Agenda

1. Grading + rubric
2. Better understanding CSS
    - Box model
    - Units
3. Discussion of reading and Layout Land
4. Sass + Sassy activities

What Is

Sass is a CSS preprocessor originally written in Ruby that compiles into CSS

2 syntaxes

- *.sass
- *.scss

Why do I use

IT IS MAGICAL!

Sass magic: Variables

```
$variable: value;
```

```
$font-mono: 'Fira Mono', monospace;
```

```
.remark-code { font-family: $font-mono; }
```

```
.remark-code { font-family: 'Fira Mono',
monospace; }
```

```
$color-grey: #889094;
$color-text: $color-grey;
```

```
p { color: $color-text; }
```

CSS Variables

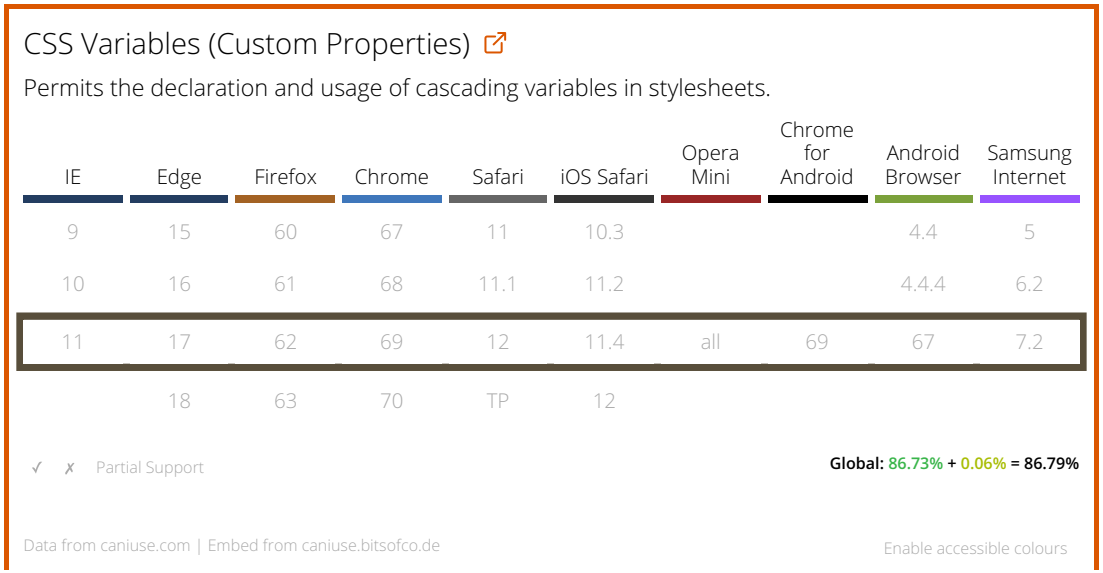
Sass

```scss
$color-grey: #889094;
$color-text: $color-grey;

p { color: $color-text; }
```

CSS

```css
:root {
  --color-grey: #889094;
  --color-text: var(--color-grey);
}

p { color: var(--color-text); }
```

CSS Variables



CSS Variables (Custom Properties)

Permits the declaration and usage of cascading variables in stylesheets.

IE	Edge	Firefox	Chrome	Safari	iOS Safari	Opera Mini	Chrome for Android	Android Browser	Samsung Internet
9	15	60	67	11	10.3			4.4	5
10	16	61	68	11.1	11.2			4.4.4	6.2
11	17	62	69	12	11.4	all	69	67	7.2
	18	63	70	TP	12				

✓ ✗ Partial Support

Global: 86.73% + 0.06% = 86.79%

Data from caniuse.com | Embed from caniuse.bitsofco.de

Enable accessible colours

Sass magic

Use variables when:

- the value is repeated at least twice
- the value is likely to be updated at least once
- all occurrences of the value are tied to the variable

Nesting

Sass magic: Nesting

Sass

```
.ul {
  padding: 0;

  li { color: green; }
}
```

```
.ul { padding: 0; }
.ul li { color: green; }
```

Sass magic: Nesting

```
<header class="site-header">
  <nav class="nav-bar">
    <ul class="nav-menu">
      <li class="nav-
menu__item"></li>
      <li class="nav-
menu__item"></li>
      <li class="nav-
menu__item"></li>
    </ul>
  </nav>
</header>
```

Don't do this

CSS

```
    header.site-header
nav.nav-bar ul.nav-menu
li.nav-menu__item {}
```

Sass

```
header.site-header {
  nav.nav-bar {
    ul.nav-menu {
      li.nav-menu__item {}
    }
  }
}
```

Inception rule
Don't go more than 3 levels deep

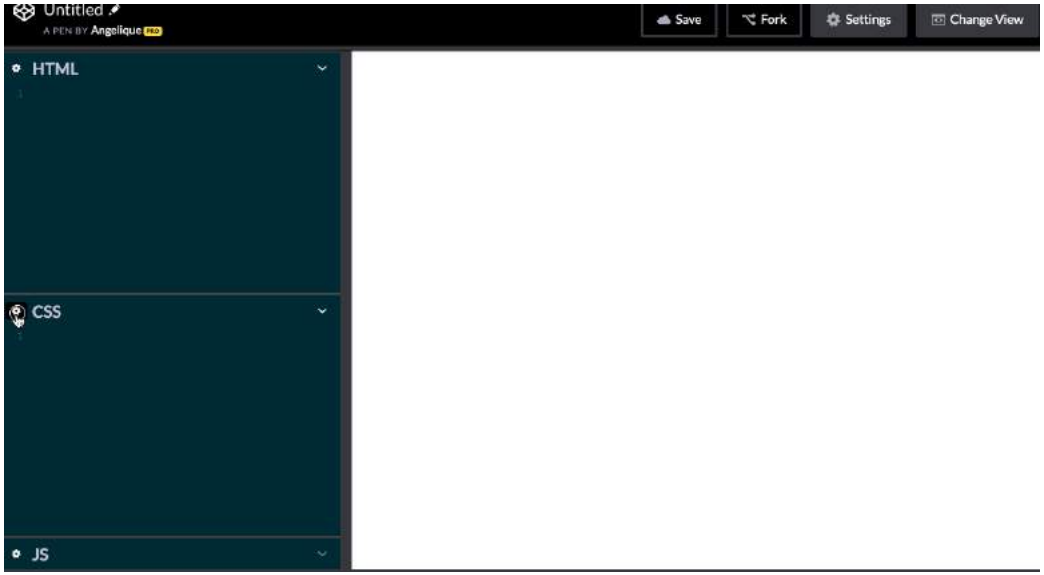
Sass magic: Nesting

```
.element {
  @media screen only and (min-width:600px) {
    // media queries here
  }
}
```

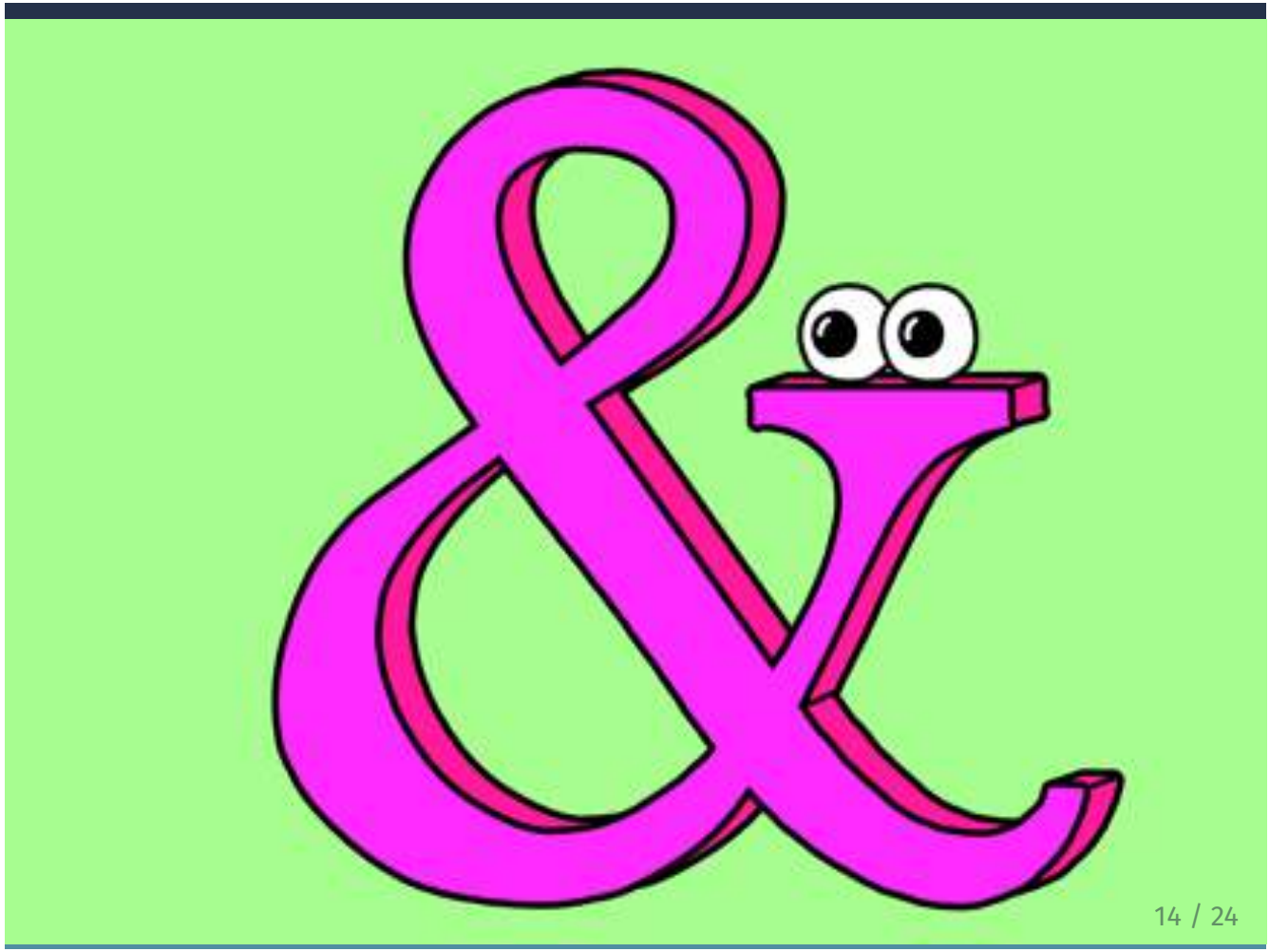
Q&A

Q&A

1. Fork your resume CodePen
2. Update your pen's settings to use Sass (SCSS)



3. Update your now Sass-y CodePen to use at least one variable and, if appropriate, nest a selector
    - Remember the *inception* rule



Sass magic: Nesting + Ampersand

SCSS

```
.some-class {
 &.another-class { }
}
```

Sass magic: Nesting + Ampersand

Sass

```
.class1 {
  &.class2 {}
}

.class1 {
  .class2 {}
}
```

CSS

```
.class1.class2 {}

.class1 .class2 {}
```

Sass magic: Nesting + Ampersand

```
.class1 {
  .class2 & {
    .class3 { color: red; }
  }
}
```

```
.class2 .class1 .class3 { color: red; }
```

Sass magic: Ampersand + Pseudo classes

```
a {
  &:link {}
  &:visited {}
  &:hover, &:focus {}
  &:active {}
}
```

Sass magic: Ampersand + Pseudo elements

```
a {
  &::before {}
  &::after {}
}
```

Sass magic: Ampersand & BEM

CSS

```
.photo {}
.photo__img {}
.photo__caption {}

.photo--featured {}
.photo--featured .photo__img
{}
.photo--featured
.photo__caption {}
```

Sass

```
.photo {
  &__img {}
  &__caption {}
  &--featured {
    .photo__img {}
    .photo__caption {}
  }
}
```

Sass magic: Mixins

```
@mixin size($width, $height) {
  height: $height;
  width: $width;
}
```

```
img {
  @include size(25px, 100%);
}
```

Sass magic: Mixins

```
img {
  @include size(25px, 100%);
}
```

```
img {
  height: 100%;
  width: 25px;
}
```

Sass magic: Mixins

```
@mixin size($width, $height:
$width) {
  height: $height;
  width: $width;
}
```

```
img {
  @include size(25px);
}
```

Sass magic: Functions

```
lighten($color, $percent)
darken($color, $percent)
rgba($color, $alpha)
complement($color)
invert($color)
```

```
p { color: rgba($color-text, 0.5); }
p { color: rgba(green, 0.5); }
```