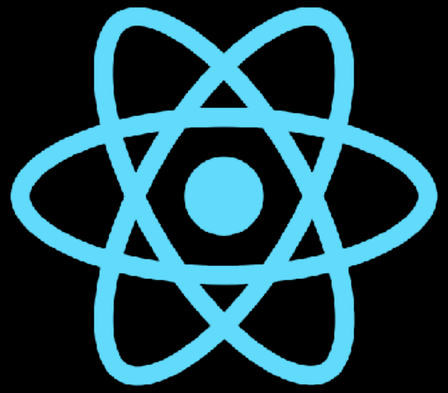


리액트, 미리 알았으면 좋았을걸

김민준
Laftel 프론트엔드 개발자
public.velopert@gmail.com

강의자료: http://bit.ly/react0422

프론트엔드 라이브러리는 왜 사용하는걸까?

리액트는 어쩌다가 만들었을까?

이 라이브러리의 철학은 무엇일까?

리액트 개발을 시작하려면 어떻게 해야할까?

사용시에 주의사항은 어떤게 있을까?

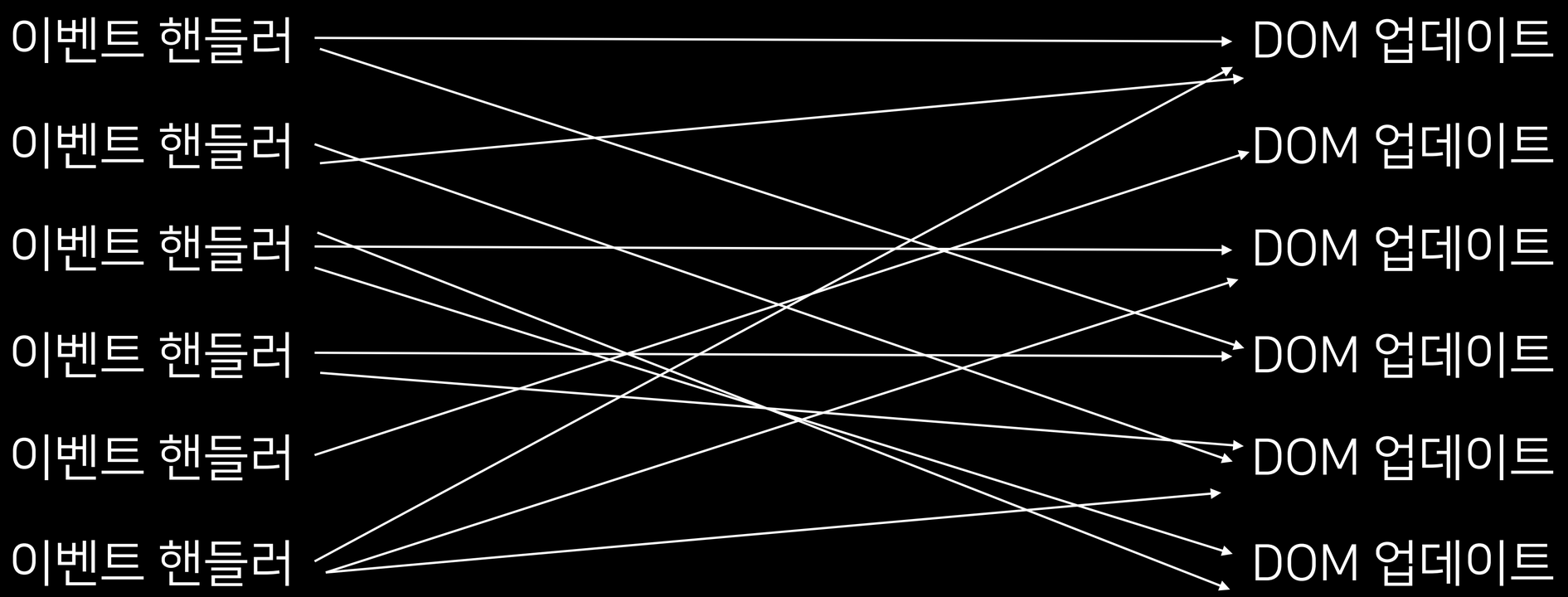
앞으로 어떻게 공부해야할까?

프론트엔드 라이브러리

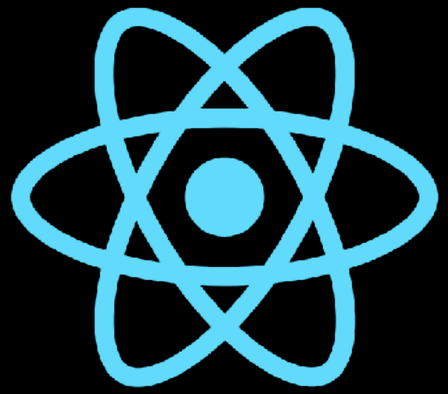
```
<div>
    <h1>Counter</h1>
    <h2 id="number">0</h2>
    <button id="increase">+</button>
</div>
```

```
var number = 0;
var elNumber = document.getElementById('number');
var btnIncrease = document.getElementById('increase');

btnIncrease.onclick = function() {
  number++;
  elNumber.innerText = number;
}
```

jQuery / plain JavaScript 스타일



Angular, Ember, Backbone,
Vue, React …



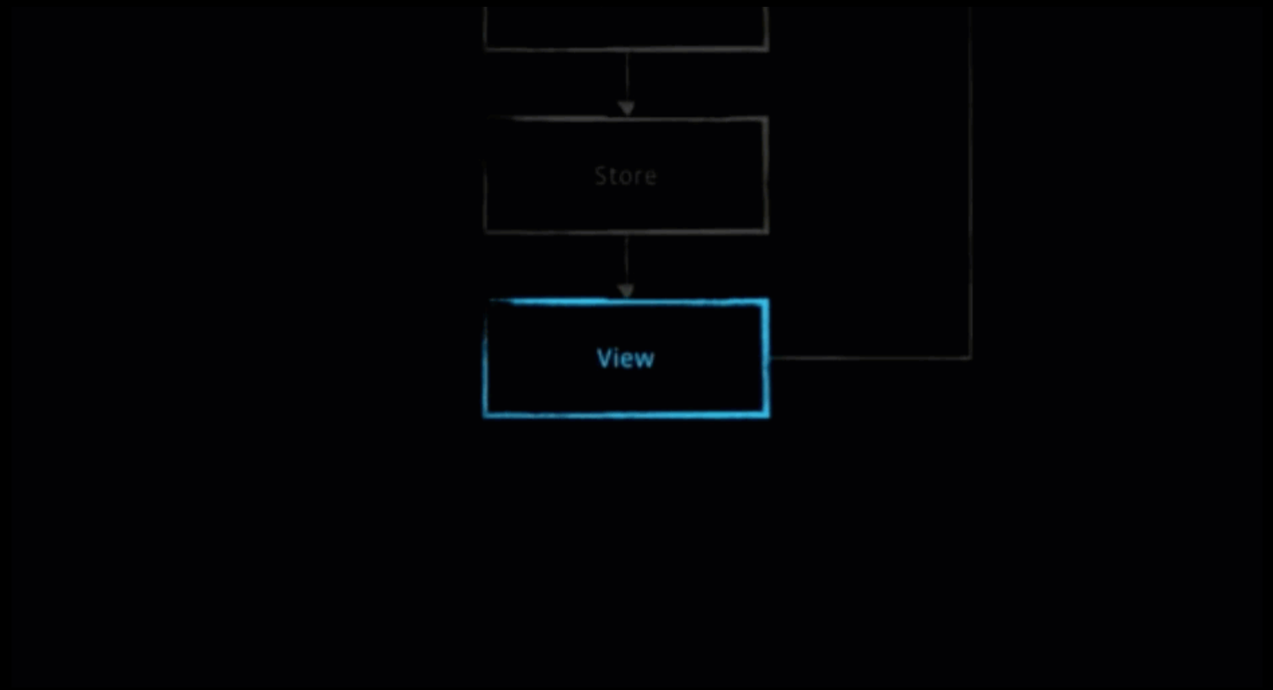
We built React to solve one problem: building large applications with data that changes over time.

번역: 우리는 지속해서 데이터가 변화하는
대규모 애플리케이션을 구축하기 위해 리액트를 만들었습니다.

MVC, MVVM, MVW 등을 사용하던
기존 웹 프레임워크 / 라이브러리

공통점: Model

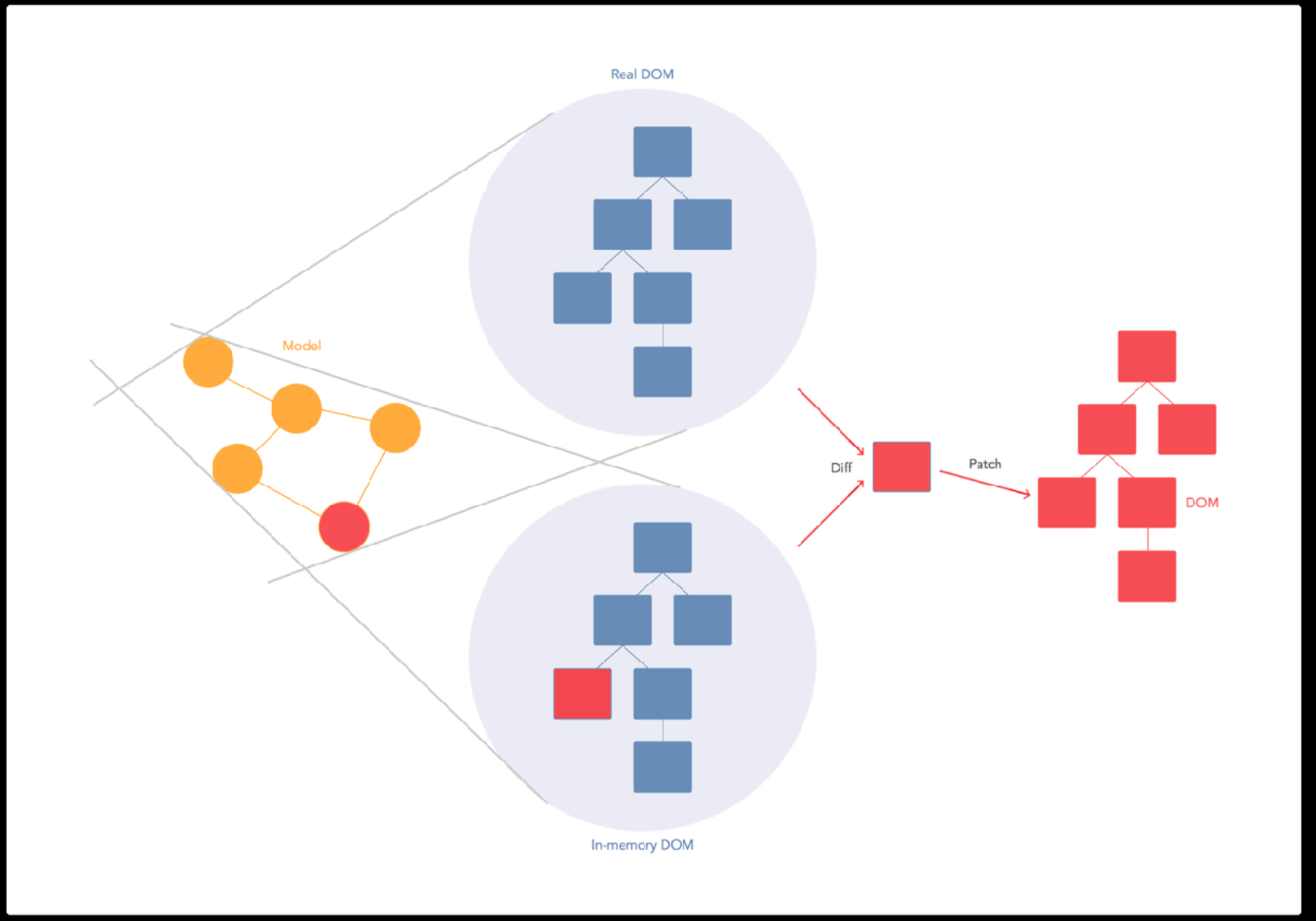
변화 (Mutation)



그냥 Mutation 을 하지 말자. 그 대신에, 데이터가 바뀌면
그냥 뷰를 날려버리고 새로 만들어버리면 어떨까?

https://www.youtube.com/watch?v=XxVg_s8xAms

Virtual DOM



https://auth0.com/blog/face-off-virtual-dom-vs-incremental-dom-vs-glimmer/

React and Virtual DOM

리액트에서만 Virtual DOM 쓰나?

Vue, Marko, Maquette, Mithril…

리액트를 특별하게 만드는 점은?

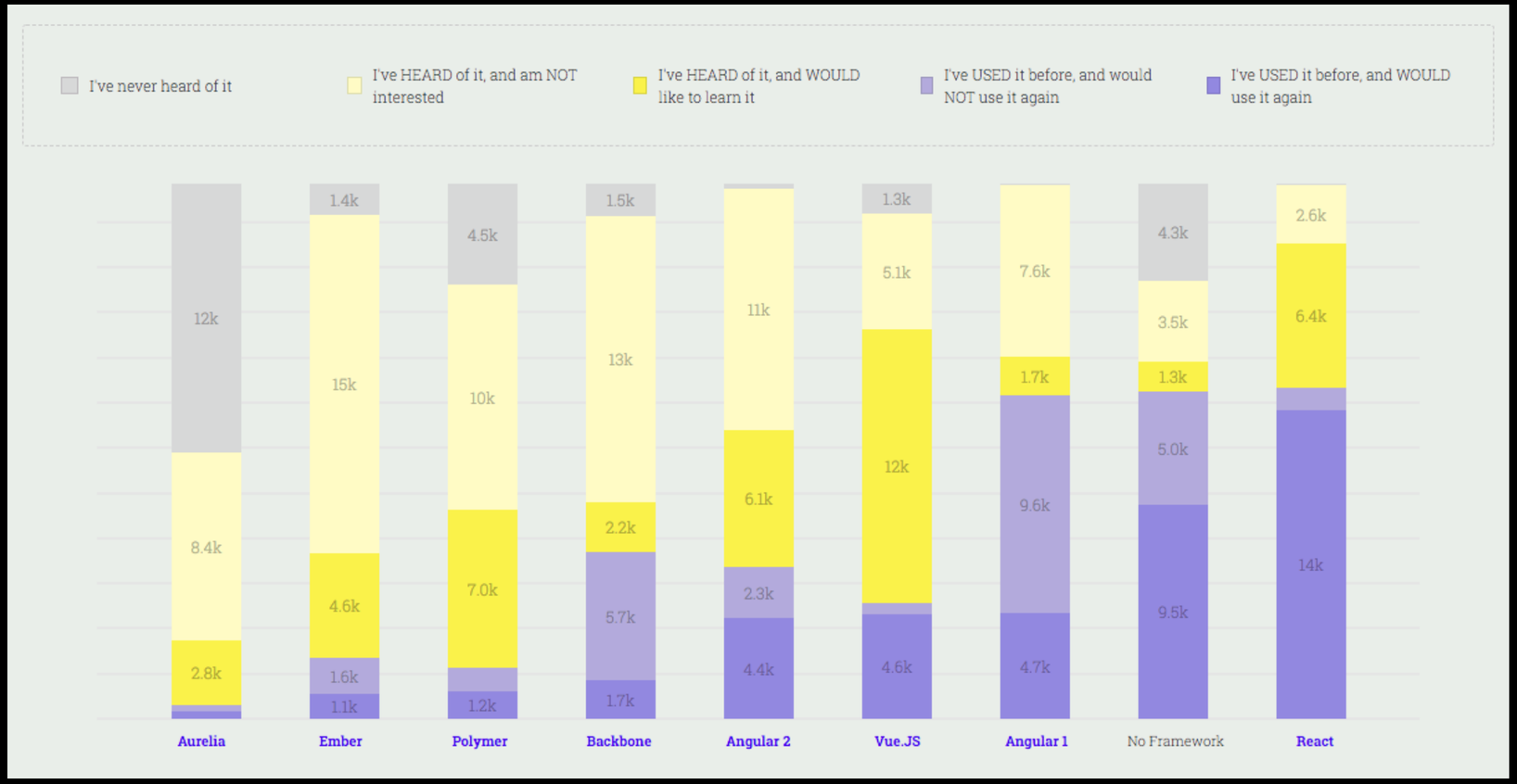
어마어마한 생태계

사용하는곳이 많다

Airbnb, Netflix, BBC, Cloudflare, Codecademy, Coursera, Dailymotion, eBay, Twitch, Walmart, Yahoo

FACEBOOK

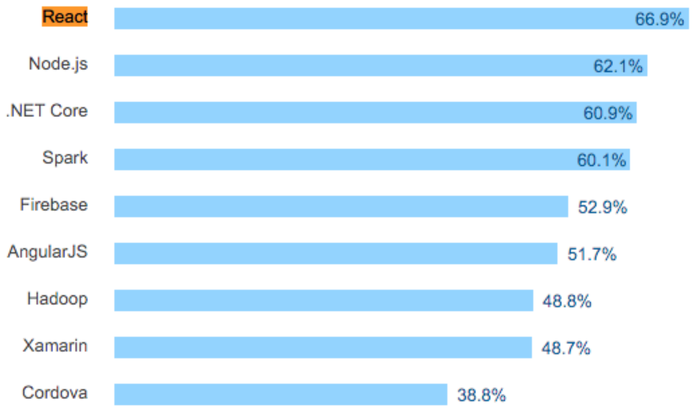
한번 사용하면 좋아하게 된다!



https://stateofjs.com/2017/front-end/results/

Most Loved, Dreaded, and Wanted Frameworks, Libraries and Other Technologies

Loved | Dreaded | Wanted



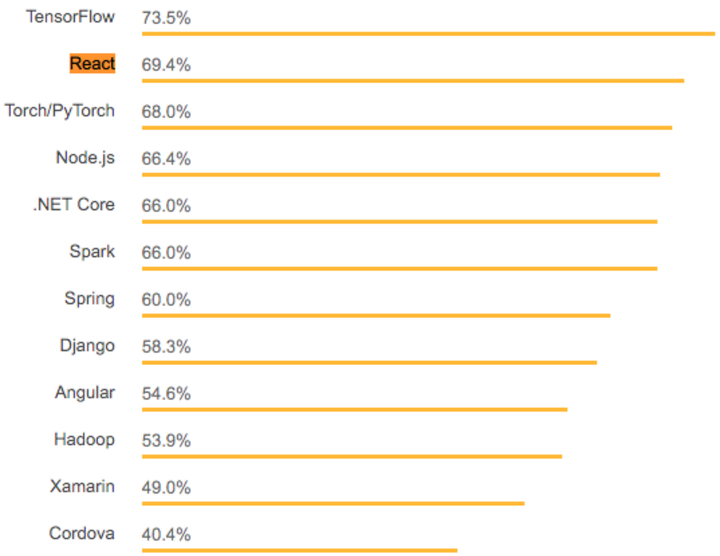
% of developers who are developing with the language or technology and have expressed interest in continuing to develop with it

React is the most loved among developers, whereas Cordova is the most dreaded. However, Node.js is the most wanted.

https://insights.stackoverflow.com/survey/2017#overview

Most Loved, Dreaded, and Wanted Frameworks, Libraries, and Tools

Loved | Dreaded | Wanted



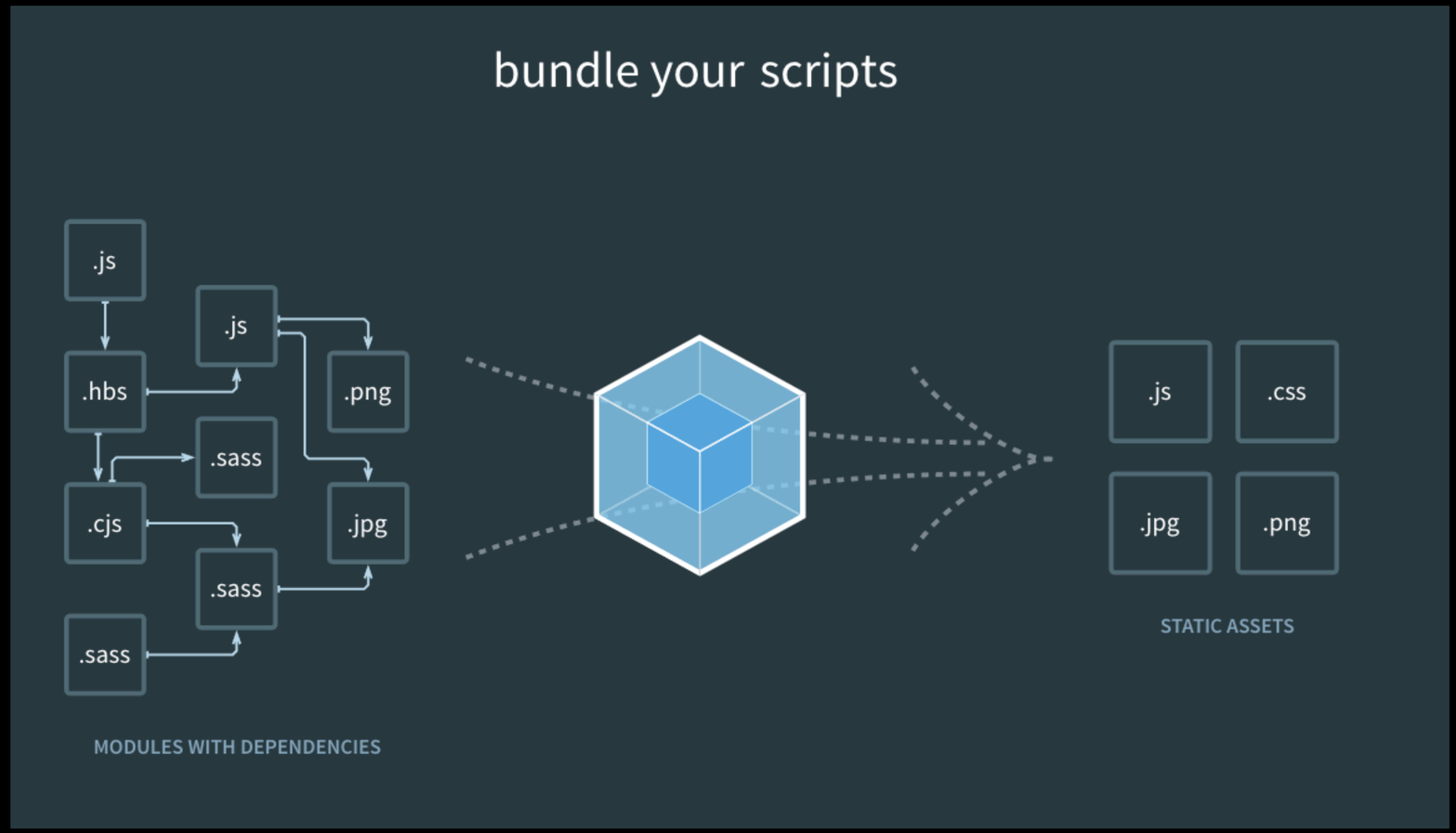
% of developers who are developing with the language or technology and have expressed interest in continuing to develop with it

TensorFlow, one of the fastest growing technologies on Stack Overflow, is most loved by developers, while Cordova is most dreaded. React is the framework developers say they most want to work with if they do not already.

https://insights.stackoverflow.com/survey/2018/

http://bit.ly/beginreact

Webpack 과 Babel


bundle your scripts
.js
.js
.hbs
.png
.sass
.cjs
.jpg
.sass
.sass
MODULES WITH DEPENDENCIES
.js
.css
.jpg
.png
STATIC ASSETS

Webpack


Babel is a JavaScript compiler.
Use next generation JavaScript, today.
Put in next-gen JavaScript
Get browser-compatible JavaScript out
var obj = {
shorthand,
method() {
return "😄";
}
};
var obj = {
shorthand: shorthand,
method: function method() {
return "😄";
}
};
Check out the REPL to experiment more!

Babel

Component

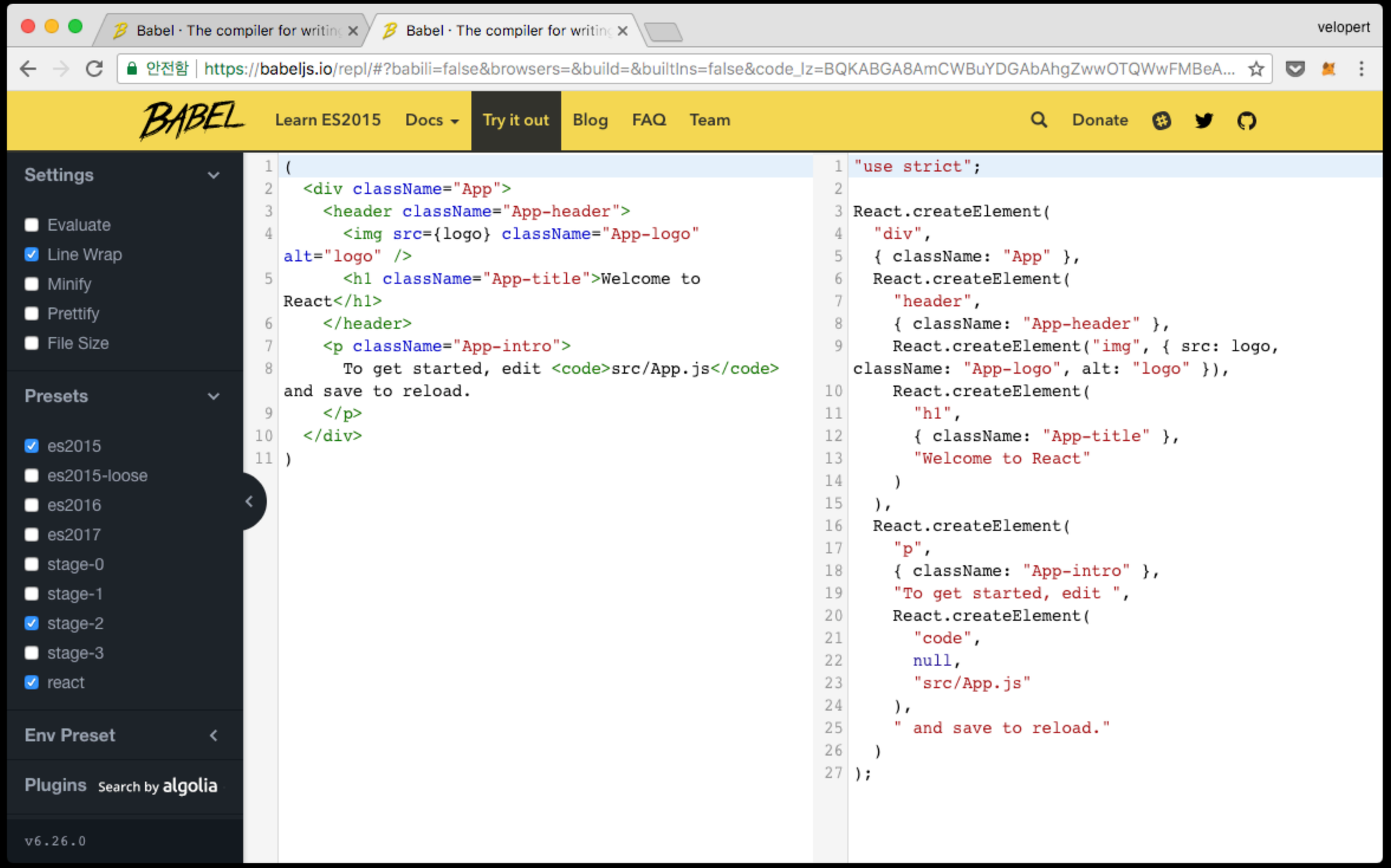
재사용 가능한 UI
단순 템플릿이 아니라, 여러가지 기능을 넣어줄 수 있다.

```jsx
import React, { Component } from 'react';

class App extends Component {
  render() {
    return (
      <div>
        <h1>안녕하세요 리액트</h1>
      </div>
    );
  }
}

export default App;
```

https://developer.mozilla.org/ko/docs/Web/JavaScript/Reference/Classes

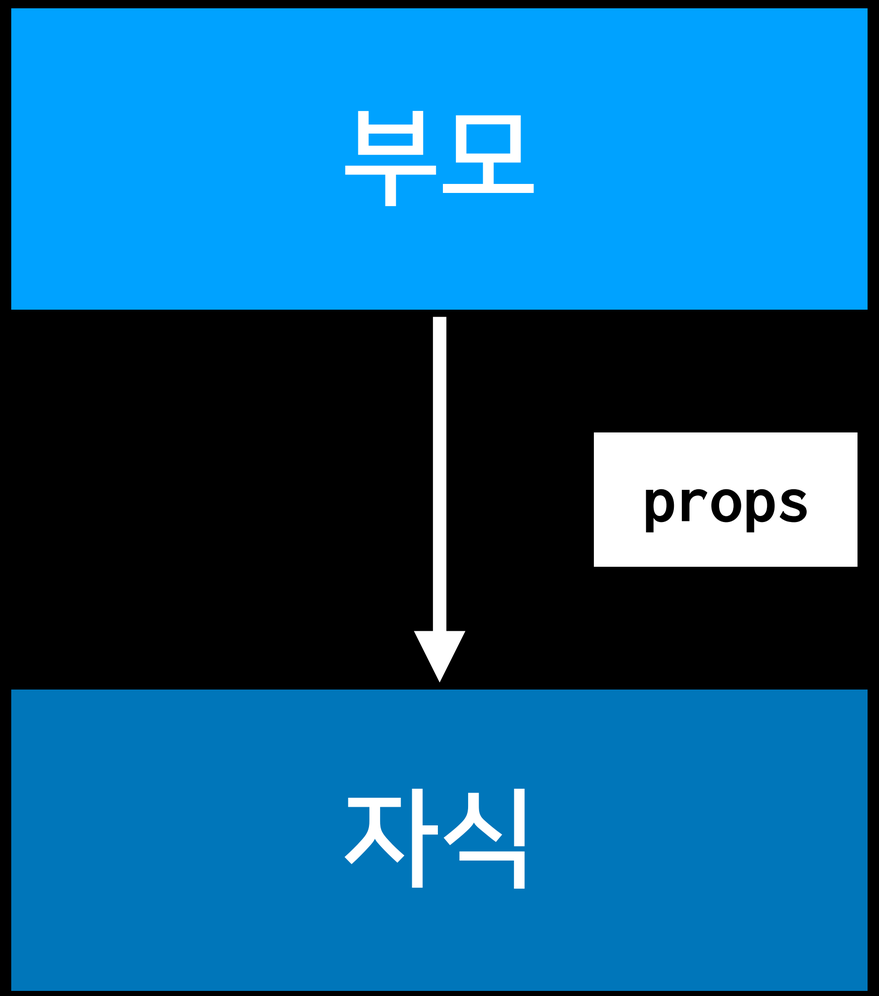
JSX

HTML 같지만, JavaScript

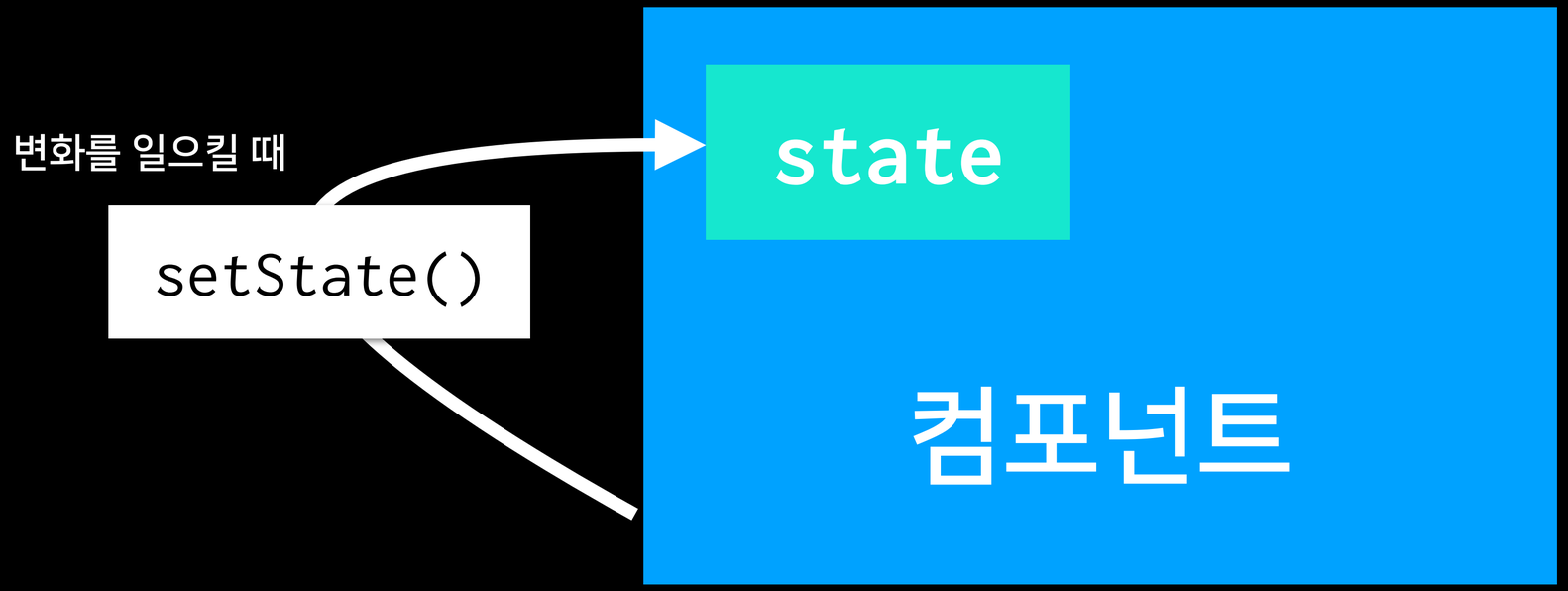


http://bit.ly/2FJsJmo

Props 와 State



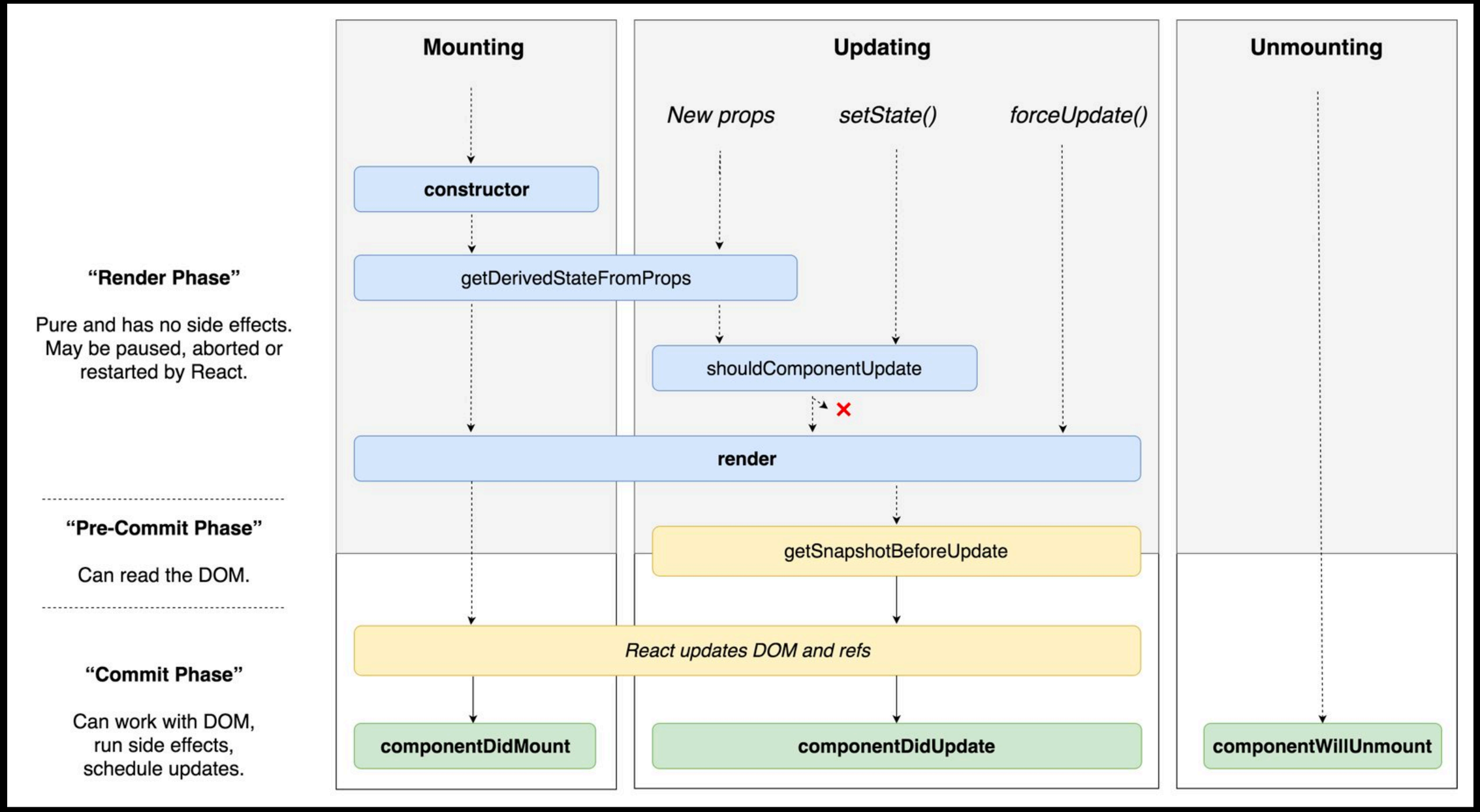

```
<Child value="value" />
```



state는 내부에서 변경 할 수 있다
변경 할 때는 언제나 setState 라는 함수를 사용한다

LifeCycle API

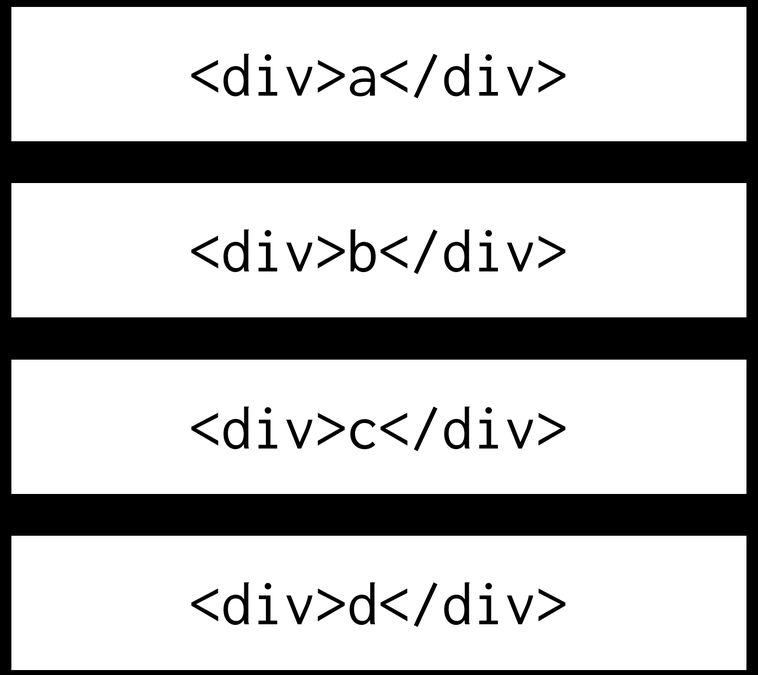
1. 나타날 때
2. 업데이트 될 때
3. 사라질 때



https://twitter.com/dan_abramov/status/981712092611989509

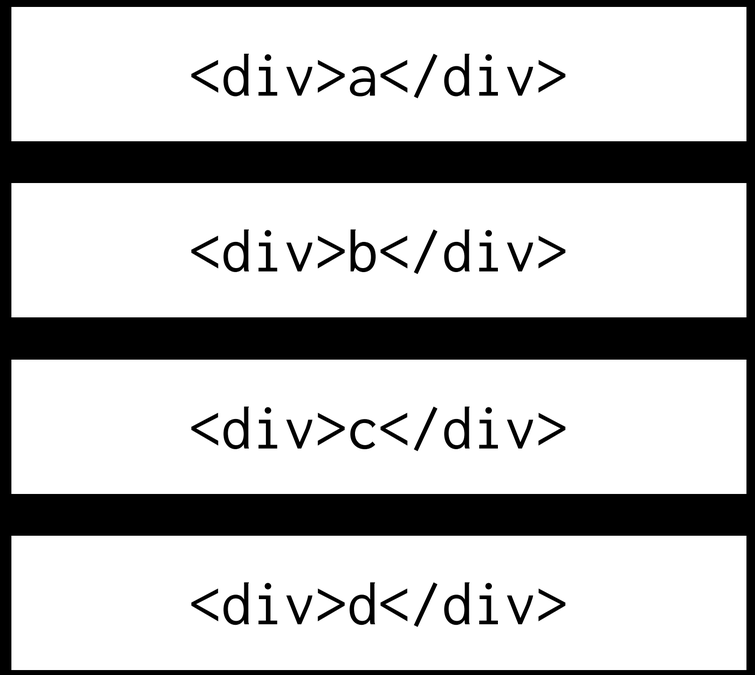
배열 렌더링, key

key 가 없다면?



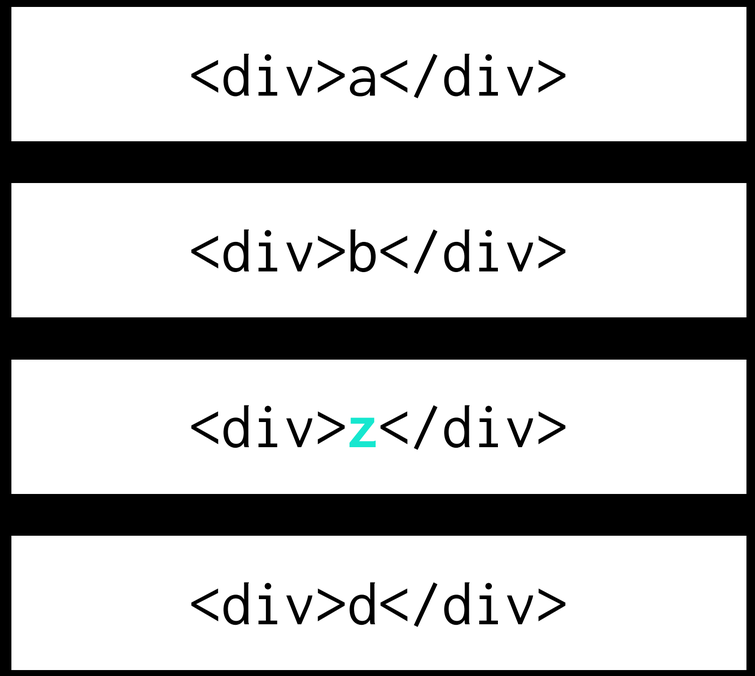

```
['a', 'b', 'c', 'd']
```

key 가 없다면?




```
['a', 'b', 'z', 'c', 'd']
```

key 가 없다면?

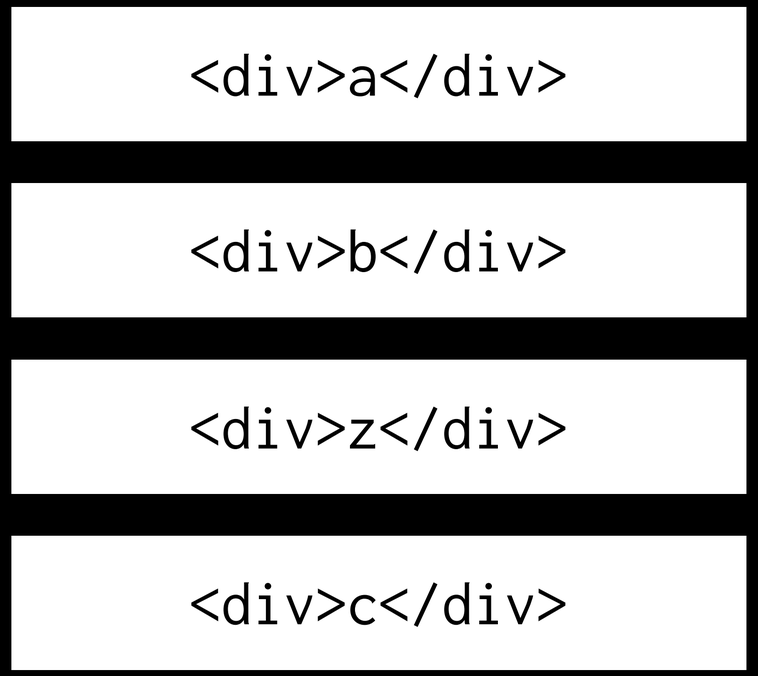



```
['a', 'b', 'z', 'c', 'd']
```

key 가 없다면?

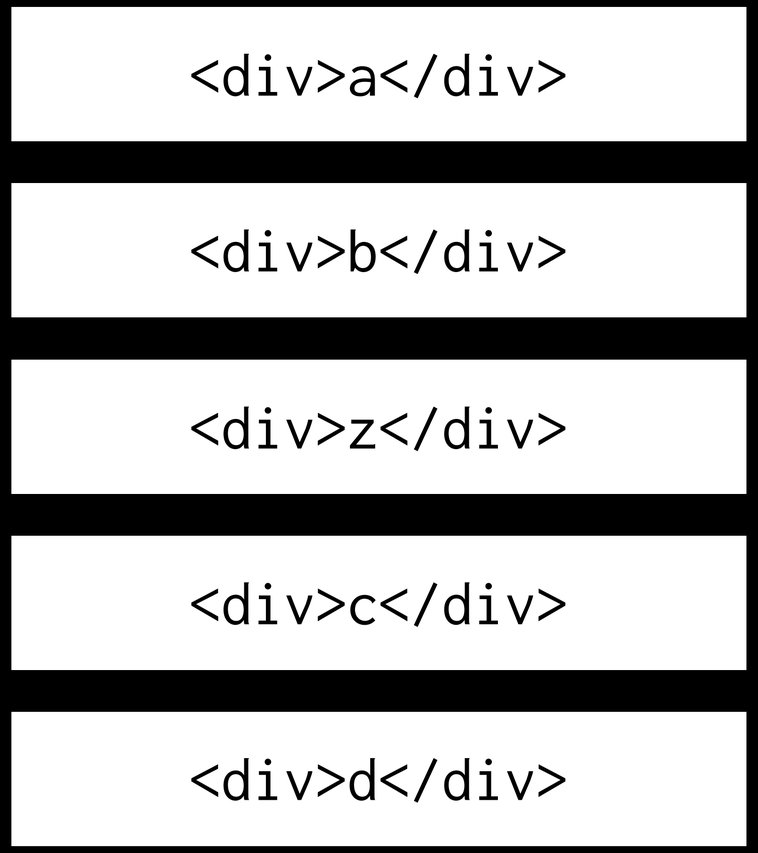

```
['a', 'b', 'z', 'c', 'd']
```

key 가 없다면?



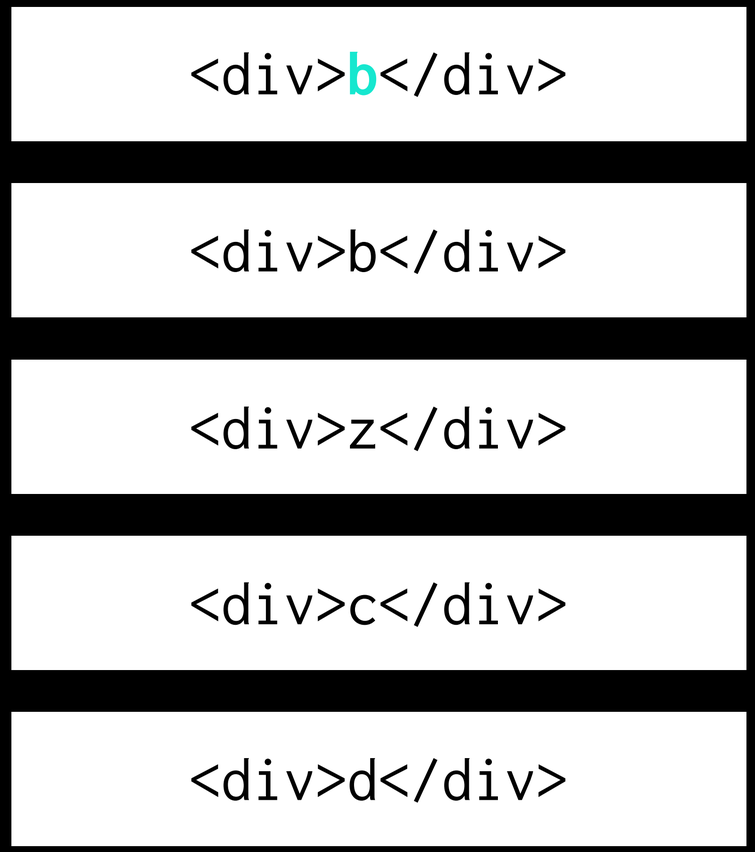

```
['a', 'b', 'z', 'c', 'd']
```

key 가 없다면?



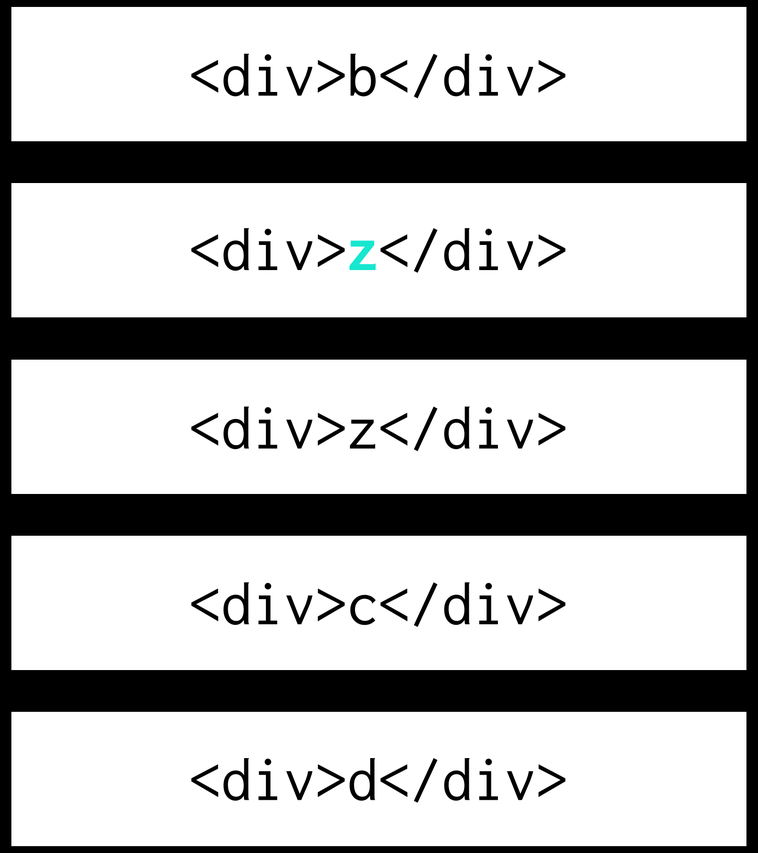
['a', 'b', 'z', 'c', 'd']

key 가 없다면?



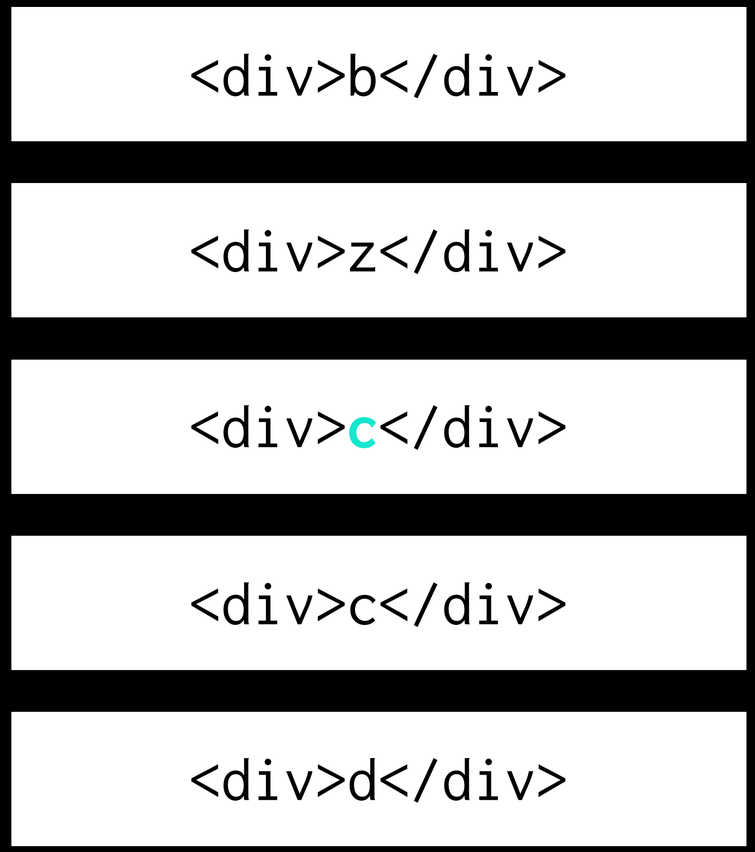
['a', 'b', 'z', 'c', 'd']

key 가 없다면?



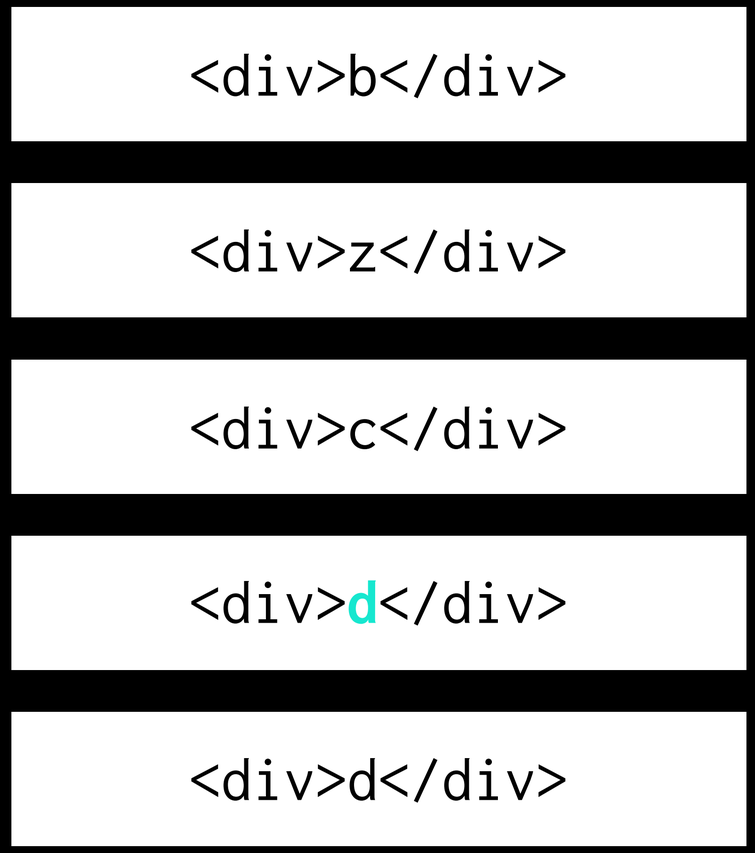
['a', 'b', 'z', 'c', 'd']

key 가 없다면?



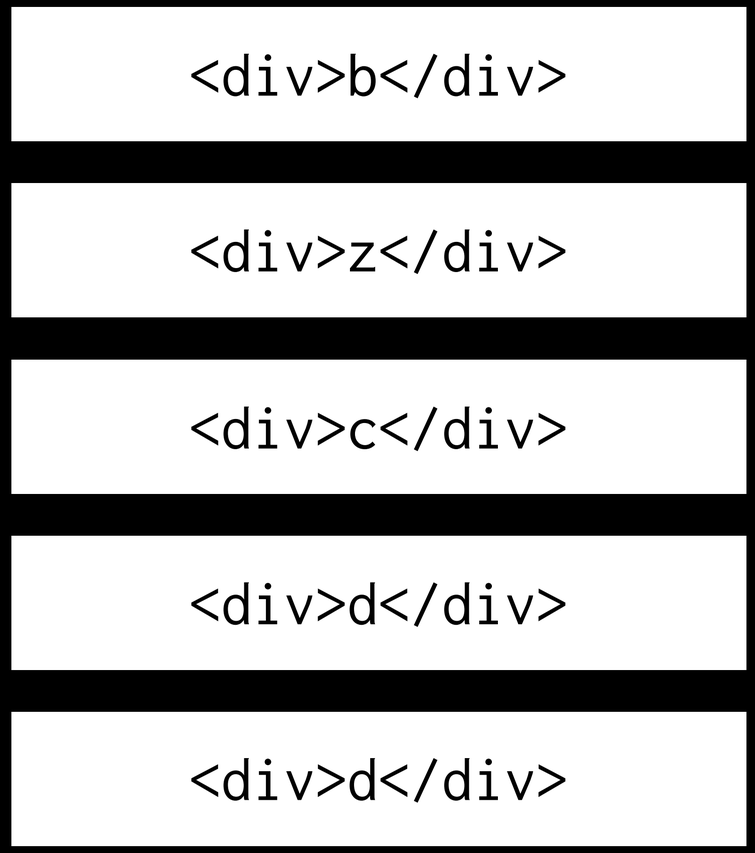
['a', 'b', 'z', 'c', 'd']

key 가 없다면?



['a', 'b', 'z', 'c', 'd']

key 가 없다면?



['a', 'b', 'z', 'c', 'd']

key 가 있다면?

```
<div key={0}>a</div>
```

```
<div key={1}>b</div>
```

```
<div key={2}>c</div>
```

```
<div key={3}>d</div>
```

```
[
    { id: 0, text: ‘a’ },
    { id: 1, text: ‘b’ },
    { id: 2, text: ‘c’ },
    { id: 3, text: ‘d’ },
]
```

key 가 있다면?

```
<div key={0}>a</div>
```

```
<div key={1}>b</div>
```

```
<div key={2}>c</div>
```

```
<div key={3}>d</div>
```

```
[
    { id: 0, text: ‘a’ },
    { id: 1, text: ‘b’ },
    { id: 5, text: ‘z’ },
    { id: 2, text: ‘c’ },
    { id: 3, text: ‘d’ },
]
```

key 가 있다면?

```
<div key={0}>a</div>
```

```
<div key={1}>b</div>
```

```
<div key={5}>z</div>
```

```
<div key={3}>d</div>
```

```
[
    { id: 0, text: ‘a’ },
    { id: 1, text: ‘b’ },
    { id: 5, text: ‘z’ },
    { id: 2, text: ‘c’ },
    { id: 3, text: ‘d’ },
]
```

key 가 있다면?

```
<div key={0}>a</div>
```

```
<div key={1}>b</div>
```

```
<div key={5}>z</div>
```

```
<div key={2}>c</div>
```

```
<div key={3}>d</div>
```

```
[
    { id: 0, text: 'a' },
    { id: 1, text: 'b' },
    { id: 5, text: 'z' },
    { id: 2, text: 'c' },
    { id: 3, text: 'd' },
]
```

key 가 있다면?

```
<div key={0}>a</div>
```

```
<div key={1}>b</div>
```

```
<div key={5}>z</div>
```

```
<div key={2}>c</div>
```

```
<div key={3}>d</div>
```

```
[
    { id: 0, text: 'a' },
    { id: 1, text: 'b' },
    { id: 5, text: 'z' },
    { id: 2, text: 'c' },
    { id: 3, text: 'd' },
]
```

초심자를 위한 주의사항

불변성, 불변성, 불변성!!!

https://codesandbox.io/s/40792lk8n9

https://codesandbox.io/s/m56w5yv0op

앞으로 펼쳐질 세상

스타일링

CSS

CSS Module

Sass, LESS, Stylus …

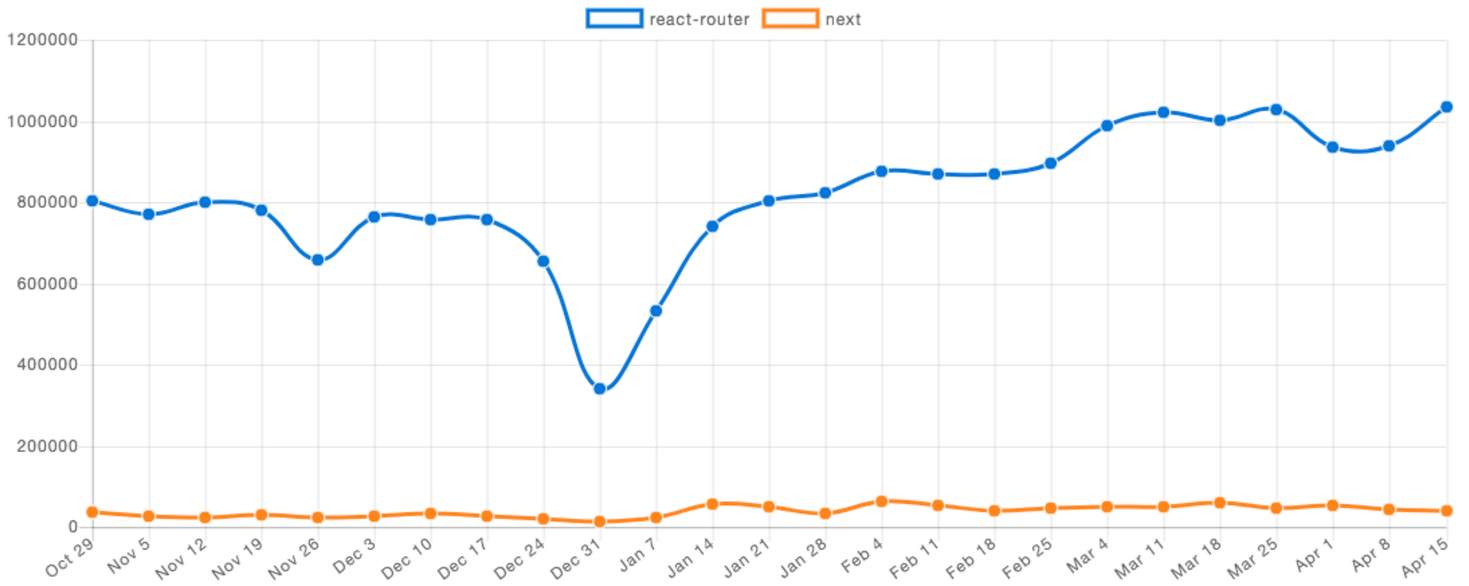
styled-components, styled-jsx

라우팅

React-Router

Next.js

Downloads in past 6 Months



Github Stats

	stars 🌟	forks 🍽	issues ⚠️	updated 🛠	created 🐣
react-router	29707	6402	48	Apr 11, 2018	May 17, 2014
next.js	24473	2308	228	Apr 19, 2018	Oct 6, 2016

상태 관리

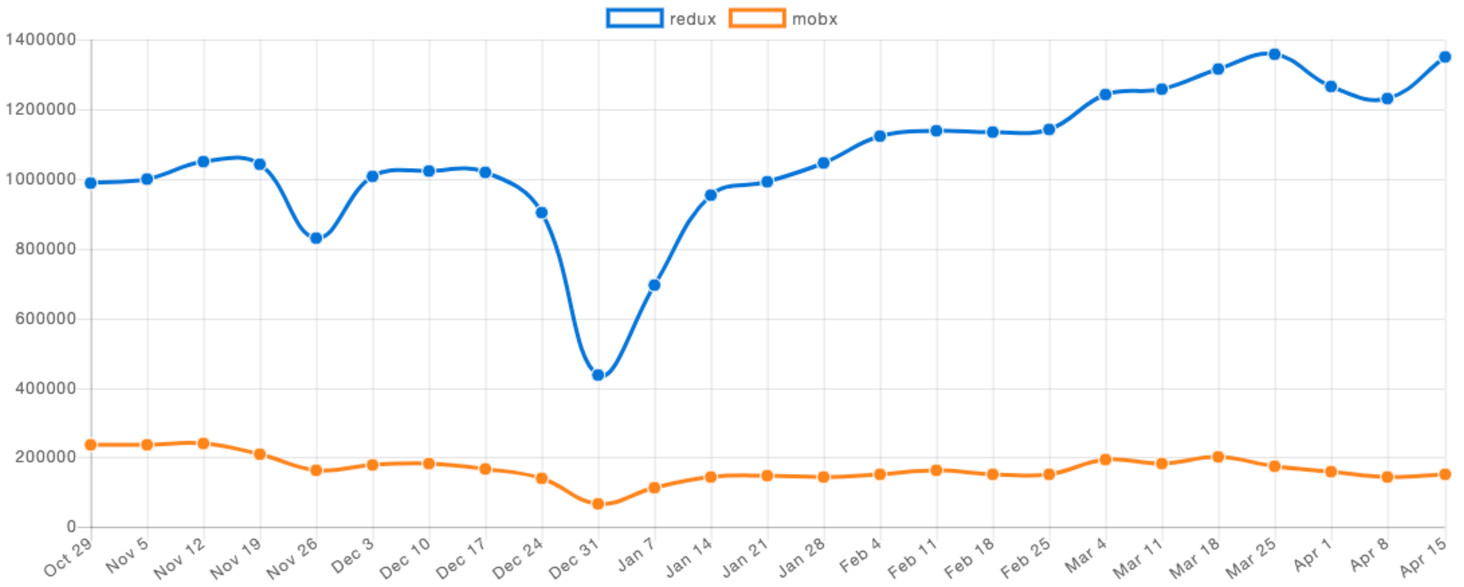
Redux

MobX

필요 없을지도..

16.3^ Context API

Downloads in past 6 Months



Github Stats

	stars 🌟	forks 🍽	issues ⚠️	updated 🛠	created 🐣
mobx	14582	828	37	Apr 20, 2018	Mar 14, 2015
redux	40184	9641	28	Apr 21, 2018	May 30, 2015

Redux 비동기 작업 관리

redux-thunk
redux-promise-middleware
redux-pender
redux-observable
redux-saga

Immutability (불변성)

Immutable.js

Immer.js

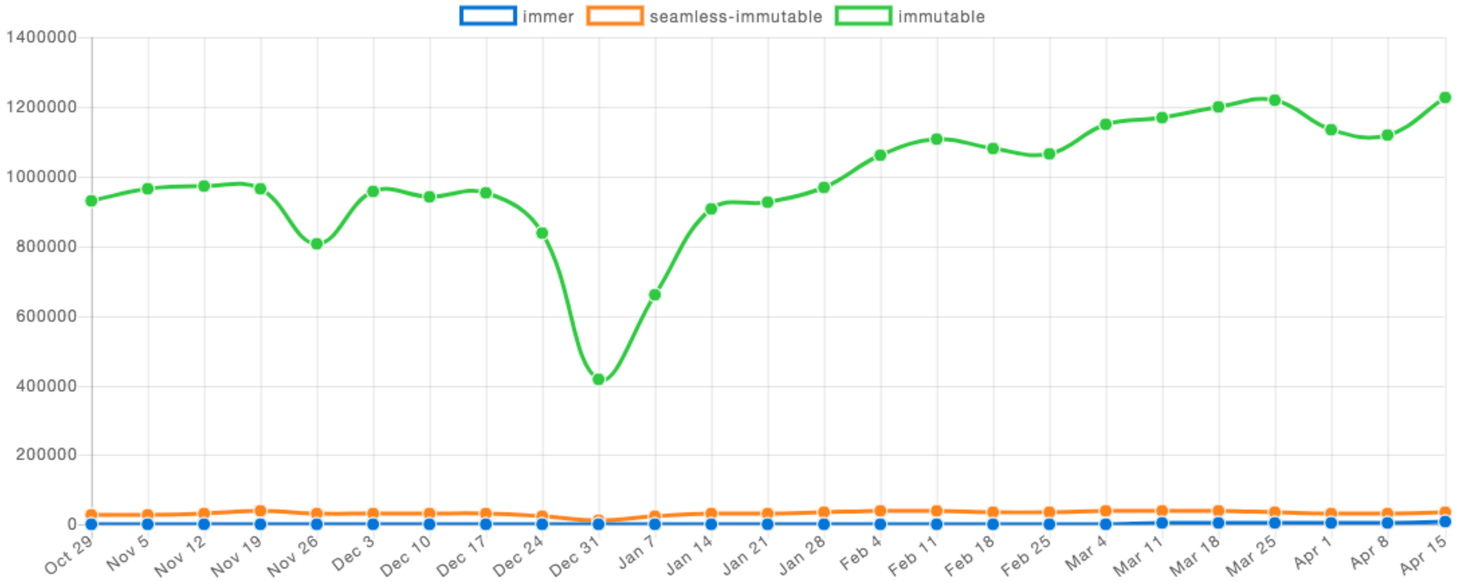
seamless-immutable

필요 없을지도..

~~react-addons-update 비추~~

immer × seamless-immutable × immutable ×

Downloads in past 6 Months



Github Stats

	stars 🌟	forks 🍽	issues ⚠️	updated 🛠	created 🐣
immer	4200	123	19	Apr 17, 2018	Dec 29, 2017
seamless-immutable	4455	185	50	Apr 18, 2018	Oct 24, 2014
immutable-js	23333	1351	103	Mar 28, 2018	Jul 2, 2014

테스팅

Jest

Enzyme

필요 없을지도..

타입 시스템

Flow

TypeScript

개인적인 조언

새로운 것을 두려워 하지 마세요..
시간 남을 때 다양한 것들을 시도해보세요

리액트 세계에선, 정답이란 없습니다
여러분이 생각하기에 옳으면 옳은 거예요.

Reddit 의 reactjs 페이지를 보세요!

리스트를 렌더링 할 때,
shouldComponentUpdate 를 통한 최적화

타입 시스템은 일찍 사용해 볼 수록 좋아요

조그마한 프로젝트를 많이 만들어보세요

(진짜 주관적인 생각)

어지간하면..
Bootstrap, Material-UI, SemanticUI
Bulma 를 사용하지 마세요

얘네는 절대 웹 개발의 필수 템이 아니에요.

리액트로 포팅된 라이브러리 중,
공식적으로 포팅된 게 아니면,
그냥 원본 라이브러리를 사용하는게 좋아요.

끝~