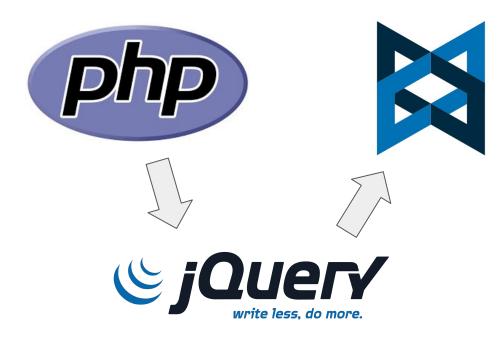
Component Driven Development with Storybook

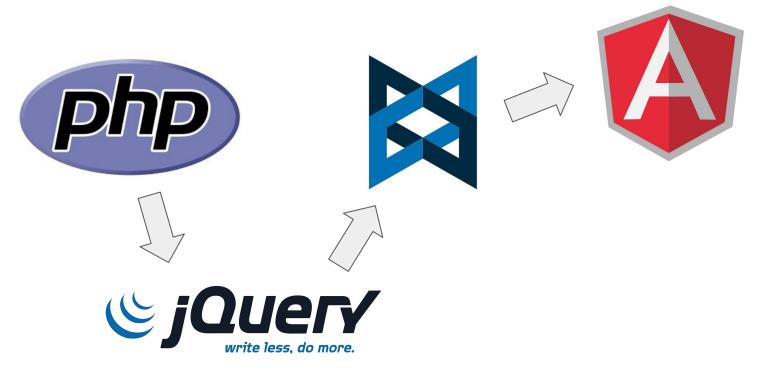
**Chris Foster** 

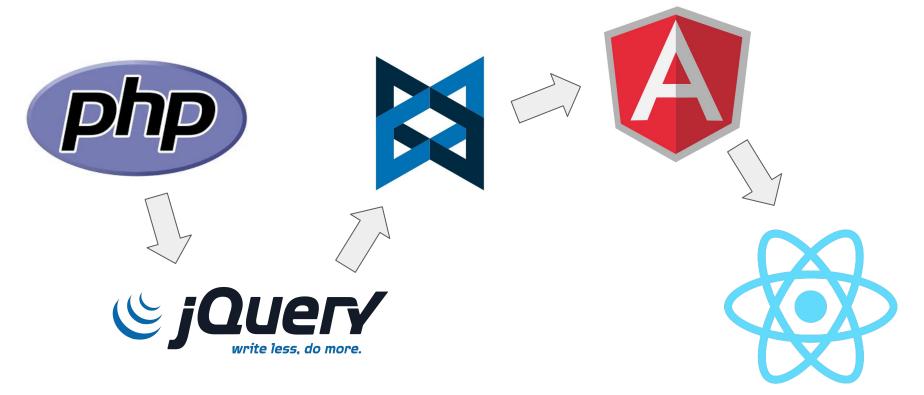






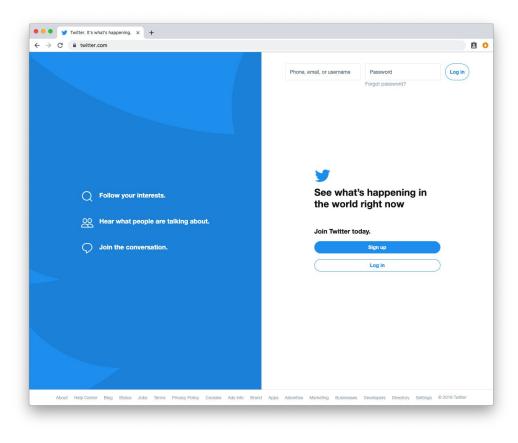






## CDD: The backstory 11/ write less, do more.

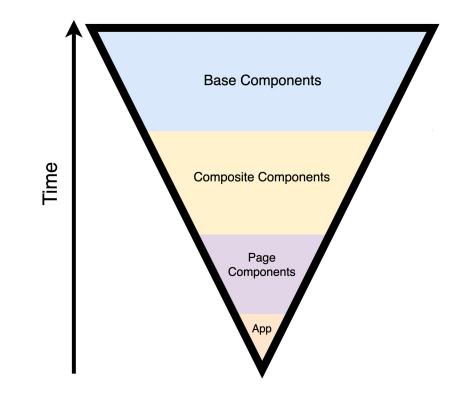
# What are components?



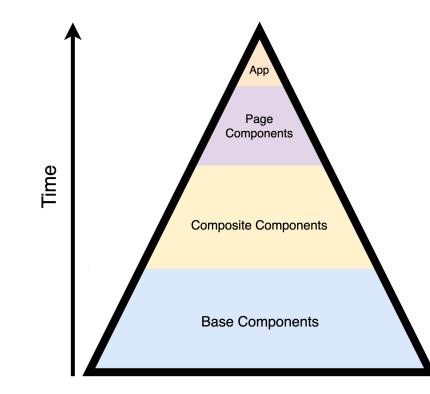
# What are components?

	Follow your interests.		Phone, 4	email, or username Password Correction Password?	g in
	Follow your interests.	1	ſ	<b>Y</b>	
C				See what's happening in the world right now Join Twitter today.	
		J		Log in	

### How do we normally build an app?



### **Component Driven Development**



## The CDD Workflow

- 1. Build each component
- 2. Create component library
- 3. Combine components

**Component Driven Development** 

throma

### Storybook is a rich tool for exploring and

building component libraries

It supports most popular

Javascript frameworks, and is

growing extensively in industry





мА	DE FOR
	React >
	React Native >
V	Vue >
A	Angular >
99	Ember >
E	HTML >
S	Svelte >
<b>@</b>	Mithril >
RIOT	Riot >

### ... **Taskbox** Build date picker \* 🗹 QA dropdown \* \* Write schema for account avatar component Review feature spec Export logo Fix bug in input error state Draft monthly blog post to customers Export projects to drive

#### ...

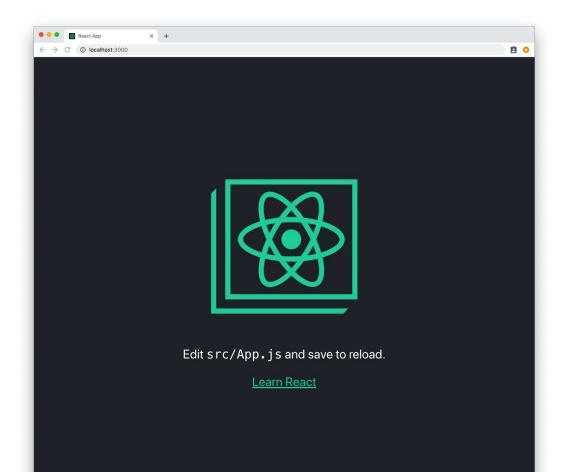
### Taskbox

Build date picker	*
QA dropdown	*
Write schema for account avatar component	*
Review feature spec	
Export logo	
Fix bug in input error state	
Draft monthly blog post to customers	
Export projects to drive	*

### Let's get started!

# Create our application: npx create-react-app demo cd demo

# Add Storybook: npx -p @storybook/cli sb init



### npm start

	~/workspace/storybook-talk/storybook-demo - npm test
PASS shc/A	pp.test.js
✓ renders v	without crashing (37ms)
Test Suites.	1 passed, 1 total
	1 passed, 1 total
and the second standard in the statement of the	
Snapshots:	
Time:	2.479s
Ran all test	suites.
Watch Usage:	Press w to show more.
nateri obager	

### npm test

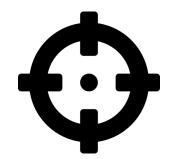
- → C ③ localhost	× + :9009/2path=/story/welcometo-storybook		Ĥ	0
S Storybook  S Storybook  Press 7/* to search  Welcome  to Storybook  B Utton	ୟ ର ସ୍ Welcome to storybook This is a UI component dev environment for your app. We've added some basic stories inside the src/stories directory. A story is a single state of one or more UI components. You can have as many stories as you want. (Basically a story is like a visual test case.) See these sample stories for a component called Button . Just like that, you can add your own components as stories.	×	Ċ	
	You can also edit those components and see changes right away. (Try editing the <u>Button</u> stories located at <u>src/stories/index.js</u> .) Usually we create stories with smaller UI components in the app. Have a look at the <u>Writing Stories</u> section in our documentation. NOTE: Have a look at the <u>.storybook/webpack.config.js</u> to add webpack loaders and plugins you are using in this project.			
	Actions			8

### npm run storybook

## Demo: Task Component & Story

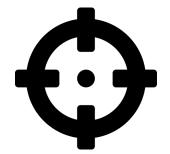
### **Benefits of Component Driven Development**

### **Benefit One: Focus Your Development**



### **Benefit One: Focus Your Development**

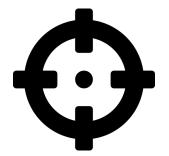
Manipulating your whole app is a waste of time



Certain states are difficult to achieve in development

### **Benefit One: Focus Your Development**

Manipulating your whole app is a waste of time



Certain states are difficult to achieve in development

CDD isolates the component you're really building

### Benefit Two: Increase UI Coverage



### Benefit Two: Increase UI Coverage

Traditional development can leave state "blind spots"



### Benefit Two: Increase UI Coverage

Traditional development can leave state "blind spots"

CDD encourages enumerating all component states

You can confidently put new components into production



### Benefit Three: Receive Targeted Feedback



### Benefit Three: Receive Targeted Feedback

Developers can deploy their Storybook easily and rapidly



### Benefit Three: Receive Targeted Feedback

Developers can deploy their Storybook easily and rapidly

Sharing a proposed UI change is as easy as a URL

Focus conversations on one single component at a time



### Benefit Four: Build a component library



### Benefit Four: Build a component library

CDD encourages high quality, robust components



Better components are more reusable components

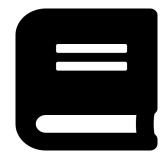
### Benefit Four: Build a component library

CDD encourages high quality, robust components



Supercharge code reuse within your organization

Use your stories to generate detailed documentation



### **Benefit Five: Parallelize development**



### Benefit Five: Parallelize development

Split work across components -- not pages



### Benefit Five: Parallelize development

Split work across components -- not pages

**Mocks.** Never be blocked by the backend team again!



## Benefit Five: Parallelize development

Split work across components -- not pages

**Mocks.** Never be blocked by the backend team again!

Provide clean, complete iterations to stakeholders earlier



## **Benefit Six: Test Visually**



## Benefit Six: Test Visually

Easily validate your entire user interface at a glance



## Benefit Six: Test Visually

Easily validate your entire user interface at a glance

Programmatically validate previously difficult UI code

Storybook integrates with powerful automated testing plugins

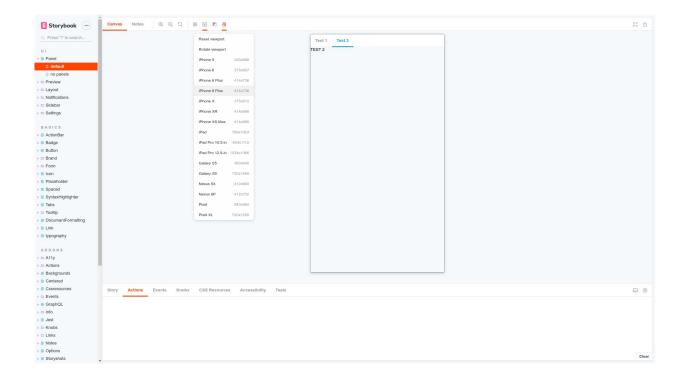


## Exploring the ecosystem

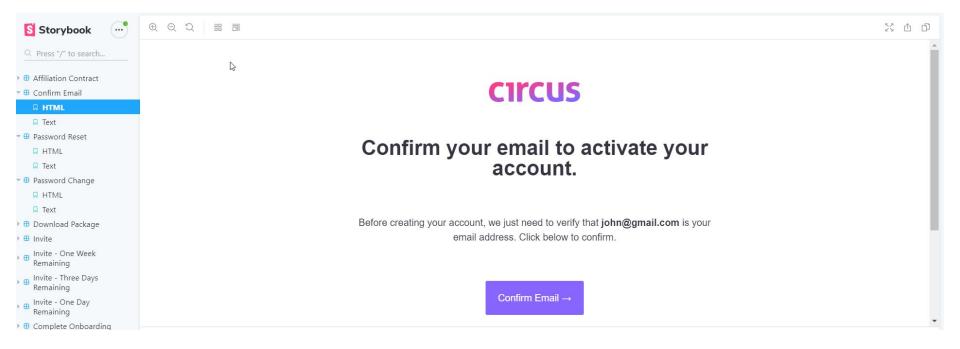
● ● ● P React Storybook ← → C ● https://kadira-sam	× \	Disabled=true&knob-Style=%7B"backgrou	ndColor"%3A"%23FFF"%2C"border 🏠
REACT STORYBOOK %	Hello Button	KNOBS DISABLED	0
Storybook Knobs with a button with some text		STYLE	<pre>{     "backgroundColor": "#FFF",     "border%: "lpx solid #DDD",     "borderRadius": 2,     "outline": 0,     "fontSize": 15,     "cursor": "pointer" }</pre>
as dynamic variables		LABEL	Helio Button

## Knobs

### **Responsive Design**



## Storybook your email templates!



REACT STORYBOOK %				
Header	$\sim$			
Footer	Item One			
Todoltem				
MainSection	1 item left All Active Completed Clear completed			
some completed				
all completed	ACTION LOGGER SPECIFICATIONS			
	SHOULD DISPLAY TWO TODOS			
	EXPECTED 1 TO EQUAL 2			
	SHOULD INDICATE THAT ONLY ONE ITEM IS LEFT			

## TDD Integration

## **Story Shots**

Button ✓ default view

x link button

- Snapshot

+ Current story

<br/>
<button
onClick={[Function anonymous]}
style={
 Object {
 "backgroundColor": "#FFFFFF",
 "border": "1px solid #eee",
 "borderRadius": 3,
 "cursor": "pointer",
 "fontSize": 15,
 "padding": "3px 10px"
 }
}>
Next Story
Go to Next Story
</button>

✓ some emojies as the text
✓ custom styles

#### Test summary

- > 4 stories tested.
- > 3/4 stories match with snapshots.
- > 1/4 differ from snapshots

### Easy visual regression checks



### **Built-in Auto-documentation with DocsPage**

## Summary

- Score with the second s
- Storybook is a feature-rich component explorer

Combined, they're a new, better way to build frontend apps!

# Thanks!

Source code: <a href="https://github.com/chrisfosterelli/cdd-with-storybook">https://github.com/chrisfosterelli/cdd-with-storybook</a>

Learn Storybook: <a href="https://www.learnstorybook.com/">https://www.learnstorybook.com/</a>

Do you use Storybook right now, or want to? Let's chat!

https://twostoryrobot.com

@chrisfosterelli

## Sources

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https://github.com/storybookjs/storybook/tree/master/addons/knobs