Intro to React
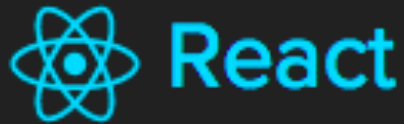
David Aragon

React in a Nutshell

- Released by Facebook in 2013
- Open Source
- "A JavaScript library for building user interfaces."

React in a Nutshell

- Helps you subdivide your UI into small components.

```
render: function() {
  return (
    <div>
      <h3>TODO</h3>
      <TodoList items={this.state.items} />
      <form onSubmit={this.handleSubmit}>
        <input onChange={this.onChange} value={this.state.text} />
        <button>{'Add #' + (this.state.items.length + 1)}</button>
      </form>
    </div>
  );
}
```

TODO

- Call dentist
- Get groceries

[   ] Add #3

React in a Nutshell

- Maintains a virtual DOM
  - optimizes DOM changes

React in a Nutshell

- Mix and match custom components with HTML

```
<div>
  <h3>TODO</h3>
  <TodoList items={this.state.items} />
  <form onSubmit={this.handleSubmit}>
    <input onChange={this.onChange} value={this.state.text} />
    <button>{'Add #' + (this.state.items.length + 1)}</button>
  </form>
</div>
```

React in a Nutshell

- One-way state binding

```
this.setState({
    items: ["orange", "apple", "kiwi"]
});
```

```
<div>
  <h3>TODO</h3>
  <TodoList items={this.state.items} />
  <form onSubmit={this.handleSubmit}>
    <input onChange={this.onChange} value={this.state.text} />
    <button>{'Add #' + (this.state.items.length + 1)}</button>
  </form>
</div>
```

JSX

- JSX lets you create JavaScript objects using HTML syntax

Pure JavaScript:

```
React.createElement('a', {href: 'http://facebook.github.io/react/'},
'Hello!')
```

JSX:

```
<a href="http://facebook.github.io/react/">Hello!</a>
```

JSX

- JSX lets you create JavaScript objects using HTML syntax

```
<div>
  <h3 className="large">TODO</h3>
  <TodoList items={this.state.items} />
  <form onSubmit={this.handleSubmit}>
    <input onChange={this.onChange} value={this.state.text} />
    <button>{'Add #' + (this.state.items.length + 1)}</button>
  </form>
</div>
```

Demo

😬

Notes on dev environment

- NPM
- Grunt
- Browserify