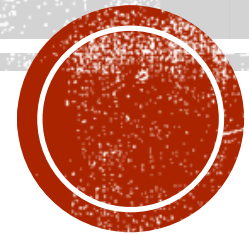


BOOTSTRAP

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GETTING INTO MATTER...

<https://plnkr.co/edit/?p=catalogue>

<https://jsfiddle.net>

■ HTML5 Basics

- <https://www.youtube.com/watch?v=NzzGt7EmXVw>
- https://www.youtube.com/watch?v=2R8_Yt8UjBo&list=PLqGj3iMvMa4KlJn1pMYPVV3eYzxJlWcON&index=2
- <https://www.youtube.com/watch?v=vpqm2fPEzbI&index=3&list=PLqGj3iMvMa4KlJn1pMYPVV3eYzxJlWcON>
- <https://www.youtube.com/watch?v=1SLB-vCqR0g&index=4&list=PLqGj3iMvMa4KlJn1pMYPVV3eYzxJlWcON>
- https://www.youtube.com/watch?v=u-3aQpZD3_Q&list=PLqGj3iMvMa4KlJn1pMYPVV3eYzxJlWcON&index=5
- <https://www.youtube.com/watch?v=gb8SzwkM6Lo&list=PLqGj3iMvMa4KlJn1pMYPVV3eYzxJlWcON&index=6>
- <https://www.youtube.com/watch?v=J25mYgiLGSI&list=PLqGj3iMvMa4KlJn1pMYPVV3eYzxJlWcON&index=7>



GETTING INTO MATTER...

- CSS Basics

- https://www.youtube.com/watch?v=s7ONvIgOWdM&list=PLqGj3iMvMa4IOmy04kDxh_hqODMqoeCy

- Sass vs Less

- <https://www.youtube.com/watch?v=lJclQekSfSM>

- Bourbon...

- https://www.youtube.com/watch?v=8ItNE_DX6Cc



INDEX

- What is Bootstrapp?
- What is Less?
- How we can use the grid?
- Working on cases

Keep in mind

<http://paletton.com/#uid=1000u0kl1llaFw0g0qFqFg0w0aF>

<http://dasplankton.de/ContrastA/>

<http://www.creativebloq.com/typography/what-is-typography-123652>



WHAT IS BOOTSTRAP?

<http://getbootstrap.com>

```
<!DOCTYPE html>  
<html lang="en">  
...  
</html>
```

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

*To ensure proper rendering
and touch zooming*

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

```
<meta name="viewport" content="width=device-width, initial-scale=1, maximum-  
scale=1, user-scalable=no">
```

You can disable zooming capabilities on mobile devices



TYPOGRAPHY AND LINKS

- Bootstrap sets **basic global display, typography, and link styles**.
- Specifically, we:
 - Set **background-color: #fff;** on the body
 - Use the **@font-family-base, @font-size-base, and @line-height-base** attributes as our typographic base
 - Set the global link color via **@link-color** and apply **link underlines only on :hover**
 - These styles can be found within **scaffolding.less**



CONTAINERS

For improved **cross-browser rendering**, we use [Normalize.css](#)

Bootstrap requires a containing element to wrap site contents and house our grid system. You may choose one of two containers to use in your projects. Note that, due to padding and more, neither container is nestable.

Use **.container** for a responsive fixed width container.

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

```
...
```

```
</div>
```

Use **.container-fluid** for a full width container, spanning the entire width of your viewport.

```
<div class="container-fluid">
```

```
...
```

```
</div>
```



1

2

3

4

5

6

7

8

9

10

11

12

BOOTSTRAP 4 GRID SYSTEM

GRID SYSTEM

- Bootstrap includes a responsive, mobile first fluid grid system that appropriately scales up to 12 columns as the device or viewport size increases. It includes predefined classes for easy layout options, as well as powerful mixins for generating more semantic layouts.

Grid system				
	Extra small devices Phones (<768px)	Small devices tablet (>=768px)	Medium devices Desktops (>=992px)	Large devices Desktop (>=1200px)
Grid behavior	Horizontal at all times	Collapsed to start, horizontal above breakpoint		
Max container width	None(auto)	750px	970px	1170px
Class prefix	.col-xs-	.col-sm-	.col-md-	.col-lg-
# of columns	12			
Gutter width	30px (15px on each side of column)			
Max column width	Auto	60px	78px	95px
Offsets/Column ordering	N/A	Yes		

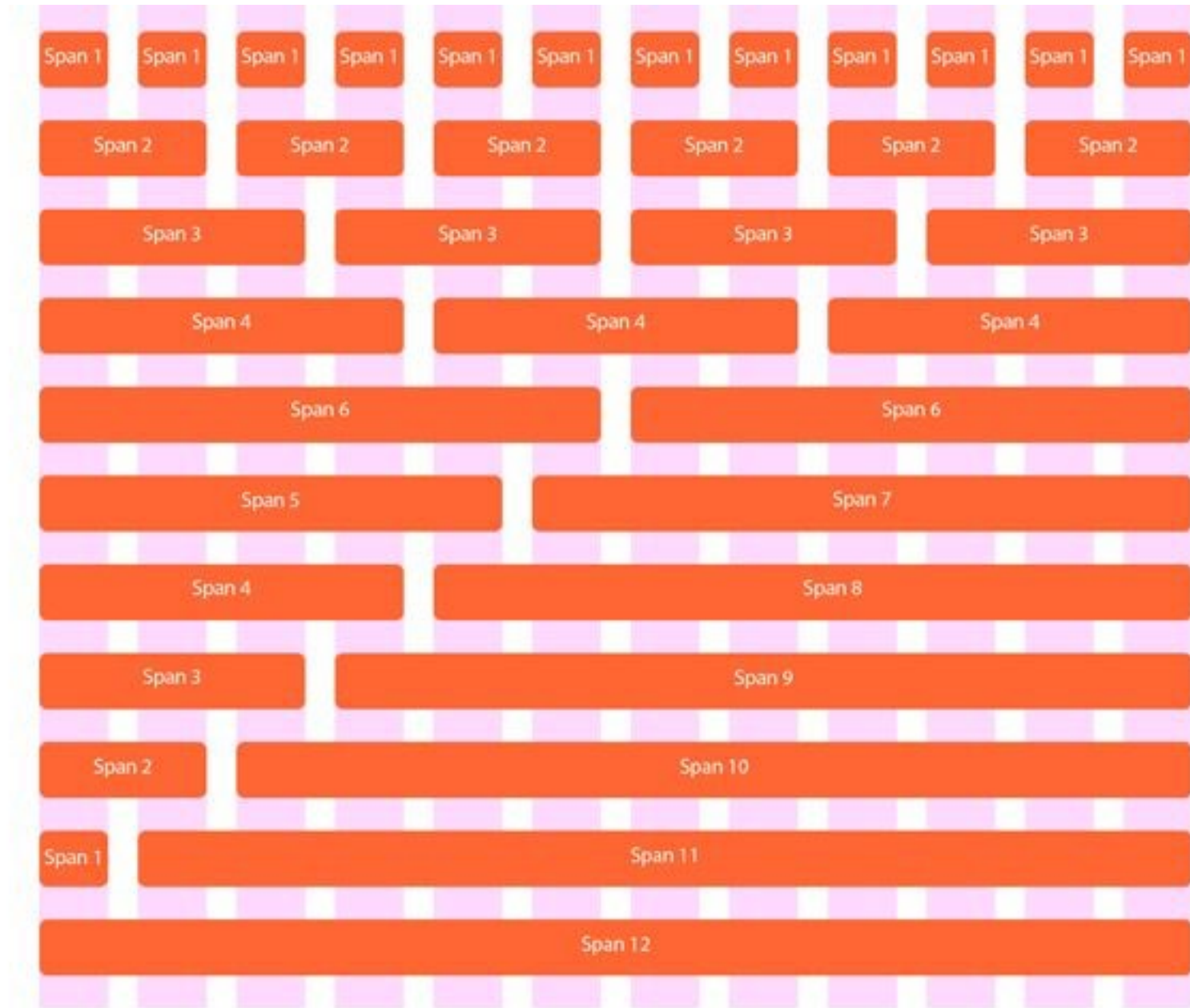


THE EXTRA SMALL TO SMALL RANGE

```
<div class="row">
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
  <div class="col-md-1">.col-md-1</div>
</div>
<div class="row">
  <div class="col-md-8">.col-md-8</div>
  <div class="col-md-4">.col-md-4</div>
</div>
<div class="row">
  <div class="col-md-4">.col-md-4</div>
  <div class="col-md-4">.col-md-4</div>
  <div class="col-md-4">.col-md-4</div>
</div>
<div class="row">
  <div class="col-md-6">.col-md-6</div>
  <div class="col-md-6">.col-md-6</div>
</div>
```

.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1	.col-md-1
.col-md-8								.col-md-4			
.col-md-4				.col-md-4				.col-md-4			
.col-md-6						.col-md-6					





Bootstrap Grid System



Bootstrap lets you organize content based on the “number of columns” a div spans – out of a total 12 columns.

Example:

`<div class="col-md-12">`
(Spans full width)

`<div class="col-md-4">`
(Spans 1/3 of full width)

Rice DevChats { }

`col-xs-*`

- Extra small devices
- Mobile devices

`col-sm-*`

- Small devices
- tablets

`col-md-*`

- medium devices
- laptops , desktops

`col-lg-*`

- extra large desktops devices



BOOTSTRAP 3

DEVICE	CLASS
Extra Small less than 768px	col-xs-
Small 768px and up	col-sm-
Medium 992px and up	col-md-
Large 1200px and up	col-lg-

BOOTSTRAP 4

DEVICE	CLASS
Extra Small (less than 34em) Small (34em and up)	col-xs- col-sm-
Medium 48em and up	col-md-
Large 62em and up	col-lg-
Extra Large 75em and up	col-xl-



URL'S GRID RESOURCES

- <http://www.responsivegridsystem.com/calculator/>
- <http://gridcalculator.dk/#/960/12/20/10>
- <http://jplist.com/layoutexamples/div-layout>
- <http://jqueryhouse.com/jquery-grid-plugins/>
- <http://grid.guide>





WHAT IS LESS?

- Less is a CSS pre-processor, meaning that it extends the CSS language, adding features that allow ***variables, mixins, functions*** and many other techniques that allow you to make CSS that is more ***maintainable, themeable and extendable***.

Sass {less}



COMPILES TO...

@base: #f938ab;

```
.box-shadow(@style, @c) when (iscolor(@c)) {  
  -webkit-box-shadow: @style @c;  
  box-shadow:      @style @c;  
}  
.box-shadow(@style, @alpha: 50%) when (isnumber(@alpha)) {  
  .box-shadow(@style, rgba(0, 0, 0, @alpha));  
}  
.box {  
  color: saturate(@base, 5%);  
  border-color: lighten(@base, 30%);  
  div { .box-shadow(0 0 5px, 30%) }  
}
```

```
.box {  
  color: #fe33ac;  
  border-color: #fdcdea;  
}  
.box div {  
  -webkit-box-shadow: 0 0 5px rgba(0, 0, 0, 0.3);  
  box-shadow: 0 0 5px rgba(0, 0, 0, 0.3);  
}
```



WHERE TO USE IT?

Usage

Server

Client

```
$ lessc styles.less styles.css
```

```
$ lessc --clean-css styles.less styles.min.css
```

```
$ npm install -g less
```

```
<link rel="stylesheet/less" type="text/css" href="styles.less" />
```

Next, download [less.js](#) and include it in a `<script></script>` tag in the `<head>` element of your page:

```
<script src="less.js" type="text/javascript"></script>
```



BOOTSTRAP & LESS TUTORIALS

- https://www.tutorialspoint.com/bootstrap/bootstrap_environment_setup.htm
- <https://www.codecademy.com/courses/web-beginner-en-yjvdd/0/1>
- <http://www.w3schools.com/bootstrap/>
- <http://www.tutorialspoint.com/less/>

