CSS Preprocessors

CSS Preprocessors - Pros & Cons

- **Pros**
  - Write less / easier-to-read style code (or not)
  - Write browser-specific style code (for some)
  - New features (variables, functions, maths...)
  - Transparently serve minified CSS
  - ...

- **Cons**
  - Use resources on server and/or client side
  - Learn a new language
  - Learn to debug in this new language
  - Well-writen CSS has the same result
  - ...

CSS Preprocessors – Main Features

- **Variables**

```less
// LESS

@color: #4D926F;

#header {
  color: @color;
}
h2 {
  color: @color;
}
```

```css
/* Compiled CSS */

#header {
    color: #4D926F;
}
h2 {
    color: #4D926F;
}
```

CSS Preprocessors - Main Features

- **Rules nesting**

```less
// LESS

#header {
  h1 {
    font-size: 26px;
    font-weight: bold;
  }
  p { font-size: 12px;
    a { text-decoration: none;
      &:hover { border-width: 1px }
    }
  }
}
```

```css
/* Compiled CSS */

#header h1 {
    font-size: 26px;
    font-weight: bold;
}
#header p {
    font-size: 12px;
}
#header p a {
    text-decoration: none;
}
#header p a:hover {
    border-width: 1px;
}
```

CSS Preprocessors - Main Features

- **Functions**

```
// LESS                              /* Compiled CSS */

.rounded-corners (@radius: 5px) {    #header {
  border-radius: @radius;              border-radius: 5px;
  -webkit-border-radius: @radius;      -webkit-border-radius: 5px;
  -moz-border-radius: @radius;         -moz-border-radius: 5px;
}                                    }
                                     #footer {
#header {                              border-radius: 10px;
  .rounded-corners;                    -webkit-border-radius: 10px;
}                                      -moz-border-radius: 10px;
#footer {                            }
  .rounded-corners(10px);
```

CSS Preprocessors - Features

- **Math**

```
// LESS

@the-border: 1px;
@base-color: #111;
@red:        #842210;

#header {
  color: @base-color * 3;
  border-left: @the-border;
  border-right: @the-border * 2;
}
#footer {
  color: @base-color + #003300;
  border-color: desaturate(@red, 10%);
}
```

```
/* Compiled CSS */

#header {
  color: #333;
  border-left: 1px;
  border-right: 2px;
}
#footer {
  color: #114411;
  border-color: #7d2717;
}
```

CSS Preprocessors - Choice

Features / Processors	Nesting	Variables	Functions	Math	...
LESS	V	V	V	V	
SASS	V	V	V	V	
Dynamic CSS	X	V	V	V	
xCSS	V	V	X	V	
CSS DRY	V	X	X	X	
...					

Tips

www.dzone.com/links/r/10_less_css_examples_you_should_steal_for_your_pr.html