product

product

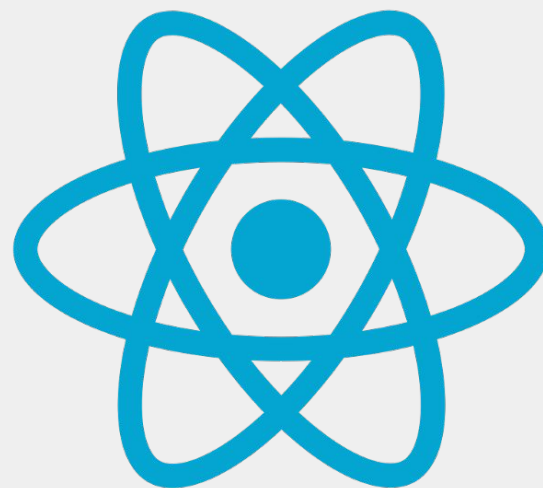
product

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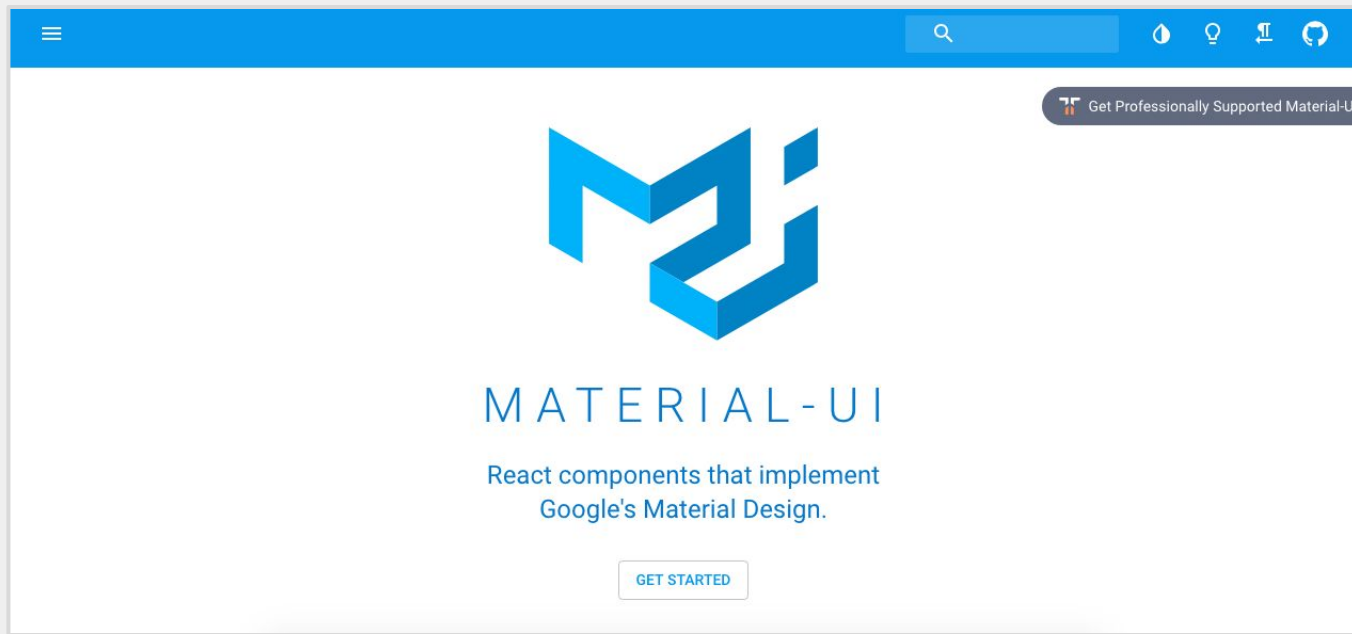


UI Component Library

What is a UI component library?

A development playground and a way to visually demonstrate your reusable components and provide developers—your primary audience—with documentation on the components' implementation.


- Visualization
- Code snippet
- API



Material UI

Uses Google's Material Design.

<https://material-ui.com> | <https://material.angular.io>

 Gestalt

Playground GitHub

Avatar

Box

Button

Card

Checkbox

Collage

Column

Container

Divider

Flyout

GroupAvatar

Heading

Icon

IconButton

Image

Label

Layer

Avatar

Source

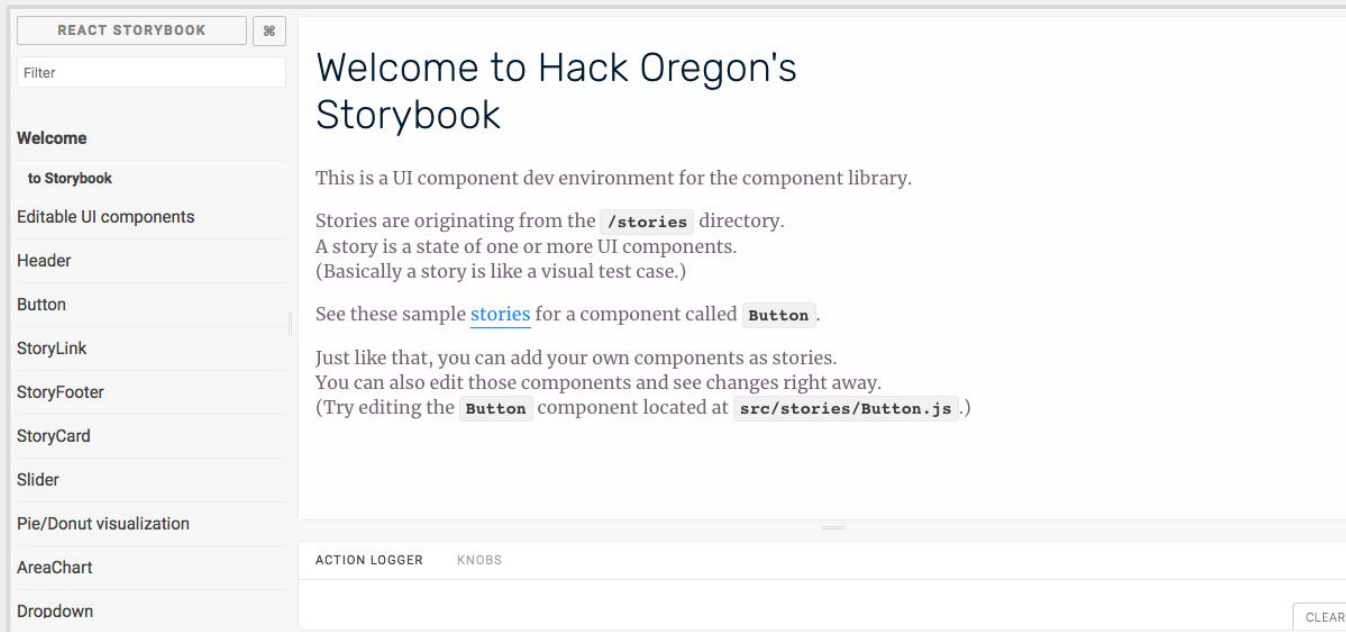
You can use an Avatar to represent a user. Every Avatar image has a subtle color wash.

Name	Type	Default
<input checked="" type="checkbox"/> name	string	-
outline	boolean	false
	Adds a white border around Avatar so it's visible when displayed on other images	
size	"sm" "md" "lg"	-
	sm: 24px, md: 40px, lg: 72px. If size is undefined, Avatar will fill 100% of the parent container width	
src	string	-
verified	boolean	false

<https://pinterest.github.io/gestalt/#/Heading>

Pinterest's Gestalt

<https://pinterest.github.io/gestalt/#/>



Hack Oregon

<https://hackoregon.github.io/component-library/>
<http://civicplatform.org/>

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ISIS Says It Killed Reporter After Strikes in Northern Iraq

By MARK LANDLER and ERIC SCHMITT 9:26 PM ET

Relatives of Steven J. Sotloff, a freelance journalist who was captured in Syria a year ago, said they believed he had been killed, despite a plea from his mother. Word of Mr. Sotloff's beheading came two weeks after James Foley, another American journalist, was beheaded by ISIS.

RELATED COVERAGE

- **Graphic: The Iraq-ISIS Conflict in Maps, Photos and Video**
- **Graphic: A Rogue State Along Two Rivers**



Residents of Amerli, a town of Shiite Turkmen, celebrated this week after a nearly three-month siege by Sunni militants ended.

Andreas Bruce for The New York Times

In Desperate Campaign, Town Held Off ISIS

By AZAM AHMED 7:05 PM ET

The siege of Amerli, a northern Shiite Turkmen community, is thought to be the first instance in which a town has kept ISIS at bay since the group began its march through Iraq.

■ 34 Comments

The Opinion Pages

NATO's Urgent Challenges

By THE EDITORIAL BOARD

The alliance needs unite to push back against Vladimir Putin's expansionist tendencies.

- Bittman: Will China Defeat Obesity?
- Edsall: What Makes People Poor?
- Letters: Dealing With Iraq, Syria and ISIS

OP-ED CONTRIBUTOR

Help Families From Day 1

By CLARE HUNTINGTON

Universal pre-K is a huge step forward. Now let's start earlier.

- Friedman: Ready, Aim, Fire. Not Fire, Ready, Aim.
- The Conversation: Midterms on the Menu
- Room for Debate: 'Don't Do Stupid Stuff' as Foreign Policy?



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Today's Times Insider

Behind the scenes at The New York Times

- Reading the Paper With Gay Talese
- What We're Reading: Great Summer Picks



MARKETS >

At 10:25 PM ET

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Nikkei	Shanghai
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+0.83%	+1.09%
	+0.67%

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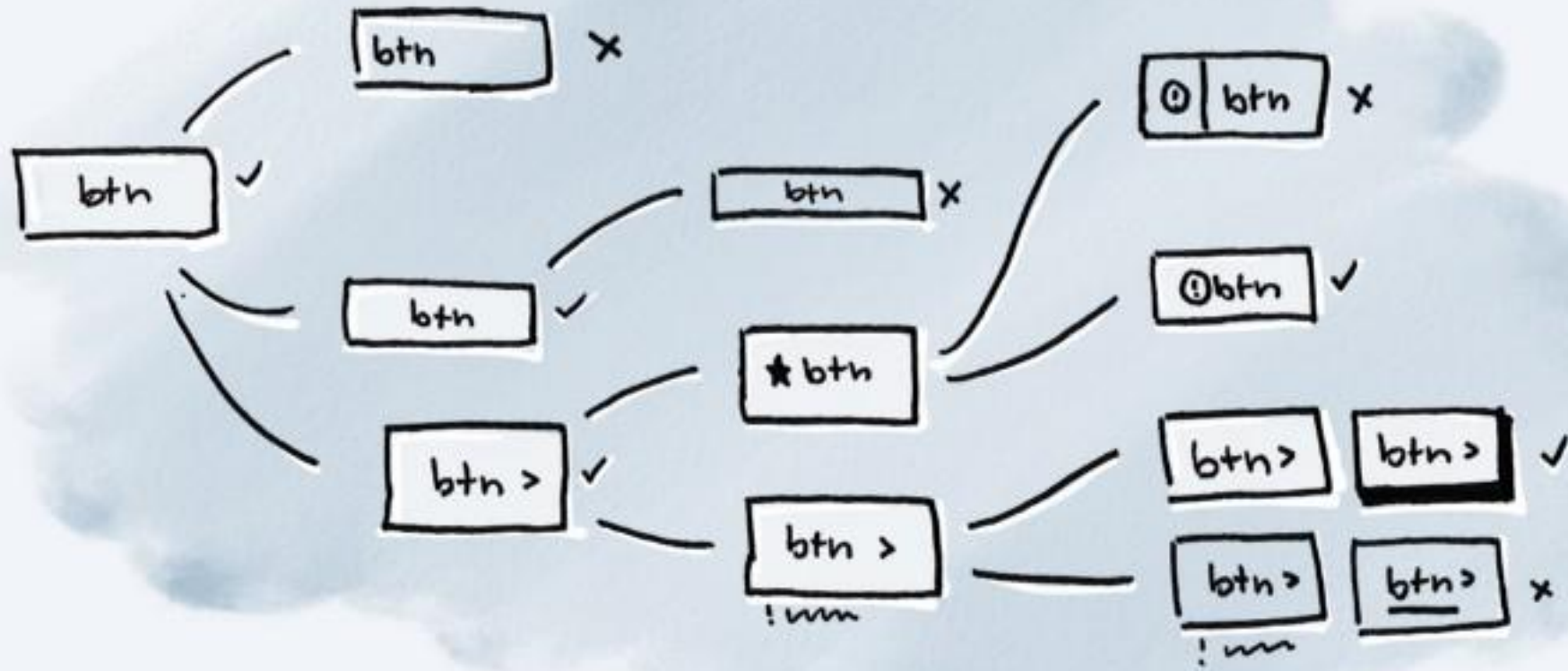


Image: <https://uxdesign.cc/design-systems-in-the-wild-cbc863f41c2>

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Dec 1, 2017

Emily Larson

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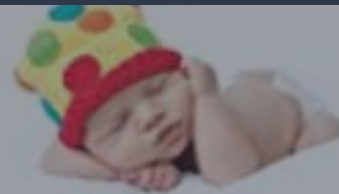
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Etymology

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Books

Pregnancy & Childbirth



Emily Larson
author of The Baby Names Almanac, The Best Baby Names

**Baby
Names**

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**Baby Names: The Ultimate
Meaning and Origin**

Naming is hard.



Design Systems.



“

*Design has always been largely about systems, and how to create products in a **scalable** and **repeatable** way. ... A unified design system is essential to building better and faster; **better because a cohesive experience is more easily understood by our users, and faster because it gives us a common language to work with.***

Karri Saarinen, Airbnb

<https://airbnb.design/building-a-visual-language/>



“

“A design system’s value is realized when products ship features using parts from the system.”

Nathan Curtis, Eight Shapes

<https://medium.com/eightshapes-llc/a-design-system-isn-t-a-project-it-s-a-product-serving-products-74dcffef935>



“

“...part of the job of a design system is to take care of the boring stuff to free you up to tackle the more exciting and challenging bits, so some amount of convention is expected and encouraged. That genericness is what allows designers and developers to create quickly, not to overthink our interfaces and unnecessarily reinvent the wheel.”

Dan Mall, designer for the Unity Design System for Exxon Mobile
<http://danmall.me/articles/distinct-design-systems/>

What does it all mean?

A design system as a product in service of other products.



“

“The generally-accepted definition of a design system is that it’s the outer circle—it encompasses pattern libraries, style guides, and any other artefacts.

But there’s something more. Just because you have a collection of design patterns doesn’t mean you have a design system. A system is a framework. It’s a rulebook. It’s what tells you how those patterns work together.”

Jeremy Keith (Clearleft)
<https://adactio.com/journal/13844>

“I tend to define a design system as the official story of how your organization designs and builds digital products. There are a lot of ingredients involved in telling that story.

A kit of UI components without accompanying philosophy, principles, guidelines, processes, and documentation is like dumping a bunch of IKEA components on the floor and saying “Here, build a dresser!” The guidelines and documentation accompanying the UI components serve as the instruction manual that come with the IKEA components to help the user properly and successfully build furniture.”

Brad Frost, author of *Atomic Design*

<http://bradfrost.com/blog/link/design-systems/>

Diana Mounter on creating a design system at Github

- 1.**
**improve design and
documentation workflow**
- 2.**
reduce CSS bloat
- 3.**
improve consistency

<https://www.youtube.com/watch?v=FZSi1bK-BRM>



“

“Where can I find the icons?”

“What color is the button border?”

“Where can I find the icons?”

Jina Anne, Amazon (Former Apple & Salesforce)
<https://www.youtube.com/watch?v=7hYOLLO2gc4>

**A UI Component
library is part of a
design system.**

**It is not the
design system.**



Living Language

A shared vocabulary for design



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Current release: [Summer '18 \(SOS 2.6.2\)](#) | [Archives](#)



Polaris

Our design system helps us work together to build a great experience for all of Shopify's merchants.

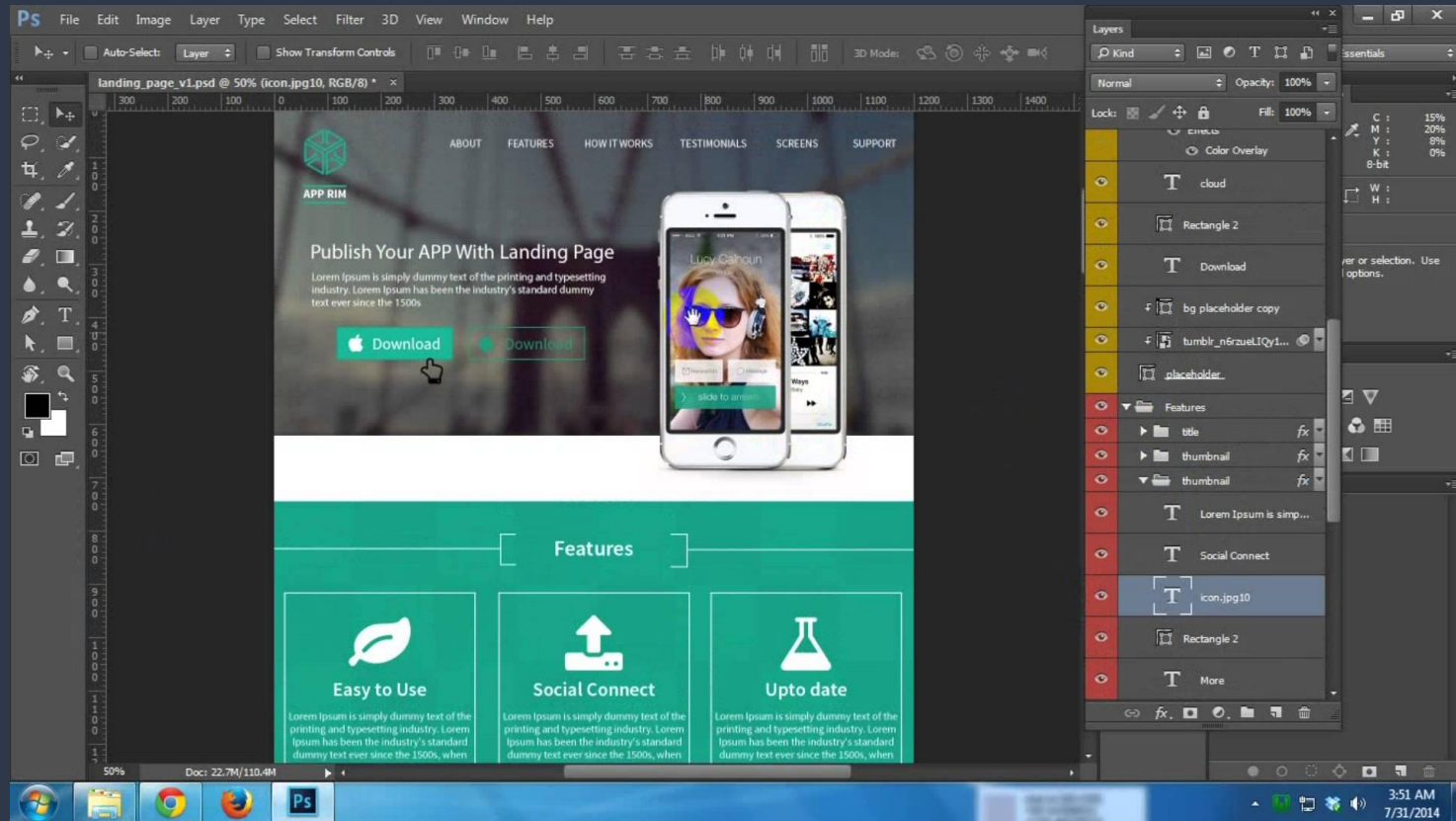


Image source https://www.youtube.com/watch?v=_ZG9WALskYc

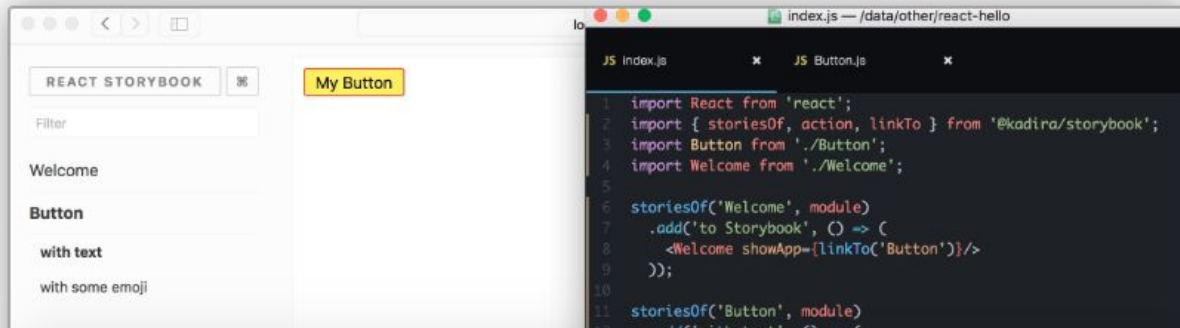


What do we get out of the box?

- Visualization?
- Code snippet?
- API?



The UI Development Environment
You'll ❤️ to use



<https://storybook.js.org/>



Cosmos

Dev tool for creating reusable React components

 Repositories 6

 People 5

 Projects 0

Type: All ▼

Language: All ▼

react-cosmos

Dev tool for creating reusable React components

[react](#) [javascript](#) [testing](#) [playground](#) [development](#)

 JavaScript ★ 4,097  178  MIT Updated 2 days ago



Top languages

 JavaScript  CoffeeScript

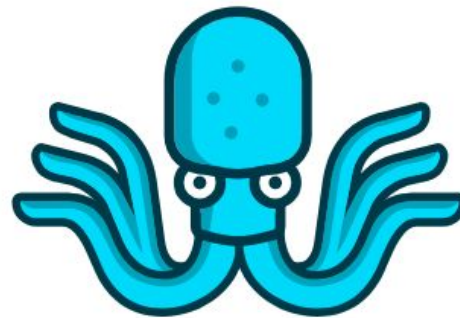
People



create-react-app-example

 JavaScript ★ 1  2 Updated on May 13

<https://react-cosmos.github.io/>



React Styleguidist

Isolated React component development environment with a living style guide

Get started

<https://react-styleguidist.js.org/>

In Comparison

	Storybook	Cosmos	Styleguidist
Visualization	Yes	Yes	Yes
Code snippet	Yes, but requires add'l config	No	Yes
API (props)	Yes, but requires add'l config	Sort of	Yes* * if you don't use styled-components or functional components

In closing...things to keep in mind



Keep iterating.

Don't worry if you don't get it right the first time.



Share.

Who will be using your components now and in the future?



Think beyond your team.

A component library is a piece of a larger design system, especially if you're working at a larger organization.



Don't go overboard.

You shouldn't put every component in the component library.



Does it make sense?

Make sure your documentation is usable.



Publish!

And make all the moneys. Get all the jobs.

More Resources

Design Systems

[Atomic Design: Create Design Systems, Not Pages](#)

[Design Systems](#) by Alla Kholmatova

[A Comprehensive Guide To Design Systems](#)

Component Libraries

[Other component libraries](#)

Other

[Atomize Design System](#)

Presentation repo

<https://github.com/melismae/that-conference-starter>

Presentation slides

Credits

Special thanks to all the people who made and released these awesome resources for free:

- Minicons by Webalys
- Presentation template by SlidesCarnival



THANK YOU, THAT CONFERENCE SPONSORS!





SEE YOU NEXT YEAR!

AUGUST 5 - 7, 2019



Thank you!

Any questions?

You can find me at:

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Twitter @melismism

msmith@newrelic.com