

Web Application Development

Prof. Paul Krause, University of Surrey

Lecture 19

Sassy CSS

Objectives for today

- Introduce Sprockets for managing the Assets Pipeline
- Show you how to make CSS Sassy

Rails' Asset Pipeline with Sprockets

- <http://getsprockets.org/>
- Locations for assets:
 - app/assets
 - for application specific assets
 - lib/assets
 - for in-house assets used across projects
 - vendor/assets
 - for assets pulled from the wider community

Sprocket Directives

```
11  *= require_self
12  *= require normalize
13  *= require layout
14  *= require navigation
15  */
16
```

What did Sassy CSS ever do for us?

SCSS Simplifies Advanced Selectors

```
1 <nav id="main_nav" role="navigation">
2   <ul>
3     <li><%= link_to "Home", root_path %></li>
4     <li><%= link_to "Events", events_path %></li>
5     <li><%= link_to "Discussion", discussion_path %></li>
6     <li><%= link_to "Shop", shop_path %></li>
7   </ul>
8 </nav>
```

Simply CSS

```
5
6 nav#main_nav ul {
7     text-align: center;
8 }
9
10 nav#main_nav li {
11     display: inline-block;
12     margin: 0 2px;
13     padding: 4px 6px;
14     font-size: 1.5em;
15 }
16
17 nav#main_nav li a,
18 a:link,
19 a:visited {
20     color: #FFF;
21     text-decoration: none;
22 }
```

If this isn't sassy, I don't know what is :)

```
1  /* navigation.css.scss
2  * In line styled navigation bar
3  *
4  */
5
6  nav#main_nav {
7    ul {
8      text-align: center;
9    }
10
11    li {
12      display: inline-block;
13      margin: 0 2px;
14      padding: 4px 6px;
15      font-size: 1.5em;
16
17      a,
18      a:link,
19      a:visited {
20        color: #FFF;
21        text-decoration: none;
22      }
23    }
24  }
```

Thank you!!!

And there's more

- Variables
- Functions
- File Imports
- Nested Selectors
- Mixins
- Inheritance

Variables

```
5 * Fonts
6 * -----
7 * Headings: Verdana, Arial, Helvetica, sans-serif
8 * Accent: Georgia, Times New Roman, serif
9 * Body: Times New Roman, Times, serif
10 *
11 * Colours
12 * -----
13 * #FFFFFF White - no kidding!
14 * #808000 Khaki
15 * #008000 Mid Green
16 * #50b450 Dark Green
17 * #333 Near Black
18 */
19
20 body {
21     font-family: 'Times New Roman', 'Times', serif;
22 }
23
24 h1, h2 {
25     color: #333;
26     font-family: 'Verdana', 'Arial', 'Helvetica', sans-serif;
27 }
28
29 h3 {
30     color: #50b450;
31     font: italic bold 20px 'Georgia', 'Times New Roman', serif;
32 }
33
```

layout.css.scss

```
8 $heading-font: 'Verdana', 'Arial', 'Helvetica', sans-serif;
9 $accent-font: 'Georgia', 'Times New Roman', serif;
10 $body-font: 'Times New Roman', 'Times', serif;
11
12 $white: #FFFFFF;
13 $khaki: #808000;
14 $mid-green: #008000;
15 $dark-green: #50b450;
16 $near-black: #333;
17
18
19 body {
20   font-family: $body-font;
21 }
22
23 h1, h2 {
24   color: $near-black;
25   font-family: $heading-font;
26 }
27
28 h3 {
29   color: $dark-green;
30   font: italic bold 20px $accent-font;
31 }
32
33 div#container {
34   display: block;
35   position: relative;
36   min-height: 1000px;
37   width: 1000px;
38   margin: 0 auto;
39   padding: 0;
40   background-color: $khaki;
41 }
```

Factor the variables into: _site-branding.scss

```
1 /*
2 * Partial: site-branding.scss
3 */
4
5 $heading-font: 'Verdana', 'Arial', 'Helvetica', sans-serif;
6 $accent-font: 'Georgia', 'Times New Roman', serif;
7 $body-font: 'Times New Roman', 'Times', serif;
8
9 $white: #FFFFFF;
10 $khaki: #808000;
11 $mid-green: #008000;
12 $dark-green: #50b450;
13 $near-black: #333;
14
15
```

and replace the variable definitions with an import

```
1  /* layout.css.scss
2  *
3  * Basic styling for the static pages
4  *
5  */
6
7  @import "site-branding";
8
9  body {
10     font-family: $body-font;
11 }
12
13 h1, h2 {
14     color: $near-black;
15     font-family: $heading-font;
16 }
17
18 h3 {
19     color: #50b450;
20     font: italic bold 20px $accent-font;
21 }
22
```

Mixins

A little digression first

- Don't forget to commit your current version of the sample app to Git
- And push it to GitHub
- Now we are going to set up the Events page to demo Mixins

app/views/events/index.html.erb

```
1 <h1>Listing events</h1>
2
3 <table>
4   <tr>
5     <th>Title</th>
6     <th>Date</th>
7     <th>Description</th>
8     <th></th>
9     <th></th>
10    <th></th>
11  </tr>
12
13  <% @events.each do |event| %>
14    <tr>
15      <td><%= event.title %></td>
16      <td><%= event.date %></td>
17      <td><%= event.description %></td>
18      <td><%= link_to 'Show', event %></td>
19      <td><%= link_to 'Edit', edit_event_path(event) %></td>
20      <td><%= link_to 'Destroy', event, confirm: 'Are you sure?', method: :delete %></td>
21    </tr>
22  <% end %>
23 </table>
24
25 <br />
26
27 <%= link_to 'New Event', new_event_path %>
28
```


Signed in as p.krause@surrey.ac.uk: [Sign out](#)

Ashtead Allotments Association

Healthy Eating and Exercise preserve Life's Balance

[Home](#) [Events](#) [Discussion](#) [Shop](#)

Listing events

| Title | Date | Description | |
|-------------------------------|------------|---|---|
| Queen's Jubilee | 2012-06-03 | The Queen will sail in a very nice boat down the River Thames. | Show Edit Destroy |
| Bradley Wiggins wins the Tour | 2012-07-22 | Bradley Wiggins became the first British rider to win the Tour de France, with a massive margin of 3 minutes 21 seconds. Mark Cavendish claimed his fourth consecutive final-stage victory. Perhaps we can have the Tour televised again next year? | Show Edit Destroy |

[New Event](#)

© 2012 Ashtead Allotment's Association

Version 2 - app/views/events/index.html.erb

```
1 <article id="events">
2
3   <% @events.each do |event| %>
4     <section>
5       <h1><%= event.title %></h1>
6       <h2>Date of event: <%= event.date %></h2>
7       <p>
8         <%= event.description %>
9       </p>
10      <% if user_signed_in? %>
11        <p>
12          <%= link_to 'Show', event %> |
13          <%= link_to 'Edit', edit_event_path(event) %>
14          <%= link_to 'Destroy', event, confirm: 'Are you sure?', method: :delete %>
15        </p>
16      <% end %>
17    </section>
18  <% end %>
19
20  <% if user_signed_in? %>
21    <section>
22      <%= link_to 'New Event', new_event_path %>
23    </section>
24  <% end %>
25
26 </article>
```

Ashtead Allotments Association

[Sign up](#) or [sign in](#)

Healthy Eating and Exercise preserve Life's Balance

[Home](#) [Events](#) [Discussion](#) [Shop](#)

Queen's Jubilee

Date of event: 2012-06-03

The Queen will sail in a very nice boat down the River Thames.

Bradley Wiggins wins the Tour

Date of event: 2012-07-22

Bradley Wiggins became the first British rider to win the Tour de France, with a massive margin of 3 minutes 21 seconds. Mark Cavendish claimed his fourth consecutive final-stage victory. Perhaps we can have the Tour televised again next year?

© 2012 Ashtead Allotment's Association

app/assets/stylesheets/events.css.scss

```
1 // Place all the styles related to the Events controller here.
2 // They will automatically be included in application.css.
3 // You can use Sass (SCSS) here: http://sass-lang.com/
4 @import "site-branding";
5
6 article#events {
7   padding-left: 20px;
8   section {
9     margin-left: 20px;
10    margin-right: 100px;
11    padding: 20px;
12    background-color: #2EB82E;
13    h1, h2 {
14      color: $white;
15      font-size: 20px;
16    }
17  }
18 }
19
20 article#events section:nth-child(even) {
21   background-color: #398F39;
22 }
```

Signed in as p.krause@surrey.ac.uk: [Sign out](#)

Ashtead Allotments Association

Healthy Eating and Exercise preserve Life's Balance

[Home](#) [Events](#) [Discussion](#) [Shop](#)

Queen's Jubilee

Date of event: 2012-06-03

The Queen will sail in a very nice boat down the River Thames.

[Show](#) | [Edit](#) | [Destroy](#)

Bradley Wiggins wins the Tour

Date of event: 2012-07-22

Bradley Wiggins became the first British rider to win the Tour de France, with a massive margin of 3 minutes 21 seconds. Mark Cavendish claimed his fourth consecutive final-stage victory. Perhaps we can have the Tour televised again next year?

[Show](#) | [Edit](#) | [Destroy](#)[New Event](#)

app/assets/stylesheets/_popout.scss

```
1 @mixin popout {  
2   border-top: #fff 2px solid;  
3 }
```

Version 2: app/assets/stylesheets/events.css.scss

```
1 // Place all the styles related to the Events controller here.
2 // They will automatically be included in application.css.
3 // You can use Sass (SCSS) here: http://sass-lang.com/
4 @import "site-branding";
5 @import "popout";
6
7 article#events {
8   padding-left: 20px;
9   section {
10     @include popout;
11     margin-left: 20px;
12     margin-right: 100px;
13     padding: 20px;
14     background-color: #2EB82E;
15     h1, h2 {
16       color: $white;
17       font-size: 20px;
18     }
19   }
20 }
21
22 article#events section:nth-child(even) {
23   background-color: #398F39;
24 }
```

Signed in as p.krause@surrey.ac.uk: [Sign out](#)

Ashtead Allotments Association

Healthy Eating and Exercise preserve Life's Balance

[Home](#) [Events](#) [Discussion](#) [Shop](#)

Queen's Jubilee

Date of event: 2012-06-03

The Queen will sail in a very nice boat down the River Thames.

[Show](#) | [Edit](#) | [Destroy](#)

Bradley Wiggins wins the Tour

Date of event: 2012-07-22

Bradley Wiggins became the first British rider to win the Tour de France, with a massive margin of 3 minutes 21 seconds. Mark Cavendish claimed his fourth consecutive final-stage victory. Perhaps we can have the Tour televised again next year?

[Show](#) | [Edit](#) | [Destroy](#)[New Event](#)

Some more things to explore

- Variables
- Selector Inheritance
- Sprites
- Web fonts
- See:
 - “The Rails View”, by John Athayde & Bruce Williams, Pragmatic Programmers

What we have learnt

- Sass does CSS properly
 - The Rails Way