

Sass



Improve your CSS with

- CSS helps to...
 - Arrange elements
 - Add interaction
 - Adapt content to different screen sizes
 - Beautify
- But...
 - Long files = difficult maintenance
 - More files = more http requests





- SCSS: adding code to CSS
 - DRY - Don't Repeat Yourself
 - KISS - Keep It Simple Stupid
- With great power comes great responsibility
 - PRO: Better organization and maintenance
 - CON: Needed to be translated to CSS



- koala-app.com
- Organization
 - CSS in css folder
 - SCSS in scss folder

Sass - Variables

- Names start with '\$'
- Can be local or global
- Declared on top
- Keywords
 - !default: value if it is not defined
 - !global: converts local value to global

```
$primaryColor: #eecdff;  
$primaryColor: #ecc !default;  
  
body {  
  background: $primaryColor;  
  $primaryColor: #ccc !global;  
}  
  
p {  
  color: $primaryColor;  
}
```

Sass - Maths

- Easier to understand
- Do not mix units!

```
.container {  
  width: 100%;  
}  
  
article[role*="main"] {  
  float: left;  
  width: 600px / 960px * 100%;  
}  
  
aside[role$="ary"] {  
  float: right;  
  width: 300px / 960px * 100%;  
}
```

Sass - Nesting

- To group styles applied to the same parent
- ‘&’ is to indicate the parent
 - If not used, the compiler puts a space between the parent and the child
 - Mandatory for pseudo-classes
- No more than four levels!

```
nav {  
  ul {  
    margin: 0;  
    padding: 0;  
    list-style: none;  
  }  
  
  &:hover { display: inline-block; }  
  
  #main {  
    display: block;  
    padding: 6px 12px;  
    text-decoration: none;  
  }  
}
```

Sass - Extend / Inheritance

- To not repeat code (DRY)
- More organized
- More understandable

```
%message-shared {  
  border: 1px solid #ccc;  
  padding: 10px;  
  color: #333;  
}  
  
.message {  
  @extend %message-shared;  
}  
  
.success {  
  @extend %message-shared;  
  border-color: green;  
}
```

Sass - Mixins

- Functions with or without parameters
- DRY (again)
- Less errors
- Useful with vendor prefixes

```
@mixin reset-measures {  
  width: 100%;  
  height: 100%;  
  margin: 0;  
  padding: 0;  
}  
  
.box { @include reset-measures; }  
  
.bigbox { @include reset-measures; }
```


Sass - Mixins

```
@mixin background-gradient($dark, $light) {  
  /* Safari 4-5, Chrome 1-9 */  
  background: -webkit-gradient(linear, left top, left bottom, color-stop(0%, $dark), color-stop(100%, $light));  
  /* Safari 5.1, Chrome 10+ */  
  background: -webkit-linear-gradient(top, $dark 0%, $light 100%);  
  /* Firefox 3.6+ */  
  background: -moz-linear-gradient(top, $dark 0%, $light 100%);  
  /* IE 6-9 */  
  filter: progid:DXImageTransform.Microsoft.gradient( startColorstr=#{ $dark}, endColorstr=#{ $light}, GradientType=0);  
  /* IE 10+ */  
  background: -ms-linear-gradient(top, $dark 0%, $light 100%);  
  /* Opera 11.10+ */  
  background: -o-linear-gradient(top, $dark 0%, $light 100%);  
}  
  
.box { @include background-gradient("#000000", "#ffffff"); }  
.bigbox { @include background-gradient("#ff0000", "#ffff00"); }
```

Sass - Partial

- Maintenance
 - Organization
 - Reusing styles
 - Fewer lines per file
 - Meaningful file names
- Multiple scss, one single css
 - Less HTML imports
 - Fewer http requests

```
// _reset.scss
```

```
html, body, ul, ol {  
  margin: 0;  
  padding: 0;  
}
```

```
// base.scss
```

```
@import 'reset';
```

```
body {  
  font: 100% Helvetica, sans-serif;  
  background-color: #efefef;  
}
```

Sass - Advanced

- Custom functions

```
@function getColumnWidth($width, $columns, $margin){  
  @return ($width / $columns) - ($margin * 2);  
}  
  
$container-width: 100%;  
$column-count: 4;  
$margin: 1%;  
  
.column {  
  height: 200px;  
  float: left;  
  width: getColumnWidth($container-width, $column-count, $margin);  
}
```

- Functions

```
darken($color, $amount)  
lighten($color, $amount)  
grayscale($color)
```

Sass - Advanced

- Maps

```
$settings: (  
  columns: 12,  
  margin: 15px,  
  breakpoints: (  
    xs: "(max-width : 480px)",  
    sm: "(max-width : 768px) and (min-width: 481px)",  
    md: "(max-width : 1024px) and (min-width: 769px)",  
    lg: "(min-width : 1025px)"  
  )  
);
```

- Loops

- Conditionals

- Advanced mixins