Compass with Sass

CSS Layout tools for programmers and designers.
Presented to the Sacramento Ruby Meet-up, December 17th 2009
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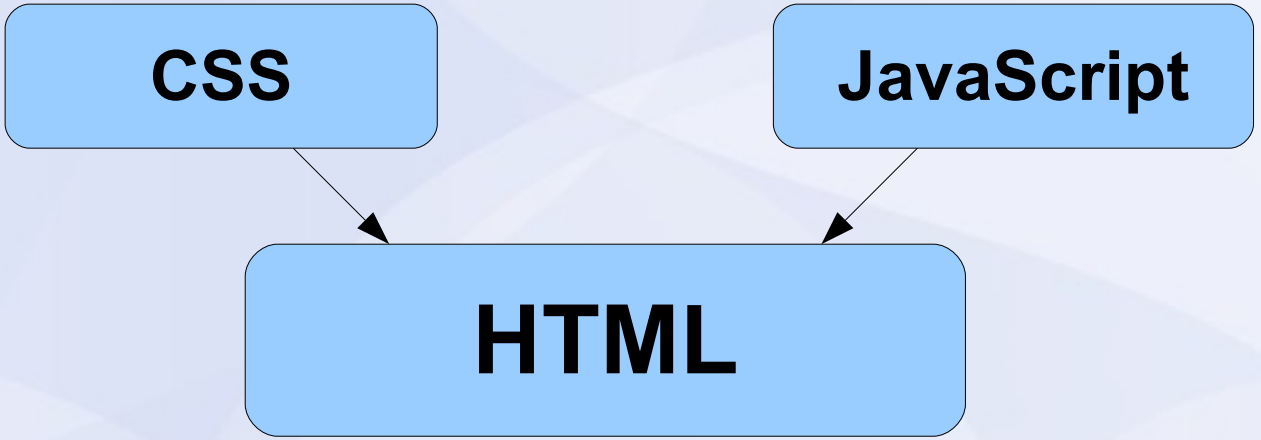
Compass with Sass

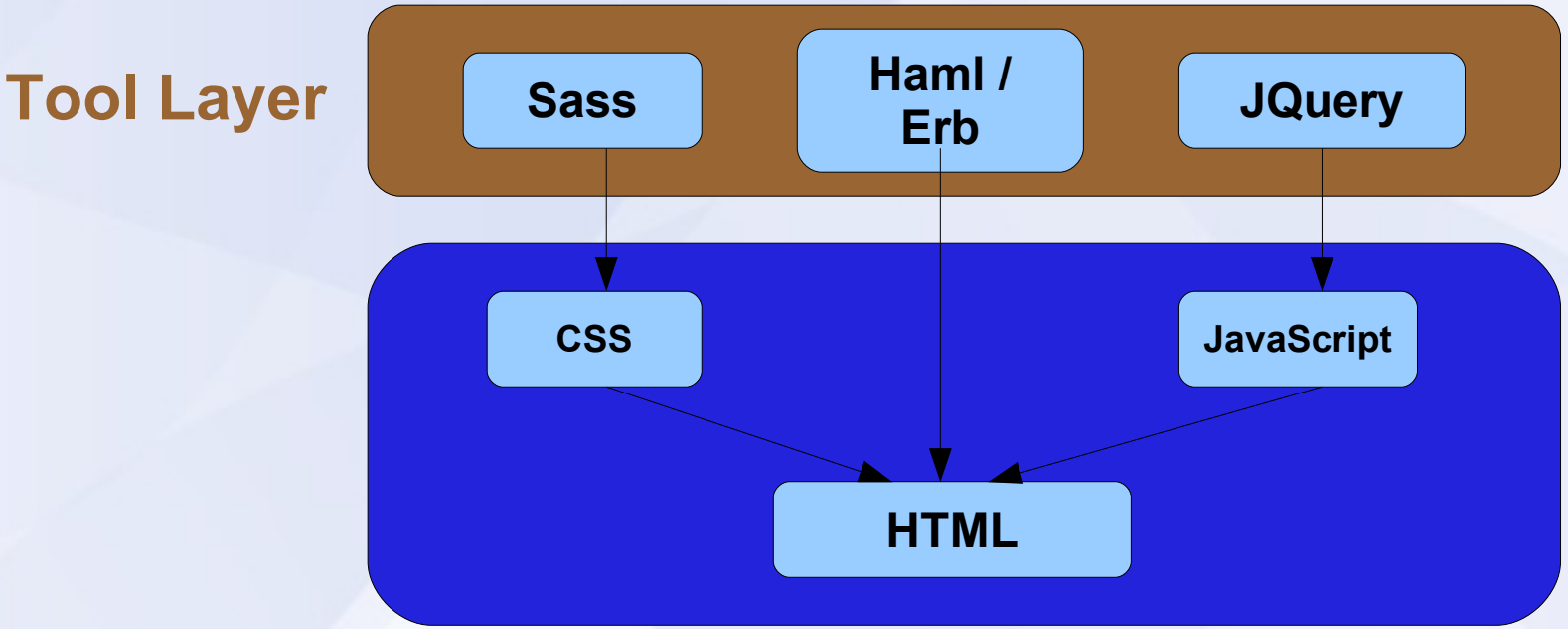


The Development stack for Web Design begins with HTML and its accompanying presentation and scripting technologies.
This is what goes out on the wire.

Compass with Sass

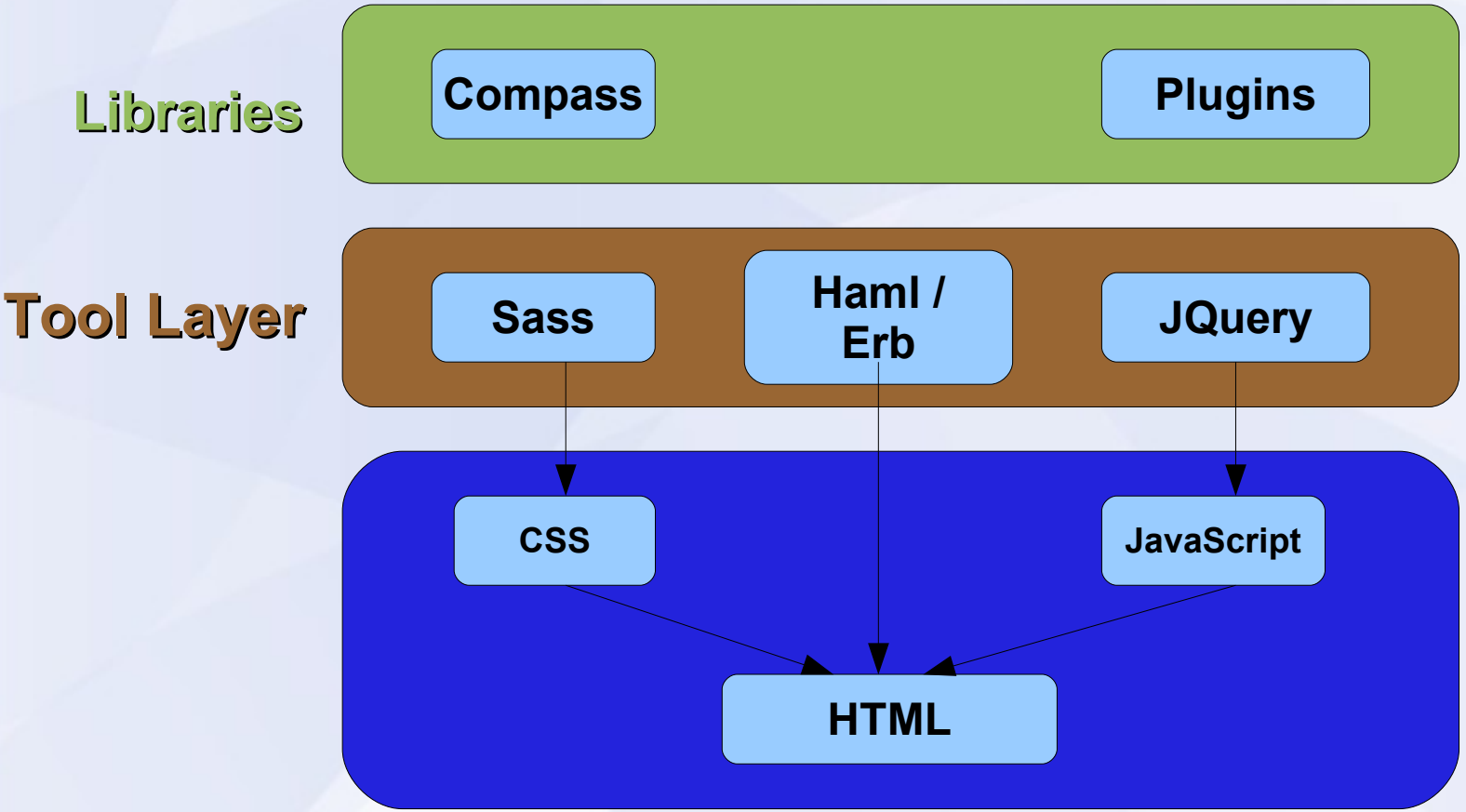
HTML is easy to render standardized across a number of platforms, but lacks tools that make for good design.

Design tools and template languages have developed to make the design process easier.



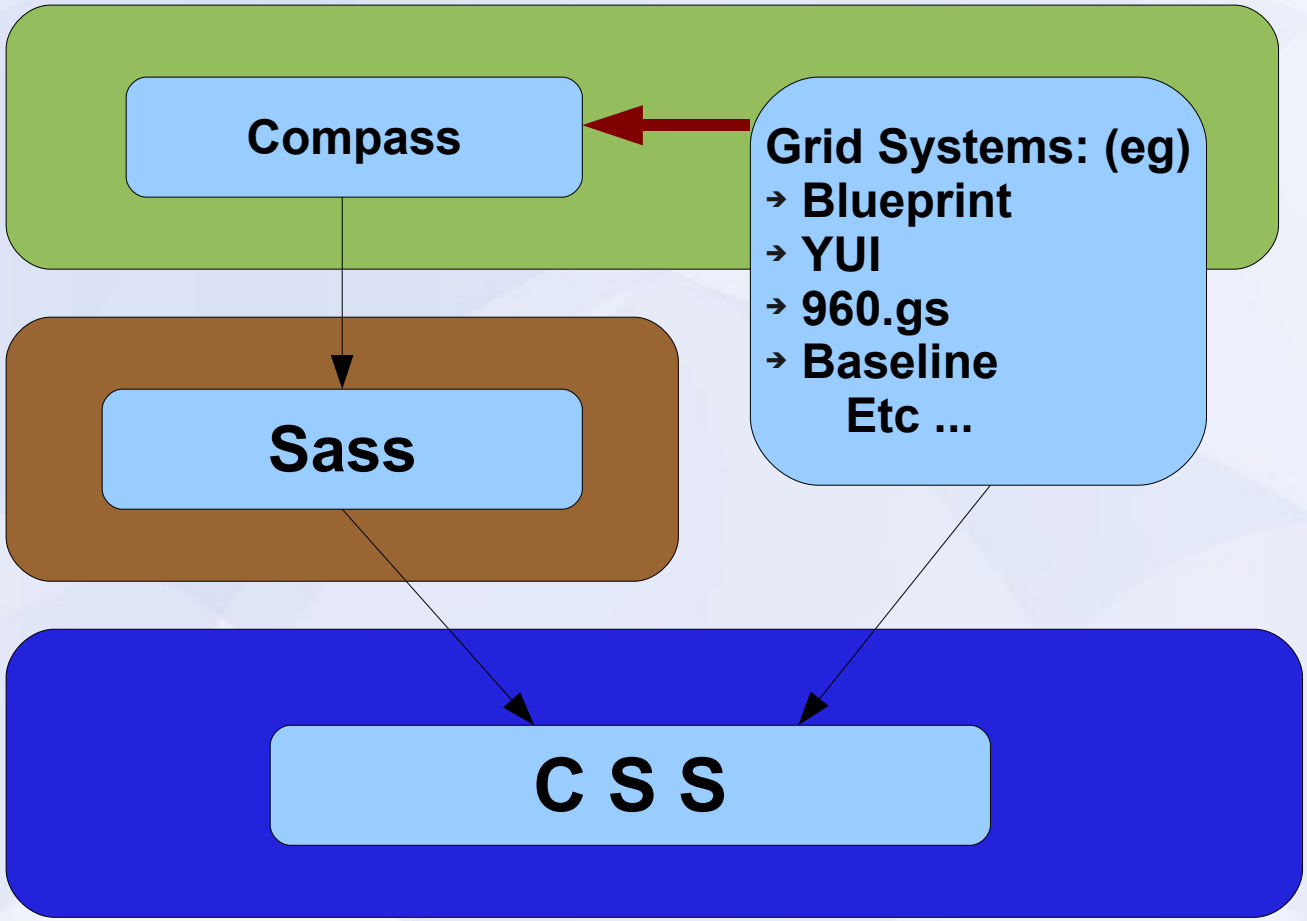
Compass with Sass

One thing enabled by these tools is support for libraries of useful code. Compass is a library of useful code for Sass



The Presentation Stack

Grid Systems encapsulate a common layout design pattern. Originally they were made as CSS libraries but that had some disadvantages.



What CSS Lacks

- Variables
- Scope
- Arithmetic
- Everything On the Wire
  - Libraries must be sent to clients in full
  - HTTP Overhead penalizes modularity

These tools are needed to keep source DRY

Libraries often need extra HTML markup to work correctly

The lack of these tools make libraries hard to write, and code difficult to maintain. Using JavaScript is on solution, but it still takes up bandwidth and is not as portable. Sass is a server side tool that compiles to CSS.

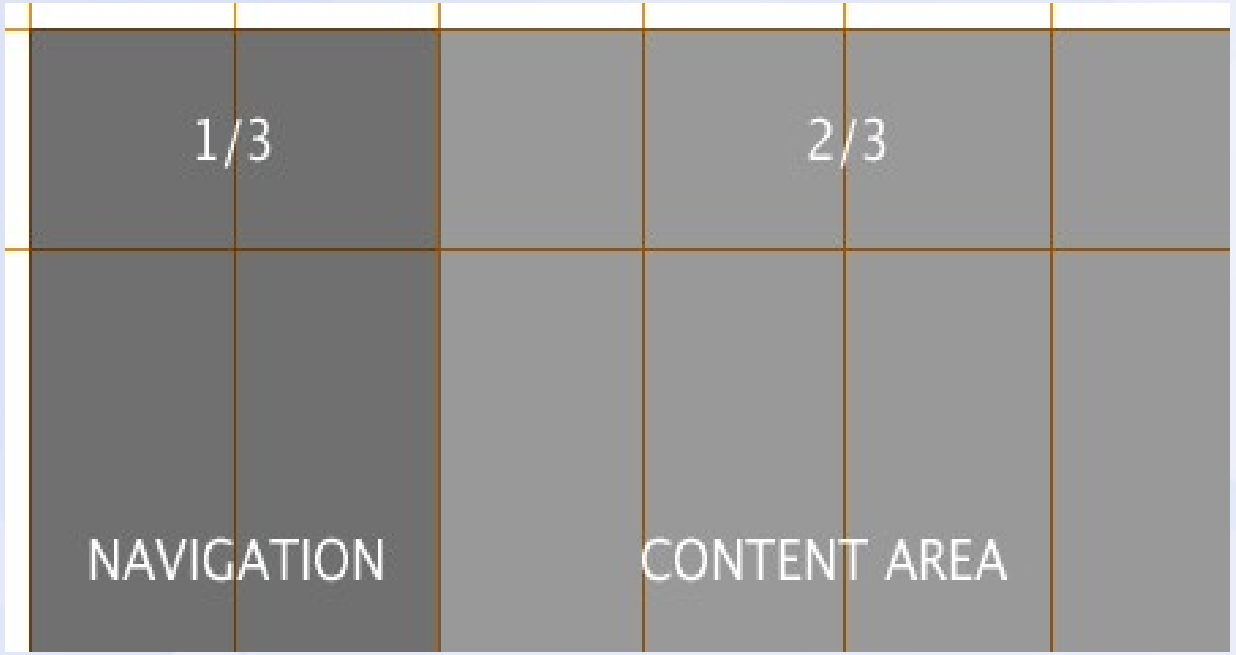
Advantages to Sass/Compass

- Variables for size, color, text, etc...
- Nested Scoping *(python like indented scope)*
- Basic Arithmetic Including Color
- Pure HTML and Compact CSS

Compass uses the power of Sass to create Grid Layouts with purely semantic markup and CSS selectors.

Sidetrack About Grids

By aligning elements on a page both horizontally and vertically, the design of a page is drawn together. Visual navigation is aided by strong lines in the page flow.



CSS Grid systems use “columns” to line elements up vertically, and set line heights so that horizontal lines are possible with some planning.

Example: Resume

```
%body
 #container
   #personal
      ...
   #attributes
     %ul
       %li team player
       ...
   #main
     .section
       %h2 Education
       %ul
            …
     .section
       %h2 Etc...
```

Example: Resume

Screen.sass (part 1)

```
!blueprint_grid_columns ||= 21
!blueprint_grid_width   ||= 40px
!blueprint_grid_margin  ||= 8px

@import blueprint.sass
@import blueprint/modules/fancy_type
@import compass/utilities.sass
@import compass/reset.sass
```

Before including the library, we set up our grid. Here I choose to use a Fibonacci number for my columns so that I can have Golden ration widths

Example: Resume

Screen.sass (part 2)

```
!background = #FFFFFF
!contrast = #000000

=colborder2
  :padding-left= !blueprint_grid_width - \
      0.5 * !blueprint_grid_margin - 3
  :margin-left= !blueprint_grid_width \
     - 0.5 * !blueprint_grid_margin
  :border-left 3px solid #333742

+blueprint-typography
```

Resume: Example

```
#container
  +container /* set up the grid here */
  :background-color= !background
  padding: 10px
  //padding-top: 36px
  margin-top: 36px
  margin-bottom: 150px
  border: 2px solid #883333

  >.header /* Nested CSS Selectors */
    +column(21) /* full width */
    padding-top: 8px
    padding-bottom: 8px
    ...
```

Resume: Example

```
#mainmenu
  +horizontal-list(6px)
```

Resume: Example

```
#attributes
  +column(5) /* 5 columns */
  +colborder2 /* plus a border */
[…]
#main
  +column(18, "last")
  .section
    +clearfix /* easy to remember */
    h2
      +column(4)
      […]
    p,ul
      +column(14, "last")
```

Running Compass

- compass -w
  - On the fly development
- Integrate into frameworks
  - Rails
  - Merb
  - Sinatra

Resources

- Sass:
  http://sass-lang.com/
- Compass:
  http://wiki.github.com/chriseppstein/compass
- A List Apart:
  http://www.alistapart.com/
- My Example Code
  http://github.com/startrader/Resume
- Finish Product:
  http://jfmjourney.com/static/resume