

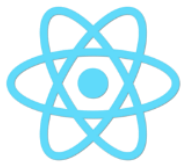
# Building Applications with React and Flux



Cory House

@housecor | [www.bitnative.com](http://www.bitnative.com)

# Here's the Plan



Module 1

Module 2

Module 3

Module 4

Module 5

Module 6

Module 7

Module 8

Module 9

Module 10



Intro and Core Technologies

Environment Setup

React Core Concepts

React Components

React Lifecycle

React Composition

React Router



React Forms

Flux

Flux Demos

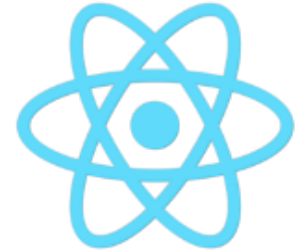
# Who is This Course For?

New to React

New to React Router

New to Flux

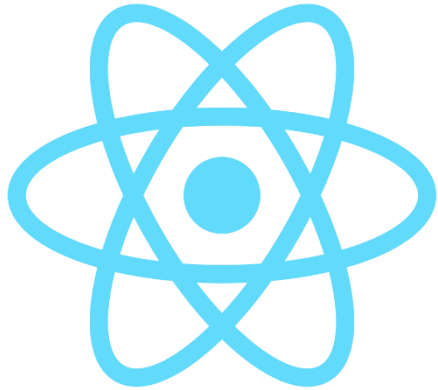
# A World of Components



**Kendo UI**  
THE ART OF WEB DEVELOPMENT



# Innovation



JSX

Virtual DOM

Isomorphic Rendering

Unidirectional Flows

---

They call it **React** for a reason.

---



**Ben Alman**

@cowboy



**Follow**

Facebook: Rethink established best practices™



RETWEETS

**21**

FAVORITES

**21**



4:40 PM - 29 May 2013

Try to keep an open mind.



HTML should be a *projection* of app state,  
not a source of truth.

JavaScript and HTML belong in the **same file**.

Unidirectional flow. No two-way binding.

Inline styles can be good.

~~All Variables Should be Global.~~

# Battle Proven



Let's Talk Tech

# Core Technologies



Server-side JavaScript



Node packages in the browser



Components



Routing



Unidirectional data flows



Task runner



# Node



Server-side JS

Uses the V8 Engine

Includes npm package manager

# npm: Node's Package Manager



.NET



Ruby



Java

**maven**

Python

**PIP**

PHP



The Web



Node



# CommonJS Pattern

//1. Get reference to dependency

```
var dependency = require('/path/to/file');
```

//2. Declare module

```
var MyModule = {  
  //code here...  
}
```

//3. Expose to others

```
module.exports = MyModule;
```

# Browserify



Use Node modules in the browser

Bundle dependencies

# React



Component Library

Simple composition

Utilizes virtual DOM

Can render on client and server

# React Router



Nested views map to nested routes

Declarative

Used at Facebook

Inspired by Ember

# Flux



Uni-directional data flows

More a pattern than a library

# Gulp



Task runner

Rich plugin ecosystem

Stream-based



# What about testing?



[DOCS](#) [SUPPORT](#) [GITHUB](#)

## Jest

PAINLESS JAVASCRIPT UNIT TESTING

### FAMILIAR APPROACH

Built on top of the Jasmine test framework, using familiar `expect(value).toBe(other)` assertions

### MOCK BY DEFAULT

Automatically *mocks* CommonJS modules returned by `require()`, making most existing code testable

### SHORT FEEDBACK LOOP

DOM APIs are mocked and tests run in parallel via a small node.js command line utility

---

**Why not just use vanilla Jasmine?**

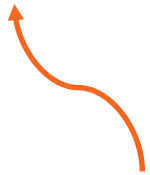
# What about ES2015?

## ES5

Approved in 2009

The JS you already know

Excellent browser support



We're using ES5 in this course.

## ES2015 (ES6)

Approved June 2015

Browser support is growing

Can transpile to ES5 via Babel

# What about ES2015?

[Learn ES2015](#)[Setup](#)[Usage ▾](#)[Advanced ▾](#)[Try it out](#)[FAQ](#)[Community](#)[Blog](#)[Twitter](#)[GitHub](#)

## Babel is a JavaScript compiler.

Use next generation JavaScript, today.

Grab yourself a copy of *Exploring ES6* today!



Star

8,461

# Versions

React 0.13.3

React-Router 0.13.3

Flux 2.0.3

# Wrap Up

<b>Node &amp; npm</b>	Packages
<b>React</b>	Components
<b>React Router</b>	Routing
<b>Flux</b>	Data flows
<b>Browserify</b>	Bundler
<b>Gulp</b>	Builds