

Creating a Page Layout with the Bootstrap Grid System



Gill Cleeren

CTO Xpirit Belgium

@gillcleeren – xpirit.com/gill



Overview



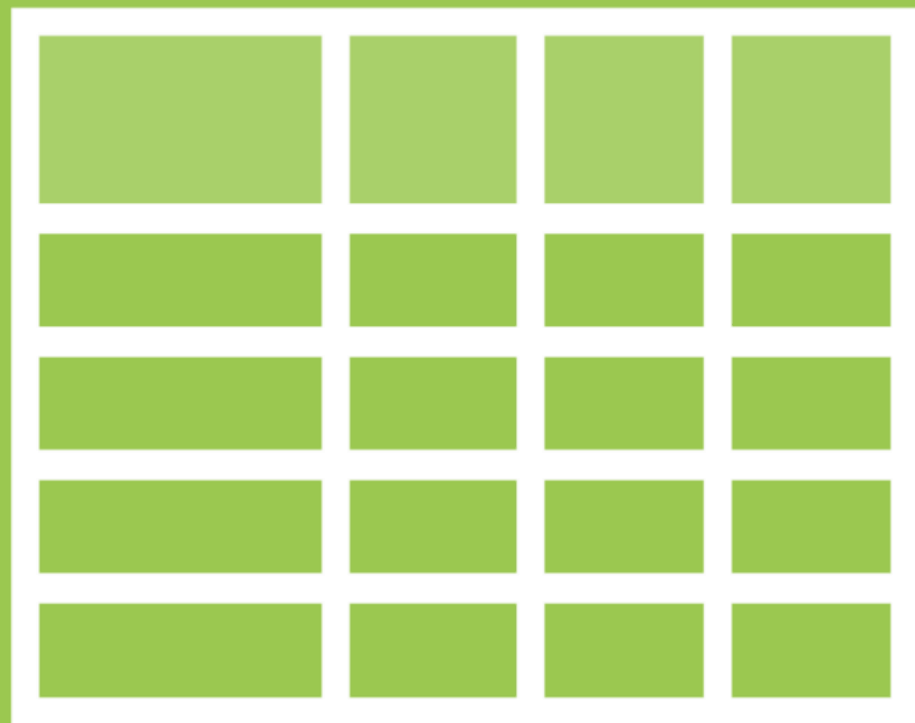
Understanding the Bootstrap Grid system

Applying the Bootstrap Grid



Understanding the Bootstrap Grid System





It all started with a table...

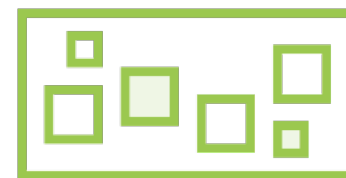
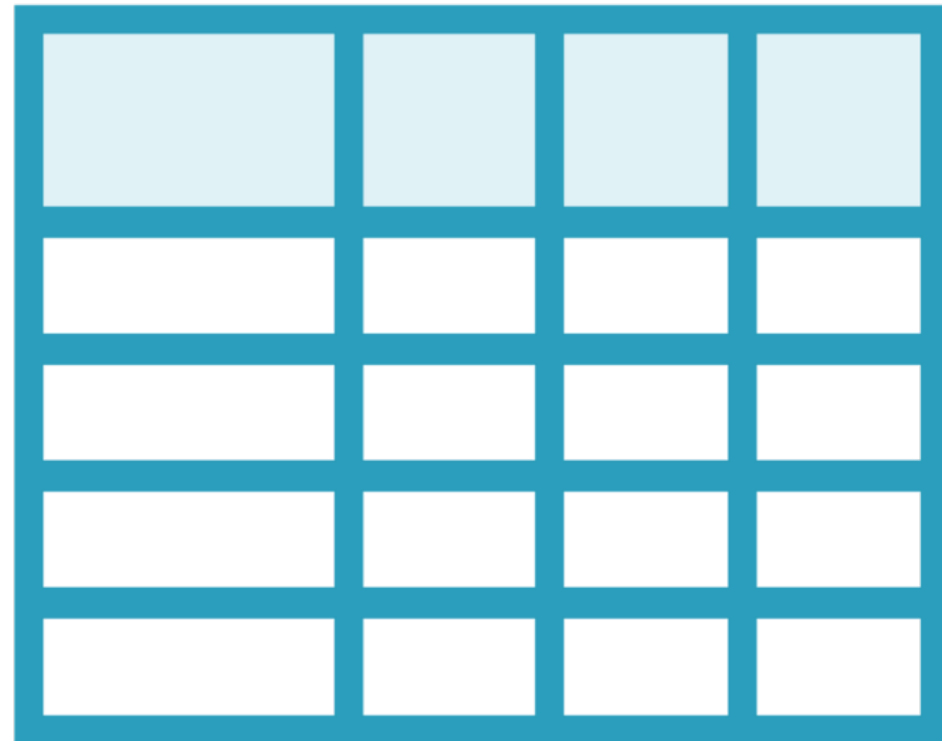
Don't scale well

Most sites use a table-like structure though

Bootstrap uses Grid



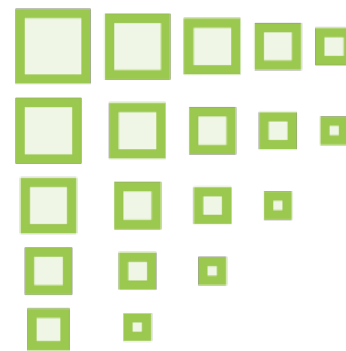
Bootstrap Grid Concepts



Container

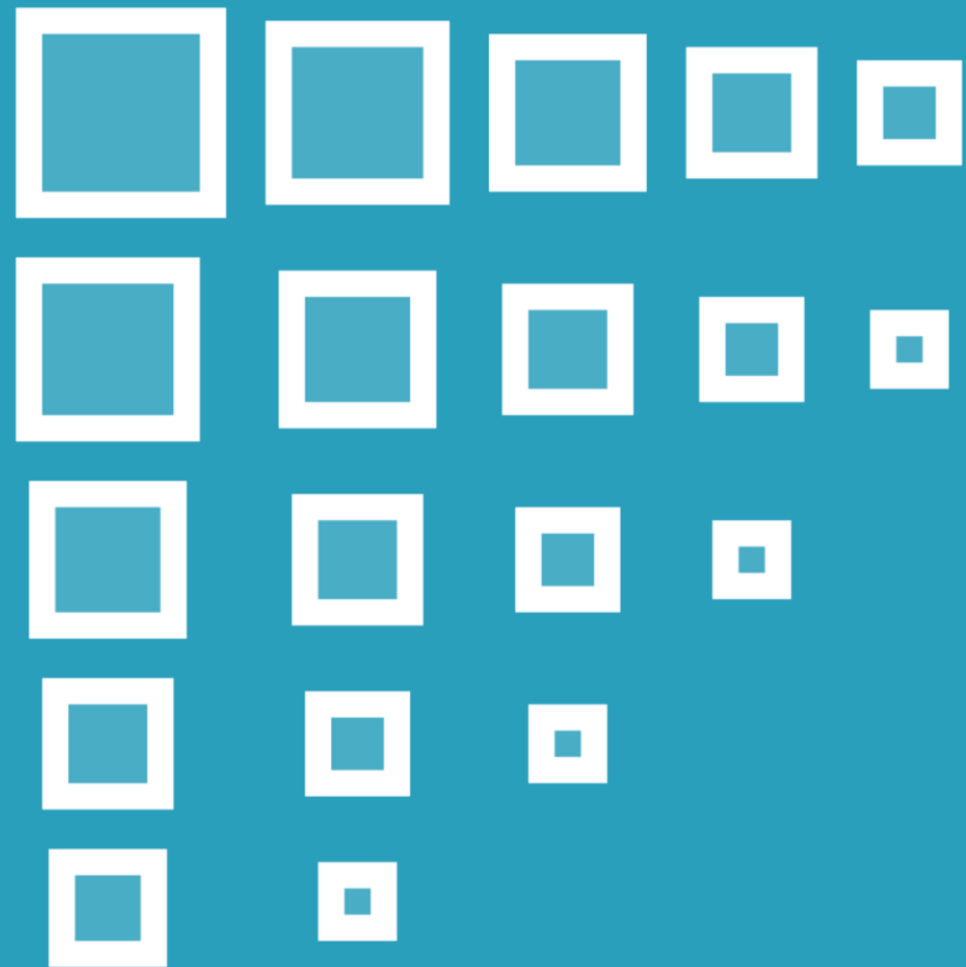


Rows and columns



Breakpoints





Breakpoints

Widths on which layout will “adapt” to different arrangement

Foundation for responsive design

Can be customized, often not needed

Based on media queries



Available Breakpoints in Bootstrap 5

Name	Prefix	Width
Extra small	None	< 576px
Small	sm	>= 576px
Medium	md	>= 768px
Large	lg	>= 992px
Extra large	xl	>= 1200px
Extra extra large	xxl	>= 1400px



The Container

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



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



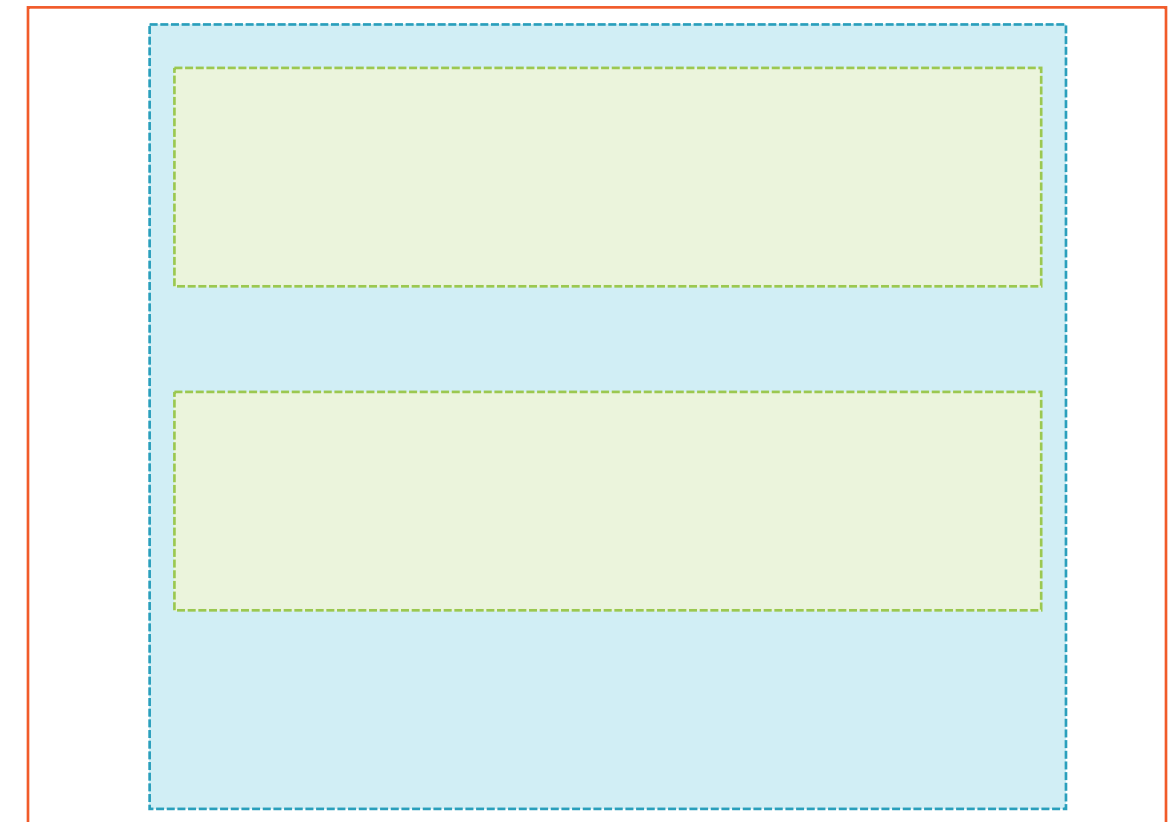
Responsive Containers

Name	Extra small	Small	Medium	Large	X-Large	XX-Large
.container	100%	540px	720px	960px	1140px	1320px
.container-sm	100%	540px	720px	960px	1140px	1320px
.container-md	100%	100%	720px	960px	1140px	1320px
.container-lg	100%	100%	100%	960px	1140px	1320px
.container-xl	100%	100%	100%	100%	1140px	1320px
.container-xxl	100%	100%	100%	100%	100%	1320px
.container-fluid	100%	100%	100%	100%	100%	100%



Adding Rows

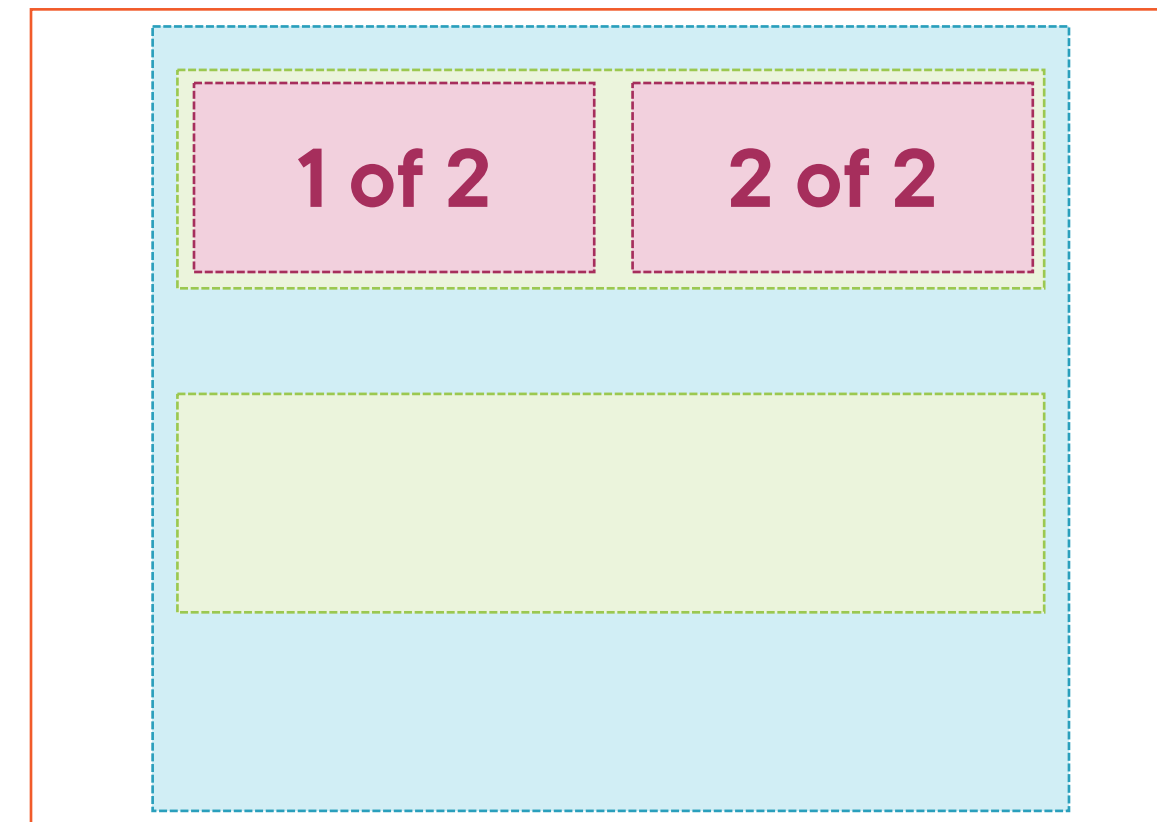
```
<div class="container">  
  <div class="row">  
  </div>  
  
  <div class="row">  
  </div>  
</div>
```



Adding Columns to Rows

Columns are equally sized on all sizes

```
<div class="container">  
  <div class="row">  
    <div class="col">  
      1 of 2  
    </div>  
    <div class="col">  
      2 of 2  
    </div>  
  </div>  
  <div class="row">  
  </div>  
</div>
```





Each row has
12 columns

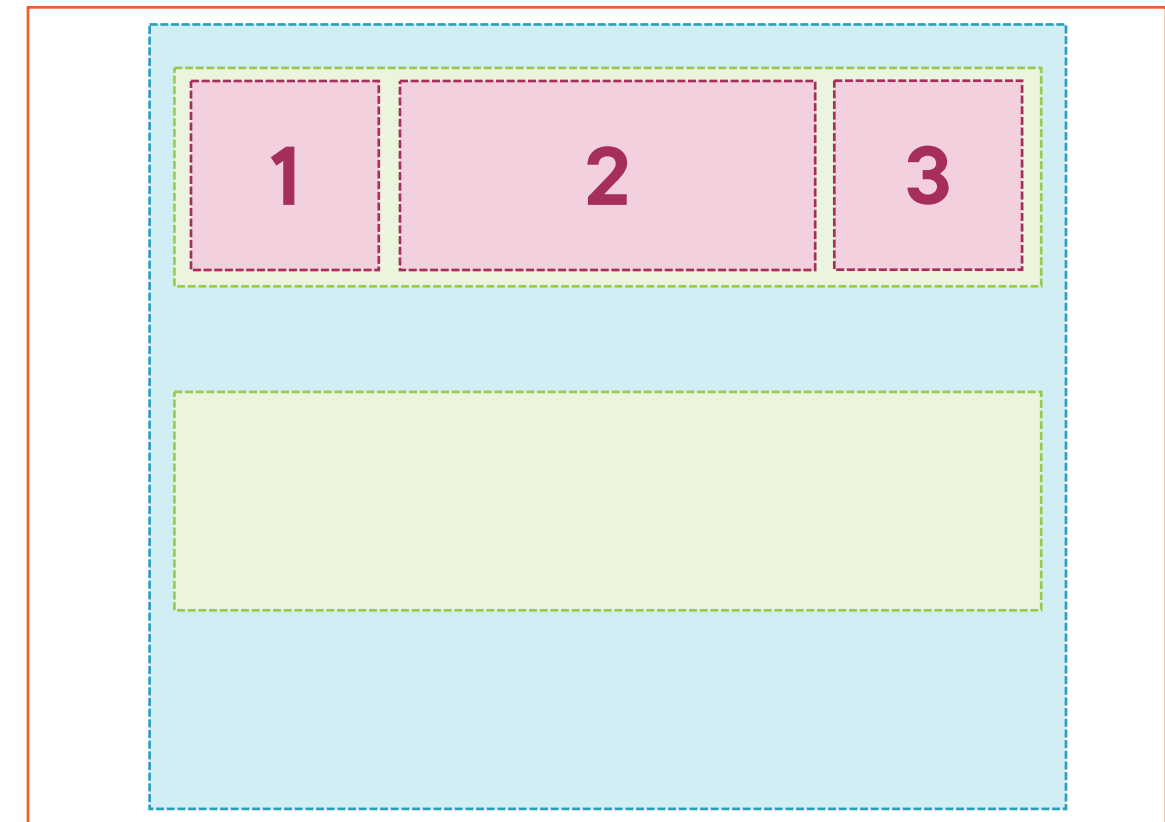
`col-xx`

Will stack if more are added



Setting One Column Width

```
<div class="container">
  <div class="row">
    <div class="col">
      1
    </div>
    <div class="col-6">
      2
    </div>
    <div class="col">
      3
    </div>
  </div>
  <div class="row">
    </div>
</div>
```



Responsiveness Using Breakpoints

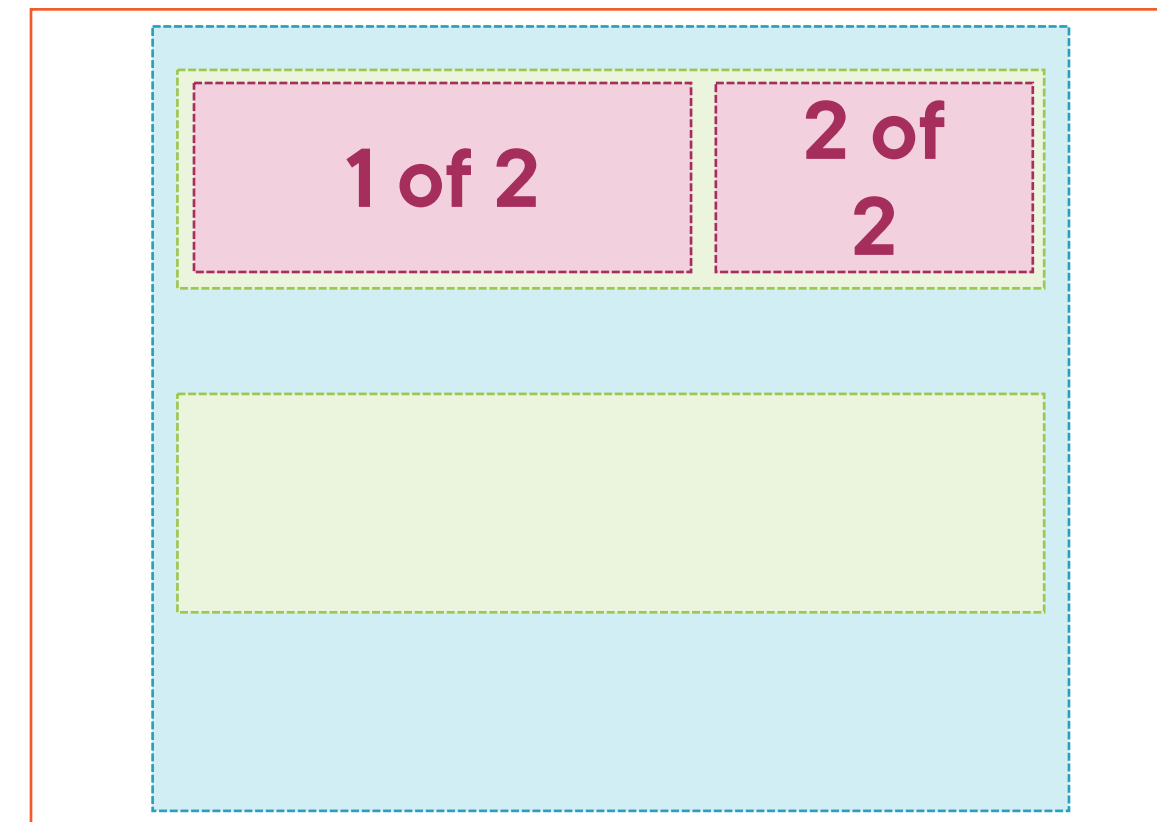
Name	Prefix	Width
Extra small	col-	< 576px
Small	col-sm-	>= 576px
Medium	col-md-	>= 768px
Large	col-lg-	>= 992px
Extra large	col-xl-	>= 1200px
Extra extra large	col-xxl-	>=1400px



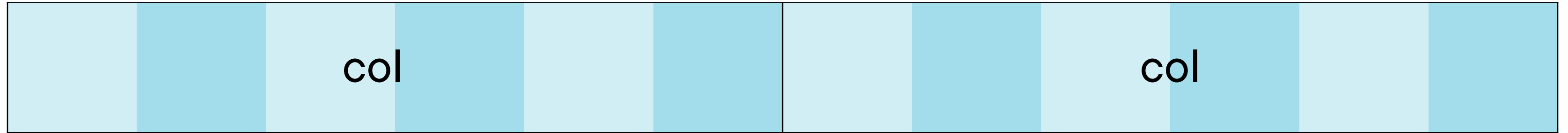
Column Naming

Below md, this will be one column

```
<div class="container">
  <div class="row">
    <div class="col-md-8">
      1 of 2
    </div>
    <div class="col-md-4">
      2 of 2
    </div>
  </div>
  <div class="row">
  </div>
</div>
```



Column Sizing



Column Sizing

		col						col		
	col-4				col-4			col-4		



Column Sizing

		col						col		
	col-4			col-4			col-4			
col-xx-3			col-xx-3					col-xx-6		



Column Sizing

		col					col		
	col-4			col-4			col-4		
	col-xx-3		col-xx-3				col-xx-6		
col-xx-2	col-xx-2		col-xx-2		col-xx-2		col-xx-2		col-xx-2



Column Sizing

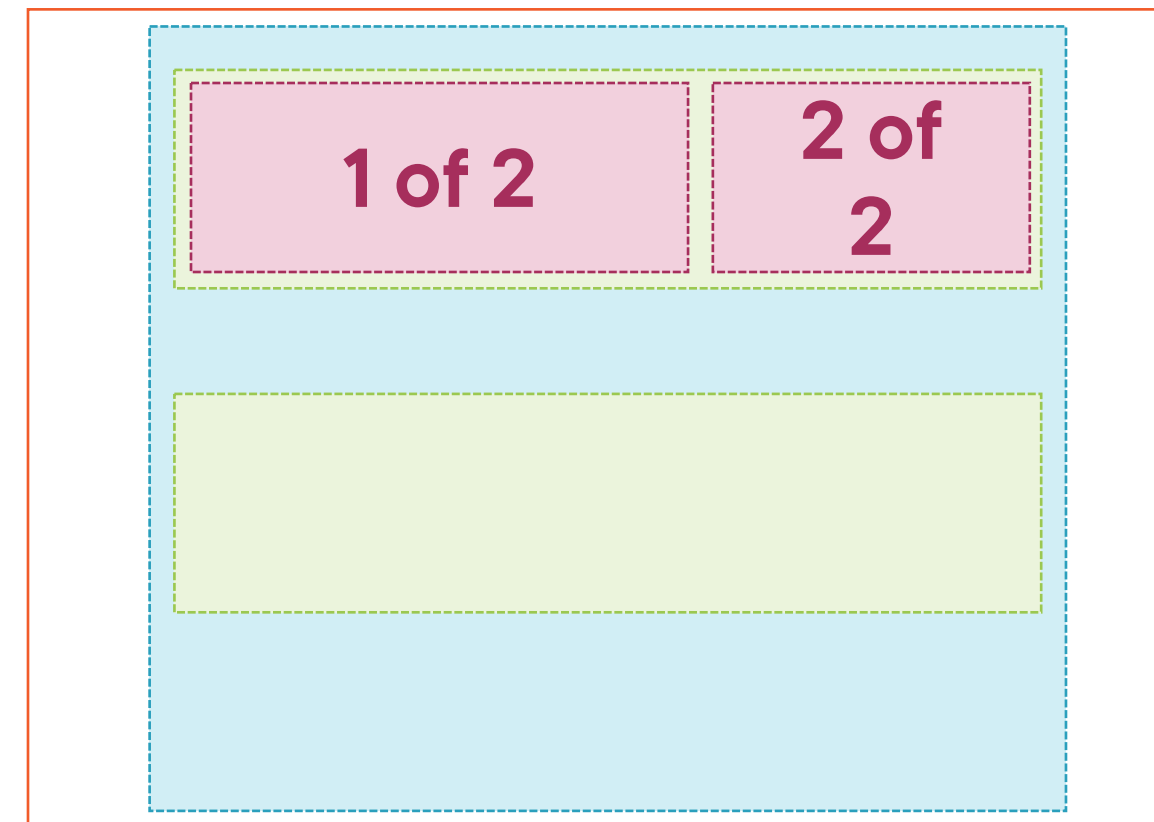
		col					col		
	col-4			col-4			col-4		
	col-xx-3		col-xx-3				col-xx-6		
col-xx-2	col-xx-2		col-xx-2		col-xx-2		col-xx-2		col-xx-2
				col-xx-10					col-xx-2



Combining Column Sizes

```
<div class="row">  
  <div class="col-md-8 col-sm-4">  
    1 of 2  
  </div>  
  <div class="col-md-4 col-sm-8">  
    2 of 2  
  </div>  
</div>
```

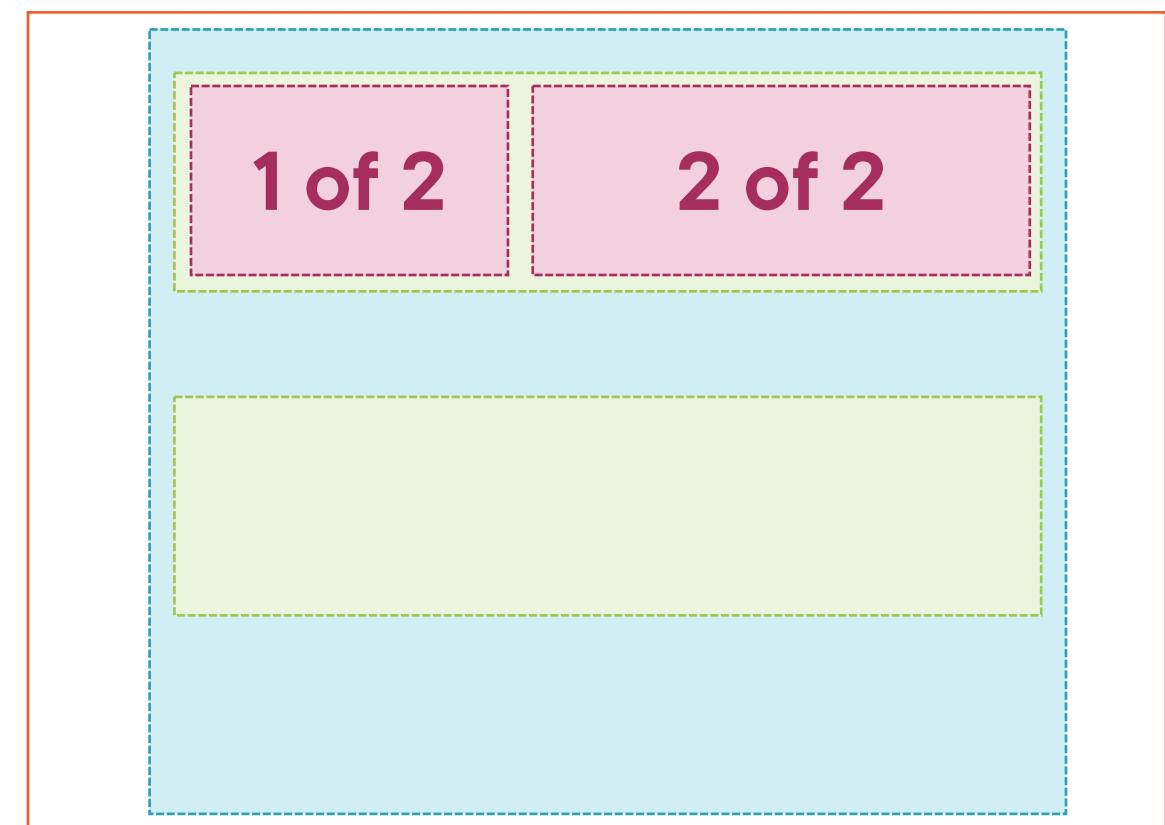
Medium and up



Combining Column Sizes

Between small and medium

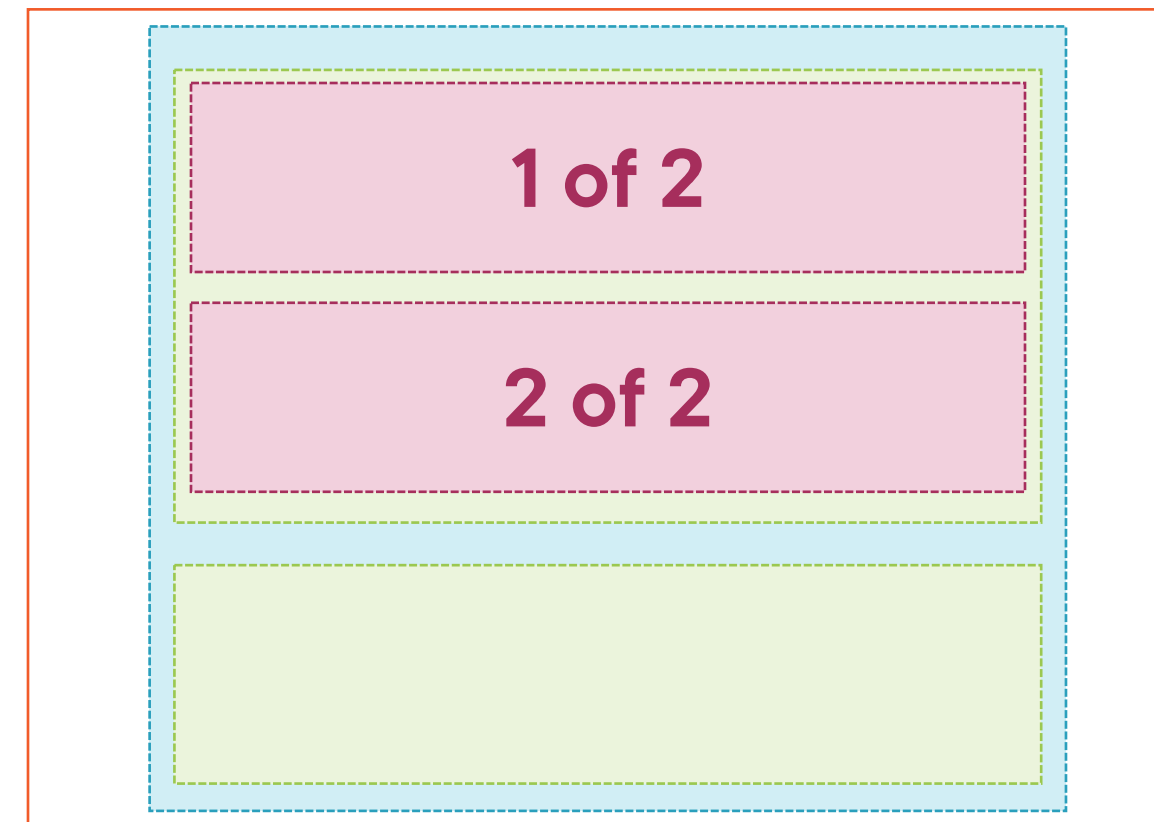
```
<div class="row">  
  <div class="col-md-8 col-sm-4">  
    1 of 2  
  </div>  
  <div class="col-md-4 col-sm-8">  
    2 of 2  
  </div>  
</div>
```



Combining Column Sizes

```
<div class="row">  
  <div class="col-md-8 col-sm-4">  
    1 of 2  
  </div>  
  <div class="col-md-4 col-sm-8">  
    2 of 2  
  </div>  
</div>
```

Under small



Demo



Understanding the grid layout system

- Container
- Rows
- Columns



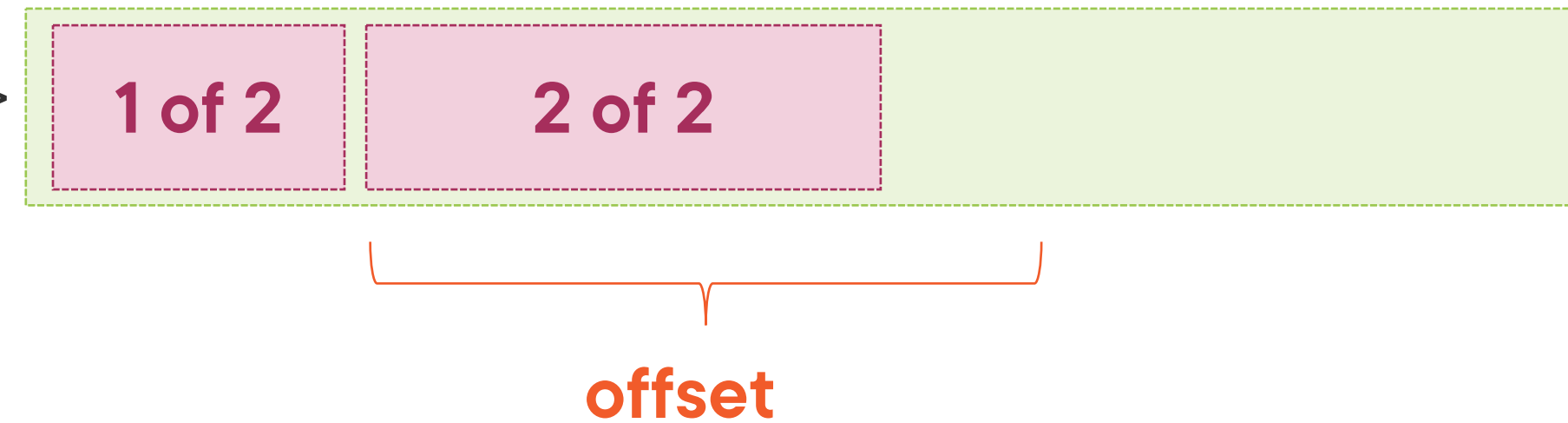
Changing the Order of Columns

```
<div class="row">  
  <div class="col-md-2">  
    1 of 3  
  </div>  
  <div class="col-md-4 order-5 ">  
    2 of 3  
  </div>  
  <div class="col-md-6 order-1 ">  
    3 of 3  
  </div>  
</div>
```



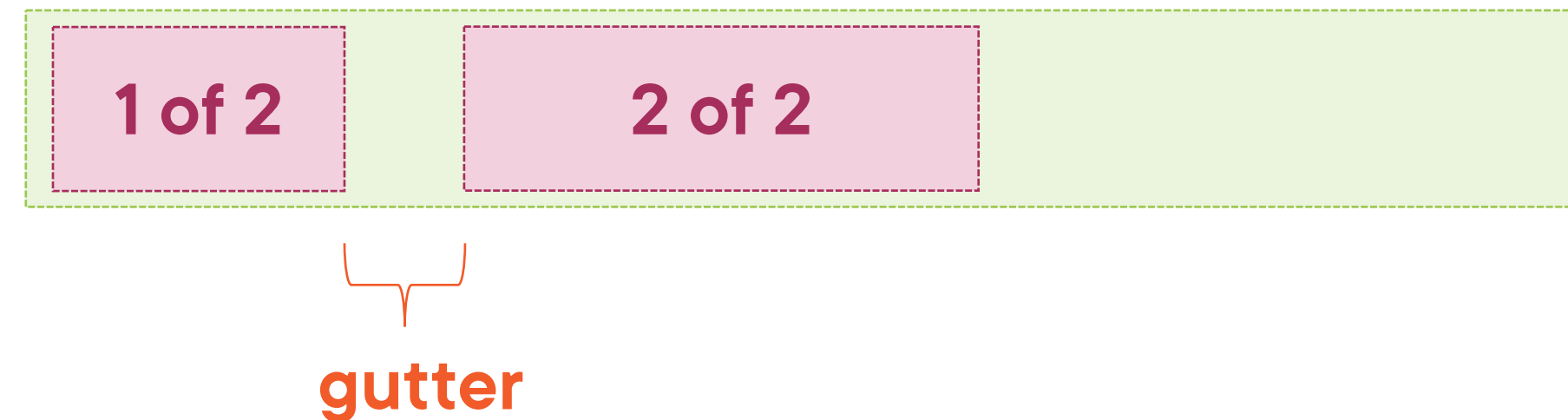
Leaving Some Space

```
<div class="row">  
  <div class="col-md-2">  
    1 of 2  
  </div>  
  <div class="col-md-4 offset-md-6">  
    2 of 2  
  </div>  
</div>
```



Adding Gutters

```
<div class="row gx-4 ">  
  <div class="col-md-2">  
    <div>1 of 2</div>  
  </div>  
  <div class="col-md-4">  
    <div>2 of 2</div>  
  </div>  
</div>
```



Gutters can also be vertical or both



No Gutters At All

```
<div class="row g-0">  
  <div class="col-md-2">  
    <div>1 of 2</div>  
  </div>  
  <div class="col-md-4">  
    <div>2 of 2</div>  
  </div>  
</div>
```



Demo



Working with columns



Demo



Adding responsive layout to the detail page using the grid



Summary



Creating responsive page layouts becomes easy

Based on concept of media queries

Although “limited” to 12 columns, very flexible





Up next:
Adding style
with Bootstrap

