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

```
## require_self
| ** require normalize
| ** require layout
| ** require navigation
| ** */
| ** */
| ** */

16
```

What did Sassy CSS ever do for us?

SCSS Simplifies Advanced Selectors

Simply CSS

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

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

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

And there's more

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

Variables

```
5 * Fonts
 7 * Headings: Verdana, Arial, Helvetica, sans-serif
 8 * Accent: Georgia, Times New Roman, serif
 9 * Body: Times New Roman, Times, serif
10 *
11 * Colours
13 * #FFFFFF White - no kidding!
14 * #808000 Khaki
15 * #000000 Fild Green
16 * #50b450 Dark Green
18 */
19
20 body {
     font-family: 'Times New Roman', 'Times', serif;
21
22 }
23
24 h1, h2 {
25
     color: #333;
     font-family: 'Verdana', 'Arial', 'Helvetica', sans-serif;
26
27 }
28
     color: #50b450;
   Tont: italic bold 20px 'Georgia', 'Times New Roman', serif;
32 }
33
```

layout.css.scss

```
8 $heading-font: 'Verdana', 'Arial', 'Helvetica', sans-serif;
 9 $accent_fent: 'Georgia', 'Times New Reman', serif;
$body-font: 'Times New Roman', 'Times', serif;
   $white: #FFFFFF;
13 $khaki: #808000;
14 $mid green: #000000;
16 $dark-green: #50b450;
16 $near-black: #333:
17
18
19
   font-family: $body-font;
21 }
22
23 h1, h2 {
     color: $near-black;
     font-family: $heading-font;
26 }
27
28 ha
     color: $dark-green;
   Tont: italic hold 20px $accent-font;
31 }
32
33 div#container {
34
     display: block;
     position: relative;
36
     min-height: 1000px;
     width: 1000px;
38
     margin: 0 auto;
39
     padding: 0;
     background-color: $khaki;
41 }
```

Factor the variables into: _site-branding.scsc

```
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

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

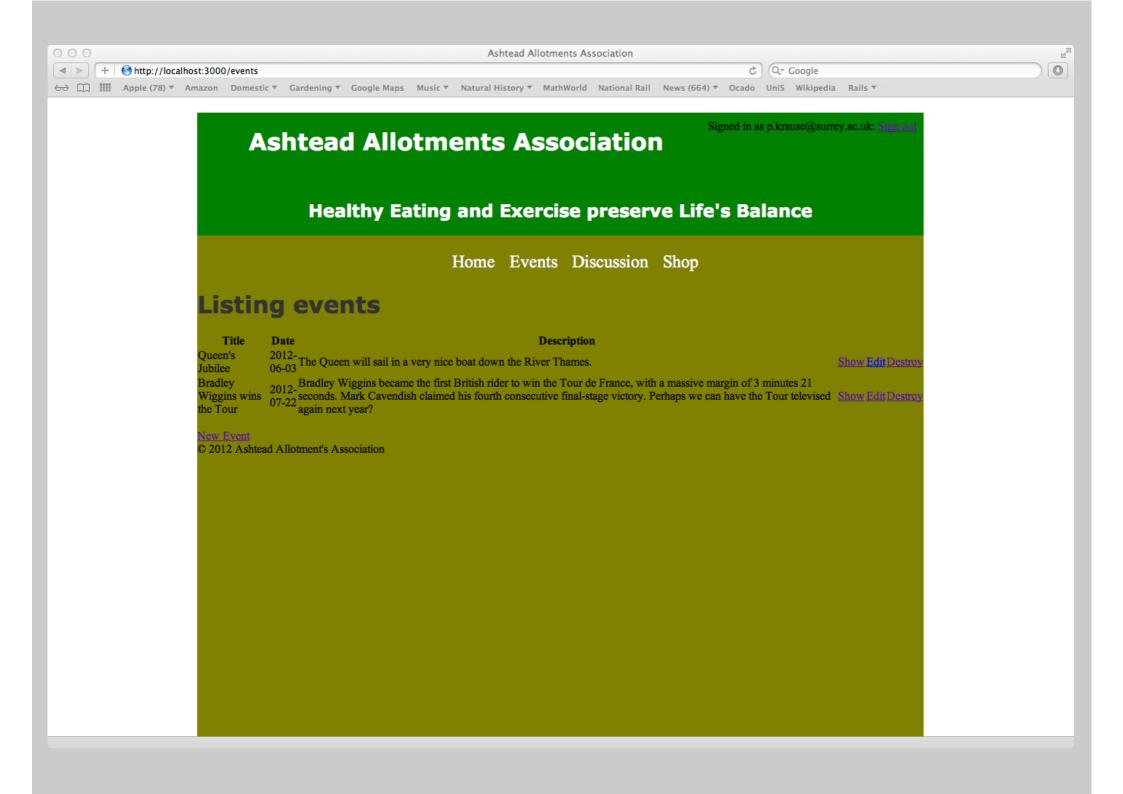
Mixins

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

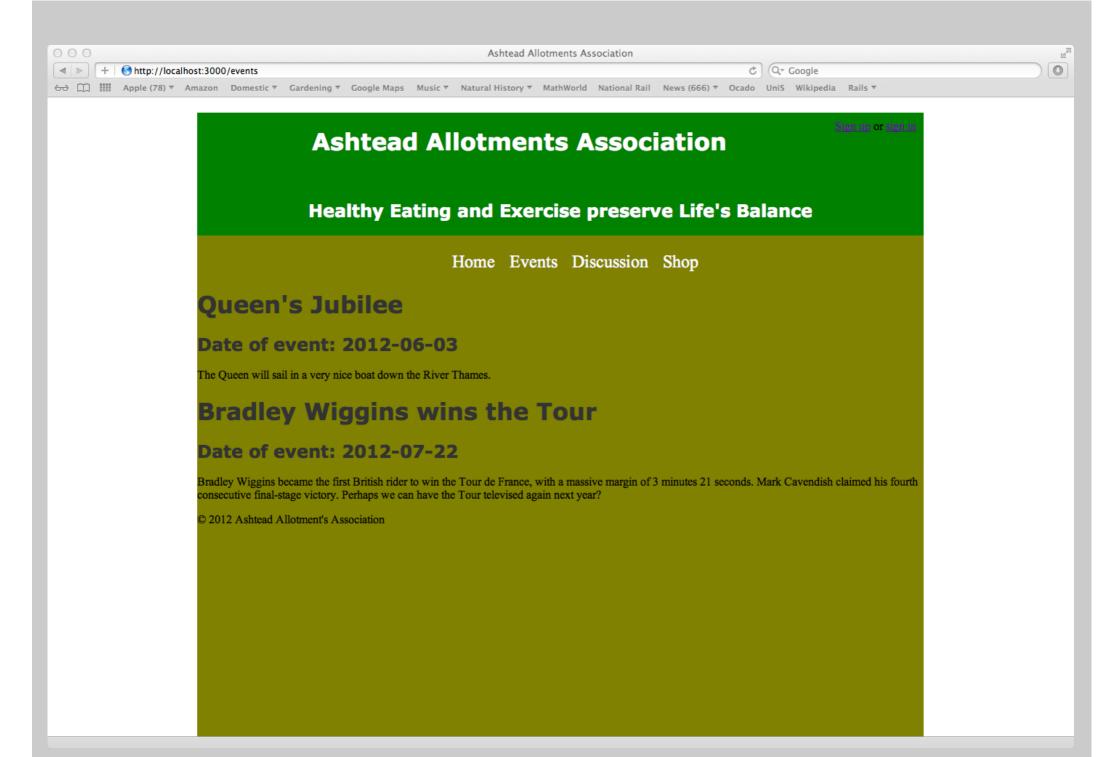
app/views/events/index.html.erb

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



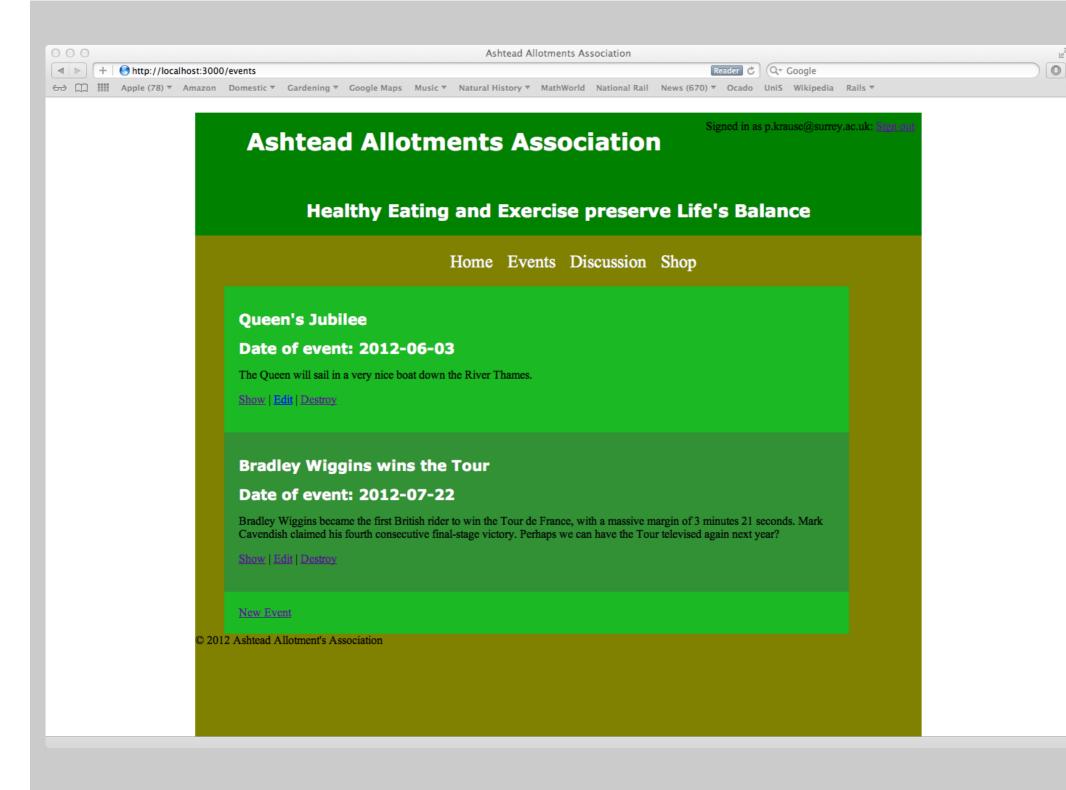
Version 2 - app/views/events/index.html.erb

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



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/
   @import "site-branding";
   article#events {
     padding-left: 20px;
     section {
8
       margin-left: 20px;
10
       margin-right: 100px;
11
       padding: 20px;
       background-color: #2EB82E;
12
         h1, h2 {
13
14
           color: $white;
15
           font-size: 20px;
16
17
18 }
19
20
   article#events section:nth-child(even) {
21
         background-color: #398F39;
22
```

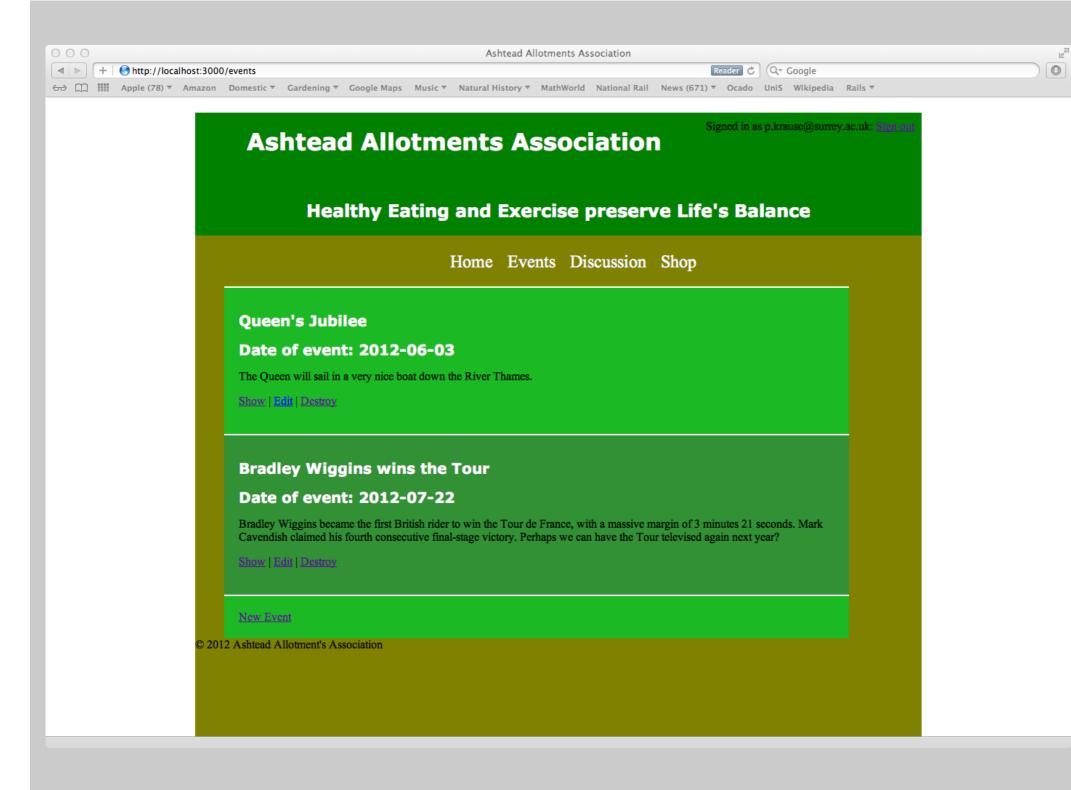


app/assets/stylesheets/_popout.scss

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

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
   article#events {
     padding-left: 20px;
     section {
10
       @include popout;
11
       margin-left: 20px;
12
       margin-right: 100px;
13
       padding: 20px;
       background-color: #2EB82E;
14
15
         h1, h2 {
           color: $white;
16
17
           font-size: 20px;
18
19
20 }
21
   article#events section:nth-child(even) {
         background-color: #398F39;
23
24
```



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