# CSS-IN-JS 😱

# MY GOAL IS TO GET YOU

🙄

From this...

🤔

To this...

😍

Or even this.

# WHY NOT JUST CSS-IN-CSS?

Implicit global scope

Easy to cause unintended consequences

CSS is primarily a document-based architecture

Cascading rules can cause problems: !important

# WHAT ABOUT BEM, SASS, LESS?

# DRAWBACKS

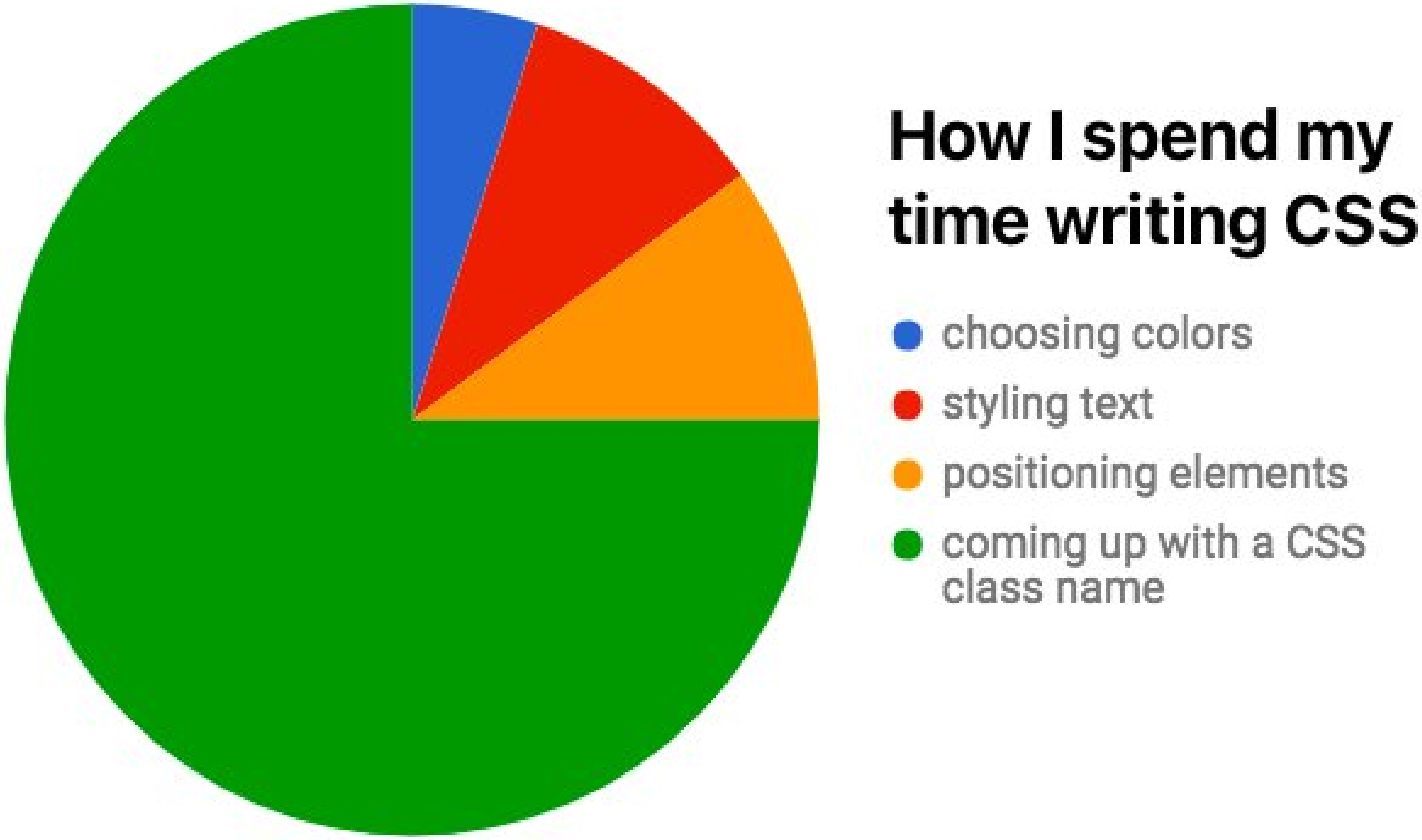
Another syntax to learn with SASS/LESS

Style still separate from our component logic

Can still have conflicts: SASS-quatch, anyone?

Hard to refactor/remove unused styles

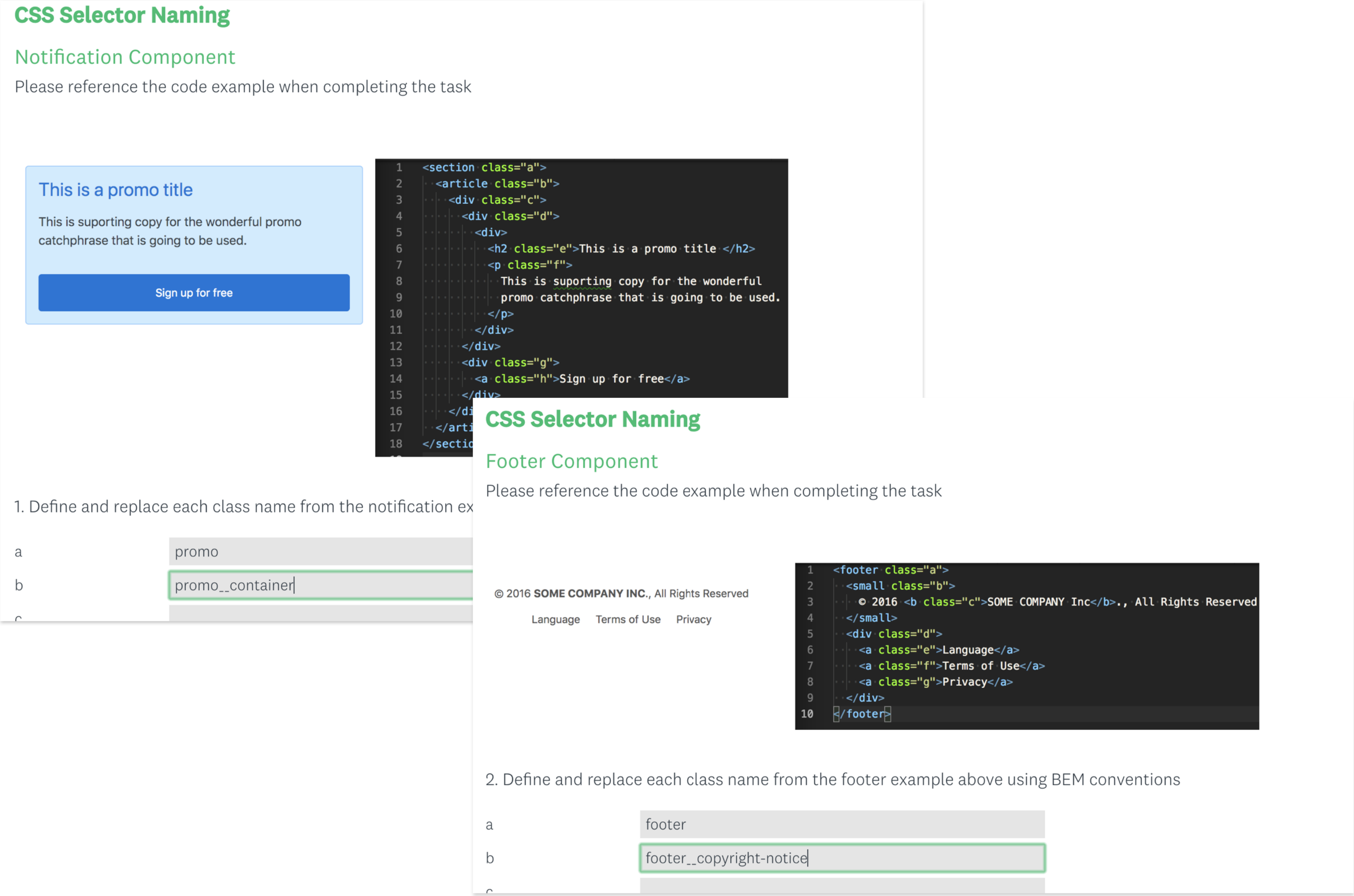
BEM Naming Fatigue



https://www.reddit.com/r/css/comments/74anpd/how_i_spend_my_time_writing_css_this_is_so_true/

# KURT'S BEM EXERCISE

https://docs.google.com/spreadsheets/d/1_Hv5EnOuPjkrd8J247uzv1PxU3qsLr1IhnSzC_wyxxI/edit#gid=0



## CSS Selector Naming

### Notification Component

Please reference the code example when completing the task

This is a promo title
This is suporting copy for the wonderful promo catchphrase that is going to be used.
Sign up for free

```
<section class="a">
  <article class="b">
    <div class="c">
      <div class="d">
        <div>
          <h2 class="e">This is a promo title </h2>
          <p class="f">
            This is suporting copy for the wonderful
            promo catchphrase that is going to be used.
          </p>
        </div>
      </div>
      <div class="g">
        <a class="h">Sign up for free</a>
      </div>
    </di
  </arti
</sectio
```

1. Define and replace each class name from the notification ex

a promo

b promo__container

c

## CSS Selector Naming

### Footer Component

Please reference the code example when completing the task

```
<footer class="a">
  <small class="b">
    © 2016 <b class="c">SOME COMPANY Inc</b>., All Rights Reserved
  </small>
  <div class="d">
    <a class="e">Language</a>
    <a class="f">Terms of Use</a>
    <a class="g">Privacy</a>
  </div>
</footer>
```

2. Define and replace each class name from the footer example above using BEM conventions

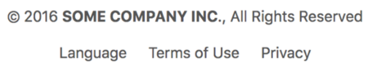
a footer

b footer__copyright-notice

c

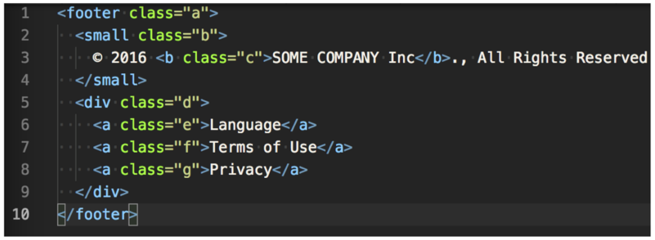
## Footer Component

Please reference the code example when completing the task



© 2016 **SOME COMPANY INC.**, All Rights Reserved

Language Terms of Use Privacy



```
<footer class="a">
  <small class="b">
    © 2016 <b class="c">SOME COMPANY Inc</b>., All Rights Reserved
  </small>
  <div class="d">
    <a class="e">Language</a>
    <a class="f">Terms of Use</a>
    <a class="g">Privacy</a>
  </div>
</footer>
```

| | |
|---|---|
| a | footer |
| b | footer__top |
| c | emphasis |
| d | footer__bottom |
| e | footer__action |
| f | footer__action |
| g | footer__action |

| | |
|---|---|
| a | footer |
| b | footer__copyright |
| c | footer__copyright__company |
| d | footer__links |
| e | footer__links__item |
| f | footer__links__item |
| g | footer__links__item |

| | |
|---|---|
| a | footer |
| b | footer__text |
| c | footer--useless |
| d | footer__links |
| e | footer__links__link |
| f | footer__links__link |
| g | footer__links__link |

| | |
|---|---|
| a | footer |
| b | footer__copyright |
| c | footer__company-name |
| d | footer__links |
| e | footer__language |
| f | footer__terms-of-use |
| g | footer__privacy |

| | |
|---|---|
| a | footer |
| b | footer__copyright |
| c | footer__copyright-coy |
| d | footer__navigation |
| e | footer__navigation-a |
| f | footer__navigation-a |
| g | footer__navigation-a |

| | |
|---|---|
| a | footer |
| b | footer__copyright-notice |
| c | footer__copyright-notice--bold |
| d | footer__links |
| e | footer__link |
| f | footer__link |
| g | footer__link |

| | |
|---|---|
| a | app-footer |
| b | app-footer__legal |
| d | app-footer__links |
| e | app-footer__link (or blank) |
| f | app-footer__link (or blank) |
| g | app-footer__link (or blank) |

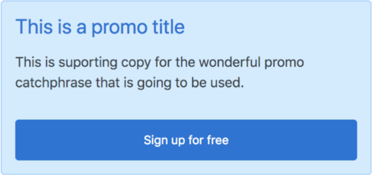
| | |
|---|---|
| a | footer |
| b | footer__legal |
| c | footer__legal__company-name |
| d | footer__links |
| e | footer__links__link |
| f | footer__links__link |
| g | footer__links__link |

| | |
|---|---|
| a | footer |
| b | footer__copyright |
| c | footer-copyright__company-name |
| d | footer__menu |
| e | footer-menu__option footer-menu__option--language |
| f | footer-menu__option footer-menu__option--terms |
| g | footer-menu__option footer-menu__option--privacy |

## CSS Selector Naming

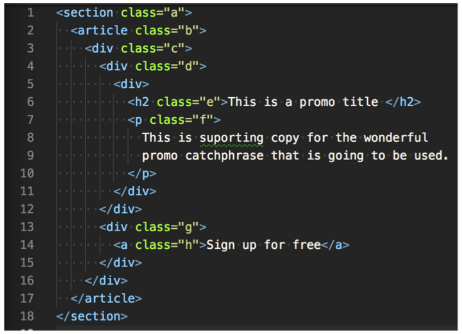
### Notification Component

Please reference the code example when completing the task



This is a promo title

This is suporting copy for the wonderful promo catchphrase that is going to be used.



```
<section class="a">
  <article class="b">
    <div class="c">
      <div class="d">
        <div>
          <h2 class="e">This is a promo title </h2>
          <p class="f">
            This is suporting copy for the wonderful
            promo catchphrase that is going to be used.
          </p>
        </div>
      </div>
      <div class="g">
        <a class="h">Sign up for free</a>
      </div>
    </div>
  </article>
</section>
```

| | |
|---|---|
| a | notification |
| e | notification__title |
| f | notification__body |
| g | notification__button |
| h | notification__button-text |

| | |
|---|---|
| a | promo |
| b | promo__wrapper |
| c | promo__content |
| d | ???? |
| e | promo__heading |
| f | promo__conent |
| g | promo__footer |
| h | promo__callToAction |

| | |
|---|---|
| a | promotions |
| b | promotion |
| d | promotion__header |
| e | promotion__header__title |
| f | promotion__header__text |
| g | promotion__footer |
| h | promotion__footer__cta |

| | |
|---|---|
| a | promo-card |
| e | promo-card__title |
| f | promo-card__text |
| g | promo-card__btn |

| | |
|---|---|
| a | promos |
| b | notification |
| c | notification__container |
| d | notification__body |
| e | notification-body__title |
| f | notification-body__text |
| g | notification__actions |
| h | notification-actions__button |

| | |
|---|---|
| a | too_many_divs |
| b | too_too_many_divs |
| c | too_too_too_many_divs |
| d | promo |
| e | promo__title |
| f | promo__content |
| g | promo__actions |
| h | button |

| | |
|---|---|
| a | section |
| b | section__article |
| c | promo |
| d | promo__inner |
| e | promo__inner__text__title |
| f | promo__inner__text__desc |
| g | promo__inner__button |
| h | promo__inner__button__text |

| | |
|---|---|
| a | promo |
| b | promo__article |
| d | promo__info |
| e | promo__title |
| f | promo__description |
| g | promo__actions |
| h | promo__sign-up-button |

| | |
|---|---|
| a | weird-promotion |
| b | werid-promotion__article |
| c | weird-promotion__useless |
| d | weird-promotion__header-wrapper |
| e | weird-promotion__header |
| f | weird-promotion__body |
| g | weird-promotion__button |
| h | weird-promotion__button__text |

| | |
|---|---|
| a | notifications |
| b | notification |
| c | I wouldn't use this div |
| d | notification__copy |
| e | notification__title |
| f | notification__body |
| g | I wouldn't use this div |
| h | notification__cta |

| | |
|---|---|
| **Time Spent:** | 00:03:48 |
| **Time Spent:** | 00:03:28 |
| **Time Spent:** | 00:11:26 |
| **Time Spent:** | 00:07:36 |
| **Time Spent:** | 00:52:20 |
| **Time Spent:** | 01:58:09 |
| **Time Spent:** | 00:09:23 |
| **Time Spent:** | 00:13:16 |
| **Time Spent:** | 00:04:28 |
| **Time Spent:** | 00:04:38 |

# WHAT DID WE LEARN?

Naming things is kinda hard

More complex the markup, the more unique our selectors

Using BEM is kinda hard

BEM can be time consuming

Naming things is a problem

# SO, WHAT EXACTLY IS CSS-IN-JS?

# WHAT IT IS NOT

```
const styles = {
  color: white,
  backgroundColor: black
};
<p style={styles}>inline style!</p>
```

# WHAT IT IS

Let's look at styled-components.

Demo

# SO, WHAT'S THE BIG DEAL?

Isolates styles to the component

Exposes component props

Only renders critical CSS

Reuses what's existing

Automates CSS selector naming

Dead code elimination

No additional build step

# HOW DOES THIS WORK?

Good article that does a deep dive on styled-components

`styled()` is a component factory

on `componentWillMount()`, the template literal is evaluated

The style strings are hashed into a unique identifier using MurmurHash

That hash value and style strings are turned into a CSS stylesheet using Stylis

## THIS

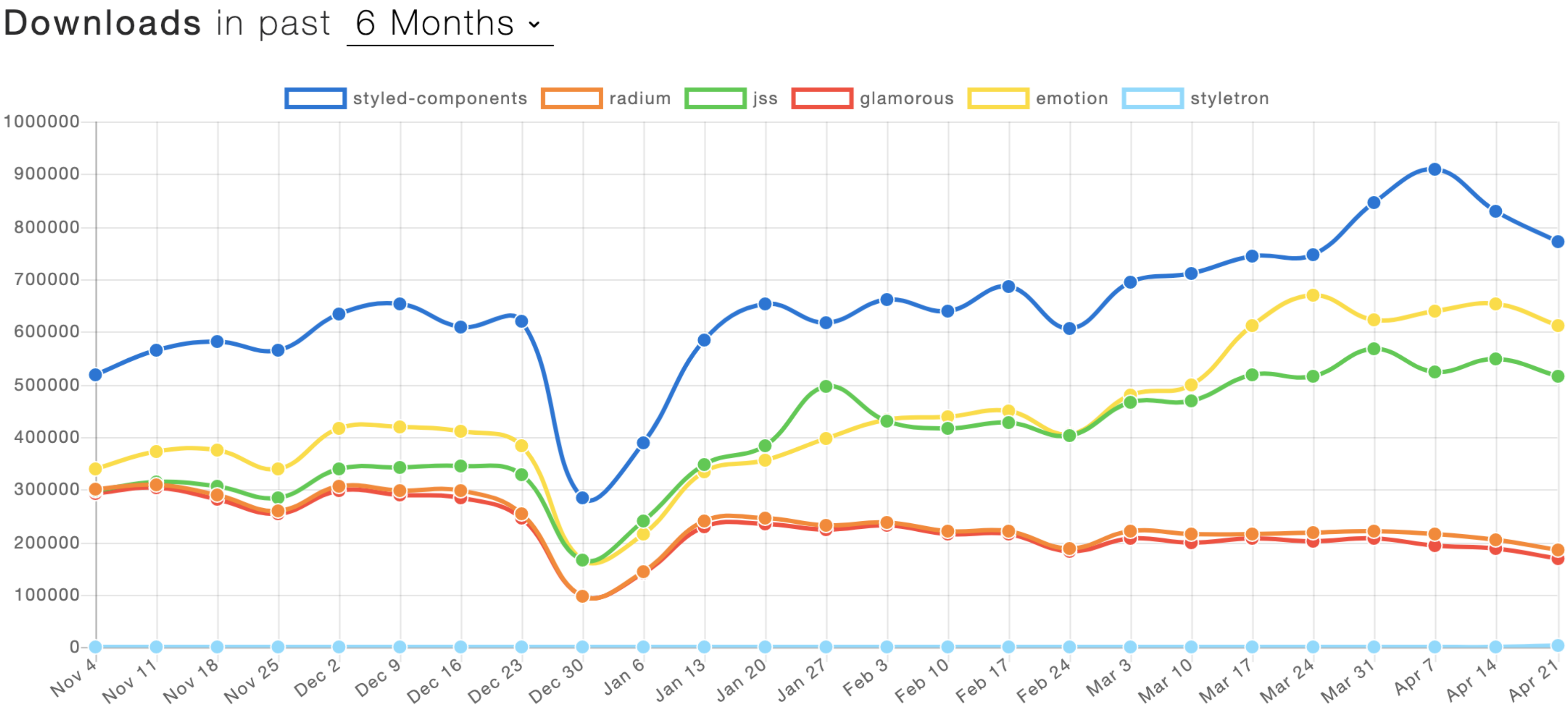
```
const Text = styled.div`
  color: white,
  background: black
`

<Text>Hello CSS-in-JS</Text>
```

# BECOMES

```
<head>
<style>
  .jsZVzX {
    color: white;
    background: black;
  }
</style>
</head>
...
...
<div class="sc-bdVaJa jsZVzX">Hello CSS-in-JS</div>
```

# OTHER CSS-IN-JS OPTIONS

- Emotion
- Glamorous
- JSS



Downloads in past 6 Months ⌄

[NPM Trends]

## SOME ALTERNATIVE APPROACHES

- CSS Modules
- LitElement - Shadow DOM

That's all folks.