Modular Design

Developing, Maintaining, and Extending Component-Based CSS



The Current State of CSS

BEM

SMACSS

OOCSS

Utility Classes



Methodology - Hierarchy

Globals

Simplified Pattern Lab model

One to one relationships

Unidirectional Hierarchy



Our File Structure

```
I-- CSS
  |-- atoms
    |-- _button.scss...
  |-- molecules
    |-- _bitlink-item.scss...
  |-- templates
    |-- _layout.scss...
  |-- globals
    |-- _colors.scss
    |-- _fonts.scss
    -- reset.scss...
```



Methodology - Components

Parts of a component:

Name

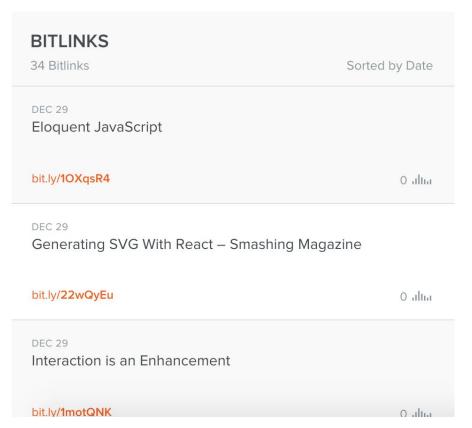
Children

Nested Components

Aspect



Our Component





Our Component



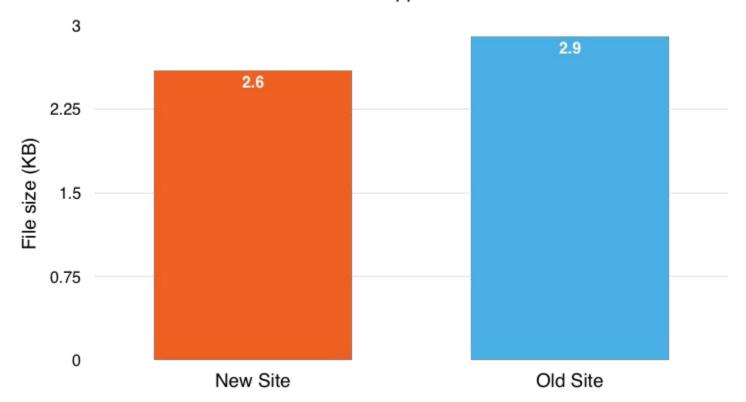
Our Sass

```
%bitlink-item--default {
  padding: 1.5rem 2.75rem 1.2rem;
  border-top: $border-style;
  position: relative;
  text-decoration: none;
  display: block;
  .checkbox--SMALL{
    position: absolute;
    top: 3.2rem;
    left: 2.6rem:
  .icon--TAG {
    color: $gray-1;
    float: right;
  .bitlink--MAIN {
    display: inline-block;
    outline: none;
    width: calc(100% - 7rem):
    overflow: hidden:
    text-overflow: ellipsis;
```

```
.bitlink-item--MAIN {
 @extend %bitlink-item--default;
 background-color: $gray-3;
.bitlink-item--ACTIVE {
 @extend %bitlink-item--default;
 background-color: $white;
.bitlink-item--created-date {
 @include h6--small;
.bitlink-item--title {
 @include h4:
 margin-bottom: 1.25rem;
 word-wrap: break-word;
 height: 4.5rem;
 overflow: hidden:
 -webkit-line-clamp: 2;
 display: -webkit-box;
 -webkit-box-orient: vertical:
```



Size of Gzipped CSS File



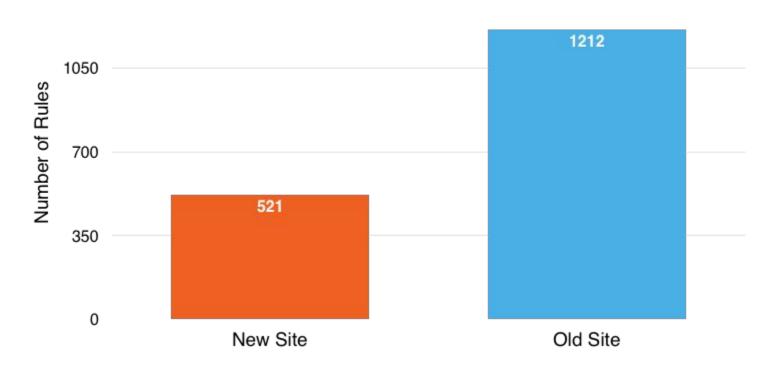
Lines of CSS and Sass





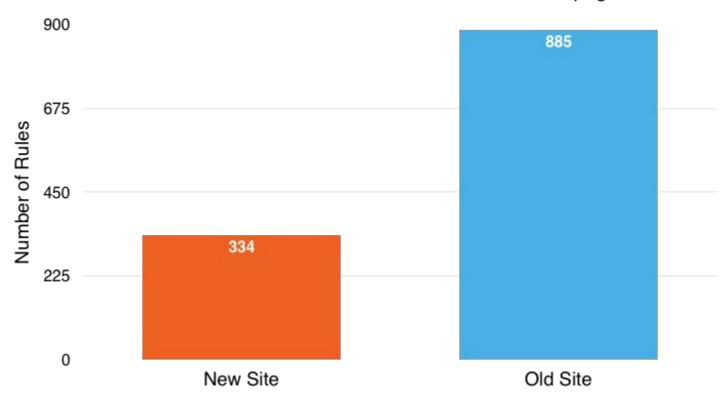
Total Number of CSS Rules





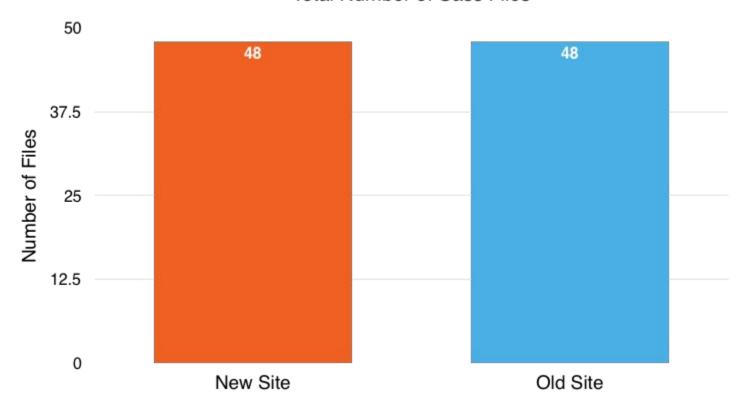


Number of Unused CSS Rules on the Homepage



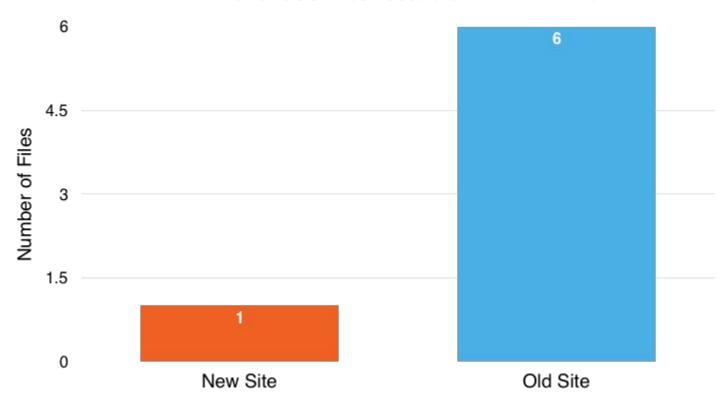


Total Number of Sass Files





Number of CSS Files Associated with Bitlink Item





What About React Inline Styles?

Netscape's JSSS

Separation of concerns

DOM weight

High-specificity

CSS solutions for dynamic styling

Alternative solutions for cascading issues



What's the Catch?

Requires discipline and restraint

Requires a CSS preprocessing language

Naming stuff is hard

Not particularly DRY



Benefits

Simplified hierarchy

Reduce nested selectors

1:1 relationships and no element styles

Readable HTML

Smaller CSS files

(Relatively) stress-free maintenance and refactoring!



THANK YOU

bitly