



Let's Get Sassy

RESPONSIVE DESIGN WITH FOUNDATION AND SASS

A close-up photograph of a fluffy white cat with large, expressive brown eyes. The cat is looking directly at the viewer, its gaze intense and curious. Its fur is soft and well-groomed, with visible whiskers and a gentle texture. The lighting is soft, highlighting the cat's features against a dark background.

Ali Gray

WEB DESIGNER, PORTLAND COMMUNITY COLLEGE

@IAMALIGRAY



Malik's Gateway

Malik Lewis used the Gateway to College Program to finish high school and start his college career »



College News



- > First Middle College graduates
Jul 31
- > Cultural luau attracts hundreds
Jul 30
- > Safety first at Cascade Campus
Jul 29

[more news...](#)

PCC in the News

- > Art sales help PCC programs
Aug 10
- > PCC's share of funds increases
Jul 27

[more "in the news"...](#)

Announcements

- > Bond Program
Building our future

Spotlights



Malik's Gateway

Earn Your Degree or Certificate

to kick-start your career or four-year degree - [apply now!](#)

Get Job Ready

in a year or less.

Enrich Your Life

through non-credit Community Education classes.

Develop Your Business or Career

at the CLIMB Center for Advancement.

Prepare for College

with high school completion, GED, and English skill courses.

Make Opportunity Happen

by supporting the PCC Foundation.

Get Job Ready

in a year or less.

Enrich Your Life

through non-credit Community Education classes.

Develop Your Business or Career

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Prepare for College

with high school completion, GED, and English skill courses.

Make Opportunity Happen

by supporting the PCC Foundation.

College News

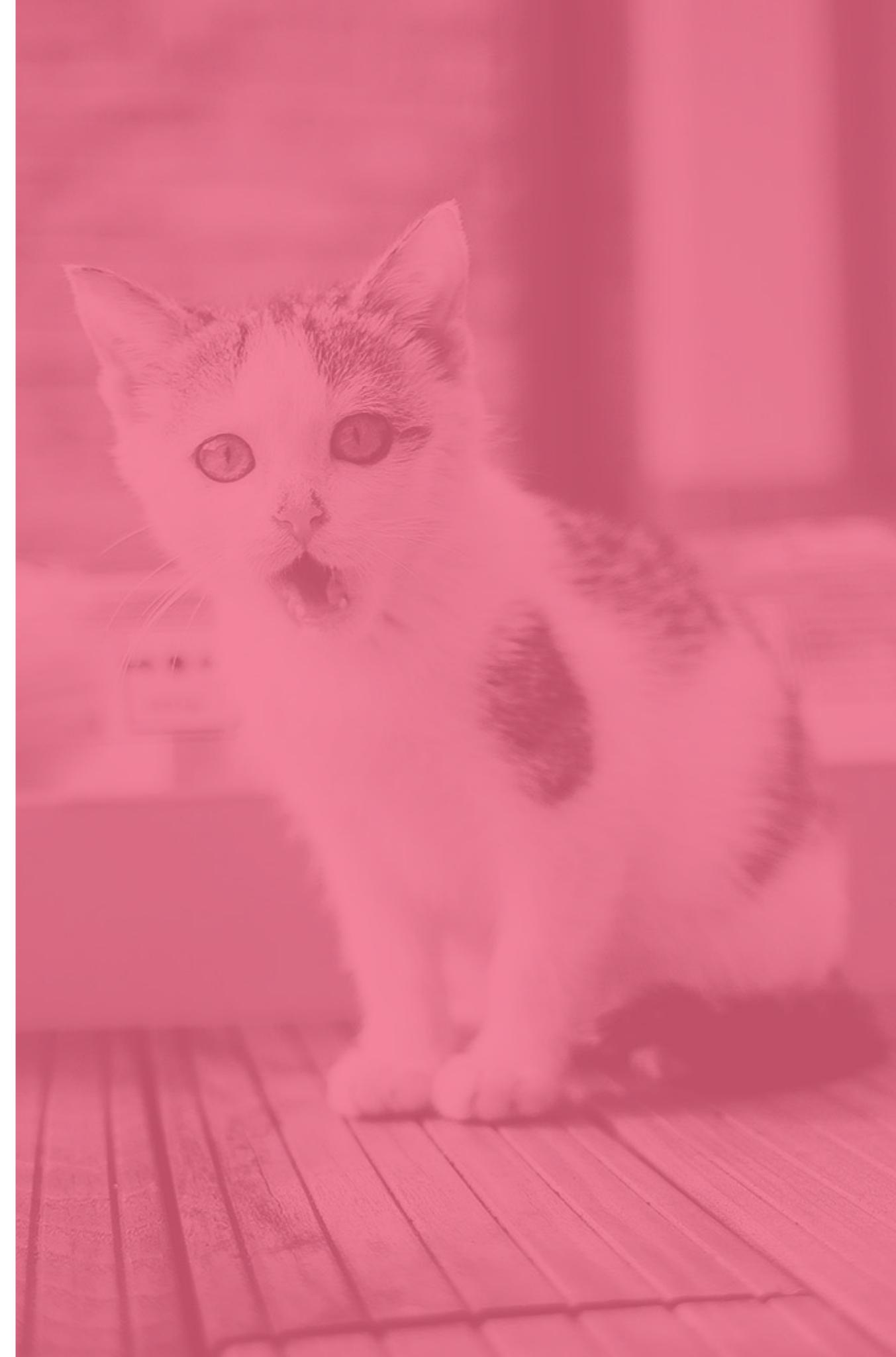


- > VP of Finance finalists declared
Aug 20

- > In a league of her own
Aug 18

- > Sonnleitner joins PCC Board
Aug 14

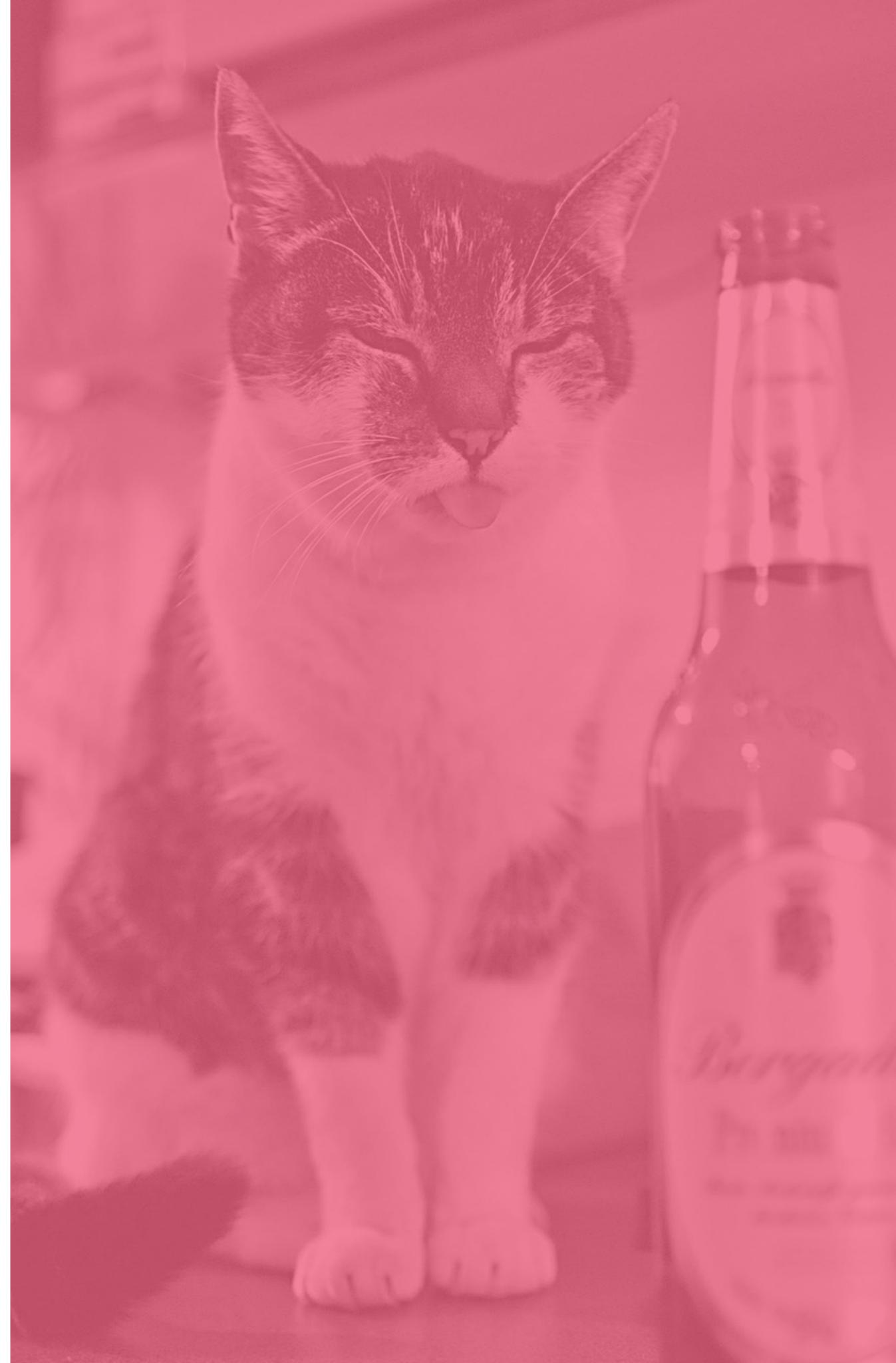
BUT
HOW?





RESPONSIVE
WEBSITES
THE
FUN
WAY

BUILDING A
RESPONSIVE FRAMEWORK
FROM SCRATCH
IS
YUCK





PLAIN CSS
IS A
PAIN IN THE ASS
SO LET'S USE
Sass

A close-up photograph of a person's face, partially obscured by a solid red overlay. A single, delicate white feather is positioned in front of the person's eye, adding a touch of elegance and mystery. The lighting is soft, creating a gentle glow around the feather and the person's skin.

Foundation:
Responsive out of the box

Foundation

The most advanced responsive front-end framework in the world.

[Download Foundation 5](#)

★ 20.5k stargazers  @ZURBfoundation



WHY USE Foundation?



- ❖ Same frame, any website with CSS/Sass
- ❖ Effortless responsiveness
- ❖ Plugins to copy/paste
- ❖ Modular
- ❖ Accessible
- ❖ Doesn't require much testing if done correctly

FOUNDATION FOR KITTENS



- ✿ Responsive front-end framework (HTML, CSS, JS)
- ✿ Developed by ZURB, released in 2011
- ✿ Open-source, built on Sass
- ✿ Mobile-first philosophy
- ✿ Great for prototyping
- ✿ (Similar: Bootstrap, Skeleton...)

FOUNDATION FOR KITTENS

Download Foundation 5

[GETTING STARTED](#)[DOWNLOAD](#)[HTML TEMPLATES](#)[BUILDING BLOCKS](#)[RESOURCES](#)[CONTRIBUTE](#)

Complete

Grab this version of Foundation if you want everything in the framework in simple, vanilla CSS and JS.

Essential

A simple, lighter version that includes typography, the grid, buttons, Reveal and Interchange.*

*59kb (okay, plus dependencies).

Custom

Include or remove certain elements and define the size of columns, colors, font size and more.

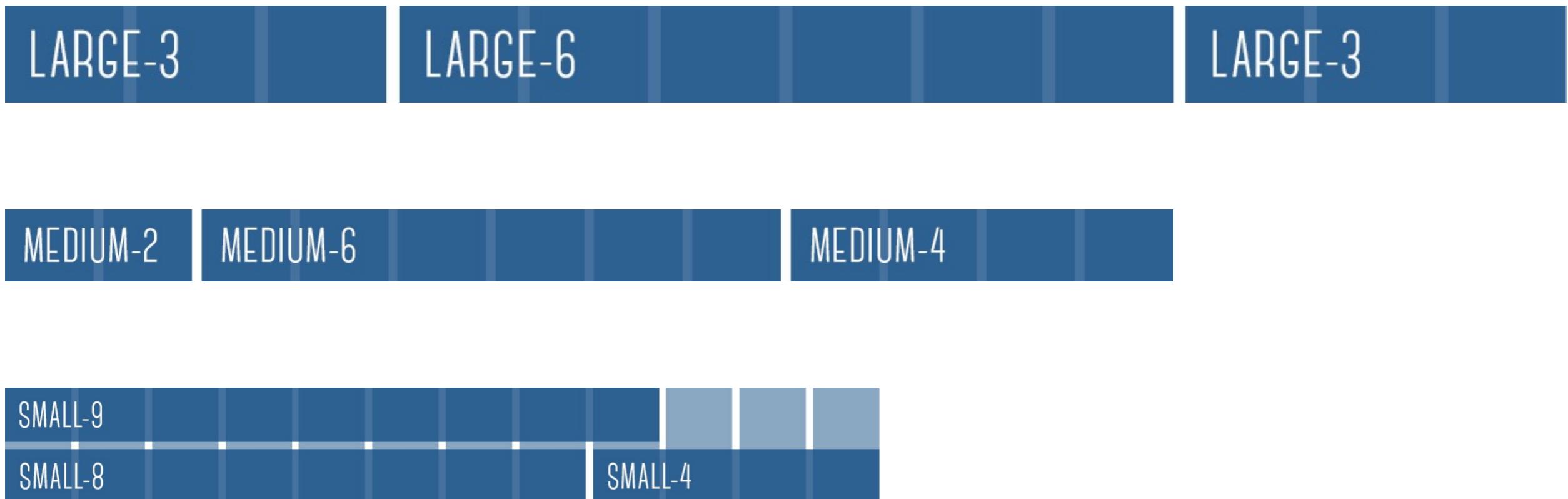
Sass

Foundation is built using SCSS, and you can work with it in the same way. Check out the instructions on the Install documentation page.

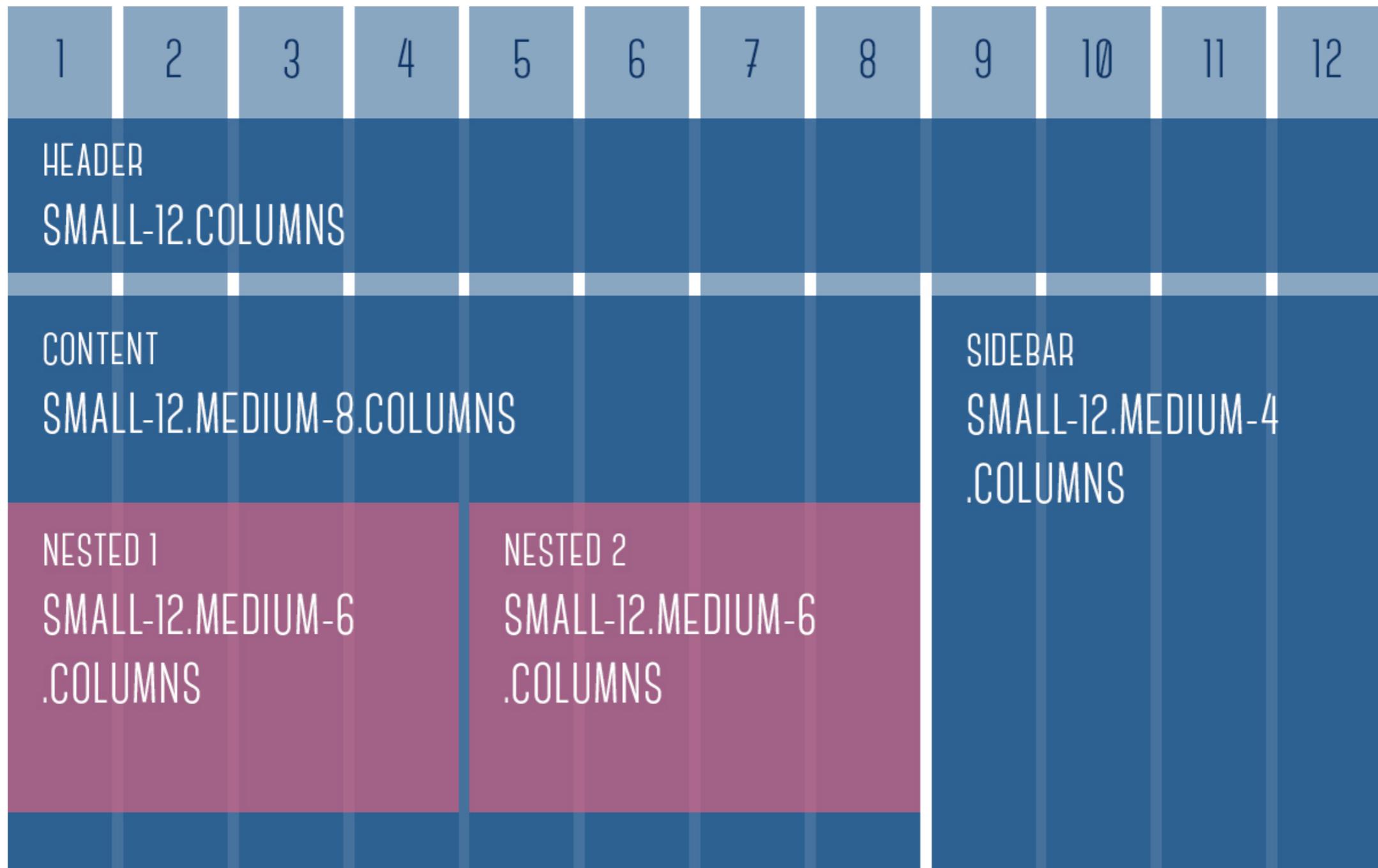
[Download Everything](#)[Download Essentials](#)[Custom Download](#)[Install via SCSS](#)

FOUNDATION FOR CATS — *The Grid*

```
1 <div class="row">
2   <div class="small-9 medium-2 large-3 columns">...</div>
3   <div class="small-8 medium-6 large-6 columns">...</div>
4   <div class="small-4 medium-4 large-3 columns">...</div>
5 </div>
```



FOUNDATION FOR CATS — *The Grid*



FOUNDATION FOR CATS — The Grid

```
1  <!-- HEADER -->
2  <div class="row">
3    <div class="small-12 columns">Header</div>
4  </div> <!-- header .row -->
5
6  <!-- CONTENT & SIDEBAR -->
7  <div class="row">
8
9    <!-- CONTENT -->
10   <div class="small-12 medium-8 columns">
11     Content
12
13    <!-- 2 NESTED CALLOUTS -->
14    <div class="row">
15      <div class="small-12 medium-6 columns">Nested 1</div>
16      <div class="small-12 medium-6 columns">Nested 2</div>
17    </div> <!-- nested .row -->
18
19   </div> <!-- content .columns -->
20
21   <!-- SIDEBAR -->
22   <div class="small-12 medium-4 columns">Sidebar</div>
23
24 </div> <!-- sidebar content .row -->
```

FOUNDATION FOR TOMCATS — *The Grid*

- ✿ Offsets (move incomplete rows to the right)



- ✿ Centered (center incomplete rows)



- ✿ Source Ordering (rendered in different order than in code)



- ✿ class="“row collapse” removes the padding between columns

HEADER

SMALL-12.COLUMNS

NESTED NAVIGATION

SMALL-12.MEDIUM-8.MEDIUM-OFFSET-4.COLUMNS

PAGE HEADER SMALL-12.COLUMNS

CONTENT SMALL-12.COLUMNS

PLAIN TEXT

FLOATED PHOTO OR VIDEO

NESTED 1
SMALL-12.MEDIUM-4
.COLUMNS

NESTED 2
SMALL-12.MEDIUM-4
.COLUMNS

NESTED 3
SMALL-12.MEDIUM-4
.COLUMNS

NESTED 1
SMALL-12.MEDIUM-6
.COLUMNS

NESTED 2
SMALL-12.MEDIUM-6
.COLUMNS

FOOTER SMALL-12.COLUMNS



Portland
Community
College

About PCC Academic Programs Calendars Class Schedule Resources

Earn Your Degree or Certificate

PCC / Admissions /

Think PCC First

Going to college is the investment of a lifetime...and choosing PCC could be the smartest choice you'll ever make.

If you're serious about finding your future, Portland Community College is ready to help you succeed. One of the top 20 community colleges in the country, PCC is a community unmatched in its [breadth of opportunities](#). Here, you can follow your passion in endless ways, alongside a top-notch faculty totally focused on your success, and within one of the most diverse settings you'll find in the entire state. And, you can do it all [without going into debt for the rest of your life](#). Whether you are beginning the first two years of your bachelor's or starting your career, PCC is the place to start. If you think you are ready to blaze a path to your future... think PCC first.

apply now →



PCC is ready to help you...



Begin your university degree

Each year, 5,000 students transfer PCC credits to four-year colleges.

- [Learn about university transfer](#)



Start your career

With classes in more than 80 subjects, earn the degree or certificate you need.

- [Short-term certificates](#)
- [Learn about academic programs](#)



Explore your options

Not sure exactly what path you want to take? PCC can help.

- [Career Resource Center](#)
- [Get on our mailing list](#)

Ready to get started?



[Apply now](#)

Complete the admissions form to get started.



[New student checklist](#)

All the steps to complete before your first day of class.

Come see us

Visit a [PCC campus](#) for a Preview Day for High School Students or a [New Student Welcome Day](#).

Need more help getting started? Contact us! We can guide you through the process of becoming a PCC student.

Cascade: [Roberto](#)
Sylvania: [Teresa](#)

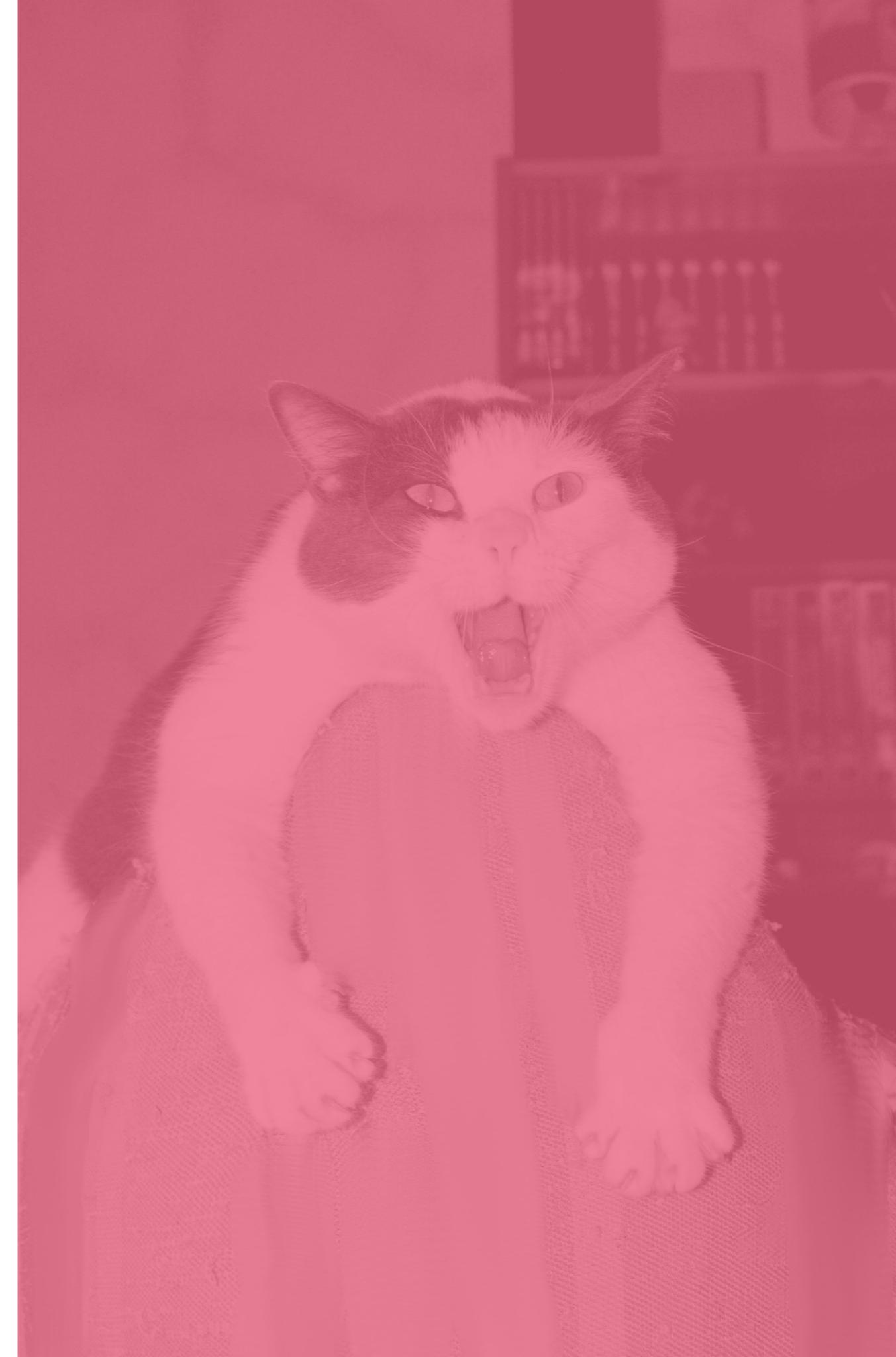
Rock Creek: [Heidi](#)
Southeast: [Luis](#)

.ROW	HEADER SMALL-12.COLUMNS	NESTED NAVIGATION SMALL-12.MEDIUM-8.MEDIUM-OFFSET-4.COLUMNS	
.ROW	PAGE HEADER	SMALL-12.COLUMNS	
.ROW	CONTENT	SMALL-12.COLUMNS	
	PLAIN TEXT	FLOATED PHOTO OR VIDEO	
.ROW	NESTED 1 SMALL-12.MEDIUM-4 .COLUMNS	NESTED 2 SMALL-12.MEDIUM-4 .COLUMNS	NESTED 3 SMALL-12.MEDIUM-4 .COLUMNS
.ROW	NESTED 1 SMALL-12.MEDIUM-6 .COLUMNS	NESTED 2 SMALL-12.MEDIUM-6 .COLUMNS	
.ROW	FOOTER	SMALL-12.COLUMNS	

```
1  <!-- HEADER -->
2  <div class="row">
3    <div id="sitewide-header" class="small-12 columns">
4      <h1>Logo</h1>
5      <div class="small-12 medium-8 medium-offset-4 columns">(nav)</div>
6    </div> <!-- #sitewide-header -->
7  </div> <!-- .row -->
8
9  <!-- PAGE HEADER -->
10 <div class="row">
11   <div id="page-header" class="small-12 columns">
12     <h2>Page Header</h2>
13   </div> <!-- #page-header -->
14 </div> <!-- .row -->
15
16 <!-- CONTENT -->
17 <div class="row">
18   <div id="content" class="small-12 columns">
19
20     
21     <p>Lorem ipsum dolor sit amet.</p>
22
23   <!-- 3 NESTED CALLOUTS -->
24   <div class="row">
25     <div class="small-12 medium-4 columns"><h3>Nested 1</h3></div>
26     <div class="small-12 medium-4 columns"><h3>Nested 2</h3></div>
27     <div class="small-12 medium-4 columns"><h3>Nested 3</h3></div>
28   </div> <!-- .row -->
29
30   <!-- 2 NESTED CALLOUTS -->
31   <div class="row">
32     <div class="small-12 medium-6 columns"><h3>Nested 1</h3></div>
33     <div class="small-12 medium-6 columns"><h3>Nested 2</h3></div>
34   </div> <!-- .row -->
35
36   </div> <!-- #content -->
37 </div> <!-- .row -->
38
39 <!-- FOOTER -->
40 <div class="row">
41   <div class="small-12 columns">(footer)</div>
42 </div> <!-- .row -->
```

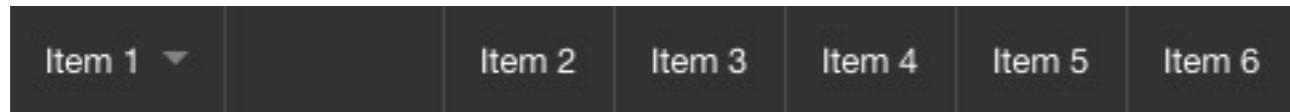
CONFUSED?
TEMPLATES!

FOUNDATION.ZURB.COM/TEMPLATES.HTML



FOUNDATION FOR CATS – *Navigation*

- ✿ Top-bar



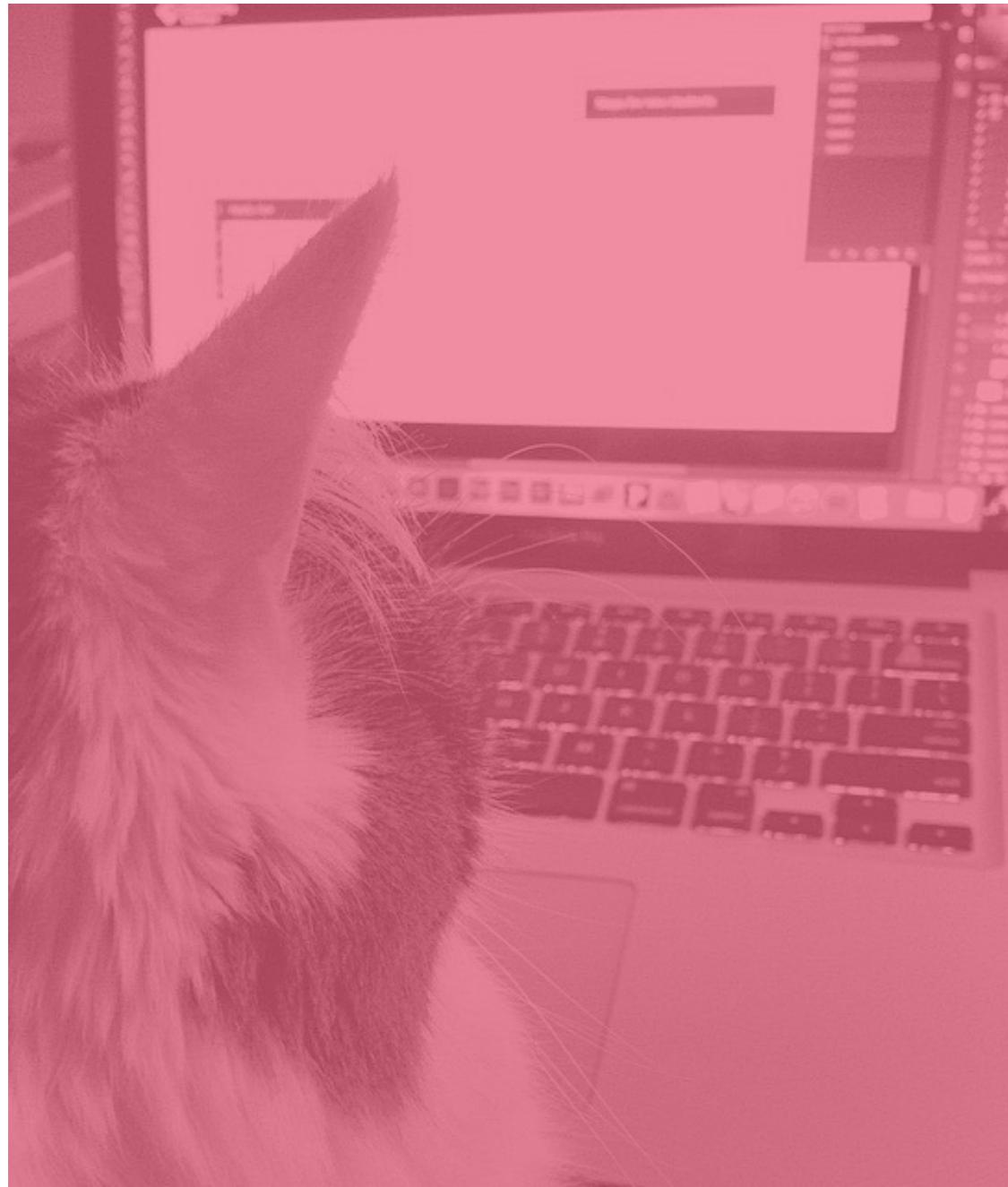
- ✿ Tons of features like buttons, dropdowns, search bars, stick-to-top
- ✿ ...and Foundation offers 7 other types of responsive navigation menus

FOUNDATION FOR CATS — *Visibility*



- Show/hide by screen size
- Orientation detection
- Touch detection
- Show/hide for screen readers
- Skip links, .show-for-focus
- Show/hide for print

FOUNDATION FOR CATS — *Media*



- ✿ Block grid
- ✿ Slider
- ✿ Lightbox, modal
- ✿ Flex video

A fluffy black cat is sitting on a dark laptop keyboard, looking intently at the screen. The laptop is open, showing a website for 'CHIP - Mein digitales Ich' with various images and text. The cat's fur is dark and textured, and its eyes are focused on the screen.

Sass = Syntactically
Awesome Style Sheets



INSTALL LEARN SASS BLOG DOCUMENTATION GET INVOLVED LIBSASS

CSS with superpowers



Sass is the most mature, stable, and powerful professional grade CSS extension language in the world.

Current Release: Selective Steve (3.4.15)

[Release Notes](#)

[Fork on Github](#)

CSS COMPATIBLE

Sass is completely compatible with all versions of CSS. We take this compatibility seriously, so that you can seamlessly use any available CSS libraries.

FEATURE RICH

Sass boasts more features and abilities than any other CSS extension language out there. The Sass Core Team has worked endlessly to not only keep up, but stay ahead.

MATURE

Sass has been actively supported for over 8 years by its loving Core Team.

INDUSTRY APPROVED

Over and over again, the industry is choosing Sass as the premier CSS extension language.

LARGE COMMUNITY

Sass is actively supported and developed by a consortium of several tech companies and hundreds of developers.

FRAMEWORKS

There are endless number of frameworks built with Sass. [Compass](#), [Bourbon](#), and [Susy](#) just to name a few.



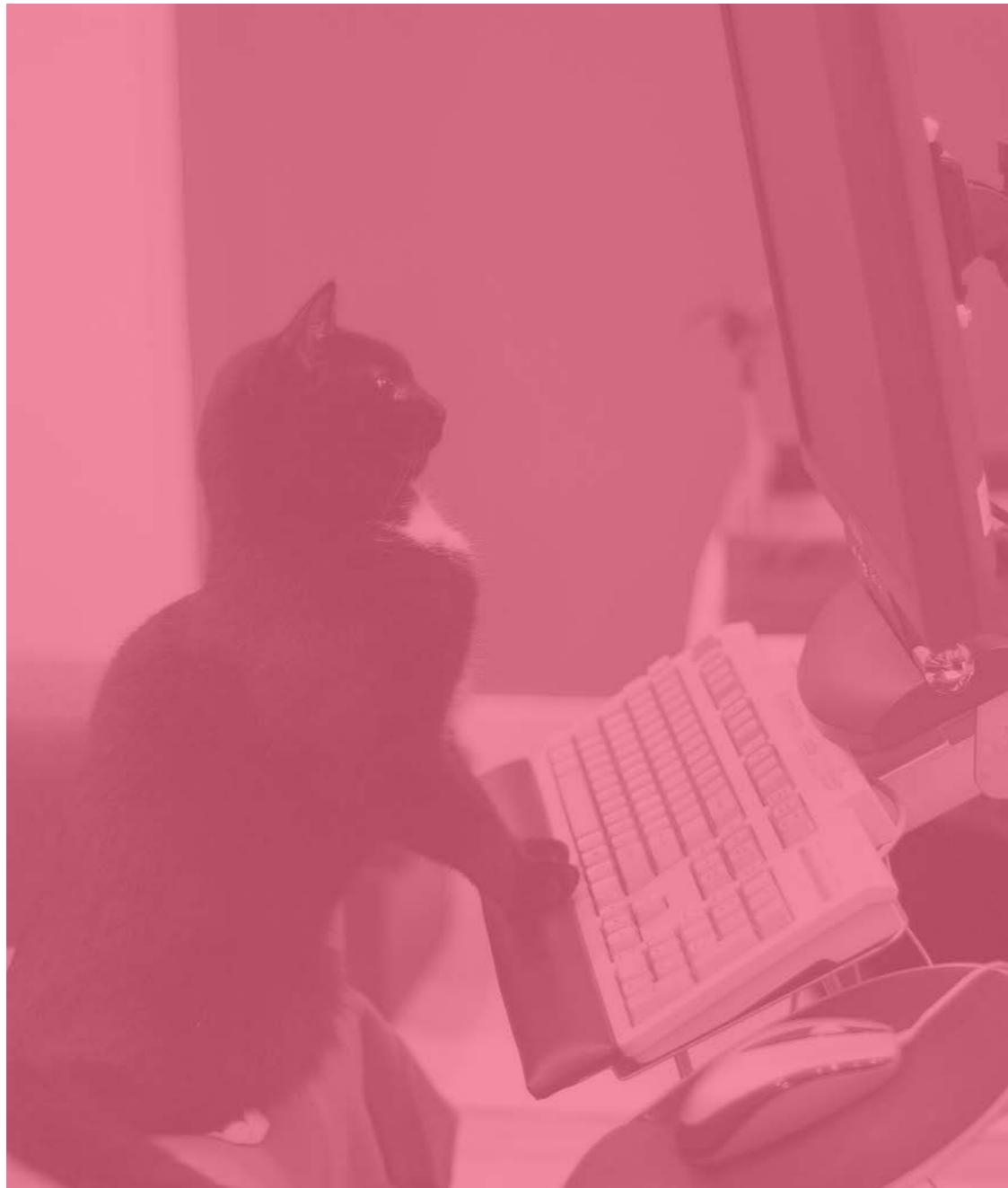
WHY USE
Sass?

SASS FOR KITTENS



- ❖ Designed by Hampton Catlin in 2006
- ❖ Coded in Ruby, open-source
- ❖ Extends CSS to provide features available in traditional programming languages
- ❖ .sass vs .scss
- ❖ Scout app (no command line)
- ❖ SassMeister
- ❖ (Similar: CoffeeScript, LESS)

SASS FOR KITTENS



✿ How Sass works

.SCSS / .SASS



SASS COMPILER



.CSS

SASS FOR CATS — *Partials*

Folder structure

```
└─ css
    └─ base
        └─ _colors.scss
        └─ _global.scss
        └─ _mixins.scss
        └─ _typography.scss
    └─ components
        └─ _callouts.scss
        └─ class-schedule.scss
        └─ _forms.scss
        └─ _tabs.scss
    └─ layout
        └─ _footer.scss
        └─ _header.scss
        └─ _media-queries.scss
        └─ _sidebar.scss
```

style.scss

```
@import "base/colors", "base/global",
"base/mixins", "base/typography";

@import "components/callouts",
"components/forms", "components/tabs";

@import "layout/footer", "layout/header",
"layout/media-queries", "layout/sidebar";
```

SASS FOR CATS — *Nesting*

Sass

```
1 .header {  
2   background:#e1e1e1;  
3   width:100%;  
4   p {  
5     font-size:12px;  
6     a {  
7       color:#0088a4;  
8       text-decoration:none;  
9       &:hover {  
10         color:#333;  
11         text-decoration:underline;  
12       }  
13     }  
14   }  
15   ul li {  
16     padding:0 10px;  
17     &.emphasis {  
18       color:#9e0c0f;  
19     }  
20   }  
21 }
```

Compiled CSS

```
1 .header {  
2   background:#e1e1e1;  
3   width:100%;  
4 }  
5 .header p {  
6   font-size:12px;  
7 }  
8 .header p a {  
9   color:#0088a4;  
10  text-decoration:none;  
11 }  
12 .header p a:hover {  
13  color:#333;  
14  text-decoration:underline;  
15 }  
16 .header ul li {  
17  padding:0 10px;  
18 }  
19 .header ul li.emphasis {  
20  color:#9e0c0f;  
21 }
```

SASS FOR CATS – Variables

Sass

```
1 $background:#e1e1e1;
2 $link:#0088a4;
3 $link-hover:#333;
4
5 .header {
6   background:$background;
7   width:100%;
8   p {
9     font-size:12px;
10    a {
11      color:$link;
12      text-decoration:none;
13      &:hover {
14        color:$link-hover;
15        text-decoration:underline;
16      }
17    }
18 }
```

Compiled CSS

```
1 .header {
2   background:#e1e1e1;
3   width:100%;
4 }
5 .header p {
6   font-size:12px;
7 }
8 .header p a {
9   color:#0088a4;
10  text-decoration:none;
11 }
12 .header p a:hover {
13  color:#333;
14  text-decoration:underline;
15 }
```

SASS FOR CATS — *Mixins*

Sass

```
1 @mixin border-radius($radius) {  
2   -webkit-border-radius: $radius;  
3   -moz-border-radius: $radius;  
4   -ms-border-radius: $radius;  
5   border-radius: $radius;  
6 }  
7  
8 .button {  
9   @include border-radius(10px);  
10 }  
11  
12 .callout {  
13   @include border-radius(5px);  
14 }
```

Compiled CSS

```
1 .button {  
2   -webkit-border-radius: 10px;  
3   -moz-border-radius: 10px;  
4   -ms-border-radius: 10px;  
5   border-radius: 10px;  
6 }  
7  
8 .callout {  
9   -webkit-border-radius: 5px;  
10  -moz-border-radius: 5px;  
11  -ms-border-radius: 5px;  
12  border-radius: 5px;  
13 }
```

SASS FOR CATS — *Mixins*

Sass

```
1 @mixin button($background, $text, $width) {  
2   background:$background;  
3   // Sass can lighten and darken colors  
4   border-bottom:2px solid darken($background, 10%);  
5   color:$text;  
6   padding:10px;  
7   width:$width;  
8 }  
9  
10 .submit-btn {  
11   @include button($blue, $gray, 50%);  
12 }  
13  
14 .callout-btn {  
15   padding:0; // won't override mixin  
16   @include button(#123456, #light-gray, 100%);  
17   padding:0; // will override mixin  
18 }
```

Compiled CSS

```
1 .submit-btn {  
2   background:#0088a1;  
3   border-bottom:2px solid #0288a1;  
4   color:#333;  
5   padding:10px;  
6   width:50%;  
7 }  
8  
9 .callout-btn {  
10  background:#123456;  
11  border-bottom:2px solid #234567;  
12  color:#d1d1d1;  
13  padding:0;  
14  width:100%;  
15 }
```

SASS FOR CATS — *Mixins*

Sass

```
1 @mixin transition($args...) {  
2   -webkit-transition: $args;  
3   -moz-transition: $args;  
4   -ms-transition: $args;  
5   -o-transition: $args;  
6   transition: $args;  
7 }  
8  
9 .box {  
10   width:10%;  
11   @include transition(width 0.3s ease);  
12  
13   &:hover {  
14     width:12%;  
15     @include transition(width 2s linear 1s);  
16   }  
17 }  
18  
19 .color-changer {  
20   background-color: #000;  
21   @include transition(background-color 0.5s ease);  
22  
23   &:hover {  
24     background-color: #333;  
25   }  
26 }
```

Compiled CSS

```
1 v .box {  
2   width:10%;  
3 v   -webkit-transition: width 0.3s ease;  
4 v   -moz-transition: width 0.3s ease;  
5 v   -ms-transition: width 0.3s ease;  
6 v   -o-transition: width 0.3s ease;  
7   transition: width 0.3s ease;  
8 }  
9  
10 v .box:hover {  
11   width:12%;  
12 v   -webkit-transition: width 2s linear 1s;  
13 v   -moz-transition: width 2s linear 1s;  
14 v   -ms-transition: width 2s linear 1s;  
15 v   -o-transition: width 2s linear 1s;  
16   transition: width 2s linear 1s;  
17 }  
18  
19  
20 v .color-changer {  
21   background-color: #000;  
22 v   -webkit-transition: background-color 0.5s ease;  
23 v   -moz-transition: background-color 0.5s ease;  
24 v   -ms-transition: background-color 0.5s ease;  
25 v   -o-transition: background-color 0.5s ease;  
26   transition: background-color 0.5s ease;  
27 }  
28 v .color-changer:hover {  
29   background-color: #333;  
30 }
```

SASS FOR TOMCATS — Advanced

Sass

```
1 article {  
2   float: left;  
3   width: 600px / 960px * 100%;  
4 }  
5  
6 aside {  
7   float: right;  
8   width: 300px / 960px * 100%;  
9 }
```

Compiled CSS

```
1 article {  
2   float: left;  
3   width: 62.5%;  
4 }  
5  
6 aside {  
7   float: right;  
8   width: 31.25%;  
9 }
```

Other Math Operations

```
1 p {  
2   font: 10px/8px;           // Plain CSS, no division  
3   $width: 1000px;  
4   width: $width/2;          // Uses a variable, does division  
5   width: round(1.5)/2;      // Uses a function, does division  
6   height: (500px/2);        // Uses parentheses, does division  
7   margin-left: 5px + 8px/2px; // Uses +, does division  
8 }
```

SASS FOR TOMCATS – Advanced

Expressions

```
1 $type: monster;
2 p {
3   @if $type == ocean {
4     color: blue;
5   } @else if $type == matador {
6     color: red;
7   } @else if $type == monster {
8     color: green;
9   } @else {
10     color: black;
11   }
12 }
```

Custom Functions

```
1 $grid-width: 40px;
2 $gutter-width: 10px;
3
4 @function grid-width($n) {
5   @return $n * $grid-width + ($n - 1) * $gutter-width;
6 }
7
8 #sidebar { width: grid-width(5); }
9
10 // compiles to #sidebar { width: 240px; }
11
12
13
14 // font size - converts px to em
15 @function em($pixels, $context: $base-size) {
16   @return #{$pixels/$context}em
17 }
```

- ✿ ...and much more – check out sass-lang.com

A close-up photograph of a fluffy white cat with bright red eyes. The cat is looking directly at the camera with a slightly tilted head. Its fur is soft and light-colored, and its eyes are a vibrant red. The background is dark and out of focus.

Questions?

@ IAMALIGRAY