

# Bootstrap

## Our Process

1. Collect resources as a group
2. Do step-by-step tutorials
  - a. first a getting-started tutorial
  - b. then deeper tutorials that touch the things we want to learn

## 1. Collecting resources

### Overview

<http://bootstraphero.com/the-big-badass-list-of-twitter-bootstrap-resources>

- what is it?

<http://www.inmotionhosting.com/support/edu/joomla-3/using-bootstrap/what-is-bootstrap>

- what's it good for?

<http://twitter.github.io/bootstrap/getting-started.html#examples>

<http://www.sitepoint.com/11-reasons-to-use-twitter-bootstrap/> nice short hit on the

highlights

<http://twitter.github.io/bootstrap/components.html> official documentation -- very good explanation of what bootstrap can do and how to do it, with examples

- what are alternatives to it?

JQuery UI, HTML5 Boilerplate, Zurb Foundation

- what does it depend on? (other libraries, languages)

(jquery), Javascript, HTML, CSS, LESS?

- what are the pieces we have to (or want to) learn

grid layout

responsive design

styling tables, forms, and buttons

tabs & navbars

alerts & modal dialogs

dropdown menu bars

progress bars?

using different themes?

- what extensions? what else builds on top of Bootstrap?

<http://twitter.github.io/bootstrap/javascript.html>

<http://twitter.github.io/bootstrap/extend.html>

<http://twitter.github.io/bootstrap/getting-started.html#examples>

<https://github.com/addyosmani/jquery-ui-bootstrap> (bootstrap brought to jquery ui widgets)

<http://designmodo.github.io/Flat-UI/#> very customizable as seen here

- what should we learn next?  
LESS

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

Access online:

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

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

[http://en.wikipedia.org/wiki/Twitter\\_Bootstrap](http://en.wikipedia.org/wiki/Twitter_Bootstrap)

- provides a grid layout with responsive design
- CSS stylesheets & HTML design templates

<http://www.bootstrapfree.com/>

- forms, buttons, charts, navigation components  
<http://twitter.github.io/bootstrap/components.html>
- Allows you to pick and choose what you want and download your customization  
<http://twitter.github.io/bootstrap/customize.html>
- Arrows in all directions  
<http://bootstrap-arrows.iarfhlaith.com/index.html>

## Tutorials

- video? web page only? about how long?

Getting started: choose one:

- <http://twitter.github.io/bootstrap/getting-started.html> (the standard one, web page, 5 steps, very brief coverage of layout, nothing deeper)
  - **10 people**
- <http://www.codeproject.com/Articles/506653/Create-Clean-Webpages-with-Twitter-Bootstrap> (web page, maybe 7 steps, includes grid, menu bar, nav bar, tabs, popups, pagination)
  - **8 people**

Next step: go deeper

- <http://webdesign.tutsplus.com/tutorials/complete-websites/twitter-bootstrap-101-in-troduction/> (link above: has really helpful videos just to introduce examples using bootstrap (video 1), and understanding what's inside of the zipfile (video2), and other topics: grid, 2.0, navbar, tabs/pills, carousel, trimming the file size, customize)

- **2 people**
- <http://www.w3resource.com/twitter-bootstrap/tutorial.php> (web pages only)
- **4 people**

<http://twitter.github.io/bootstrap/base-css.html> (doesn't seem to be a tutorial)  
<http://themecrunch.com/2013/04/twitter-bootstrap-tutorials-tools-and-resources/>  
<http://www.w3resource.com/twitter-bootstrap/tutorial.php>  
<http://www.onextrapixel.com/2012/11/12/how-to-use-twitter-bootstrap-to-create-a-responsive-website-design/>

### Deeper tutorials

<http://designshack.net/articles/css/20-awesome-resources-for-twitter-bootstrap-lovers/>  
<http://twitter.github.io/bootstrap/customize.html> (looks like a customizing UI, not a step-by-step tutorial)  
[http://www.youtube.com/user/easydevtuts/videos?tag\\_id=&sort=p&view=0&shelf\\_index=1](http://www.youtube.com/user/easydevtuts/videos?tag_id=&sort=p&view=0&shelf_index=1) (video demonstrations)  
<http://www.onextrapixel.com/2012/11/12/how-to-use-twitter-bootstrap-to-create-a-responsive-website-design/>

### Example Project

- find Bootstrap example websites & pick one (or more) to reimplement

<http://builtwithbootstrap.com/>

<http://www.tripwiremagazine.com/2013/02/twitter-bootstrap-examples.html>

Either start simple:

- duplicate the Fluid Layout example  
<http://twitter.github.io/bootstrap/examples/fluid.html>
- or pick a fairly simple site from <http://builtwithbootstrap.com/>

### Goal for end of day

Bootstrap site with grid, responsive design, some navbar, some buttons, some modal dialog or alert

### How do we debug?

- Chrome Inspector

## Q&A

- where or who can we ask questions about this? Stack Overflow / each other
- what's the best API docs?
- how to search for answers?

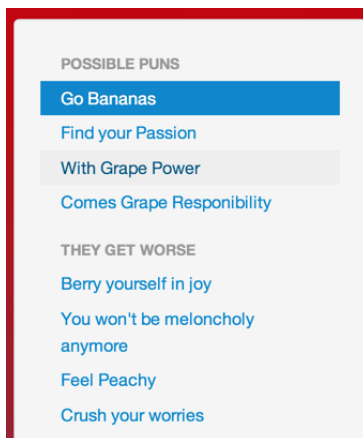
Websites built with bootstrap:

1. Codeacademy

## Examples created by us



<http://htmlpreview.github.io/?https://github.com/michelleoj/MITx/blob/master/Week%202/Bootstrap/mockup.html>



<http://htmlpreview.github.io/?https://github.com/laurabreiman/MITx/blob/master/bootstra-p-prac/fluid-site.html#>

# The Complete Works of William Shakespeare

Comedy ▾ Tragedy ▾ History ▾ Poetry ▾

## All's Well That Ends Well

[Shakespeare homepage](#) | [All's Well That Ends Well](#) | Act 1, Scene 1  
[Next scene](#)

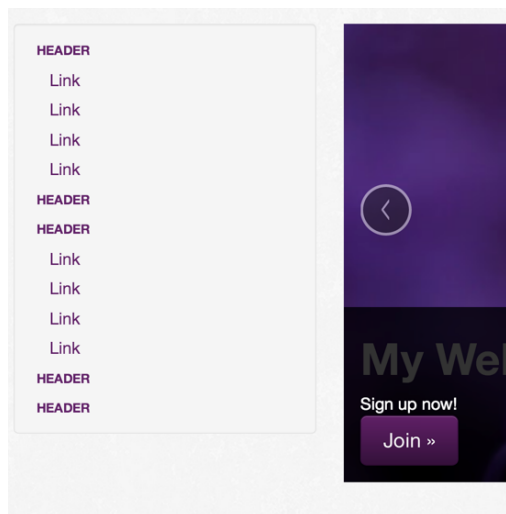
**SCENE I. Rousillon. The COUNT's palace.**

*Enter BERTRAM, the COUNTESS of Rousillon, HELENA, and LAFEU, all in black*

**COUNTESS**

In delivering my son from me, I bury a second husband.

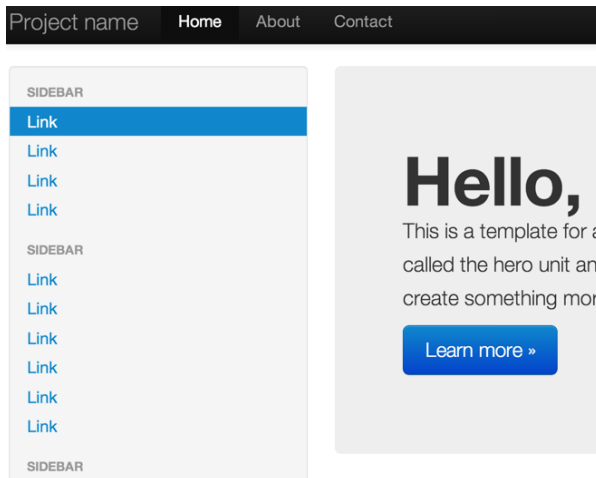
<http://htmlpreview.github.io/?https://github.com/cressid/MITx/blob/master/shakespearehomepage.html>



<http://htmlpreview.github.io/?https://github.com/jessmand/MITx/blob/master/website/website.html>



<http://htmlpreview.github.io/?https://github.com/cmchang/MITx/blob/master/Day%207/myPage.html>



<http://htmlpreview.github.io/?https://github.com/olearym/MITx/blob/master/bootstrap-fluid.html>



<http://htmlpreview.github.io/?https://github.com/stephensm/MITx/blob/master/example.html>

Resource Simulator

Simulation – 850ms

Processes

Process #2  
Need LOCK

Process #3  
Need LOCK

Process #4  
Need LOCK

Process #5  
Need LOCK

Process #6  
Need LOCK

Resources

CPU (Quad-Core)  
Process #5 (50ms)

LOCK  
Process #2  
Process #3  
Process #4  
Process #5 (100ms)  
Process #6

P5 is preempted from the CPU (Quad-Core) resource.

Settings

Resources

CPU (Quad-Core)  
LOCK

Processes

Process #2 – Waited: 550ms | Ran: 300 ms

Process #3 – Waited: 550ms | Ran: 300 ms

Process #4 – Waited: 550ms | Ran: 300 ms

Process #5 – Waited: 600ms | Ran: 250 ms

Process #6 – Waited: 800ms | Ran: 50 ms

Step Forward

Step Back

Stop Simulation

<http://htmlpreview.github.io/?https://github.com/mattpf/schedsim/blob/master/index.html>