
DELIGHTING CLIENTS PROFITABLY WITH RAPID PROTOTYPING USING SINATRA & FOUNDATION

Drupal Camp Ohio - Dec 1, 2012

HELLO THERE!



- **Molly Byrnes**
- **Project Manager**
- **Intuitive Troubleshooter**
- **@mabfire**

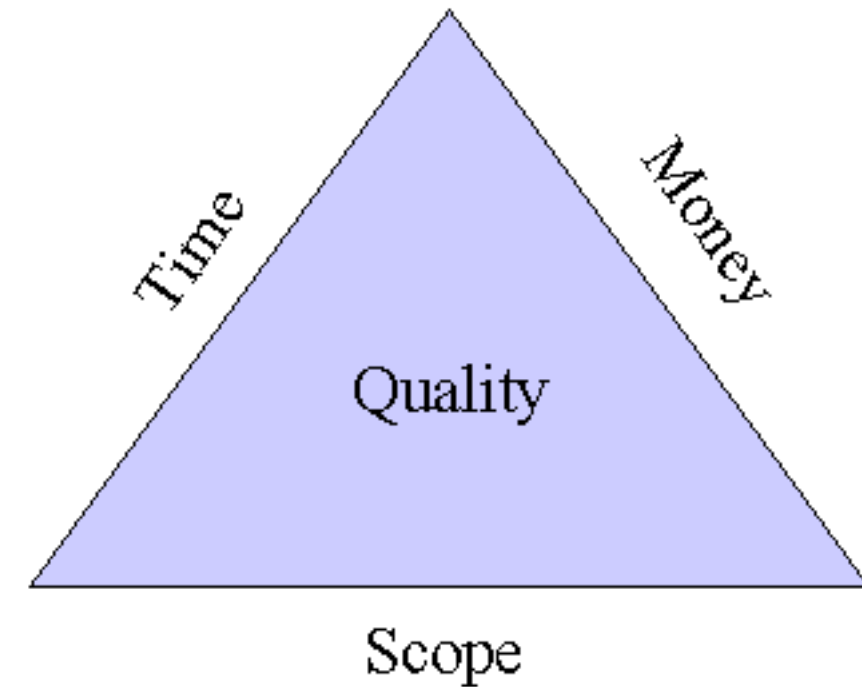


- **Nate Parsons**
- **Technical Architect**
- **Corporate Therapist**
- **@mistcat**

OH: 'What is the internet? Why are we spending all this money on it?'

WHAT IS SUCCESS?

- In the agency world it's about:
 - Coming in on budget
 - Getting the project done on time
 - Building something the client likes
 - Building something the client knows how to use





HOW DO YOU ACHIEVE IT?

- Pay great attention to the man behind the curtain:
 - Risks
 - Requirements & scope
 - Communication



WE DON'T GET CONFUSED, WE START THERE

- Every project starts with someone trying to describe to someone else something that doesn't exist.



THE TOWER OF BABEL

There are so very, very many places for misunderstanding...

- RFPs
- Contracts
- Wireframes
- Interviews
- Technical Specifications
- Budgets
- Comparisons & Analogies
- Pictures & Words



“

Confusion of goals and perfection of means seems,
in my opinion, to characterize our age.

Albert Einstein

Physicist at Princeton

”

'TELEPHONE': DRUPAL JARGON EDITION

Client:
Please add video
module to site.

Developer:
/me downloads Embedded
Media Field to Modules
directory

HOW CAN PROTOTYPING HELP?

- Helps develop a shared “language” and starts a meaningful conversation about what you’re building
- Helps uncover latent or implied requirements
- Crystal clear definition of user interaction & experience directly
- Reduces the game of “telephone” that stems from the RFP->Requirements->Wireframes->Design Comps->Development pathway

WHAT ARE THE DOWNSIDES?

- Prototyping takes a lot of time and effort up front
- Can lead to a lot of wasted effort if you discard the prototype when you build the “real” system
- Takes a unique blend of skills; design, ux, and developer
- Can take a lot of infrastructure setup to create the prototype and gather feedback on it.



“

**Let others praise ancient times;
I am glad I was born in these**

Publius Ovidius Naso (Ovid)

Poet, Ancient Rome

”

'WE CAN PROTOTYPE IT...WE HAVE THE TECHNOLOGY''



A GOLDEN AGE OF WEB PROTOTYPING

- Zurb Foundation : Easy to learn & use CSS Frameworks
- Sinatra/Rack : Lightweight prototyping frameworks
- Amazing amounts of prêt-à-porter interaction design (jQuery)
- An explosion of free & cheap infrastructure services. (Heroku, Github, Notably)

STEP 1 - THE EXCITED NEW CLIENT

OH: 'I'd like a cart like Amazon, Timeline like FB, I love Hulu, can we have videos that work exactly like that?'



LETS MAKE A DEAL

phase://
TECHNOLOGY

DANGER

LIVE DEMO!



STEP 2 - GETTING THE DETAILS RIGHT

OH: 'I know we said edgy, but I think we want to go with the corporate blue color after all...'





MIDSTREAM IMPROVEMENTS

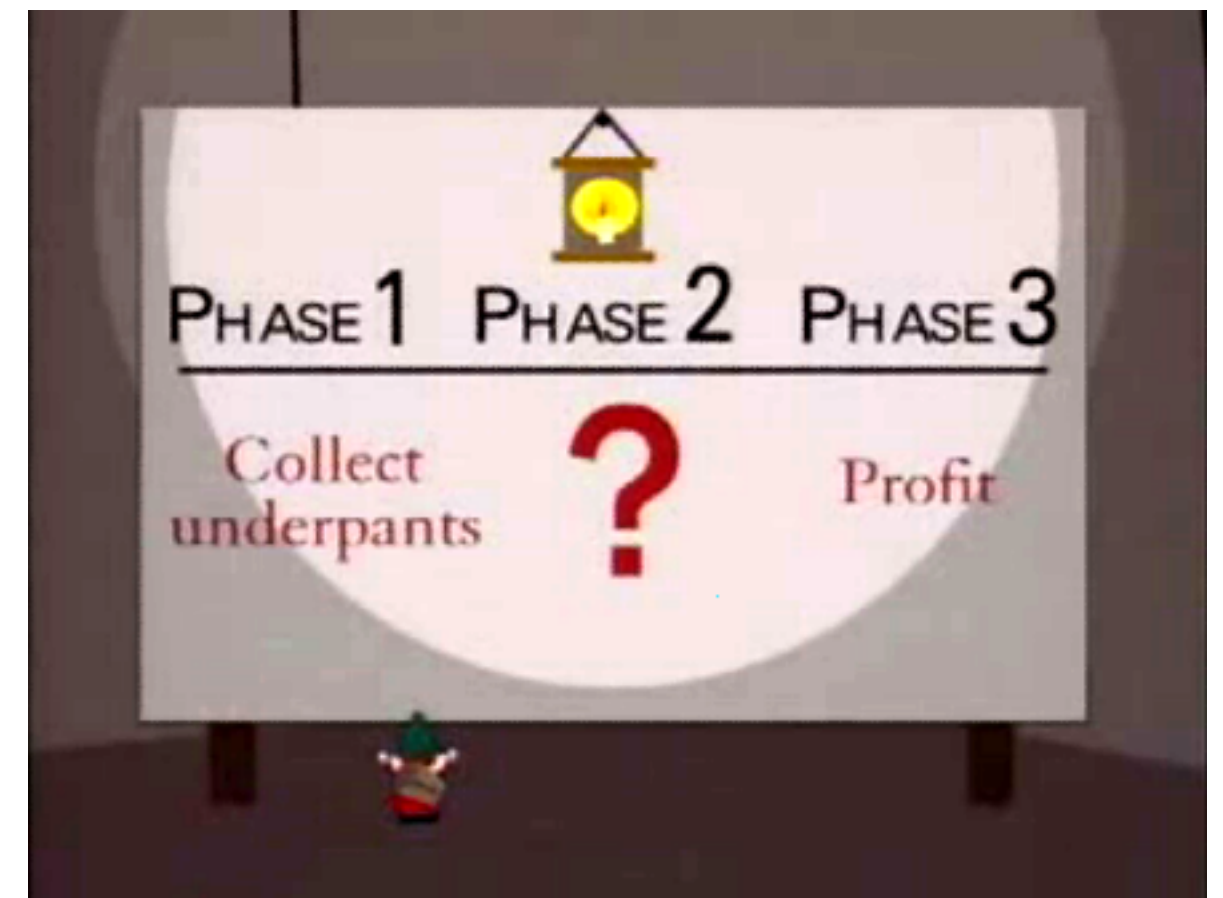
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DANGER

LIVE DEMO!

STEP 3 - BREAK OUT THE WELDING TORCH

- “So you’re telling me we can’t just launch with this prototype thing?”
- How do you connect your CMS (or other software) to your prototype?



WHAT WE'RE DOING WITH DRUPAL

- Model the theme markup as closely as possible to the prototype HTML (this doesn't have to be perfect)
- Leverage Compass/SASS to adapt to markup that cannot be changed easily (via mixins, @extends)
- Creating parallel folder structures to allow the prototype & Drupal installation to live together.

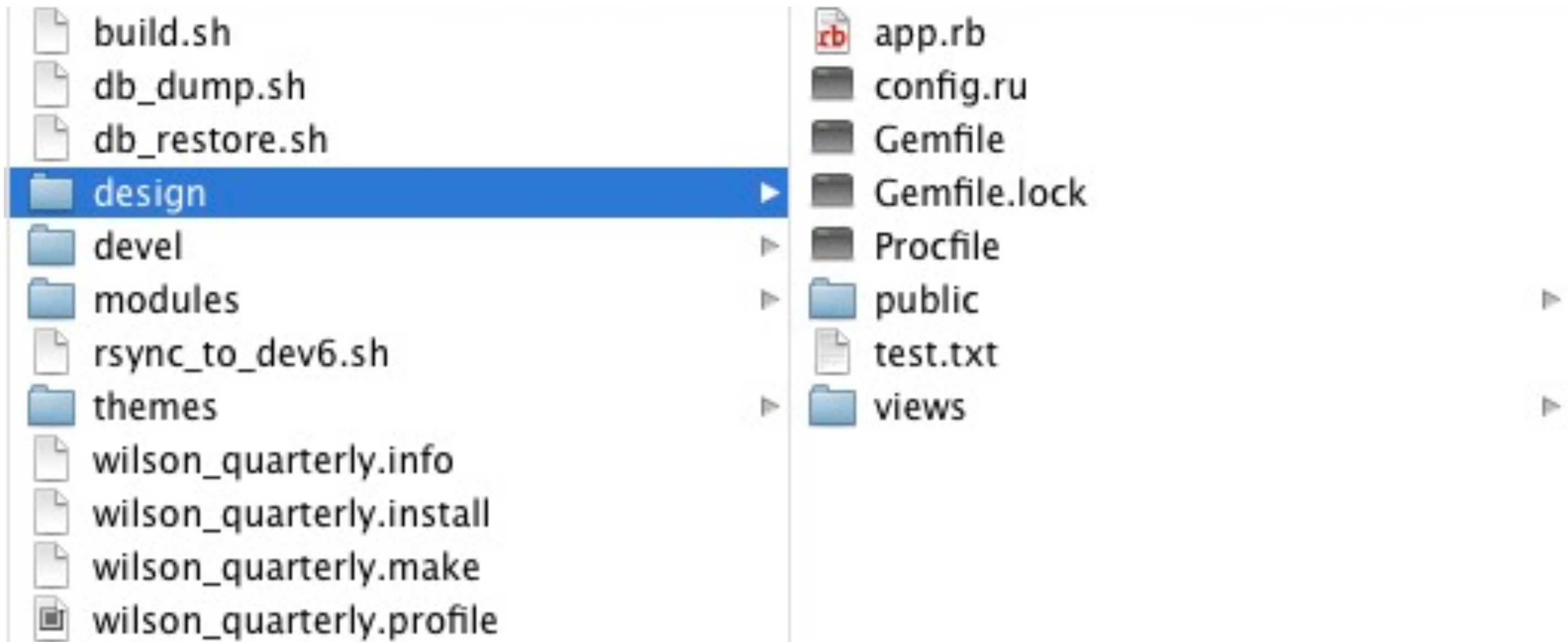


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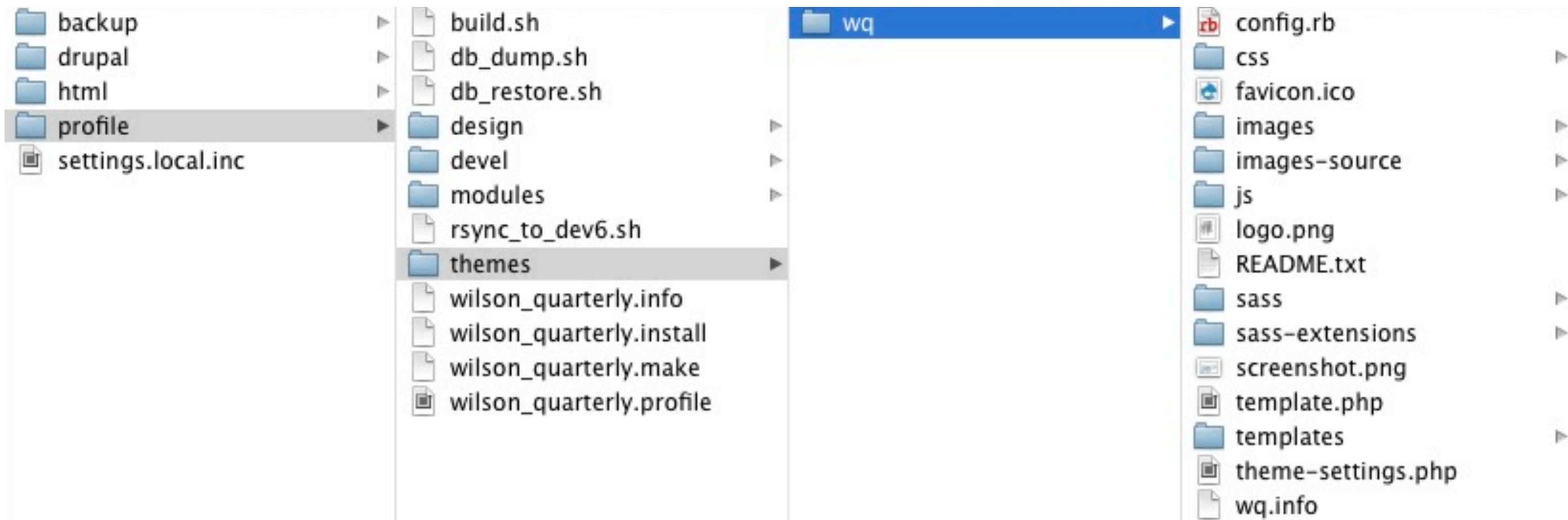
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TECHNOLOGY

THE BASIC TECHNOLOGY KIT

- Ruby (Sinatra in our case)
- Compass Gem
- Modular-Scale Gem (For Foundation)



PROTOTYPE (SINATRA) INSIDE PROFILE



THEME DIRECTORY (WE'RE USING THE ZEN 5.X SUBTHEME)

```
1 ▾ /**
2  * Make sure anything you add gets imported here, application.css which is
3  * generated by Compass on site build is the only thing that Drupal sees.
4  */
5
6  // Set base image path relative to theme
7  $image_path: "../../../design/public";
8
9  // Import Design Comps
10 @import "../../../design/views/scss/app";
11 @import "../../../design/views/scss/grid";
12 @import "../../../design/views/scss/styles";
```

```
#block-menu-menu-footer-menu{
  @extend .grid_2;
}

#block-boxes-address{
  @extend .grid_4;
}
```

PROFILE/THEMES/THEME/SASS/APPLICATION.SCSS

phase://
TECHNOLOGY


```
39 ; The "FILE" is the name of the stylesheet to add/override/remove.
40 ; The "MEDIA" in the first set of brackets is a media type or a media query.
41 ; Typical CSS media types include "all", "screen", "print", and "handheld". A
42 ; typical media query is "screen and (max-width: 320px)".
43 ;
44 ; CSS2.1 media types: http://www.w3.org/TR/CSS21/media.html#media-types
45 ; CSS3 media queries: http://www.w3.org/TR/css3-mediaqueries/
46
47 ; First we remove the system's menu styling since Zen has its own.
48 stylesheets[all][] = system.menus.css
49
50 ; Then we add our own stylesheets.
51 stylesheets[all][] = css/application.css
```

DURING DEVELOPMENT

- Disable CSS Caching
- Run “compass watch” from the theme directory
- Editing SCSS files will cause CSS to be re-compiled

```
58 # Clear caches and Run updates
59 cd $DRUPAL;
60 echo 'Clearing caches...'
61 drush cc all; drush cc all;
62
63 echo 'Running updates...'
64 drush updb -y;
65
66 # Rebuild SCSS
67 echo 'Rebuilding SCSS...'
68 cd $DRUPAL/profiles/wilson_quarterly/themes/wq
69 compass clean && compass compile
```

RESOURCES

- The basics of SASS & Programatic CSS: <http://sass-lang.com/tutorial.html>
- SASS Kung-Fu: <http://thesassway.com/>
- Getting started with Drupal7, Zen, Sass and Compass: <http://drupal.org/node/1548946>
- CSS Frameworks:
 - Zurb Foundation: <http://foundation.zurb.com/>
 - Twitter Bootstrap SASS: <https://github.com/jlong/sass-twitter-bootstrap>



EVEN MORE RESOURCES

- Sinatra
 - <http://www.sinatrarb.com/>
 - <https://github.com/jerodsanto/sinatra-foundation-skeleton>
- Compass
 - <http://compass-style.org/>
- Foundation
 - <http://foundation.zurb.com/>
- Heroku
 - <http://www.heroku.com/>



THANK YOU!

