



Syntactically
Awesome
Style Sheets

css

CSS WITH SUPERPOWERS



Why Sass?

Why Sass?

- Fully CSS-compatible
- Language extensions such as variables, nesting, and mixins
- Many useful functions for manipulating colors and other values
- Advanced features like control directives for libraries
- Well-formatted, customizable output



SCSS



Sassy CSS

Every CSS file is already a SCSS file

.scss extension

SASS



Older version

Indentation to denote nesting

New lines denotes properties

.sass extension

SCSS

```
3 body {
4   font-family: $fontStd;
5   background-color: $backgroundColor;
6   background-image: linear-gradient(to right, transparent 49%, $mainRed 49%, $mainRed 51%, $mainBlue 51%, $mainBlue 53%, transparent 53%);
7 }
8
9 // Styling the page header
10 header {
11   display: block;
12   position: fixed;
13   top: 0;
14   left: 0;
15   z-index: 100;
16
17   width: 100%;
18   height: 65px;
19   background-color: $navbarbackground;
20   color: $textColor;
21
22   border-top: 4px solid $mainRed;
23   border-bottom: 4px solid $mainBlue;
24   box-shadow: 0px 3px 9px 0px $shadowColor;
25
26   ol {
27     display: block;
28     float: right;
29     height: 100%;
30     margin: 0;
31   }
32
33   img {
34     height: 45px;
35     margin: 3px 25px 10px 25px;
36   }
37
38   li {
39     display: flex;
40     float: left;
41     height: inherit;
42     align-items: center;
43     padding: 20px;
44     font-weight: 100;
45
46     &:before {
47       margin-right: 15px;
48       height: 25px;
```

SASS

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48     &#createpoll:before
```


How Does it Work?

- Code your SCSS file
- Transpile
- Link to the generated CSS file



How Does it Work

Ahhhh! What the
H - E - Double Hockey Sticks
is transpile?!?!?

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Transpiling is a specific term for taking source code written in one language and transforming into another language that has a similar level of abstraction.



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And you can make this happen automatically. Command line sass comes with a folder watcher that will process any sass/scss files on save. Many IDE have file watchers that will transpile on save.



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```

SCSS

```
3 body {
4   font-family: $fontStd;
5   background-color: $backgroundColor;
6   background: url(../images/election_icon_k.png) no-repeat center;
7 }
8
9 // Styling the page header
10 header {
11   display: block;
12   position: fixed;
13   top: 0;
14   left: 0;
15   z-index: 100;
16
17   width: 100%;
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46     &:before {
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48       height: 25px;
```

CSS

```
16 body {
17   font-family: "Open Sans", sans-serif;
18   background-color: #F0F0F0;
19   background: url(../images/election_icon_k.png) no-repeat center;
20 }
21
22 header {
23   display: block;
24   position: fixed;
25   top: 0;
26   left: 0;
27   z-index: 100;
28   width: 100%;
29   height: 65px;
30   background-color: #FFF;
31   color: #333333;
32   border-top: 4px solid #BA3D37;
33   border-bottom: 4px solid #1C3D78;
34   box-shadow: 0px 3px 9px 0px #999999; }
35
36 header ol {
37   display: block;
38   float: right;
39   height: 100%;
40   margin: 0; }
41
42 header img {
43   height: 45px;
44   margin: 3px 25px 10px 25px; }
45
46 header li {
47   display: flex;
48   float: left;
49   height: inherit;
50   align-items: center;
51   padding: 20px;
52   font-weight: 100; }
53
54 header li:before {
55   margin-right: 15px;
56   height: 25px; }
57
58 header li#createpoll:before {
59   content: url(../images/election_icon_k.png);
60   margin-top: -10px; }
61
62 header li.selected#createpoll:before {
63   content: url(../images/election_icon_w.png);
64   margin-top: -10px; }
65
66 header li#mypolls:before {
67   content: url(../images/vote_icon_k.png);
68   margin-top: -5px; }
69
70 header li.selected#mypolls:before {
71   content: url(../images/vote_icon_w.png);
72   margin-top: -5px; }
```


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Hey, now that is
pretty cool!



Nesting rules

Referencing parent
selector (&)

Nesting properties

Variables

Math

Imports

Extend Classes

Mixins



Nesting rules

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```
#main p {  
  color: #00ff00;  
  width: 97%;  
  
  .redbox {  
    background-color: #ff0000;  
    color: #000000;  
  }  
}
```

is compiled to:

```
#main p {  
  color: #00ff00;  
  width: 97%; }  
#main p .redbox {  
  background-color: #ff0000;  
  color: #000000; }
```

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```
a {  
  font-weight: bold;  
  text-decoration: none;  
  &:hover { text-decoration: underline; }  
  body.firefox & { font-weight: normal; }  
}
```

is compiled to:

```
a {  
  font-weight: bold;  
  text-decoration: none; }  
a:hover {  
  text-decoration: underline; }  
body.firefox a {  
  font-weight: normal; }
```

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```
.funky {  
  font: {  
    family: fantasy;  
    size: 30em;  
    weight: bold;  
  }  
}
```

is compiled to:

```
.funky {  
  font-family: fantasy;  
  font-size: 30em;  
  font-weight: bold; }
```


Nesting rules

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```
#main {  
  $width: 5em !global;  
  width: $width;  
}  
  
#sidebar {  
  width: $width;  
}
```

is compiled to:

```
#main {  
  width: 5em;  
}  
  
#sidebar {  
  width: 5em;  
}
```

Nesting rules

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```
p {  
  font: 10px/3px;           // Plain CSS, no division  
  $width: 1000px;  
  width: $width/2;          // Uses a variable, does division  
  width: round(1.5)/2;      // Uses a function, does division  
  height: (500px/2);        // Uses parentheses, does division  
  margin-left: 5px + 8px/2px; // Uses +, does division  
  font: (italic bold 10px/8px); // In a list, parentheses don't count  
}
```

is compiled to:

```
p {  
  font: 10px/3px;  
  width: 500px;  
  height: 250px;  
  margin-left: 9px; }
```

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For example, if `example.scss` contains

```
.example {  
  color: red;  
}
```

then

```
#main {  
  @import "example";  
}
```

would compile to

```
#main .example {  
  color: red;  
}
```


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Mixins

```
.error {  
  border: 1px #f00;  
  background-color: #fdd;  
}  
.seriousError {  
  @extend .error;  
  border-width: 3px;  
}
```

is compiled to:

```
.error, .seriousError {  
  border: 1px #f00;  
  background-color: #fdd;  
}  
  
.seriousError {  
  border-width: 3px;  
}
```

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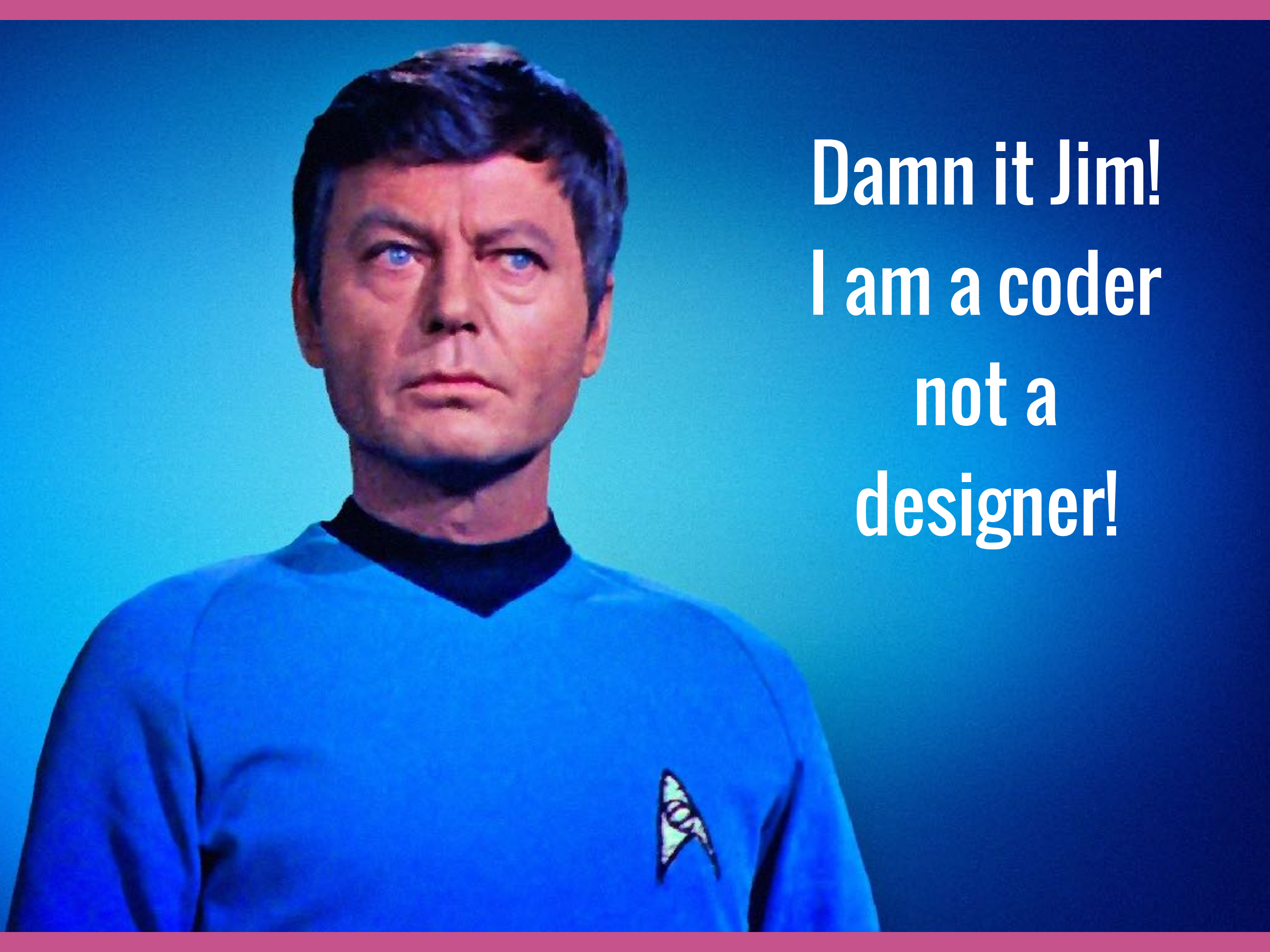
Mixins

```
@mixin large-text {  
  font: {  
    family: Arial;  
    size: 20px;  
    weight: bold;  
  }  
  color: #ff0000;  
}
```

```
.page-title {  
  @include large-text;  
  padding: 4px;  
  margin-top: 10px;  
}
```

is compiled to:

```
.page-title {  
  font-family: Arial;  
  font-size: 20px;  
  font-weight: bold;  
  color: #ff0000;  
  padding: 4px;  
  margin-top: 10px; }
```



**Damn it Jim!
I am a coder
not a
designer!**



- If
 - Boolean Logic
 - Switch Logic
- For loops
 - Each
 - Enhanced for loops
 - Nested arrays
 - Maps
- While loops
- And much more

Responsive Design



Web Resources

- **Sass Homepage:** <http://sass-lang.com/>
- **CSS-Tricks:** <https://css-tricks.com/>
- **W3Schools:** <http://www.w3schools.com/css/>
- **The Sass Way:** <http://thesassway.com/>
- **Sassmeister:** <http://www.sassmeister.com/>



A close-up portrait of a woman with blonde hair and bright blue eyes, resting her head on her hands against a magenta background. She is wearing a colorful, patterned top and a silver chain bracelet on her left wrist. The text "Thank you!" is overlaid in white on the right side of the image.

**Thank
you!**