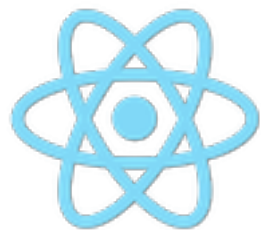


React JS

Core concepts

Recap

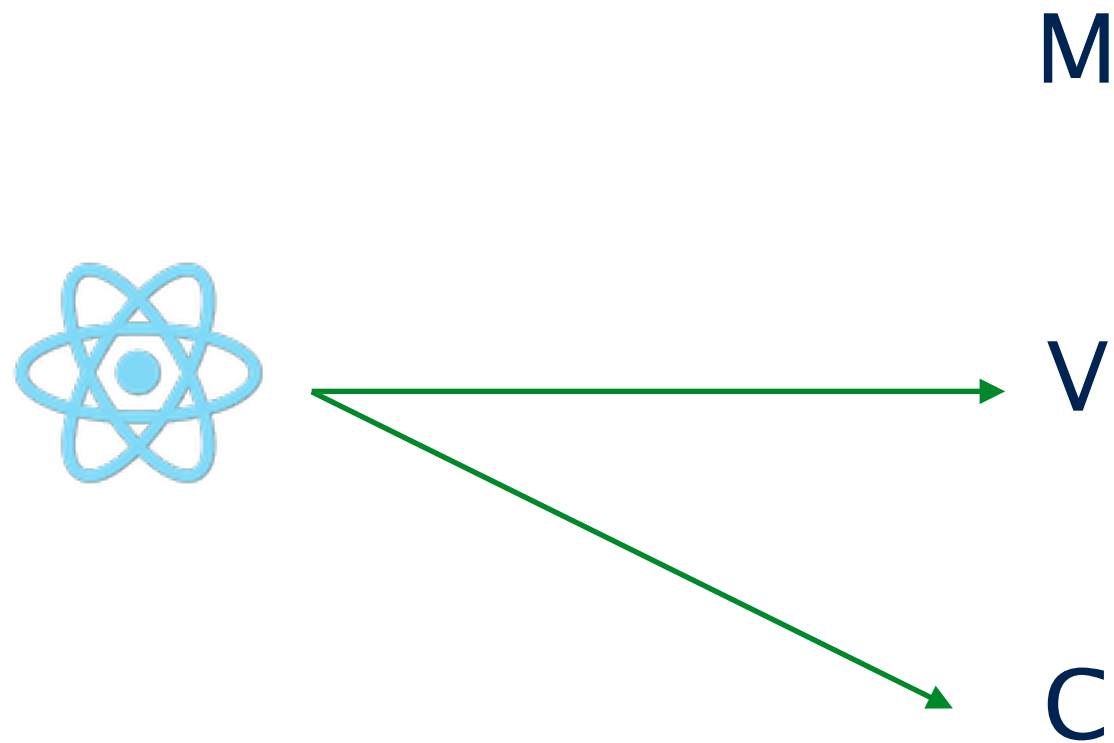


- React is a library – not a framework!
- Uni-directional data flow – Flux
- Virtual DOM
- ES6 style of coding
- Webpack – a module bundler
- Babel – ES6 to ES5 transpiler
- ESLint – JS linting
- npm Script

Topics

- React and MVC
- JSX
- Virtual DOM
- Demo

React and MVC



JSX

- 'HTML' in JS
- Differences: 'className', 'htmlFor'
- Compiles to Javascript
- Optional

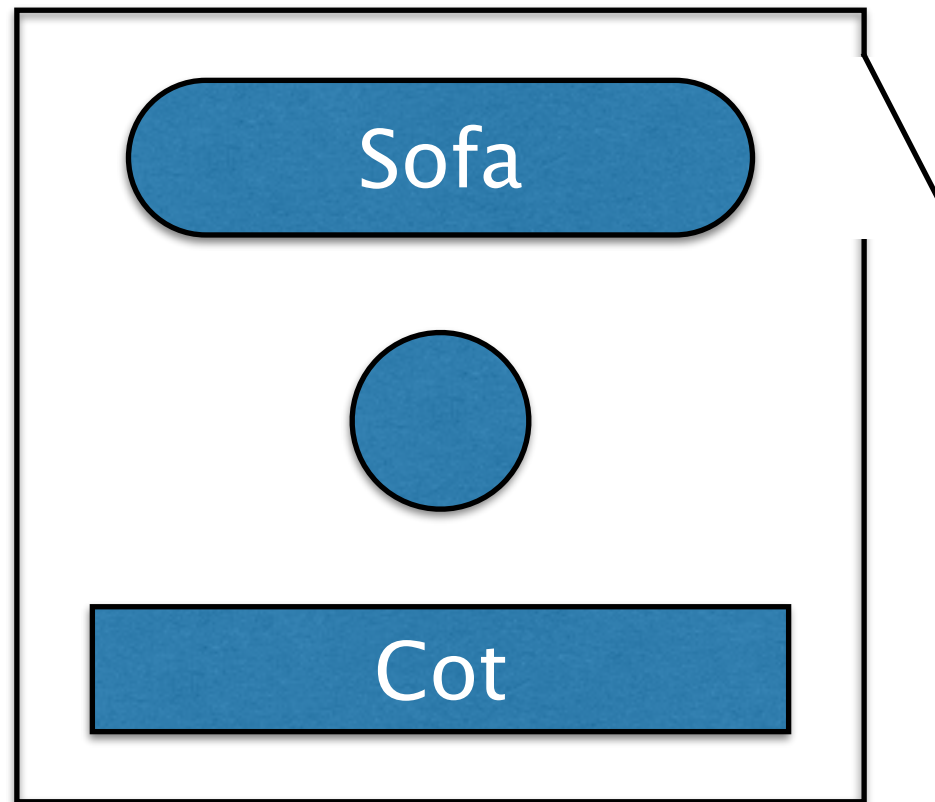
JSX

```
<h1 color='red'> My Heading</h1>
```

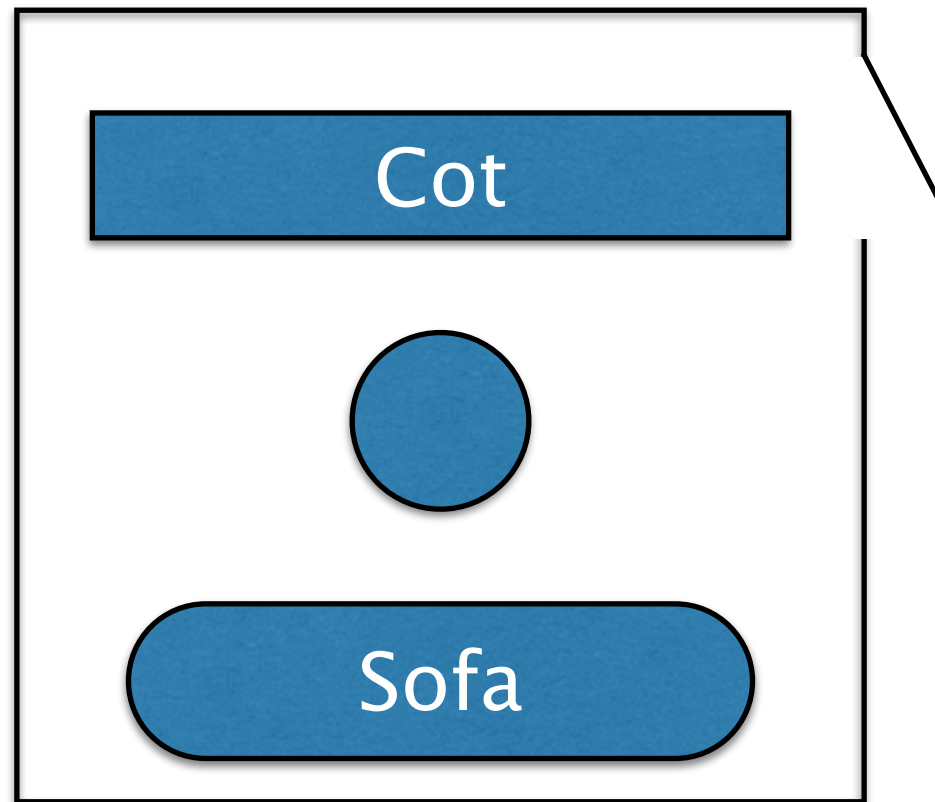


```
React.createElement('h1', {color:'red'}, 'My Heading')
```

Virtual DOM



Virtual DOM



Virtual DOM

Updating actual DOM is expensive

$$\lim_{n \rightarrow \infty} 2^n \underbrace{\sqrt{2 - \sqrt{2 + \sqrt{2 + \dots + \sqrt{2}}}}}_{n \text{ terms of square roots}}$$

$$\lim_{n \rightarrow \infty} 2^n \sqrt[n]{2 - \sqrt{2 + \sqrt{2 + \cdots + \sqrt{2}}}}$$

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Summary

- React is the V and C of MVC
- JSX: 'HTML' in JS
- Virtual DOM: The cheapest way of rendering