

LEVERAGING BOOTSTRAP

CSS FRAMEWORK, LESS, & RESPONSIVE DESIGN

A LITTLE ABOUT ME

- 7+ years of professional web design & development
- Front-end & UX developer for the new UI Workflow project


Bootstrap, from Twitter


Simple and flexible HTML, CSS, and Javascript for popular user interface components and interactions.


[View project on GitHub](#)


[Download Bootstrap \(v2.0.2\)](#)

[Upgrading from 1.4](#) [Download with docs](#) [Submit issues](#) [Roadmap and changelog](#)

 Watch 26,715

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Designed for everyone, everywhere.

Need reasons to love Bootstrap? Look no further.

Built for and by nerds

Like you, we love building awesome products on the web. We love it so much, we decided to help people just like us do it easier, better, and faster. Bootstrap is built for you.

For all skill levels

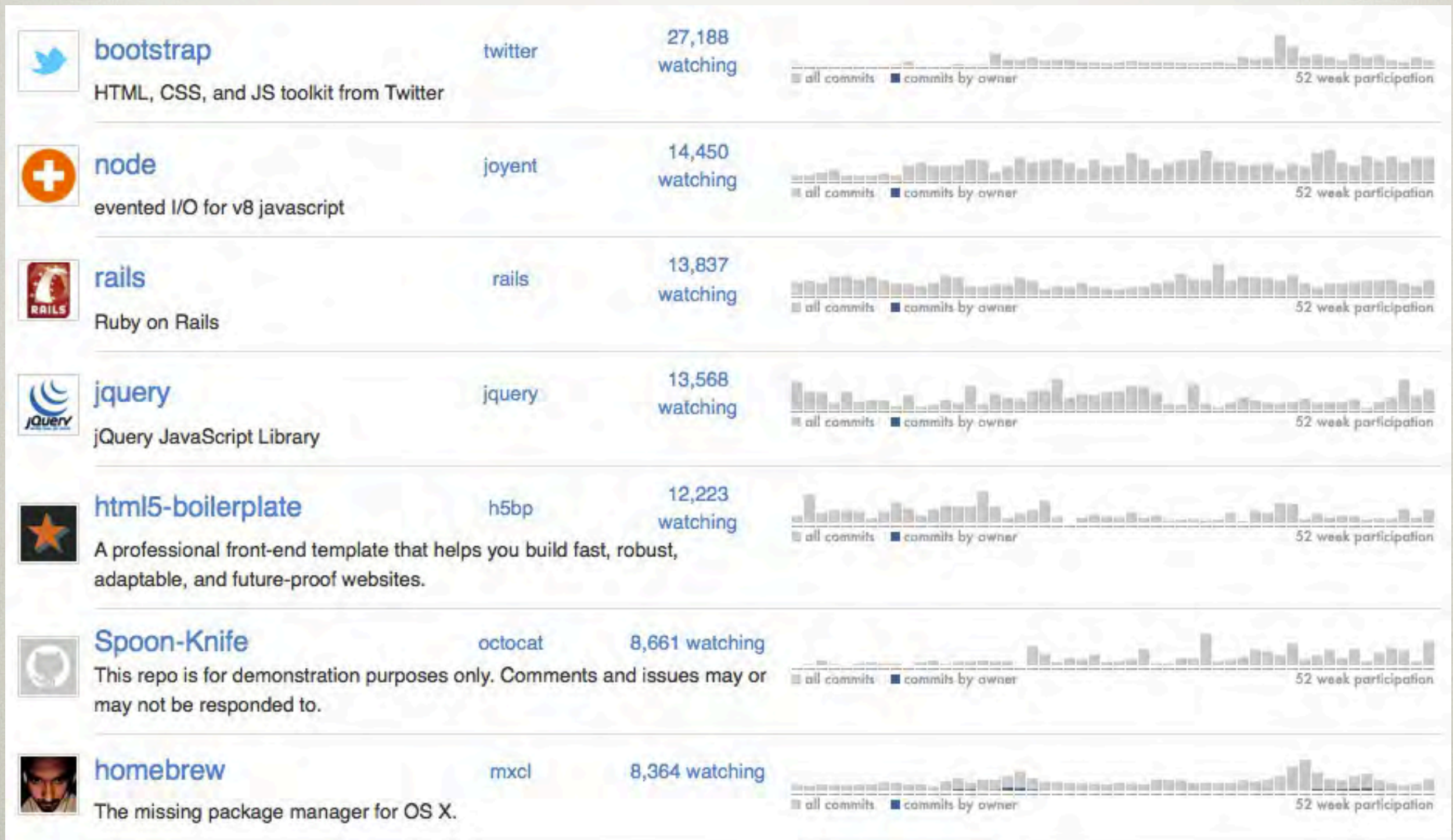
Bootstrap is designed to help people of all skill levels — designer or developer, huge nerd or early beginner. Use it as a complete kit or use to start something more complex.

Cross-everything

Originally built with only modern browsers in mind, Bootstrap has evolved to include support for all major browsers (even IE7!) and, with Bootstrap 2, tablets and smartphones, too.

<http://twitter.github.com/bootstrap>

MOST WATCHED ON GITHUB



Grid System

Tables

Modals

Fixed / Fluid Layouts

Navigation Styles

Scrollspy

Responsive Design

LESS

Dropdowns

Typography

Pagination

Button Groups

Tabs

Labels & Badges

Icons

Pills

Breadcrumbs

Buttons

Forms

Alert Messages

Typeahead

Tooltips

Progress Bars

Carousel

GRID SYSTEM

- 12 Column Grid
- Easily Define Columns
`class="span7" class="span5"`
- Fixed or Fluid Layout
`class="container" / class="row"`
`class="container-fluid" / class="row-fluid"`

GRID SYSTEM

Fixed Width

940px Wide
Responsive (optional)

```
<div class="container">  
  <div class="row">  
    <div class="span4">  
      SIDE NAVIGATION  
    </div>  
  
    <div class="span8">  
      MAIN CONTENT  
    </div>  
  </div>  
</div>
```

Fluid

Percents, Not Pixels
Responsive (optional)

```
<div class="container-fluid">  
  <div class="row-fluid">  
    <div class="span4">  
      SIDE NAVIGATION  
    </div>  
  
    <div class="span8">  
      MAIN CONTENT  
    </div>  
  </div>  
</div>
```


Hello, world!

This is a template for a simple marketing or informational website. It includes a large callout called the hero unit and three supporting pieces of content. Use it as a starting point to create something more unique.

[Learn more »](#)

Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

[View details »](#)

Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

[View details »](#)

Heading

Donec sed odio dui. Cras justo odio, dapibus ac facilisis in, egestas eget quam. Vestibulum id ligula porta felis euismod semper. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus.

[View details »](#)

```
<div class="container">

  <div class="row">
    <div class="span12">...</div>
  </div>

  <div class="row">
    <div class="span4">...</div>
    <div class="span4">...</div>
    <div class="span4">...</div>
  </div>

</div>
```


FORMS

- 4 Layout Options
 - `class="form-vertical"` (optional)
 - `class="form-horizontal"`
 - `class="form-inline"`
 - `class="form-search"`
- Styling for Input Elements
- Simple Setup w / Minimal CSS

FORMS



Email Password ☐ Remember me Sign in

```
<form class="form-inline">
  <input type="text" class="input-small" placeholder="Email" />
  <input type="password" class="input-small" placeholder="Password" />
  <label class="checkbox">
    <input type="checkbox" />Remember me
  </label>
  <button type="submit" class="btn">Sign in</button>
</form>
```


FORMS

Focused input	<input type="text" value="This is focused..."/>	
Uneditable input	<input type="text" value="Some value here"/>	
Disabled input	<input type="text" value="Disabled input here..."/>	
Disabled checkbox	<input type="checkbox"/> This is a disabled checkbox	
Input with warning	<input type="text"/>	Something may have gone wrong
Input with error	<input type="text"/>	Please correct the error
Input with success	<input type="text"/>	Woohoo!
Select with success	<input type="text" value="1"/>	Woohoo!

TABLES

- 4 Styling Options
`class="table"`
`class="table-bordered"`
`class="table-striped"`
`class="table-condensed"`

TABLES

```
<table class="table table-striped">
  ...
</table>
```

#	First Name	Last Name	Username
1	Mark	Otto	@mdo
2	Jacob	Thornton	@fat
3	Larry	the Bird	@twitter

```
<table class="table table-bordered">
  ...
</table>
```

#	First Name	Last Name	Username
1	Mark	Otto	@mdo
	Mark	Otto	@TwBootstrap
2	Jacob	Thornton	@fat
3	Larry the Bird		@twitter

ALERTS

- CSS stylings & jQuery plugin
- 4 color themes

ALERTS

Alert

Warning! Best check yo self, you're not looking too good. ✕

```
<div class="alert">
  ...
</div>
```

Error or danger

Oh snap! Change a few things up and try submitting again. ✕

```
<div class="alert alert-error">
  ...
</div>
```

Success

Well done! You successfully read this important alert message. ✕

```
<div class="alert alert-success">
  ...
</div>
```

Information

Heads up! This alert needs your attention, but it's not super important. ✕

```
<div class="alert alert-info">
  ...
</div>
```


ALERTS

Easy jQuery integration

Implementation

```
<script type="text/javascript">
  $('.alert').alert(); //Activate alert close function
</script>

<div class="alert fade in">
  <a class="close" data-dismiss="alert">x</a>
  <strong>Warning!</strong> Best check yo self, you're not looking too good.
</div>
```

Other Methods

```
$('.alert').alert('close');

$('#my-alert').bind('closed', function () {
  // do something...
});
```



ICONS

- 2 sprites - black & white




















- Markup

```
<i class="icon-star"></i>
```

```
<i class="icon-star icon-white"></i>
```

 icon-glass
 icon-music
 icon-search
 icon-envelope
 icon-heart
 icon-star
 icon-star-empty
 icon-user
 icon-film
 icon-th-large
 icon-th
 icon-th-list
 icon-ok
 icon-remove
 icon-zoom-in
 icon-zoom-out
 icon-off
 icon-signal
 icon-cog
 icon-trash

 icon-refresh
 icon-list-alt
 icon-lock
 icon-flag
 icon-headphones
 icon-volume-off
 icon-volume-down
 icon-volume-up
 icon-qr-code
 icon-barcode
 icon-tag
 icon-tags
 icon-book
 icon-bookmark
 icon-print
 icon-camera
 icon-font
 icon-bold
 icon-italic
 icon-text-height


 icon-pencil
 icon-map-marker
 icon-adjust
 icon-tint
 icon-edit
 icon-share
 icon-check
 icon-move
 icon-step-backward
 icon-fast-backward
 icon-backward
 icon-play
 icon-pause
 icon-stop
 icon-forward
 icon-fast-forward
 icon-step-forward
 icon-eject
 icon-chevron-left
 icon-chevron-right

 icon-arrow-left
 icon-arrow-right
 icon-arrow-up
 icon-arrow-down
 icon-share-alt
 icon-resize-full
 icon-resize-small
 icon-plus
 icon-minus
 icon-asterisk
 icon-exclamation-sign
 icon-gift
 icon-leaf
 icon-fire
 icon-eye-open
 icon-eye-close
 icon-warning-sign
 icon-plane
 icon-calendar
 icon-random

BUTTONS

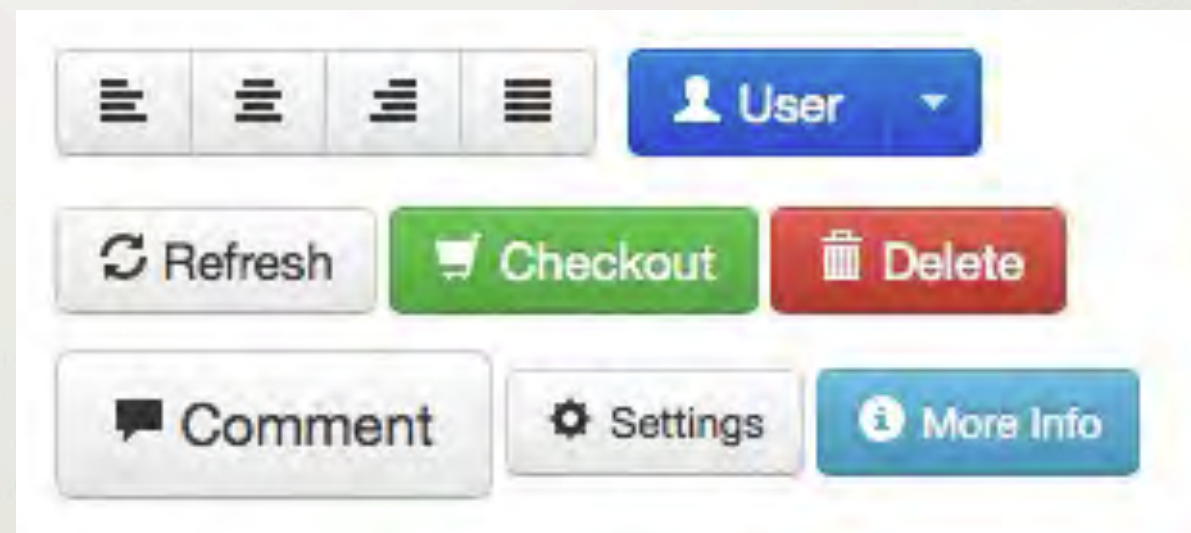
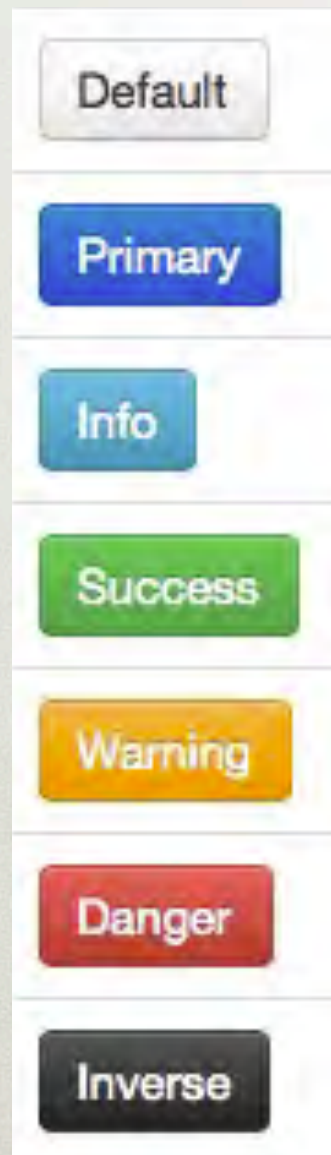
- Incredibly Easy CSS3 Buttons
- 3 sizes, 7 colors
- Add to any `<a>`, `<button>` or `<input>` element

```
<button class="btn btn-danger btn-large">  
  DON'T CLICK THIS BUTTON  
</button>
```



DON'T CLICK THIS BUTTON

BUTTONS

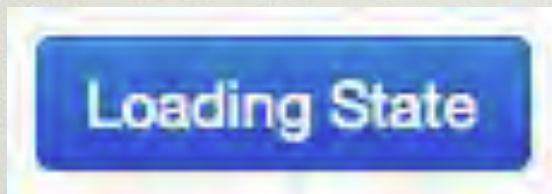


BUTTONS

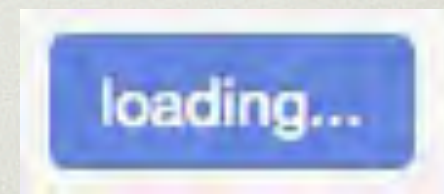
jQuery Button Plugin - Loading State

```
<script type="text/javascript">  
  $('..btn').button(); // Enable buttons jQuery plugin  
</script>  
  
<button class="btn primary" data-loading-text="loading..." >  
  Loading State  
</button>
```

Before Click



After Click



JQUERY PLUGINS

- Lightweight
- Most can be “driven” by markup

jQuery plugins A dozen Bootstrap plugins to get you started

Modals

A streamlined, but flexible, take on the traditional javascript modal plugin with only the minimum required functionality and smart defaults.

Tooltips

A new take on the jQuery Tippy plugin, Tooltips don't rely on images—they use CSS3 for animations and data-attributes for local title storage.

Collapse

Get base styles and flexible support for collapsible components like accordions and navigation.

Dropdowns

Add dropdown menus to nearly anything in Bootstrap with this simple plugin. Bootstrap features full dropdown menu support on in the navbar, tabs, and pills.

Popovers *

Add small overlays of content, like those on the iPad, to any element for housing secondary information.

* Requires [Tooltips](#) to be included

Carousel

Create a merry-go-round of any content you wish to provide an interactive slideshow of content.

Scrollspy

Use scrollspy to automatically update the links in your navbar to show the current active link based on scroll position.

Alert messages

The alert plugin is a tiny class for adding close functionality to alerts.

Typeahead

A basic, easily extended plugin for quickly creating elegant typeaheads with any form text input.

Togglable tabs

Use this plugin to make tabs and pills more useful by allowing them to toggle through tabbable panes of local content.

Buttons

Do more with buttons. Control button states or create groups of buttons for more components like toolbars.

Transitions *

For simple transition effects, include bootstrap-transition.js once to slide in modals or fade out alerts.

* Required for animation in plugins

CAROUSEL

```
<div id="myCarousel" class="carousel">

  <!-- Carousel items -->
  <div class="carousel-inner">
    <div class="active item">...</div>
    <div class="item">...</div>
    <div class="item">...</div>
  </div>

  <!-- Carousel nav -->
  <a class="carousel-control left" href="#myCarousel" data-slide="prev">&lsaquo;</a>
  <a class="carousel-control right" href="#myCarousel" data-slide="next">&rsaquo;</a>

</div>
```



BOOTSTRAP + LESS

LESS

- A CSS Pre-Processor
- Syntax is identical to CSS
- Extend Bootstrap to take advantage of the variables, mixins, and more
- Easier to code
- Easier to maintain

<http://lesscss.org/>

MIXINS

CSS

```
.someclass {  
  border-radius: 5px;  
  -webkit-border-radius: 5px;  
  -moz-border-radius: 5px;  
}
```

LESS

```
.rounded-corners ( @radius: 5px ) {  
  border-radius: @radius;  
  -webkit-border-radius: @radius;  
  -moz-border-radius: @radius;  
}  
  
.someclass {  
  .border-radius;  
}  
  
.someotherclass {  
  .border-radius( 10px );  
}
```


MIXINS

CSS

```
.gradientGrey {  
  background: #999;  
  filter: progid:DXImageTransform.Microsoft.gradient(startColorstr='#CCCCCC', endColorstr='#000000');  
  background: -webkit-gradient(linear, left top, left bottom, from(#CCC), to(#000));  
  background: -moz-linear-gradient(top, #CCC, #000);  
}
```

LESS + Bootstrap

```
.gradientGrey {  
  #gradient > .vertical( #CCC, #000 );  
}
```


MIXINS - BOOTSTRAP

<code>.clearfix()</code>	Add to any parent to clear floats within
<code>.center-block()</code>	Auto center a block-level element using margin: auto
<code>.size(@height, @width)</code>	Quickly set the height and width on one line
<code>.opacity(@opacity)</code>	Set, in whole numbers, the opacity percentage (e.g., "50")
<code>#font > #family > .sans-serif()</code>	Make an element use a sans-serif font stack
<code>#font > #family > .serif()</code>	Make an element use a serif font stack
<code>.border-radius()</code>	Round the corners of an element. Can be a single value or four space-separated values
<code>.box-shadow()</code>	Add a drop shadow to an element
<code>#gradient > .vertical()</code>	Create a cross-browser vertical background gradient

<http://twitter.github.com/bootstrap/less.html#mixins>

VARIABLES

CSS

```
a {  
  color: #0088CC;  
}  
  
a:hover {  
  color: #005580;  
}
```

LESS + Bootstrap

```
@linkColor: #0088CC;  
@linkColorHover: darken( @linkColor, 15% );  
  
a {  
  color: @linkColor;  
}  
  
a:hover {  
  color: @linkColorHover;  
}
```


OPERATORS

Any number, color, or variable can be operated on

```
@baseMargin: 25px;  
  
.header {  
  margin-top: @baseMargin + 10px;  
  margin-bottom: @baseMargin * 2;  
}
```


NESTED CLASSES

CSS

```
.content {  
  width: 940px;  
  margin: 0 auto;  
}  
  
.content .somediv {  
  -webkit-border-radius: 5px;  
  -moz-border-radius: 5px;  
  border-radius: 5px;  
  background: #F5F5F5;  
}  
  
.content .somediv a {  
  color: #0088CC;  
}  
  
.content .somediv a:hover,  
.content .somediv a:focus {  
  color: #005580;  
  text-decoration: none;  
}
```

LESS + Bootstrap

```
.content {  
  width: 940px;  
  margin: 0 auto;  
  .somediv {  
    background: #F5F5F5;  
    .border-radius(5px);  
    a {  
      color: @linkColor;  
      &:hover,  
      &:focus {  
        color: @linkColorHover;  
        text-decoration: none;  
      }  
    }  
  }  
}
```


BOOTSTRAP + RESPONSIVE DESIGN

RESPONSIVE DESIGN

- Leverage CSS Media Queries
- Apply CSS styling based upon browser resolution
 - Modify the width of column in our grid
 - Stack elements instead of float wherever necessary
 - Resize headings and text to be more appropriate for devices

```
// Landscape phones and down
@media (max-width: 480px) { }

// Landscape phone to portrait tablet
@media (max-width: 768px) { }

// Portrait tablet to landscape and desktop
@media (min-width: 768px) and (max-width: 980px) { }

// Large desktop
@media (min-width: 1200px) { }
```


RESPONSIVE BOOTSTRAP

- `<meta name="viewport" content="width=device-width, initial-scale=1.0">`
- `@import "responsive.less" (LESS)`



SIDEBAR

[Link](#)[Link](#)[Link](#)[Link](#)

SECONDARY

[Link](#)[Link](#)[Link](#)[Link](#)[Link](#)[Link](#)

SECONDARY

[Link](#)[Link](#)[Link](#)

Hello, world!

This is a template for a simple marketing or informational website. It includes a large callout called the hero unit and three supporting pieces of content. Use it as a starting point to create something more unique.

[Learn more »](#)

Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

[View details »](#)

Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

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Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

[View details »](#)

Heading

Donec id elit non mi porta gravida at eget metus. Fusce dapibus, tellus ac cursus commodo, tortor mauris condimentum nibh, ut fermentum massa justo sit amet risus. Etiam porta sem malesuada magna mollis euismod. Donec sed odio dui.

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Apr 18 2012

Saving the Day with Scoped CSS

One little known feature of HTML5 is Scoped CSS. It's an attribute for style blocks that may change the way we tackle certain styling challenges in the future.

[Read on! →](#)

Apr 9 2012

On :target

The `:target` pseudo selector in CSS is both pretty cool and pretty limited in what it can do. In this article we discuss some things it can be helpful with, it's limitations, and some work arounds.

[Read on! →](#)

HOT LINKS

[Refactoring >14,000 lines of CSS →](#)

Eugene Fedorenko talks about how Beanstalk refactored the whole app to use SASS. I'm sure a lot of folks are in this situation right now. You want to use SASS, but you have a big app and it's a big move. Short answer: yes.

The only thing I'd suggest they do differently is use Compass. I've also been involved with big SASS rewrites, none of which used Compass, and I highly regret it as: 1) inconsistent mixins across projects blows 2) those mixin files won't be as well maintained as Compass is.

Or... [BROWSE ARCHIVES](#) [Search](#)

TRAINING

CSS-Tricks is brought to you in part by Treehouse. If you want to improve your skills as a web worker, you should be on Treehouse. I can't recommend it enough.



Build for iOS
Obj-C, Xcode



Web Dev
Ruby, PHP, Python



Web Design
HTML, CSS, JS

I'M CONVINCED.

HOW DO I USE BOOTSTRAP?

- Customize & Download (Non-LESS Version)

<http://twitter.github.com/bootstrap/download.html>

- JavaScript

```
<link rel="stylesheet/less" href="/path/to/bootstrap.less">  
<script src="/path/to/less.js"></script>
```

- LESS Compiler

- Server-side
- Pre-Processors



<http://incident57.com/less/>

THANKS!

SAM SCHRUP

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