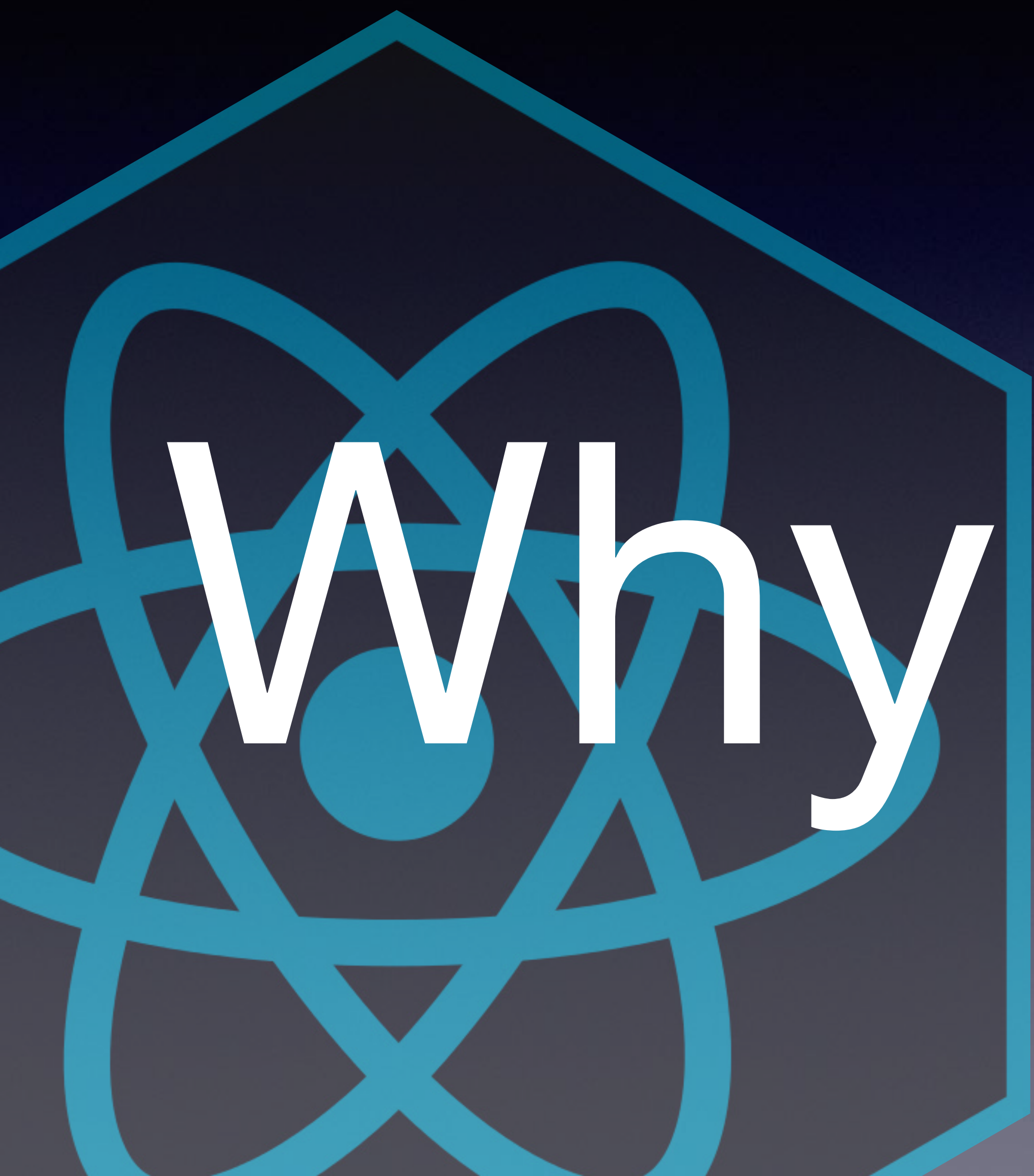


React

what to eat with, how it tastes like

by adamd



React?

This page is using the production build of React. ✓

Open the developer tools, and "Components" and "Profiler" tabs will appear to the right.

Web Penetration

To measure how often web companies make use of these frameworks, it's also useful to look at web penetration. The site Similar Tech has kept a running tab on the number of websites and domains that use these frameworks.

761,401

4.00%

WEBSITES

259,772

UNIQUE DOMAINS

101,424

3.30%

WEBSITES

74,005

UNIQUE DOMAINS

409,931

1.29%

WEBSITES

203,957

UNIQUE DOMAINS



Why GitHub? ▾

Enterprise

Explore ▾

Marketplace

Pricing ▾

Search

Sign in

Sign up

facebook / react

Watch

6.6k

★ Star

142k

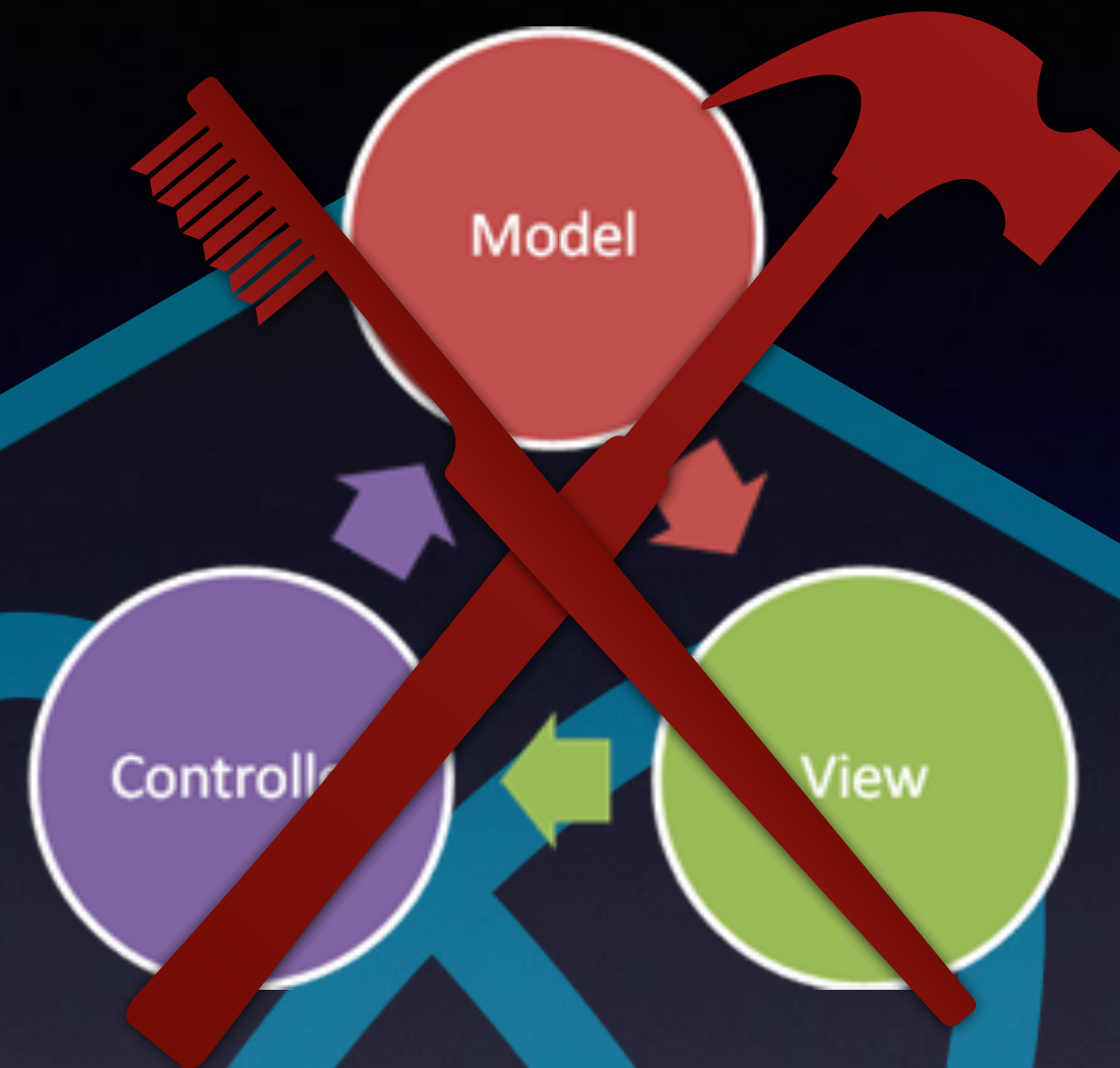
Fork

27.2k



ES6





```
class Clock extends React.Component {
  constructor(props) {
    super(props);
    this.state = {date: new Date()};
  }

  componentDidMount() {
    this.timerID = setInterval(
      () => this.tick(),
      1000
    );
  }

  tick() {
    this.setState({
      date: new Date()
    });
  }

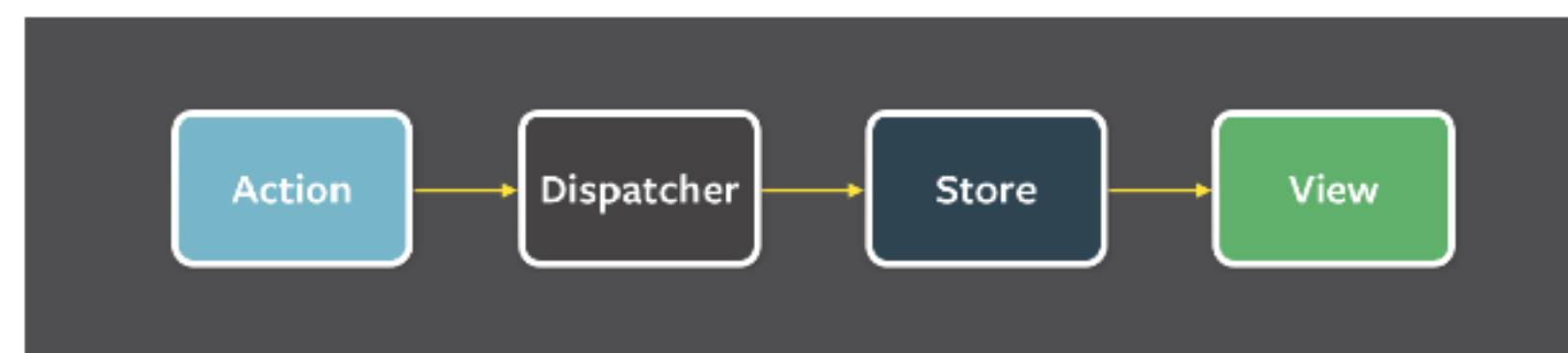
  render() {
    return (
      <div>
        <h1>Hello, world!</h1>
        <FormattedDate date={this.state.date} />
      </div>
    );
  }
}
```

Model

Controller

View

Data in a Flux application flows in a single direction:




Hello, world!

It is 12:26:46 PM.

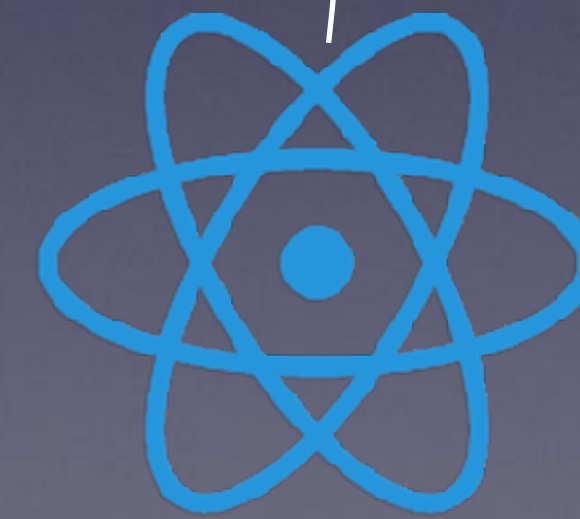
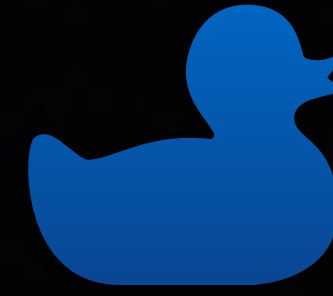
Console Sources Network Timeline

```
▼ <div id="root">
  ▼ <div data-reactroot=
    <h1>Hello, world!</h1>
    ▼ <h2>
      <!-- react-text: 4 -->
      "It is "
      <!-- /react-text -->
      <!-- react-text: 5 -->
      "12:26:46 PM"
      <!-- /react-text -->
      <!-- react-text: 6 -->
      "."
      <!-- /react-text -->
    </h2>
  </div>
</div>
```


Disclaimers!

- 
- Just the basics!
 - We trust new JS (classes & lambdas instead of IIFE and `this` hell)
 - Things change quickly in this world – modularise – React++

Jump in!



Tutorial: Intro to React

This tutorial doesn't assume any existing React knowledge.

Before We Start the Tutorial

We will build a small game during this tutorial. **You might be tempted to skip it because you're not building games — but give it a chance.** The techniques you'll learn in the tutorial are fundamental to building any React app, and mastering it will give you a deep understanding of React.

Tip

This tutorial is designed for people who prefer to **learn by doing**. If you prefer learning concepts from the ground up, check out our [step-by-step guide](#). You might find this tutorial and the guide complementary to each other.

Hello World

The smallest React example looks like this:

```
ReactDOM.render(  
  <h1>Hello, world!</h1>,  
  document.getElementById('root')  
)
```

It displays a heading saying "Hello, world!" on the page.

Try it on CodePen

Click the link above to open an online editor. Feel free to make some changes, and see how they affect the output. Most pages in this guide will have editable examples like this one.

How to Read This Guide

<https://reactjs.org/tutorial/> ( )

this

```
const element = <h1>Hello, world!</h1>;
```

```
const name = 'Josh Perez';  
const element = <h1>Hello, {name}</h1>;
```

```
function getGreeting(user) {  
  if (user) {  
    return <h1>Hello, {formatName(user)}!</h1>;  
  }  
  return <h1>Hello, Stranger.</h1>;  
}
```

```
const title = response.potentiallyMaliciousInput;  
// This is safe:  
const element = <h1>{title}</h1>;
```

```
const element = <img src={user.avatarUrl}></img>;
```

XHTML + sanitiser + JS = JSX

```
class Welcome extends React.Component {  
  render() {  
    return <h1>Hello, {this.props.name}</h1>;  
  }  
}
```

```
const element = <Welcome name="Sara" />;
```

```
ReactDOM.render(  
  element,  
  document.getElementById('root')  
);
```

Components & Props


```
class Clock extends React.Component {
  constructor(props) {
    super(props);
    this.state = {date: new Date()};
  }

  componentDidMount() {
    this.timerID = setInterval(
      () => this.tick(),
      1000
    );
  }

  tick() {
    this.setState({
      date: new Date()
    });
  }

  render() {
    return (
      <div>
        <h1>Hello, world!</h1>
        <FormattedDate date={this.state.date} />
      </div>
    );
  }
}
```

State



Questions?

The React logo, a stylized blue atom with three intersecting elliptical orbits and a central circle, is positioned on the left side of the slide. It is partially enclosed by a blue-outlined house shape that also appears on the left edge of the frame.

Live coding!

<https://reactjs.org/docs/create-a-new-react-app.html#create-react-app>



This is the world we live in.

O-ooo-o!

main.html — bridges

EXPLORER

OPEN EDITORS

main.html views/layouts

BRIDGES

.idea

controllers

data

helm-chart

models

node_modules

public

src

react

CreateSurvey.js

SurveyLink.js

react.js

tests

views

.gitattributes

.gitignore

argument-parser.js

config.js

docker-compose.yml

Dockerfile

Gruntfile.js

index.js

Jenkinsfile

package-lock.json

package.json

README.md

routes.js

wait-for-it.sh

OUTLINE

NPM SCRIPTS

MAVEN PROJECTS

main.html

views > layouts > main.html > html > body

13 <body>

14 <header>

15 <h1>BuildingBridges</h1>

16 </header>

17 {{{body}}}

18 <footer>

19 <div>

20 <p>This is the new version of BuildingBridges created by the Meeples team.</p>

21 <p>If you encounter any issues, please contact us at Meeples@pega.co

22 </div>

23 </footer>

24

25 <!-- If in heavy debugging, change 'production.min' to 'development' for dev;

26 see https://reactjs.org/docs/add-react-to-a-website.html#step-2-add-the-script-tags -->

27 <script src="https://unpkg.com/react@16/umd/react.production.min.js" crossorigin></script>

28 <script src="https://unpkg.com/react-dom@16/umd/react-dom.production.min.js" crossorigin></script>

29

30 <!-- React man-built classes. EDIT UNDER `src/react`! -->

31 <!-- For development:

32 | | | 1. run `npm run watch-react`

33 | | | 2. Edit files in `src/react`, and they should propagate in `public/js` in real-time -->

34 <script src="/js/react/SurveyLink.js"></script>

35 <script src="/js/react/CreateSurvey.js"></script>

36 <script src="/js/react.js"></script>

37 <!-- end of React dependencies -->

38

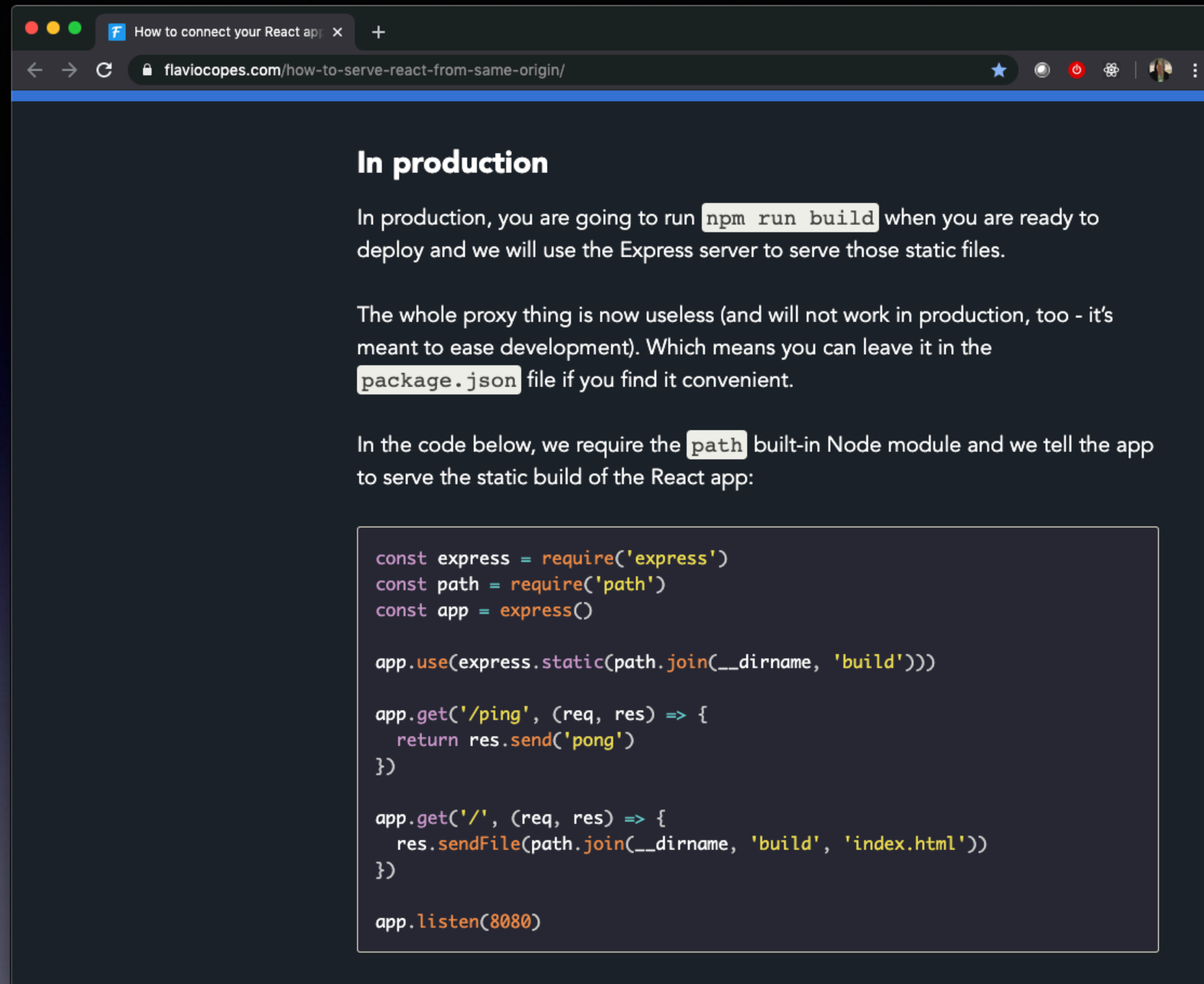
39 <script src="/js/front-end.js"></script>

40 </body>

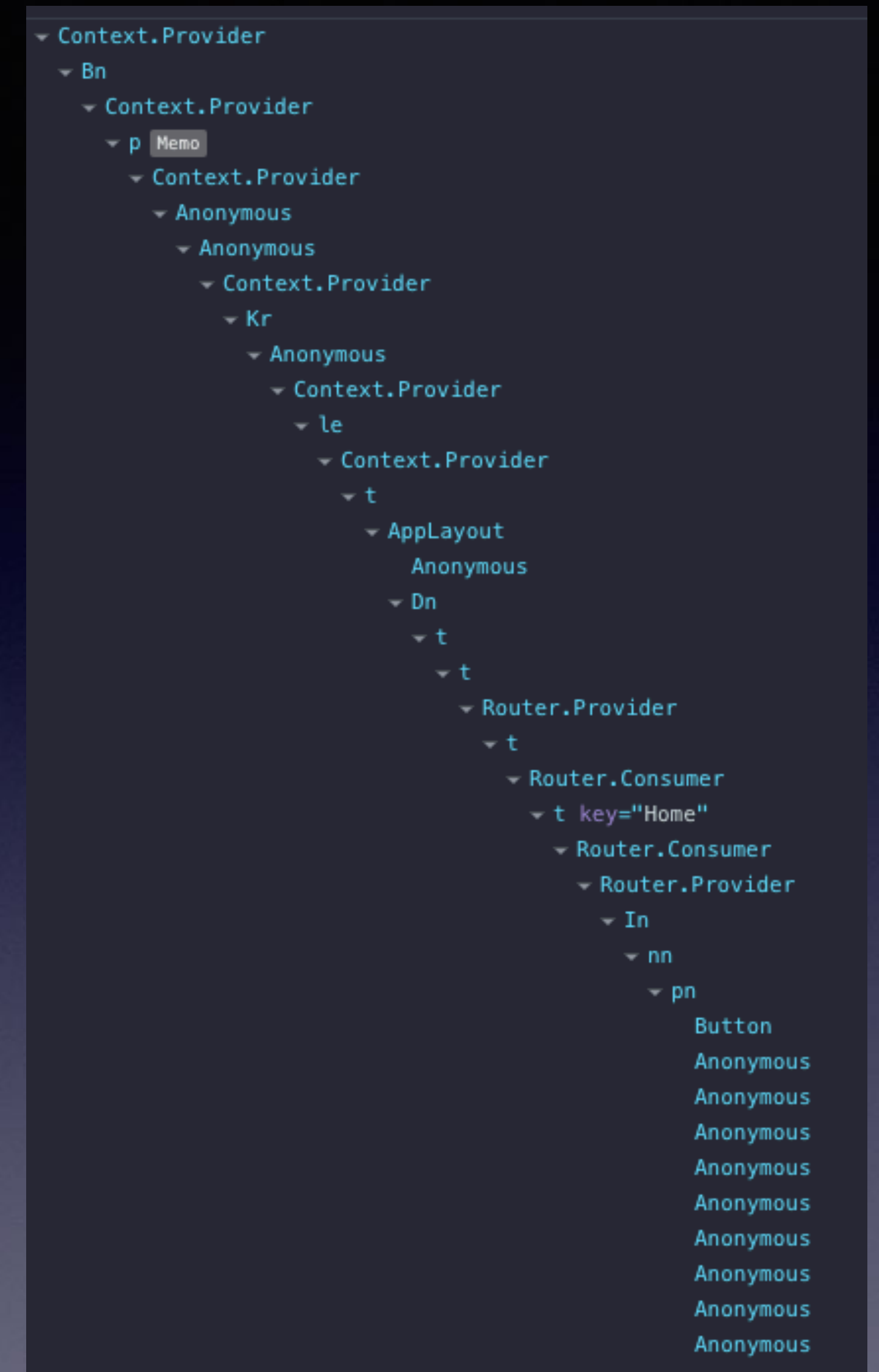
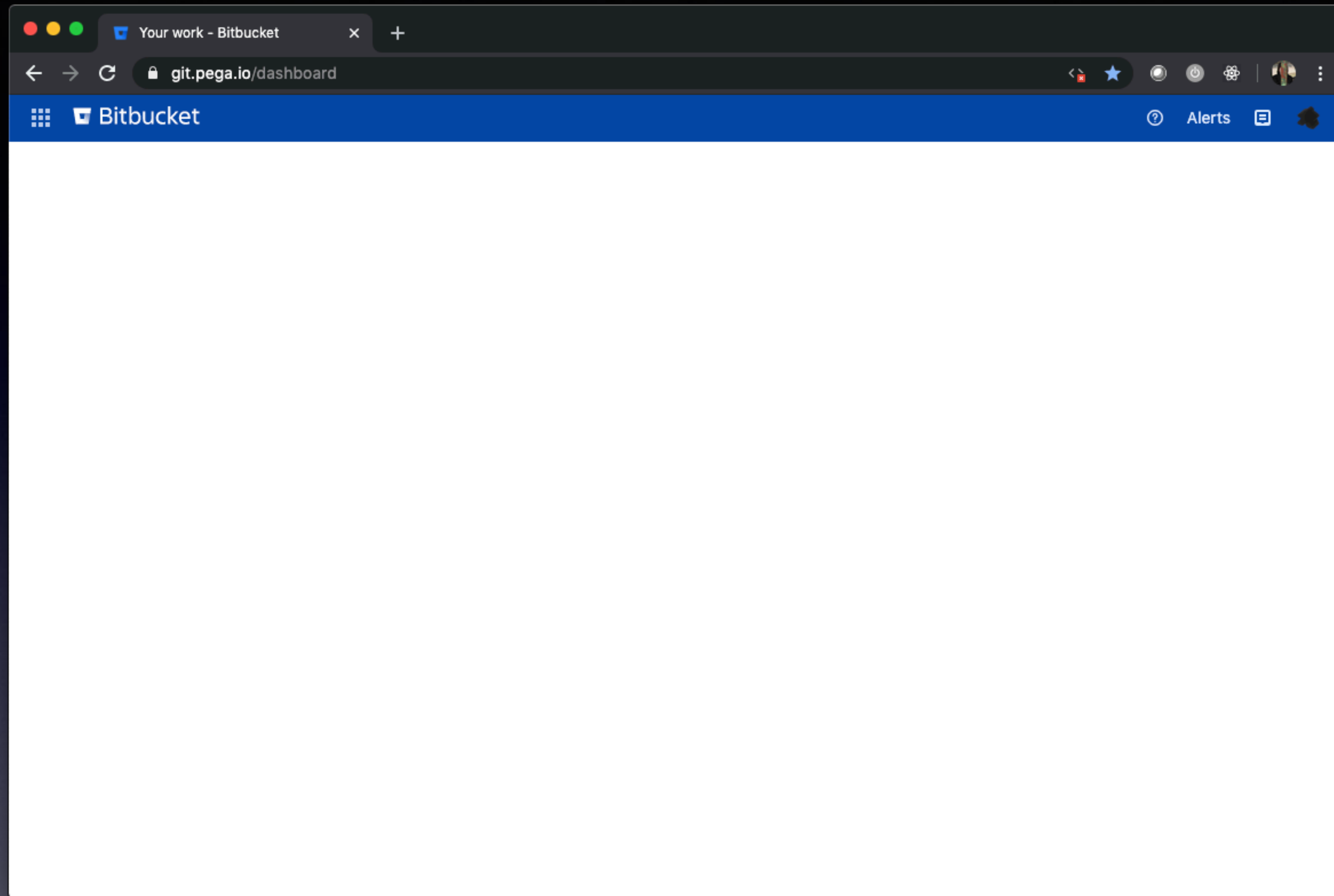
41

42 </html>

Ln 24, Col 1 Spaces: 4 UTF-8 LF HTML



<https://flaviocopes.com/how-to-serve-react-from-same-origin/>



Challenges of SPA world



```
const mapStateToProps = (state /*, ownProps*/) => {  
  return {  
    counter: state.counter  
  }  
}
```



📌 State Hook

This example renders a counter. When you click the button, it increments the value:

```
import React, { useState } from 'react';  
  
function Example() {  
  // Declare a new state variable, which we'll call "count"  
  const [count, setCount] = useState(0);  
  
  return (  
    <div>  
      <p>You clicked {count} times</p>  
      <button onClick={() => setCount(count + 1)}>  
        Click me  
      </button>  
    </div>  
  );  
}
```

FUTURE