

Bootstrap Basics

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What is Bootstrap?

- HTML, CSS, JS Framework for developing projects on the web
- Helps your layout transition between computers, tablets, and mobile
- Extensive pre-compiled or modifiable code base

Why Use It?

- Easy!
- Lots of features and online support
- Open source project
- Library with cookie-cutter mockups you can customize
- Lots of Popular Sites use it!



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MY GAMES

Wednesday, Nov. 16 11 Games

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TNT

CSN

THIS IS
WHY WE PLAY



LEAGUE PASS

WAS
94

4th
2:35
PHI
101



1 - 9

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LEAGUE PASS

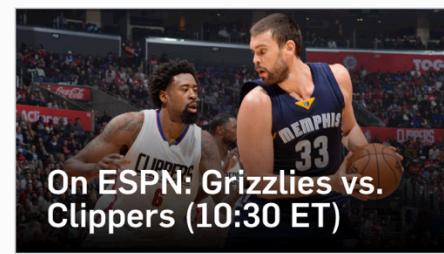
NOP
82

4th
27.9
ORL
88



4 - 7

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MY NBA

TISSOT Buzzer Beater Zone!



VOGUE

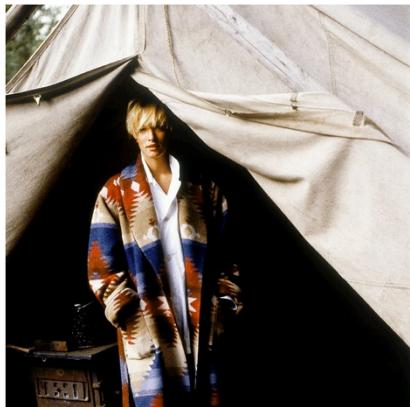


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Rollback



Rollback

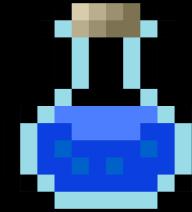


Rollback

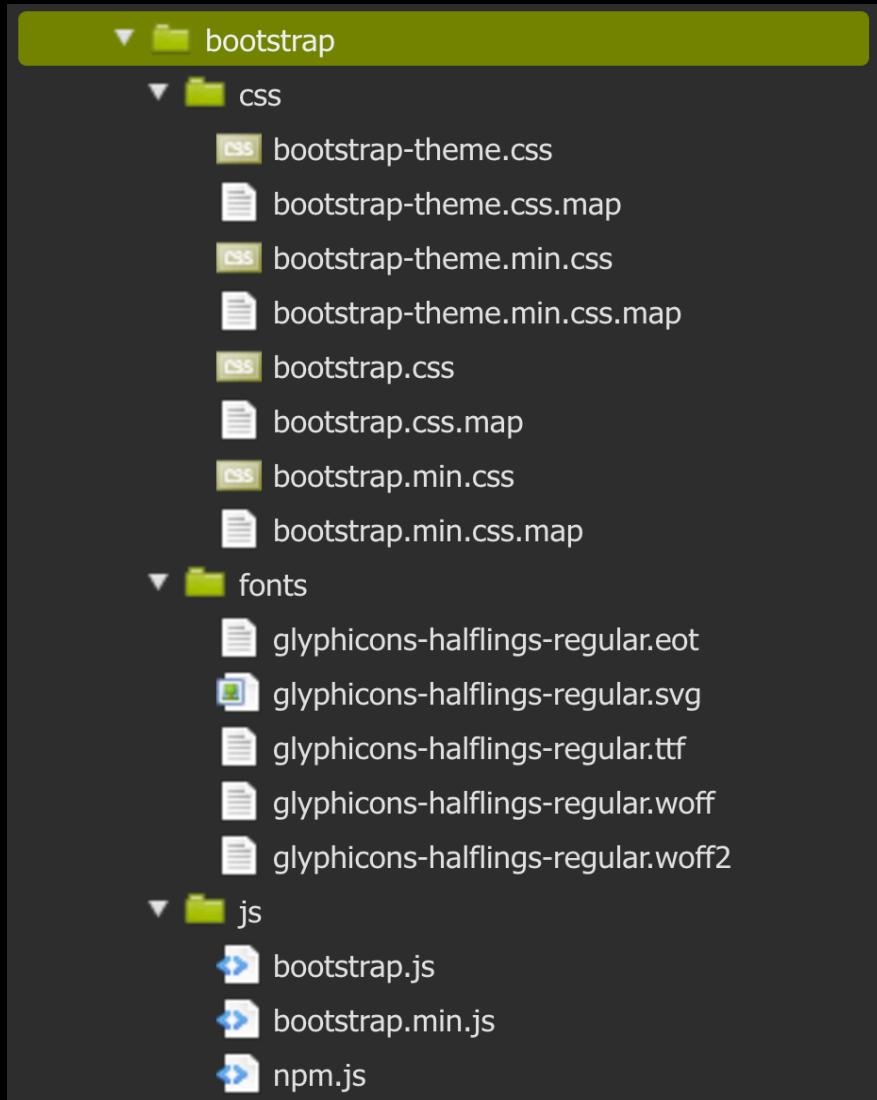


Getting Started

- Pick your poison
 - Precompiled, source code, Sass for Rails
- Ways to Download:
 - <http://getbootstrap.com/getting-started/#download>
 - npm install bootstrap@3
 - Install node.js and the grunt cli
 - bower
- Templates/Themes!



What have we here???



- Minified files
 - .min
 - No need to include multiple files for different features

Baseline

How to Include Bootstrap functionality



You've Used It Before!

`layout.html`

Getting Started...

- Boilerplate template
- chmod permissions on folder!
- apache50 start [DIR]
- Hosted site!

Head cont.

```
<head>
    <meta charset = "utf-8">
    <meta http-equiv = "X-UA-Compatible"
content = "IE = edge">
        <meta name = "viewport" content = "width
= device-width, initial-scale = 1">

    <title>Bootstrap 101 Template</title>

    <!-- Bootstrap -->
    <link href =
"//maxcdn.bootstrapcdn.com/bootstrap/3.3
```

Now let's see how to actually start...

head

```
<!DOCTYPE html>
<html>
<head>
  <title>Try v1.2 Bootstrap Online</title>
  <link
    href="/bootstrap/css/bootstrap.min.css"
    rel="stylesheet">
  <script
    src="/scripts/jquery.min.js"></script>
  <script
    src="/bootstrap/js/bootstrap.min.js"></script>
</head>
<body>
```

body

```
<body>
    <h1>Hello, world!</h1>

    <!-- jQuery (necessary for Bootstrap's
JavaScript plugins) -->
    <script src =
"https://ajax.googleapis.com/ajax/libs/jquery/1.11.1
/jquery.min.js"></script>

    <!-- Include all compiled plugins (below), or
include individual files as needed -->
    <script src =
"//maxcdn.bootstrapcdn.com/bootstrap/3.3.1/js/bootst
rap.min.js"></script>

</body>
```

Let's Get Down to Business

- Basics
- Grid Layout
- Navbar
- Fonts
- How *you* can figure out Buttons (and other Bootstrap questions) on your own!
- Design Tips

BS Basics

- Mobile First
 - Mobile-thinking functions all throughout library
- Ensures consistency across browsers
- JS Plugins
 - One script reference instead of a hundred
- Customize
 - If you want to customize something (i.e. to get to nestable components) you can!
 - Easier with full un-compiled code
- You still need a .css, this just does a ton of work for you!

Grid Layout

- 12 different columns make up a page
- Mobile → tablet → web
 - Address “critical” content first
- Rows!
 - Horizontal groups of columns
 - Used within a `.container` class (for padding)
 - Columns as only immediate children
 - Warning: Facilitate padding “gutters” between column content (15px on each side)

Grid Practicalities

	Phones	Tablets	Small Desktops	Large Desktops
Grid layout shifting	Always horizontal	Collapsed at beginning; always horizontal above breakpoints	Collapsed at beginning; always horizontal above breakpoints	Collapsed at beginning; always horizontal above breakpoints
Maximum container width	Automatically calculated (none)	750px	970px	1170px
Class prefix	.col-xs-	.col-sm-	.col-md-	.col-lg-

Grid Reminders + Tricks

- **.col-**-offset-***
 - Push columns over for more spacing
- **<div class = "clearfix visible-xs"></div>**
 - Ensure columns of different sizes “clear” each other

```
<div class = "container">

    <div class = "row">
        <div class = "col-*-*"></div>
        <div class = "col-*-*"></div>
    </div>

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

</div>
```

Navigation Bars (Nav Bars)

- Essentially just a row divided into several sub-columns
- But it can be more than that
 - Automatically “collapse” in mobile apps
 - Optional collapse on other platforms
 - Rigidly locked in place at top of app
 - No worries about variations in formatting on each page
 - Forms integrated into header (Search box)

Bootstrap Nav Bar

- Header
 - Role = navigation
 - Helps with access to BS functionality
- Categories
 - Unordered List
 - Class = .nav .navbar-nav
- Dropdown
 - Sub- Unordered List
 - Class = dropdown-menu

Nav Bar Header

```
<nav class = "navbar navbar-default" role = "navigation">  
    <div class = "navbar-header">  
        <a class = "navbar-brand" href = "#">CS50</a>  
    </div>
```

Nav Bar UL

```
<div>
  <ul class = "nav navbar-nav">
    <li class = "active"><a href = "#">Lectures</a></li>
    <li><a href = "#">Assignments</a></li>
```

Nav Bar Dropdown

```
<li class = "dropdown">
    <a href = "#" class = "dropdown-toggle" data-
toggle= "dropdown">
        Schools
    </a>

    <ul class = "dropdown-menu">
        <li><a href = "#">Yale</a></li>
        <li><a href = "#">Harvard</a></li>
    </ul>
</li>
```

- **Caret**
 - Feel free to add a class = caret for a dropdown arrow

NavBar Features

- Optional Collapse
 - Use .navbar-collapse and .collapse to trigger this

```
<div class = "collapse navbar-collapse">
```
 - Comes before the dropdown list, (ul) but after the navbar header

NavBar Features

- Fixed to the Top of the Page
 - Add “.navbar-fixed-top” to .navbar class
 - ```
<nav class = “navbar navbar-default navbar-fixed-top”
role = “navigation”>
```
  - Make sure you add padding to the body so the navbar doesn’t accidentally cover content (50px+)

# NavBar Features

- Search Form
  - Don't use Bootstrap form classes!
  - **.navbar-form does the job!**

```
– <form class = "navbar-form" role = "search">
```

# NavBar Features

- Search Form

```
<div>
 <form class = "navbar-form navbar-left" role =
"search">

 <div class = "form-group">
 <input type = "text" class = "form-control"
placeholder = "Search">
 </div>
 <button type = "submit" class = "btn btn-
default">Submit</button>

 </form>
</div>
```

# Bootstrap Text

- Helpful Tags
  - Styled heading/subheading
  - <Address>
    - Mailing address
  - <abbr>
    - Abbreviation
- Code
  - <code>
  - Start: <code>&lt;
  - End: &gt;</code>

# Bootstrap Fonts

- Default:
  - Helvetica Neue, Helvetica, Arial, Sans serif
- Customize
  - Like normal
    - Get a font link
    - Include it in your .css

# Figuring out New Things

So you have a question....

# Bootstrap Support Strategy

- I. Figure out what functionality you want
  - I. Button styling
2. See if you can find an example
  - I. websites you like
  2. Templates
  3. Themes
3. If you find an example, View Page Source (or check source code) and see how they implement
4. Google + StackOverflow
  - I. Lots of confused users + Big library = Lots of Forums
5. TutorialsPoint w3 schools
  - I. Background
6. Mess with BS + CSS yourself

# Making things Pretty

## Design Tips

# Design Tips

- Color:
  - Adobe Color CC (Kuler)
  - <https://color.adobe.com/create/color-wheel/>
- Pictures:
  - Unsplash (Creative Commons Zero)
  - No attribution or modification constraints
  - <https://unsplash.com/>
- Inspiration:
  - Bootstrap Expo
  - Free Theme Downloads:
    - <https://startbootstrap.com/>

# Design Tips

“Good Design is as little Design as possible.”

—Dieter Rams

Focus on the essentials so you can  
do less while staying true to your idea.

# Design Tips

“Good Design is as little Design as possible.”

—Dieter Rams

Focus on the essentials so you can do less while staying true to your idea.

Plus minimalism online is “In,” which makes your lives easier....

Thank You!