



CSS INTENSIVE

Instructor – Alex Dziena

CSS: CASCADING STYLE SHEETS

Declarative:

- CSS tells the browser what to do, not how to do it

Hierarchical:

- Cascading means you can have multiple style sheets, applying multiple rules to the same HTML element, and you'll always* get the same rule set applied.

Presentational:

- CSS defines the look and format, not the functionality of a web page.

THE WEB WITHOUT CSS

CSS Zen Garden

The Beauty of CSS Design

A demonstration of what can be accomplished through CSS-based design. Select any style sheet from the list to load it into this page.

Download the example [html file](#) and [css file](#)

The Road to Enlightenment

Littering a dark and dreary road lay the past relics of browser-specific tags, incompatible DOMs, broken CSS support, and abandoned browsers.

We must clear the mind of the past. Web enlightenment has been achieved thanks to the tireless efforts of folk like the W3C, WaSP, and the major browser creators.

The CSS Zen Garden invites you to relax and meditate on the important lessons of the masters. Begin to see with clarity. Learn to use the time-honored techniques in new and invigorating fashion. Become one with the web.

So What is This About?

There is a continuing need to show the power of CSS. The Zen Garden aims to excite, inspire, and encourage participation. To begin, view some of the existing designs in the list. Clicking on any one will load the style sheet into this very page. The HTML remains the same, the only thing that has changed is the external CSS file. Yes, really.

CSS allows complete and total control over the style of a hypertext document. The only way this can be illustrated in a way that gets people excited is by demonstrating what it can truly be, once the reins are placed in the hands of those able to create beauty from structure. Designers and coders alike have contributed to the beauty of the web; we can always push it further.

Participation

Strong visual design has always been our focus. You are modifying this page, so strong CSS skills are necessary too, but the example files are commented well enough that even CSS novices can use them as starting points. Please see the [CSS Resource Guide](#) for advanced tutorials and tips on working with CSS.

You may modify the style sheet in any way you wish, but not the HTML. This may seem daunting at first if you've never worked this way before, but follow the listed links to learn more, and use the sample files as a guide.

THE WEB WITH CSS



A demonstration of what can be accomplished through CSS-based design.

Select any style sheet from the list to load it into this page.

Download the example [HTML FILE](#) and [CSS FILE](#)

THE ROAD TO ENLIGHTENMENT

Littering a dark and dreary road lay the past relics of browser-specific tags, incompatible DOMs, broken CSS support, and abandoned browsers.

GARMENTS

by Dan Mall

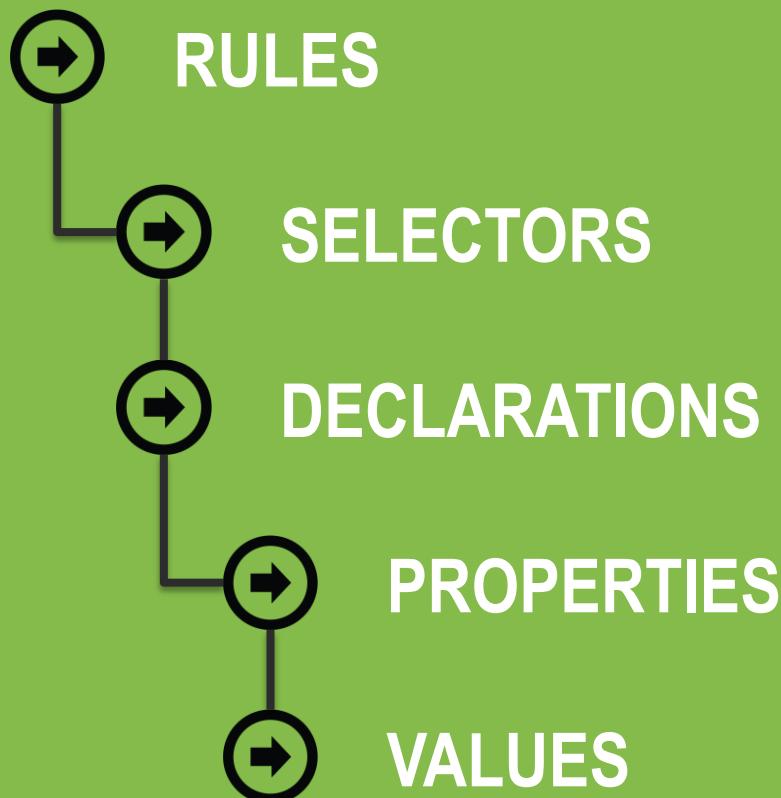
STEEL

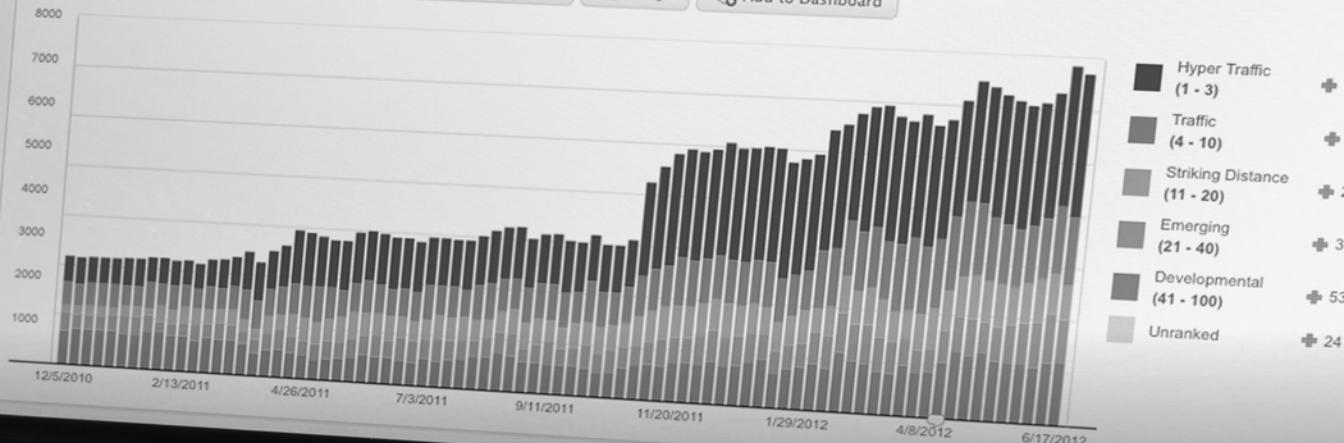
by Steffen Knoeller

APOTHECARY

by Trent Walton

ELEMENTS OF CSS



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TOPIC 1

BASIC SELECTORS & PROPERTIES

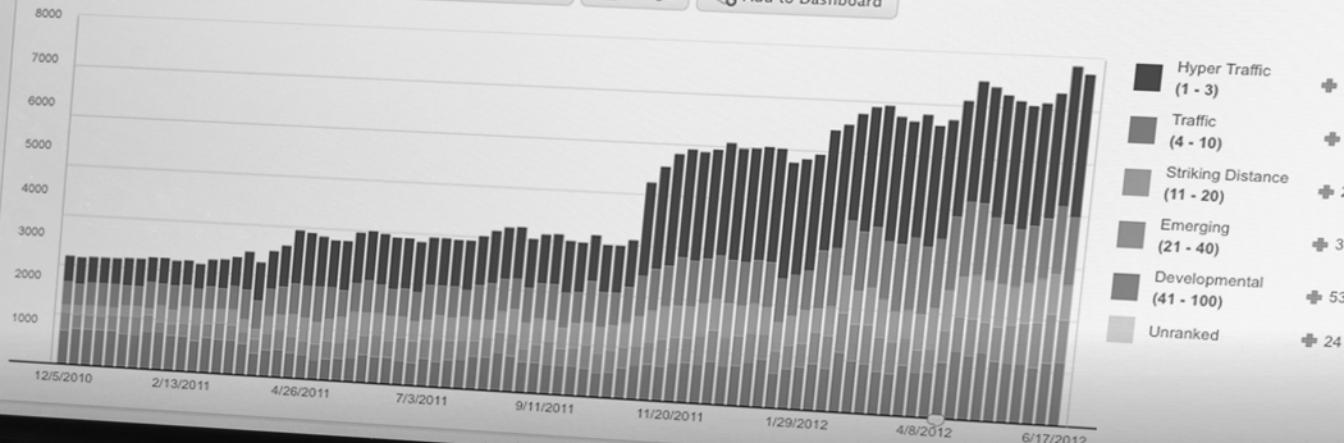
BASIC SELECTORS & PROPERTIES

SELECTORS

- Type Selectors (a)
- ID Selectors (#)
- Class Selectors (.)
- Star Selector (*)
- Descendant Selectors (p a)

PROPERTIES

- font-family
- font-weight
- color
- height
- width
- background

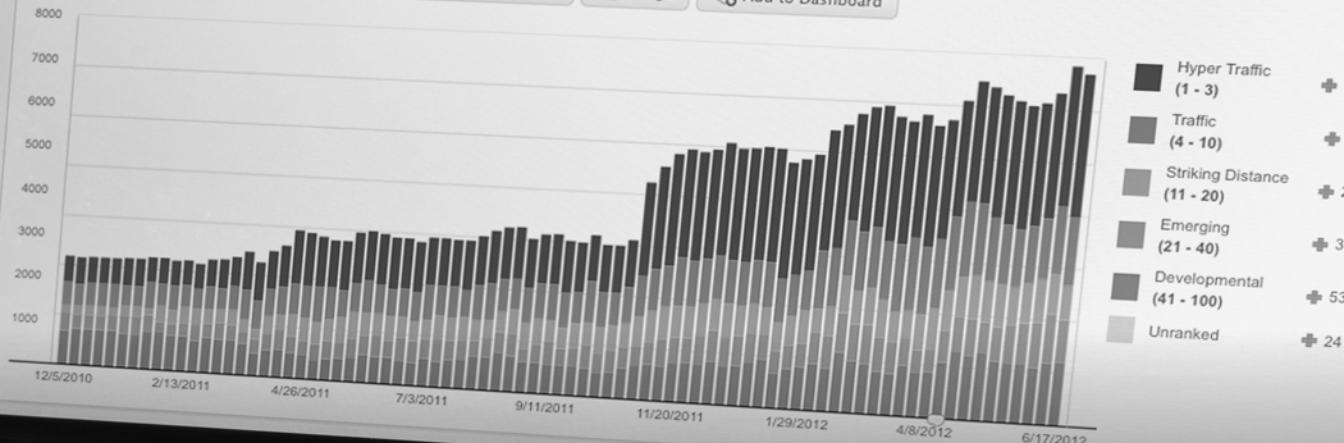
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TOPIC 2 CASCADE ORDER

CASCADE ORDER

	Least Important	=====→	Most Important
Ownership	Browser Defaults	Reader Style Sheet	Author Style Sheet
Specification	Linked	Embedded	Inline
Specificity	Contextual	Class	ID

- Rule order matters! Last rule wins
- !important keyword changes cascade order

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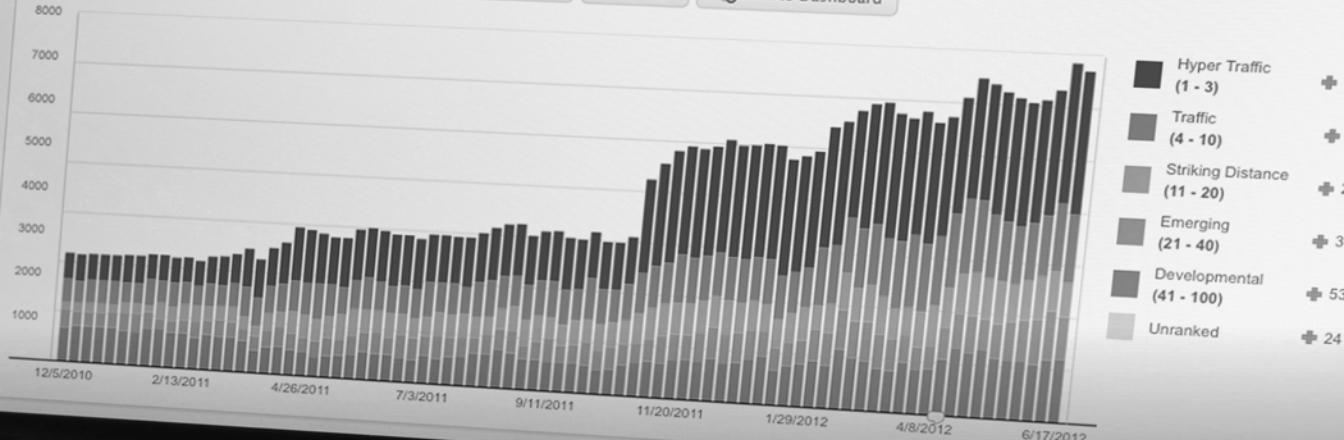
TOPIC 3

ADVANCED SELECTORS

ADVANCED SELECTORS

- Pseudo-classes (`:link,:checked,:before,:after,:nth-child(4n)`)
- Pseudo-elements(`::first-line`)
- Adjacent Selectors (+)
- Direct Descendant Selectors (>)
- Sibling Combinators (~)
- Attribute Selectors (`[title*="foo"]`)

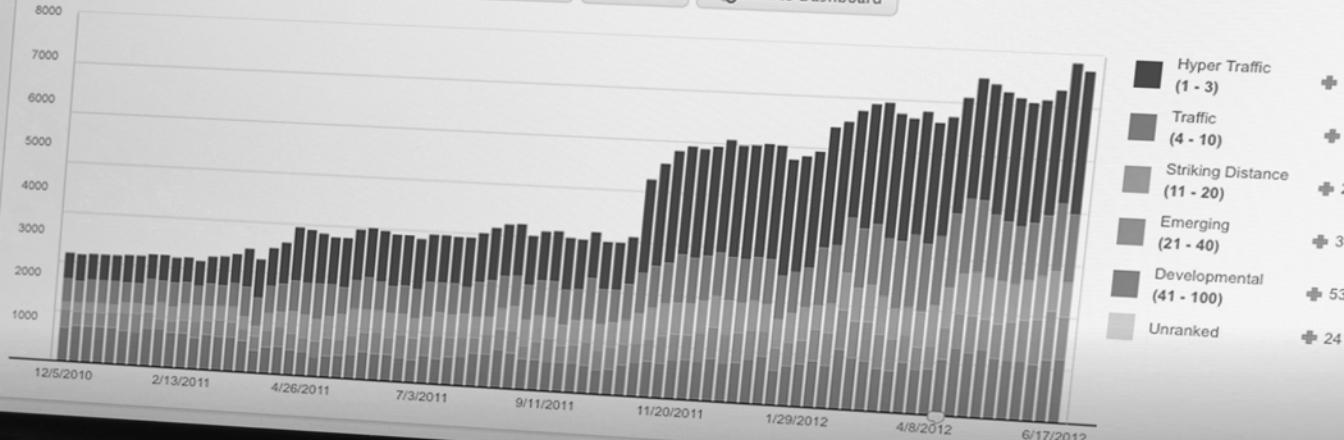
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TOPIC 4 POSITIONING

POSITIONING

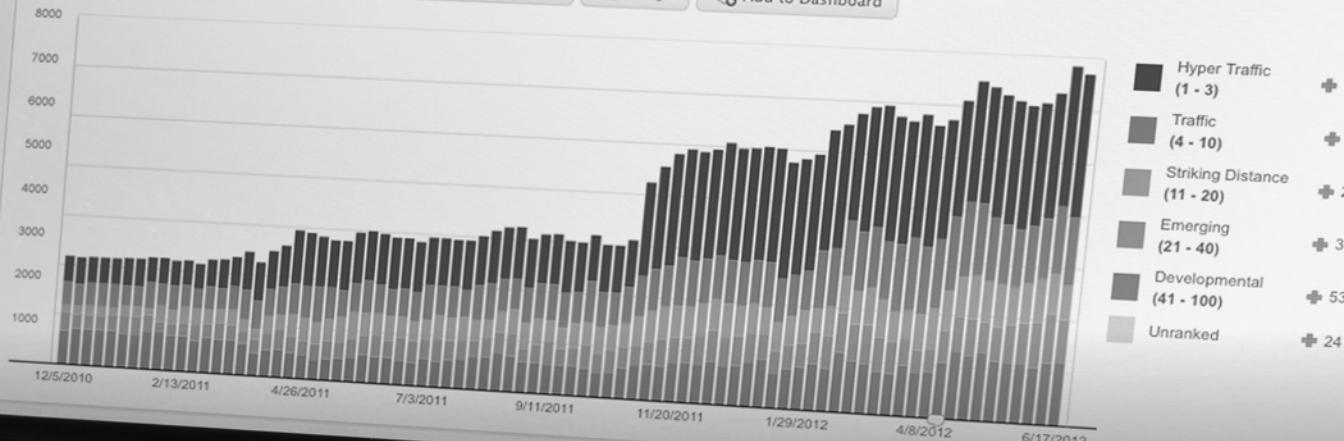
- Margin
- Padding
- Absolute, relative, fixed, initial, inherit, static
- Floats and clears
- Display types: block, inline, table, none, run-in

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TOPIC 5 TECHNIQUES

TECHNIQUES

- Includes
- Fixed width layout
- Liquid layout
- CSS rollovers
- Fixed header
- Fixed footer
- Webfonts

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TOPIC 6

RESPONSIVE AND ADAPTIVE DESIGNS

RESPONSIVE AND ADAPTIVE DESIGNS

- Media queries
 - Types
 - Expressions

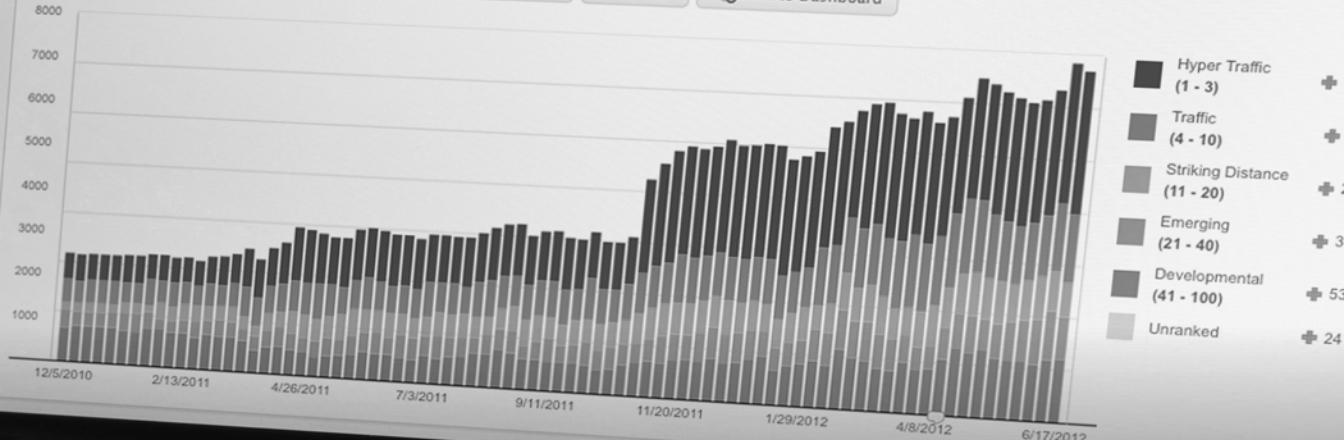
MEDIA QUERIES: TYPES

- all
- aural
- braille
- handheld
- print
- projection
- screen
- tty
- tv
- embossed

MEDIA QUERIES: EXPRESSIONS

- expression: (<media_feature> [: <value>]?)
- media features:
 - width | min-width | max-width
 - height | min-height | max-height
 - aspect-ratio | min-aspect-ratio | max-aspect-ratio
- Logical operators:
 - and
 - “,”
 - only
 - not

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TOPIC 7

CSS 3

CSS 3

- **Borders**
 - Allows rounded, shadowed, and image-based borders
- **Backgrounds**
 - Allows for background positioning
- **Gradients**
 - Allows smooth transitions between background colors
- **Transforms**
 - Allow rotation, skew, translation, scaling
- **Transitions and Animations**
 - Animated effects to change styles
- **Columns**
 - Allows division of content into columns

BORDERS

- border-radius

```
div { border:2px solid; border-radius:25px; }
```

- box-shadow

```
div { box-shadow: 10px 10px 5px #888888; }
```

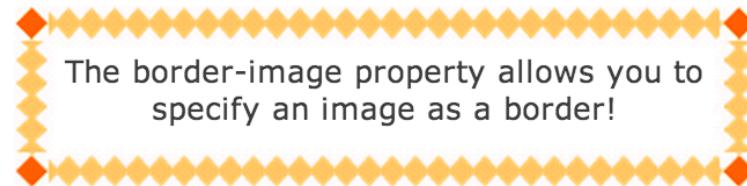
- border-image

```
div
{
-webkit-border-
image:url(border.png) 30 30
round; /* Safari 5 */
-o-border-image:url(border.png)
30 30 round; /* Opera 10.5-12.1
*/
border-image:url(border.png) 30
30 round;
}
```

This box has rounded corners!



The border-image property allows you to specify an image as a border!



The original image used to create the border above:



BACKGROUNDS

- background-origin
 - content-box
 - border-box
 - padding-box

```
div {background-origin:content-box; }
```

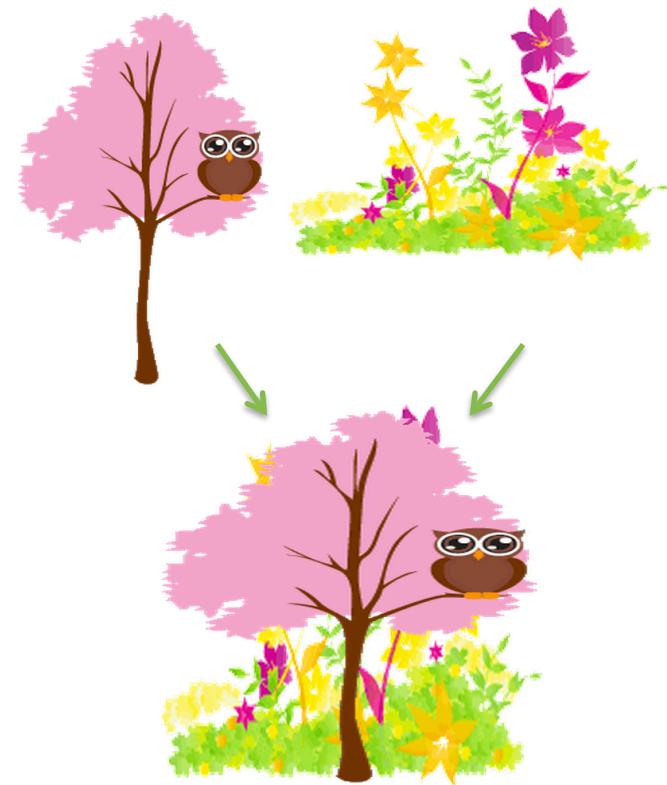
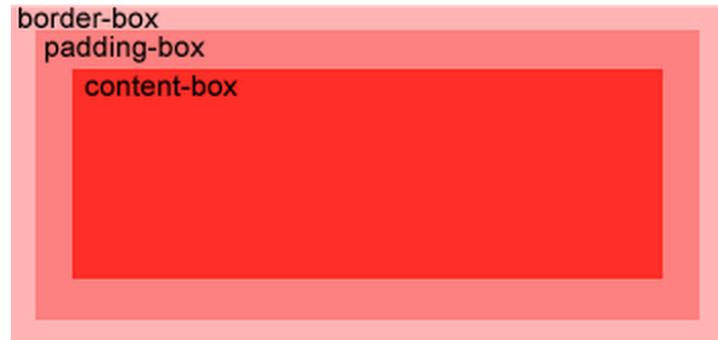
- background-size

```
div { background-size: width height; }
```

```
div { background-size: 80px 60px; }
```

- Multiple background images

```
div  
{background:url(img_tree.gif),url(img_flwr.gif); }
```



GRADIENTS

- Linear

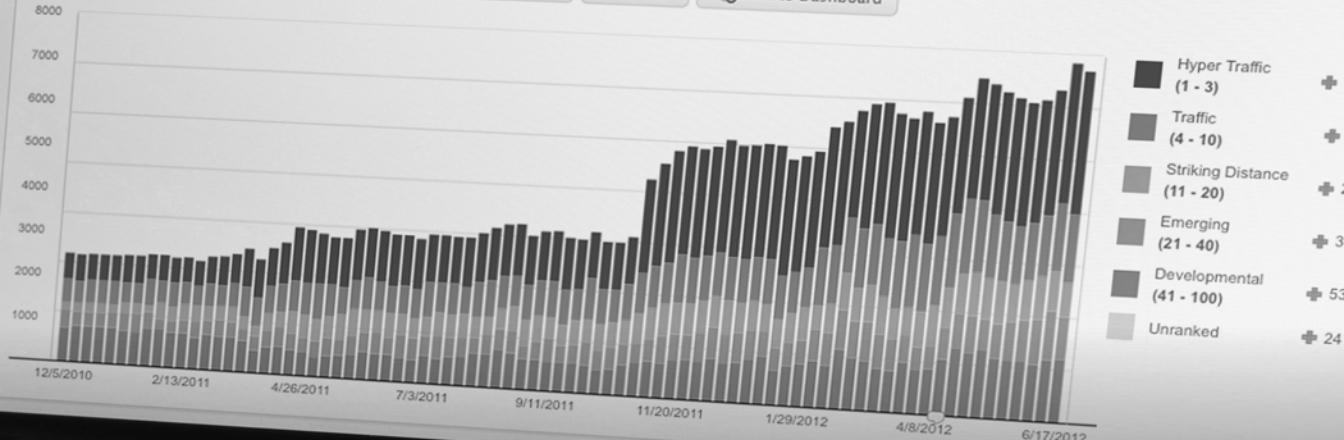
```
#grad
{
background: -webkit-linear-gradient(45deg,
red, blue); /* For Safari 5.1 to 6.0 */
background: -o-linear-gradient(45deg, red,
blue); /* For Opera 11.1 to 12.0 */
background: -moz-linear-gradient(45deg,
red, blue); /* For Firefox 3.6 to 15 */
background: linear-gradient(45deg, red,
blue); /* Standard syntax */
}
```

- Transparency

```
#grad
{background: -webkit-linear-gradient(left,
rgba(255,0,0,0), rgba(255,0,0,1)); /* For
Safari 5.1 to 6.0 */
background: -o-linear-gradient(right,
rgba(255,0,0,0), rgba(255,0,0,1)); /* For
Opera 11.1 to 12.0 */
background: -moz-linear-gradient(right,
rgba(255,0,0,0), rgba(255,0,0,1)); /* For
Firefox 3.6 to 15 */
background: linear-gradient(to right,
rgba(255,0,0,0), rgba(255,0,0,1)); /**
Standard syntax (must be last) */
}
```



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TOPIC 8

FRAMEWORKS AND TOOLS

FRAMEWORKS AND TOOLS

- Resets
- Standard frameworks
- Preprocessors (SASS)

RESETS

- Resets reduce browser inconsistencies
- <http://www.cssreset.com/>
 - Css resets attempt to generically reset most HTML elements to a standard style starting-point
- <http://necolas.github.io/normalize.css/>
 - “Precisely targets only the styles that need normalizing”

FRAMEWORKS

- Bootstrap
 - <http://getbootstrap.com/>
 - Designed for easy responsive design implementation
- Less
 - <http://lessframework.com/>
 - Designed for consistency between devices
- Foundation
 - <http://foundation.zurb.com/>
 - Designed for speed: rendering speed, development speed, and learning speed
 - Built in SASS

PREPROCESSORS: SASS

- CSS preprocessor written in Ruby
- DSL that includes variables, nesting, mixins, inheritance, extension, math operators, and more
- Installation: `gem install sass`
- <http://sass-lang.com/guide>