

Bootstrap

Bootstrap is the most popular HTML, CSS, and JS framework for developing responsive, mobile first projects on the web.

Outline

- What is bootstrap?
- What can we do use bootstrap?
- Bootstrap basics
- Examples with code demo
- Materials for further learning

What is bootstrap?

- Front-end framework
- CSS + JS
 - Web design + Layout pattern (CSS)
 - Common widgets + Functionality (JS)
- Currently v3.3.7 (v4 beta)

What can we do use bootstrap?

- Fast prototyping (templates)
- Well tested style, aesthetic design principle
- Mobile first / Responsive design

Mobile devices

Generally speaking, Bootstrap supports the latest versions of each major platform's default browsers. Note that proxy browsers (such as Opera Mini, Opera Mobile's Turbo mode, UC Browser Mini, Amazon Silk) are not supported.

	Chrome	Firefox	Safari
Android	✓ Supported	✓ Supported	N/A
iOS	✓ Supported	✓ Supported	✓ Supported

Desktop browsers

Similarly, the latest versions of most desktop browsers are supported.

	Chrome	Firefox	Internet Explorer	Opera	Safari
Mac	✓ Supported	✓ Supported	N/A	✓ Supported	✓ Supported
Windows	✓ Supported	✓ Supported	✓ Supported	✓ Supported	✗ Not supported

Bootstrap basics - get started

- Content delivery network (CDN)
 - `<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">`
 - `<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js"></script>`
- Download compiled css and js files

Bootstrap basics - mobile responsive

Add to head:

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

The browser will (probably) render the width of the page at the width of its own screen.

Bootstrap basics - container

- Requires a container class to wrap up all the sites content

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

Bootstrap basics - grid system

	Extra small devices Phones (<768px)	Small devices Tablets (≥768px)	Medium devices Desktops (≥992px)	Large devices Desktops (≥1200px)
Grid behavior	Horizontal at all times	Collapsed to start, horizontal above breakpoints		
Container width	None (auto)	750px	970px	1170px
Class prefix	<code>.col-xs-</code>	<code>.col-sm-</code>	<code>.col-md-</code>	<code>.col-lg-</code>
# of columns	12			
Column width	Auto	~62px	~81px	~97px

<code>.col-md-1</code>	<code>.col-md-1</code>	<code>.col-md-1</code>	<code>.col-md-1</code>	<code>.col-md-1</code>	<code>.col-md-1</code>	<code>.col-md-1</code>	<code>.col-md-1</code>	<code>.col-md-1</code>	<code>.col-md-1</code>	<code>.col-md-1</code>	<code>.col-md-1</code>
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<code>.col-md-8</code>	<code>.col-md-4</code>
------------------------	------------------------

<code>.col-md-4</code>	<code>.col-md-4</code>	<code>.col-md-4</code>
------------------------	------------------------	------------------------

<code>.col-md-6</code>	<code>.col-md-6</code>
------------------------	------------------------

Bootstrap basics - css @media

```
.container {  
  padding-right: 15px;  
  padding-left: 15px;  
  margin-right: auto;  
  margin-left: auto;  
}  
@media (min-width: 768px) {  
  .container {  
    width: 750px;  
  }  
}  
@media (min-width: 992px) {  
  .container {  
    width: 970px;  
  }  
}  
@media (min-width: 1200px) {  
  .container {  
    width: 1170px;  
  }  
}  
} //https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.css
```

Bootstrap basics - styles

- tables
- forms
- button
- image
- typography

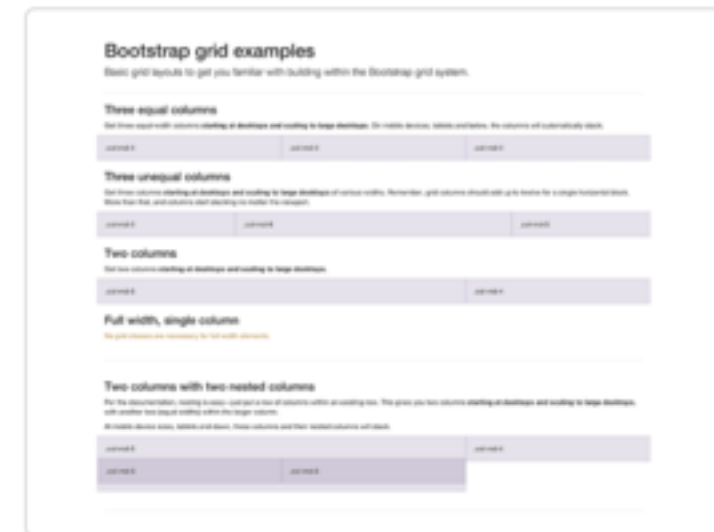
Bootstrap basics - templates



Starter template



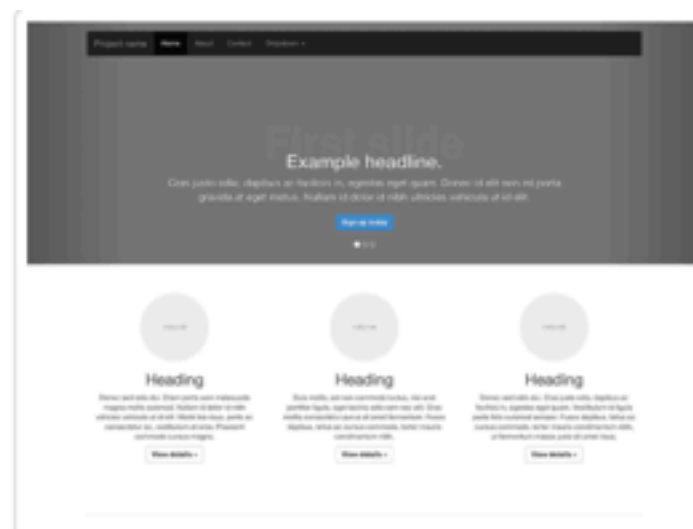
Bootstrap theme



Grids



Cover



Carousel



Blog

Bootstrap code demo - grid system

- https://www.w3schools.com/bootstrap/tryit.asp?filename=trybs_grid_stacked_to_hor&stacked=h
- review basics
- change grid size

Bootstrap materials

Coding is a process of reusing

Bootstrap materials

- Templates
 - <https://templatemag.com/free-bootstrap-templates/>
- Extra Components
 - <https://bootsnipp.com/>

Bootstrap materials

- Official document
 - <https://getbootstrap.com/docs/3.3/>
- W3School
 - <https://www.w3schools.com/bootstrap/default.asp>
- stack overflow with tag: bootstrap
 - <https://stackoverflow.com/questions/tagged/twitter-bootstrap-3>

Now go and write Bootstrap
experience on your resume!