

Introduction to React

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What is React?

What is React?

- A JavaScript library for building user interfaces
- Declarative through the use of reusable components
- Written by Facebook
- Unidirectional flows
- Virtual DOM
- Sometimes called the View layer in MVC

...and what it isn't

- A framework
- The best tool for building client side applications

Virtual DOM

Virtual DOM

"DOM"

```
<h1 class="heading">Introduction to React</h1>
```

=>

"Virtual DOM"

```
const virtualDom = {  
  type: 'h1',  
  props: {  
    className: 'heading',  
    children: 'Introduction to React'  
  }  
}
```

Virtual DOM

"DOM"

```
<h1 class="heading">Bath</h1>
```

=>

"Virtual DOM"

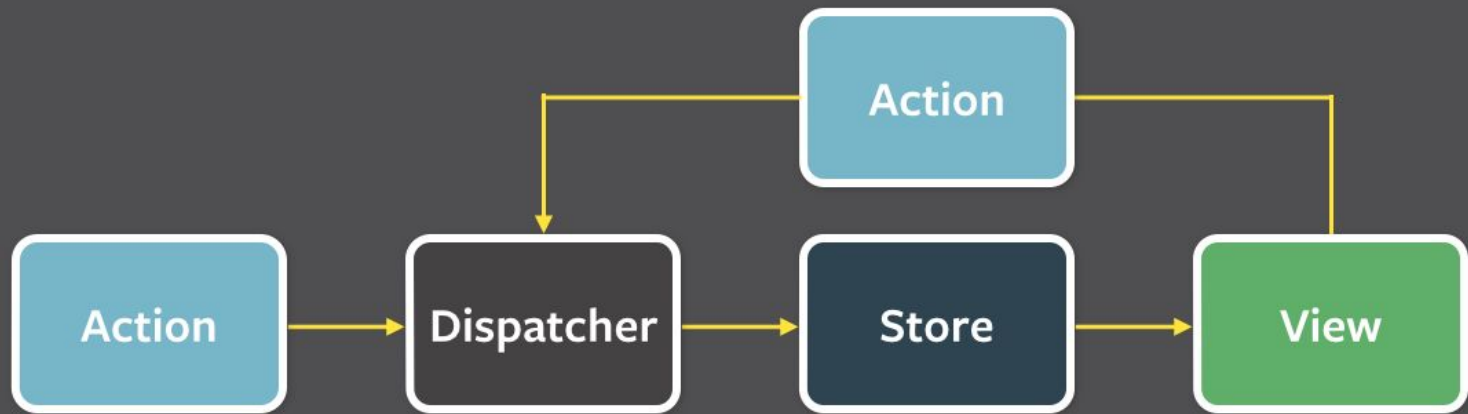
```
const virtualDom = {  
  type: 'h1',  
  props: {  
    className: 'heading',  
    children: 'Bath'  
  }  
}
```

Demo: Components, JSX, Props & State

Demo: Styling Components

Once upon a time Facebook had a bug

Flux



Pros & Cons

Pros

- Components
- One way data flow
- Fast rendering
- Just JavaScript/JSX
- Active development

Cons

- Boiler plate
- So many choices
 - Application state: Flux (FB), Redux, Mobx
 - API: fetch, isomorphic-fetch, axios
 - Language: ES5, ES6 or TypeScript
 - Build tooling: Webpack, Rollup, Browserify
- Just JavaScript/JSX

What else?

React Native!

The END

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Bonus: The Lost Artefacts

Did you know about

- Functional setState
- PureComponent