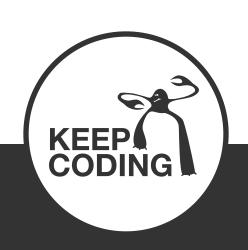


Introducción



Introducción

SASS es un preprocesador y extensión del lenguaje CSS

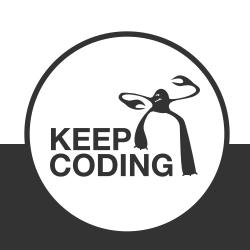
Añade características dinámicas a CSS como anidamiento, variables y funciones

Ventajas:

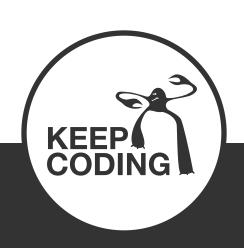
- Desarrollo de CSS más rápido y conciso
- Mejor mantenimiento del código

Inconvenientes

Hay que procesar SASS para convertirlo a CSS

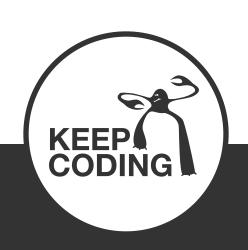


Nuestro primer SASS



hello.scss

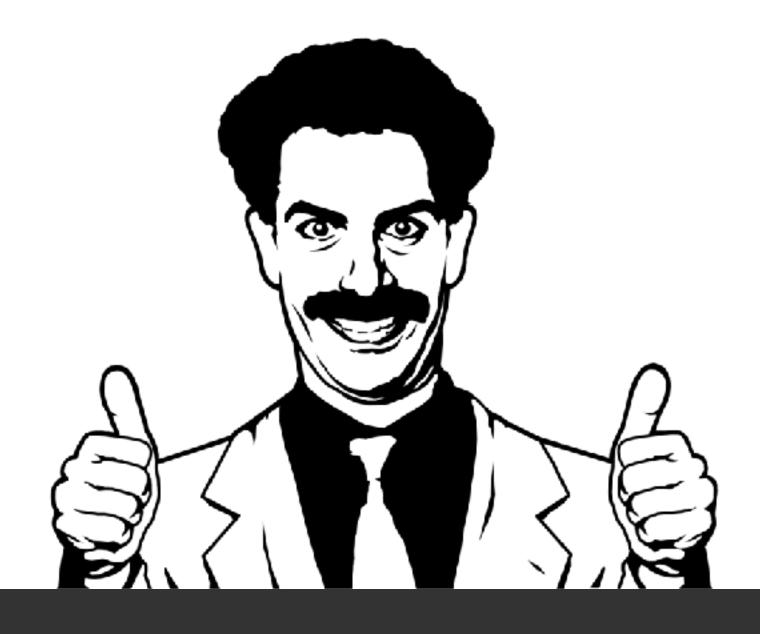
```
$main-text-color: blue;
body {
    color: $main-text-color;
}
```

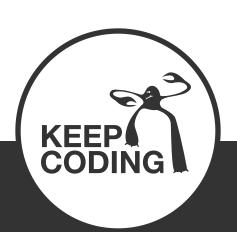


hello.scss

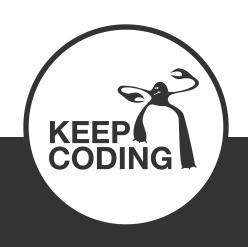
```
$ node-sass hello.scss
```

```
body {
  color: blue;
}
```





Sintaxis ¿SASS o SCSS?



SASS vs SCSS

SASS Syntax

nav ul

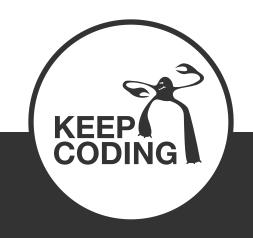
margin: 0

padding: 0

list-style: none

SCSS Syntax

```
nav {
  ul {
  margin: 0;
  padding: 0;
  list-style: none;
  }
}
```

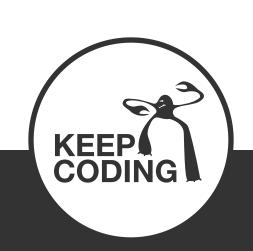


SASS vs SCSS

Ambas pueden convertirse fácilmente a CSS.

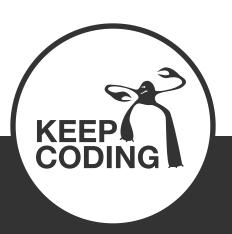
SCSS es en realidad una versión de SASS (Sassy CSS) y es la más utilizada debido a:

- Es una extensión de CSS y su sintaxis es 100% compatible con él. Podemos cambiar la extensión de un archivo .css a .scss y funcionará. No pasa lo mismo con SASS.
- Menor barrera de entrada conociendo la sintaxis de CSS



Variables

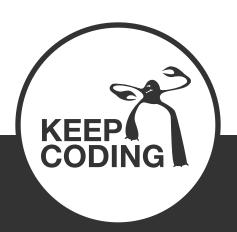
Podemos definir variables para almacenar valores o incluso para utilizar como nombres de propiedades CSS o rutas a ficheros.



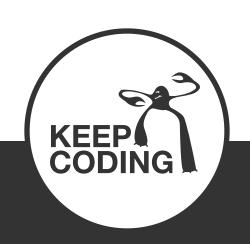
Variables

```
$font-stack: Helvetica, sans-serif;
$primary-color: #333;

body {
   font: 100% $font-stack;
   color: $primary-color;
}
```

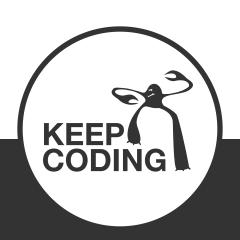


```
body {
  font: 100% Helvetica, sans-serif;
  color: #333;
}
```



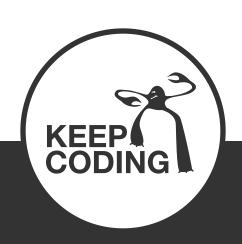
Anidamiento

Podemos anidar las reglas unas dentro otras, lo que nos ahorrará mucho código repetitivo

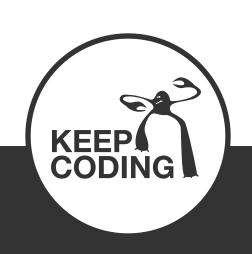


Anidamiento

```
nav {
  ul {
    margin: 0;
    padding: 0;
    list-style: none;
  }
}
```

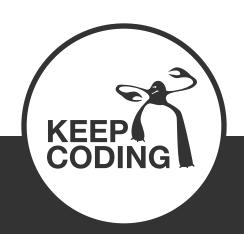


```
nav ul {
  margin: 0;
  padding: 0;
  list-style: none;
}
```

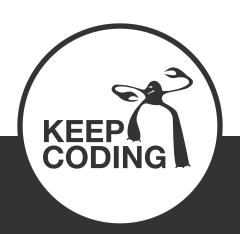


Especialización de un elemento

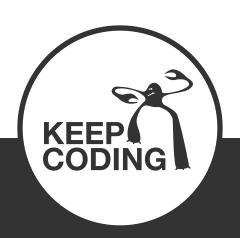
```
font-weight: bold;
text-decoration: none;
&.redLink { color: red }
&:hover { text-decoration: underline; }
body.firefox & { font-weight: normal; }
```



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



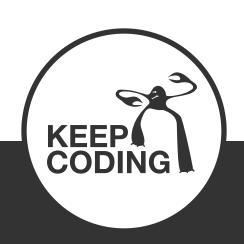
Comentarios



Comentarios

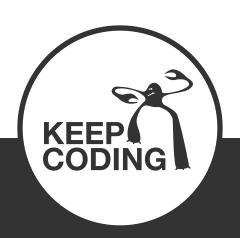
/* comentarios clásicos o multilínea */

// comentario de una sola línea



Mixins

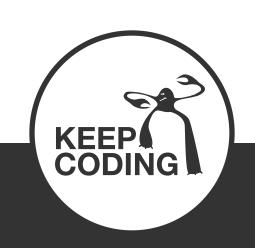
Los mixins nos permiten mezclar propiedades de clases y también definir funciones de generación de código CSS.



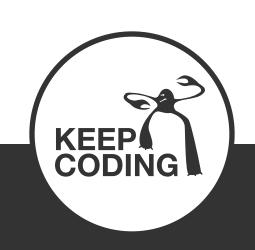
Mixin sin parámetros

```
@mixin clearfix {
  display: inline-block;
  &:after {....}
  * html & { height: 1px }
}
.menu { @include clearfix; }
```

Debemos utilizar la directiva @include para utilizar un mixin.

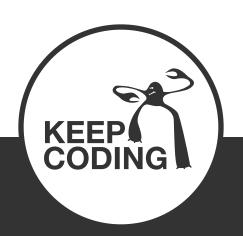


```
.menu { display: inline-block; }
.menu:after {...}
* html .menu { height: 1px }
```

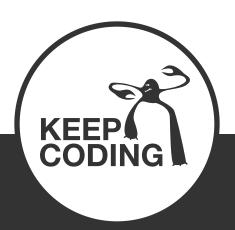


Mixin con parámetro

```
@mixin border-radius($radius) {
  -webkit-border-radius: $radius;
  -moz-border-radius: $radius;
  -ms-border-radius: $radius;
  border-radius: $radius;
}
.box { @include border-radius(10px); }
```

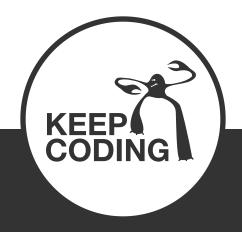


```
.box {
  -webkit-border-radius: 10px;
  -moz-border-radius: 10px;
  -ms-border-radius: 10px;
  border-radius: 10px;
}
```

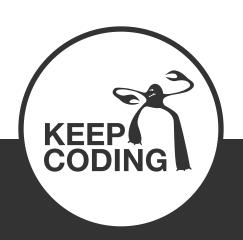


Mixin como bloque

```
@mixin apply-to-ie-only {
 html.ie {
  @content;
@include apply-to-ie-only {
 #logo {
  background-image: url(/logo.gif);
```

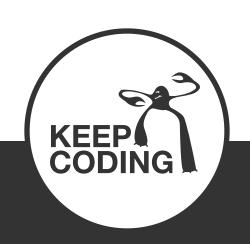


```
html.ie #logo {
  background-image: url(/logo.gif);
}
```



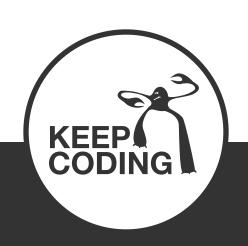
Util para responsive

```
$desktop-width: 1024px;
$tablet-width: 768px;
@mixin tablet {
 @media (min-width: #{$tablet-width}) and (max-width: #{$desktop-
width - 1px}) {
  @content;
```

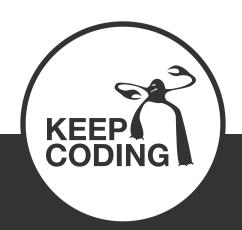


Util para responsive

```
p {
  font-size: 16px;
  @include tablet {
   font-size: 18px;
  }
}
```

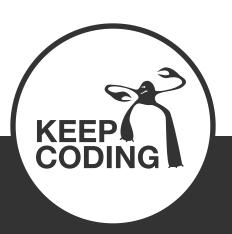


```
p {
  font-size: 16px;
}
@media (min-width: 768px) and (max-width: 1023px) {
    p {
      font-size: 18px;
    }
}
```



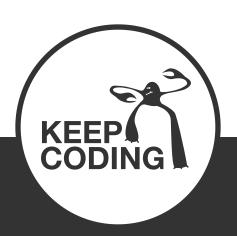
Operadores

Al poder definir variables podemos realizar operaciones básicas con las mismas



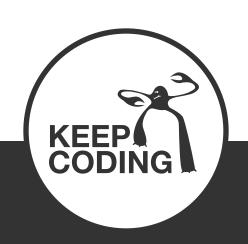
Operadores

```
article[role="main"] {
  float: left;
  width: 600px / 960px * 100%;
}
```



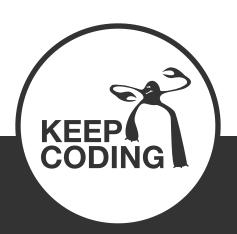
Operadores

```
article[role="main"] {
  float: left;
  width: 62.5%;
}
```



Funciones built-in

SASS incorpora una serie de funciones built-in para realizar diferentes operaciones

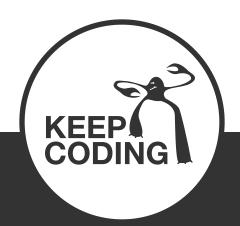


opacify & transparentize

```
$translucent-red: rgba(255, 0, 0, 0.5);

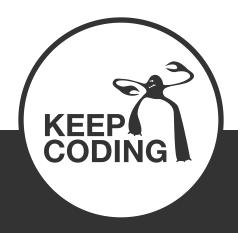
p {
  color: opacify($translucent-red, 0.3);
  background: transparentize($translucent-red, 0.25);
}
```

Añaden o quitan transparencia a un color



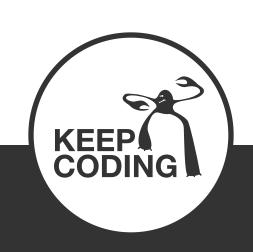
opacify & transparentize

```
p {
  color: rgba(255, 0, 0, 0.8);
  background-color: rgba(255, 0, 0, 0.25);
}
```



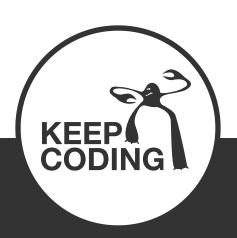
Funciones built-in

http://sass-lang.com/documentation/Sass/Script/Functions.html



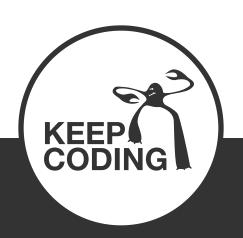
@import

La directiva @import se comporta de diferentes maneras en función de la extensión del archivo que importemos.



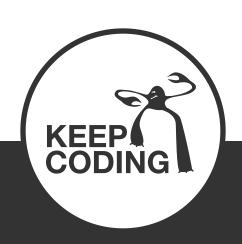
Se mantiene intacta cuando...

- Si la extensión del archivo es .css
- Si el archivo empieza por "http"
- Si el archivo es una url()
- Si la instrucción tiene media queries



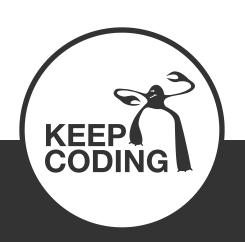
@import

```
@import "foo.css";
@import "foo" screen;
@import "http://foo.com/bar";
@import url(foo);
```



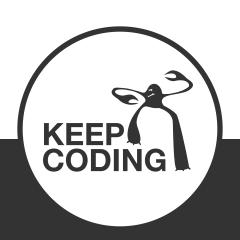
Resultado del @import

```
@import "foo.css";
@import "foo" screen;
@import "http://foo.com/bar";
@import url(foo);
```



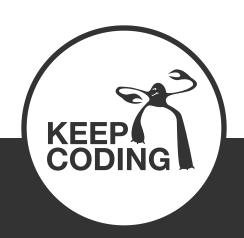
@import

```
// _example.scss
.red-color {
 color: red;
// base.scss
#main {
 @import "example";
```



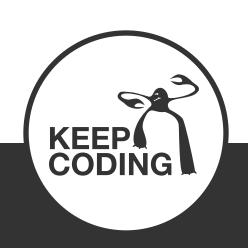
Resultado de @import anidado

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



Partials

Archivos SASS que queremos cargar pero no compilar (no queremos crear su respectivo archivo CSS)



Partials

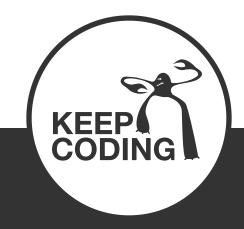
```
_reset.scss
```

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

base.scss

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

```
body {
  font: 100% Helvetica;
  background-color: white;
}
```

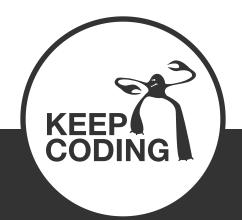


Partials

El nombre de archivo un *partial* deben comenzar por _ seguido del nombre del partial (y su extensión).

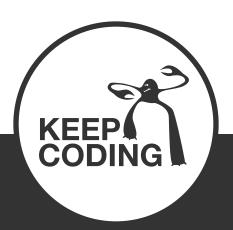
Para usarlo, debemos utilizar la instrucción @import seguido del nombre del partial.

Nombre	Archivo	Importación
reset	_reset.scss	@import "reset"



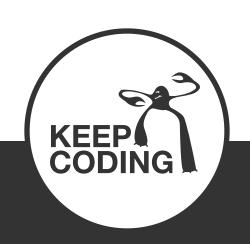


Funciona igual que en CSS...pero pueden anidarse!

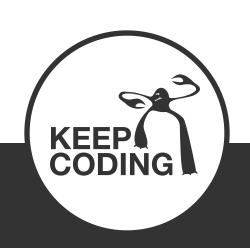


Especializando el comportamiento de una clase

```
.sidebar {
  width: 300px;
  @media screen and (orientation: landscape) {
    width: 500px;
  }
}
```

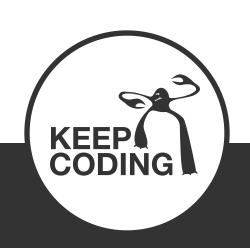


```
.sidebar {
  width: 300px;
}
@media screen and (orientation: landscape) {
    .sidebar {
     width: 500px;
    }
}
```

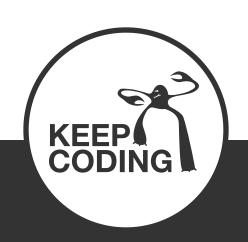


Anidándose unas con otras

```
@media screen {
    .sidebar {
      @media (orientation: landscape) {
         width: 500px;
      }
    }
}
```

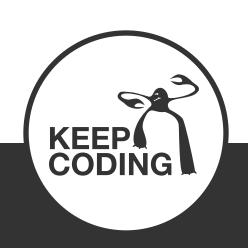


```
@media screen and (orientation: landscape) {
   .sidebar {
     width: 500px;
   }
}
```



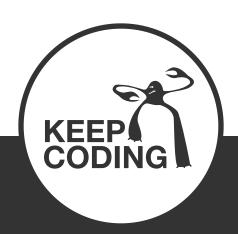


Permite heredar las reglas de un estilo

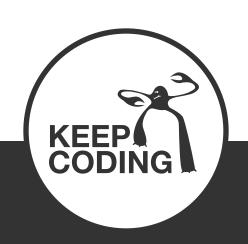


Herencia

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

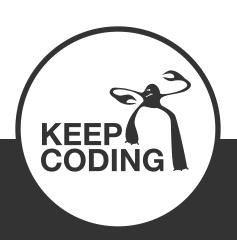


```
.message, .success {
 border: 1px solid #ccccc;
 padding: 10px;
 color: #333;
.success {
 border-color: green;
```

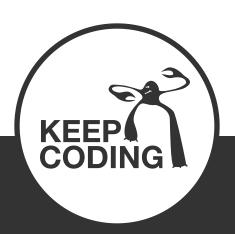




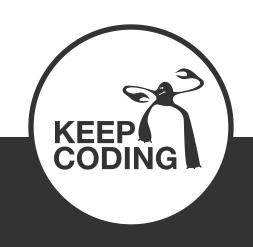
Permite escribir reglas condicionales





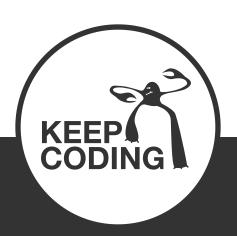


```
p {
 border: 1px solid;
}
```



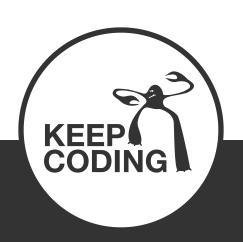


Permite hacer un bucle para escribir reglas

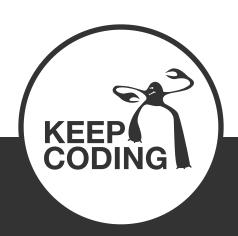




```
@for $i from 1 through 3 {
   .item-#{$i} { width: 2em * $i; }
}
```

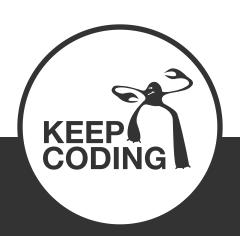


```
.item-1 {
 width: 2em;
.item-2 {
 width: 4em;
.item-3 {
 width: 6em;
```



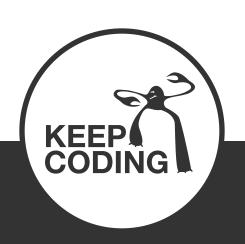


Permite recorrer una lista de valores

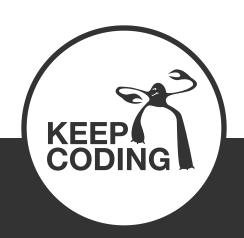


@each

```
@each $animal in puma, sea-slug, bird {
   .#{$animal}-icon {
    background: url('/images/#{$animal}.png');
   }
}
```

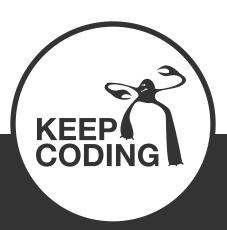


```
.puma-icon {
 background: url('/images/puma.png');
.sea-slug-icon {
 background: url('/images/sea-slug.png');
.egret-icon {
 background: url('/images/bird.png');
```





Permite realizar un bucle mientras se cumple una condición



@while

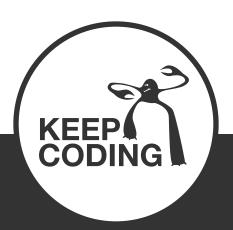
```
$i: 6;

@while $i > 0 {

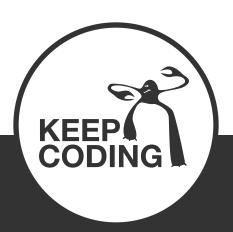
.item-#{$i} { width: 2em * $i; }

$i: $i - 2;

}
```

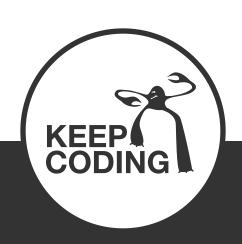


```
.item-6 {
 width: 12em;
.item-4 {
 width: 8em;
.item-2 {
 width: 4em;
```





Permite definir nuestras propias funciones

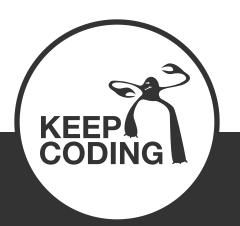


@function

```
$grid-width: 40px;
$gutter-width: 10px;

@function grid-width($n) {
    @return $n * $grid-width + ($n - 1) * $gutter-width;
}

#sidebar { width: grid-width(5); }
```



```
#sidebar {
  width: 240px;
}
```

