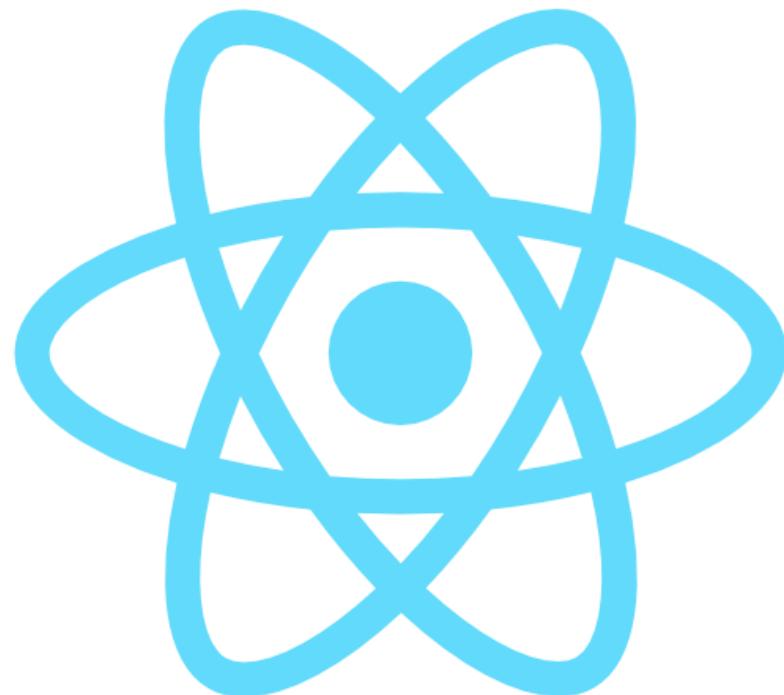


REACT FOR NON-BELIEVERS



Rodrigo Silveira - Front-end Engineer

A JavaScript library for building user interfaces

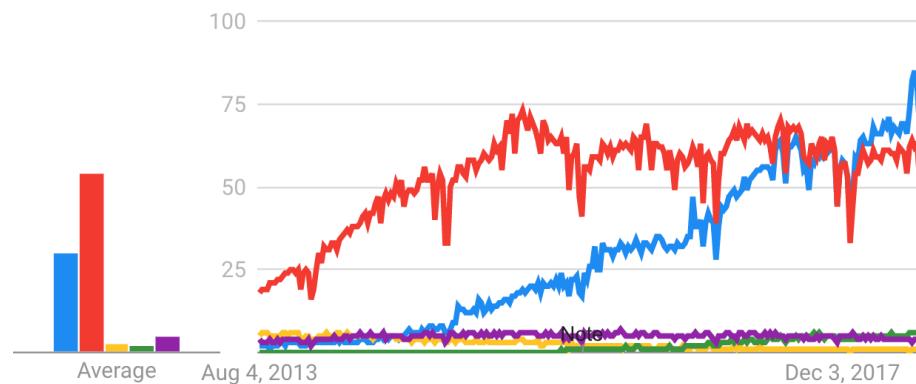
- *reactjs.org*

STILL HOT

Interest over time

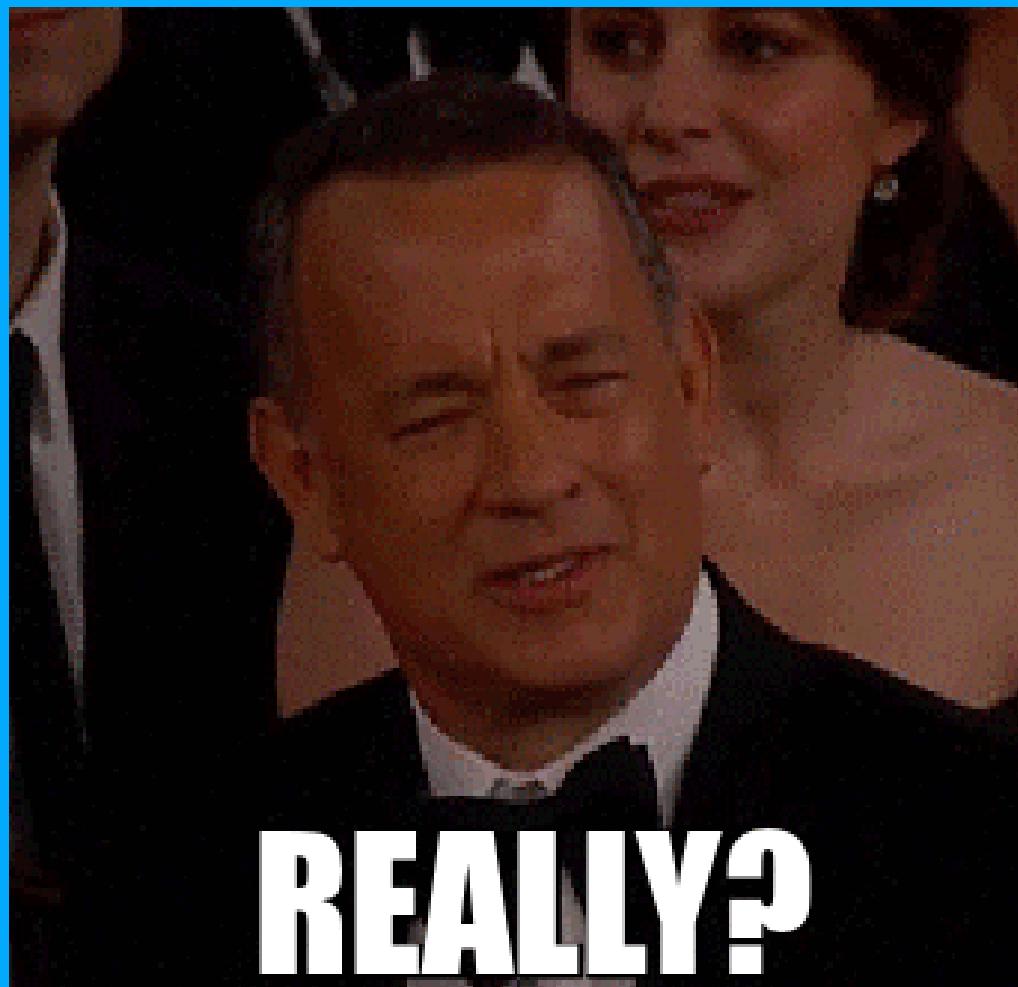
Google Trends

● React ● AngularJS ● Backbone.js ● Vue.js ● Ember.js



United States. Past 5 years. Web Search.

Source: [Google Trends](#)



REALLY?



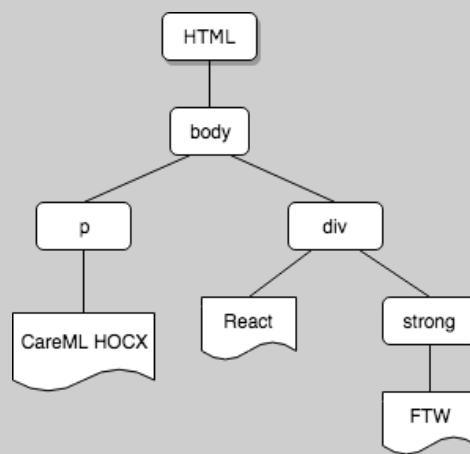
WHOA!
HEY, COOL, MAN!





8000 B.C

```
<html>
  <body>
    <p>CareML HOCX</p>
    <div>
      React <strong>FTW</strong>
    </div>
  </body>
</html>
```



```
var message = document.getElementById("message");

function modifyText() {
    message.style.color = 'purple';
    message.firstChild.nodeValue = 'Hello from 2000';
}

message.addEventListener("click", modifyText, false);

window.onload = function() {
    setThingsUp();
}
```



2006

```
var hiddenBox = $("#banner-message");
$("#button-container button").on("click", function(event) {
    hiddenBox.show();
}) ;
```

```
$.ajax( {
    url: "/api/getWeather",
    data: {
        zipcode: 97201
    },
    success: function( result ) {
        $("#weather-temp").html( "<strong>" + result + "</strong> degrees");
    }
}) ;
```

Preview the all-new Yahoo! home page

edit ►

Finance Music Answers YAHOO! Mail My Yahoo! Messenger

Search for: on the Web Advanced My Web Answers

Take a survey for Yahoo! from Questionmarket.com - Chance to win \$500

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In the News 2:15pm, Mon Jul 24

- Rice visit aims to bolster Lebanon gov't
- 11,700 Americans evacuated from Lebanon
- Maliki, Bush to mull adding troops in Iraq
- Gadhafi: Libya came close to building bomb
- Crews battle California fires, sizzling heat
- Gas prices move past \$3 to all-time high
- San Diego cross becomes legal test case
- Indie music site offers obscure releases online

Markets: Stock Quotes:
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Enter City or U.S. Zip Code Go

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Hotels: Save \$200 on Flight + Hotel
Enter to win 2 free plane tickets - Try Trip Planner
*Info on taxes and fees

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Fantasy Football HotJobs

Entertainment » More Entertainment

Validation demo

https://spreadsheets.google.com/ccc?key=tjnX813s-PGcNV-7iXGdggQ&hl=en#gid=0

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File Edit View Insert Format Form Tools Help

A B

	Date	Client	Project
1			
2	9/22/2010	Kid's Room	
3	9/22/2010	Walls	
4	9/23/2010	Seating	
5	9/24/2010	Storage	
6	9/24/2010	Interior	
7	9/24/2010		
8	9/24/2010		
9	9/24/2010		
10			
11			
12			
13			
14			
15			
16			
17			

Sort sheet by column B, A → Z
Sort sheet by column B, Z → A
Sort range by column B, A → Z
Sort range by column B, Z → A
Sort...
Freeze rows
Freeze columns
Check spelling (B3:B7)...
Protect sheet...
Scripts
Notification rules...
Data validation...
Solve...
Enable Autocomplete

Projects Client List

M V C
Model
View
Controller

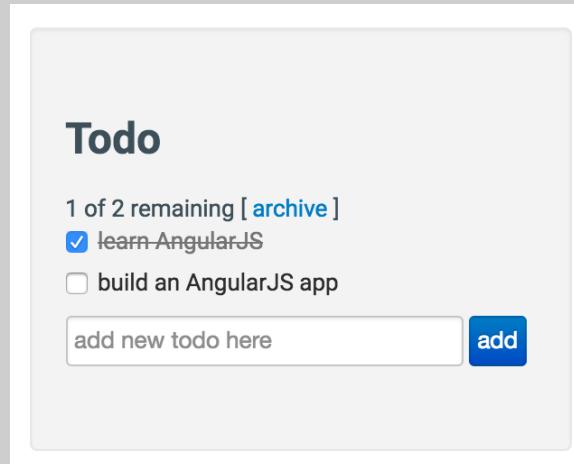
2010



Knockout.



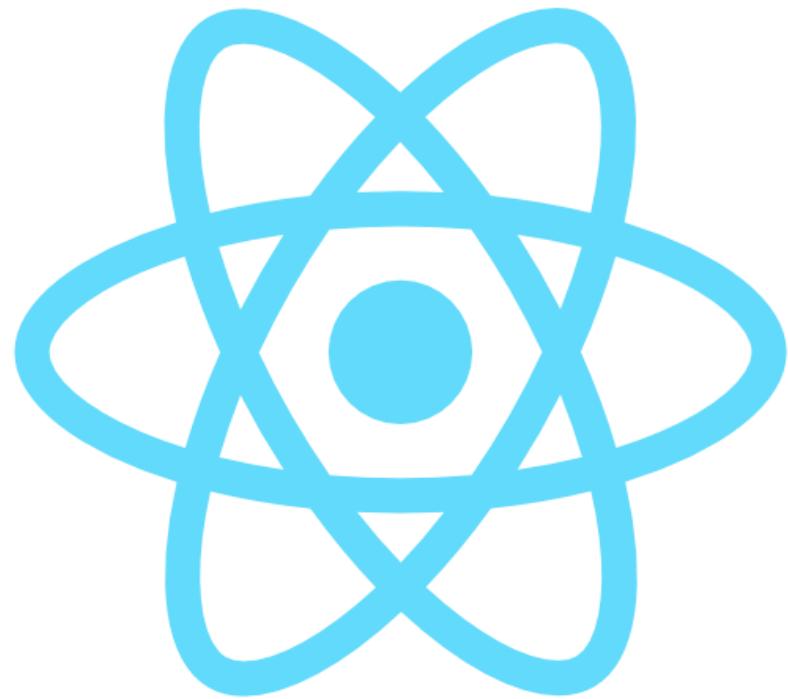
```
<div ng-controller="TodoListController as
todoList">
<span>{{todoList.remaining()}} of
{{todoList.todos.length}} remaining</span>
[ <a href="" ng-
click="todoList.archive()">archive</a> ]
<ul class="unstyled">
<li ng-repeat="todo in todoList.todos">
<label class="checkbox">
<input type="checkbox" ng-
model="todo.done">
<span class="done-{{todo.done}}">
{{todo.text}}</span>
</label>
</li>
</ul>
<form ng-submit="todoList.addTodo()">
<input type="text" ng-
model="todoList.todoText" size="30"
placeholder="add new todo here">
<input class="btn-primary" type="submit"
value="add">
</form>
</div>
```



```
angular.module('todoApp', [])
.controller('TodoListController', function() {
  var todoList = this;
  todoList.todos = [
    {text:'learn AngularJS', done:true},
    {text:'build an AngularJS app', done:false}];

  todoList.addTodo = function() {
    todoList.todos.push({text:todoList.todoText, done:false});
    todoList.todoText = '';
  };

  todoList.remaining = function() {
    var count = 0;
    angular.forEach(todoList.todos, function(todo) {
      count += todo.done ? 0 : 1;
    });
    return count;
  };
}) ;
```



2013

The V in MVC

Composable components

JS instead of templates

$f(\mathbf{x}) \rightarrow y$

f(state) → UI

Demo

```
class CoverImg extends React.Component {
  constructor() {
    super()
    this.state = { cover: true }
  }

  onClick() {
    this.setState({cover: !this.state.cover})
  }

  render() {
    let imgStyle =
      this.state.cover ? {filter: "blur(50px)"} : {};

    return (
      <div>
        <img style={imgStyle} src={'assets/violating.gif'} />

        <button onClick={() => this.onClick()}>
          {this.state.cover ? 'Reveal' : 'Cover'}
        </button>
      </div>
    )
  }
}
```

Reveal

Declarative



HATE



Ben Alman

@cowboy



Facebook: Rethink established best practices™

2:40 PM - May 29, 2013



61



33 people are talking about this



**Rerender entire
application when data
changes**



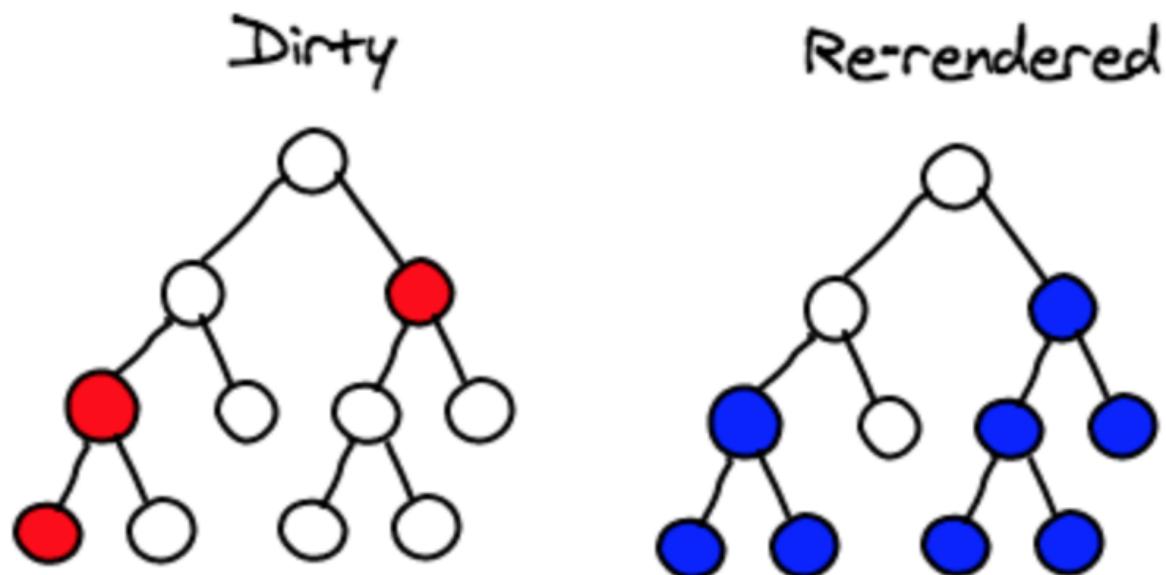
JSX

```
function render() {
  return (
    <div>
      <MyButton onClick={
        () =>
        console.log('yolo')
      }>
        Reveal
      </MyButton>
    </div>
  );
}
```

```
function render() {
  return
  React.createElement(
    'div',
    null,
    React.createElement(
      MyButton,
      { onClick:
        () =>
        console.log('yolo')
      },
      'Reveal'
    )
  );
}
```

Virtual DOM

Reconciliation



Beyond Web

**React Native
AR/VR
Server-side
Canvas
Netflix TV**

Separation of concerns



Separation of Concerns



Thanks Cristiano Rastelli
(@areaweb)

@bruce1

Separation of Concerns

(only, from a different point of view)



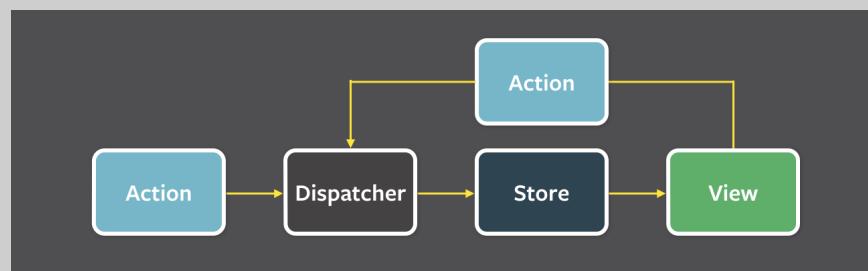
BrucE lawson

How about the M&C

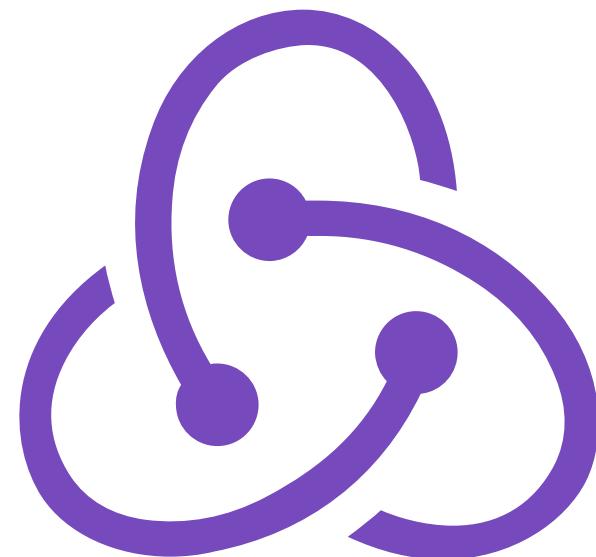
Flux



Unidirectional data flow



Redux



```
class Counter extends React.Component {
  increment() {
    this.props.dispatch({ type: 'INCREMENT' });
  }

  decrement() {
    this.props.dispatch({ type: 'DECREMENT' });
  }

  render() {
    return (
      <div>
        <h2>Counter</h2>
        <div>
          <button onClick={this.decrement.bind(this)}>-</button>
          { ' ' }
          <span>{this.props.count}</span>
          { ' ' }
          <button onClick={this.increment.bind(this)}>+</button>
        </div>
      </div>
    );
  }
}

function mapStateToProps(state) {
  return {
    count: state.count
  };
}
```

Counter



We're hiring



Thank You!