Bootstrap Grid

Topics Covered:

- Grid System.
- Gird Classes.
- Stacked to Horizontal.
- Auto Layout Columns.
- Three equal columns.
- Three equal columns using numbers.
- Three unequal columns.
- Setting one column width.
- Rows, Cols and Height.
- Nested columns.

Topics in Detail:

Grid System:

- Bootstrap's grid system is built with flexbox and allows up to 12 columns across the page.
- If required you can group the columns together to create wider columns.
- The grid system is responsive, and the columns will re-arrange automatically depending on the screen size.

span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1
span 4				span 4				span 4			
span 4				span 8							
span 6						span 6					
span 12											

Grid Classes:

Class Name	Description
.col-	extra small devices
.col-sm-	small devices
.col-md-	medium devices
.col-lg-	large devices
.col-xl-	xlarge devices
.col-xxl-	xxlarge devices

Stacked to horizontal:

- The following example shows a simple "stacked-to-horizontal" two-column layout, meaning.
- It will result in a 50%/50% split on all screens, except for extra small screens, which it will automatically stack (100%)
- The numbers in the *.col-sm-** classes indicates how many columns the div should span (out of 12). So, *.col-sm-1* spans 1 column, *.col-sm-4* spans 4 columns, *.col-sm-6* spans 6 columns, etc.

```
<div class="container-fluid mt-3">
  <h1>Grid Example</h1>
  <div class="row">
    <div class="col-sm-6 bg-primary text-white p-3">
      col-sm-6
    </div>
    <div class="col-sm-6 bg-dark text-white p-3">
      col-sm-6
    </div>
  </div>
</div>
```
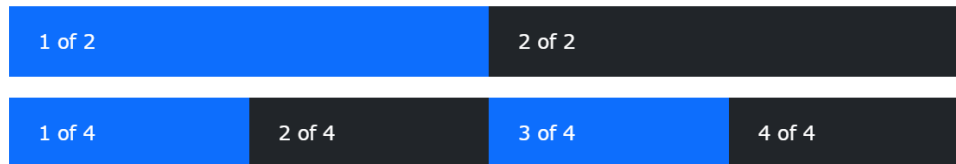
col-sm-6	col-sm-6

Auto Layout Columns:

- To create equal width columns for all devices remove the number from *.col-size-** and only use the *.col-size* class on a specified number of col elements.
- Bootstrap will recognize how many columns there are, and each column will get the same width. The size classes (sm, md, etc.) determine when the columns should be responsive.

```html
<!-- Two columns: 50% width on all screens, except for extra small (100% width) -->
<div class="row">
  <div class="col-sm">1 of 2</div>
  <div class="col-sm">2 of 2</div>
</div>

<!-- Four columns: 25% width on all screens, except for extra small (100% width)-->
<div class="row">
  <div class="col-sm">1 of 4</div>
  <div class="col-sm">2 of 4</div>
  <div class="col-sm">3 of 4</div>
  <div class="col-sm">4 of 4</div>
</div>
```

1 of 2	2 of 2

1 of 4	2 of 4	3 of 4	4 of 4

Three Equal Columns:

- The *.col* class is used to specify the number of elements and Bootstrap will recognize how many elements there are (and create equal-width columns). In the example below, we use three col elements, which gets a width of 33.33% each.

```html
<div class="row">
    <div class="col">col</div>
    <div class="col">col</div>
    <div class="col">col</div>
</div>
```

col	col	col

Three Equal Columns Using Numbers:

- Numbers can also be used to control the column width.
- Just make sure that the sum adds up to 12 or fewer (it is not required that you use all 12 available columns)

```
<div class="row">
   <div class="col-4">col-4</div>
   <div class="col-4">col-4</div>
   <div class="col-4">col-4</div>
</div>
```

col-4	col-4	col-4

Three Unequal Columns:

- Numbers must be used to create unequal columns.
- The following example will create a 25%/50%/25% split.

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

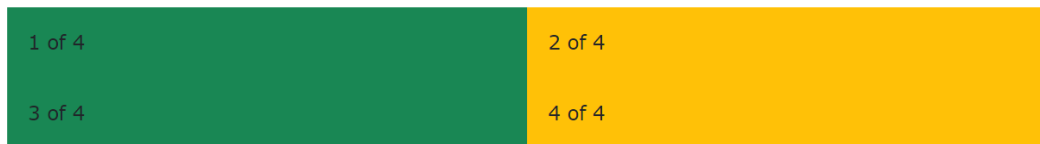| col-3	col-6	col-3

Setting one column width:

- However, it is enough to only set the width of one column, and have the sibling columns automatically resize around it.
- The following example will create a 25%/50%/25% split.

```
<div class="row">
    <div class="col">col</div>
    <div class="col-6">col-6</div>
    <div class="col">col</div>
</div>
```

col	col-6	col

Row, Cols, and Height:

- You can also control how many columns that should appear next to each other (regardless of how many cols), with the *.row-cols-** classes.

1 of 2	
2 of 2	

1 of 4	2 of 4
3 of 4	4 of 4

1 of 6	2 of 6	3 of 6
4 of 6	5 of 6	6 of 6

- If one of the columns is taller than the other (due to text or CSS height), the rest will follow.

Lorem ipsum dolor sit amet, cibo sensibus interesset no sit. Et dolor possim volutpat qui. No malis tollit iriure eam, et vel tale zril blandit, rebum vidisse nostrum qui eu. No nostrud dolorem legendos mea, ea eum mucius oporteat platonem.Eam an case scribentur, ei clita causae cum, alia debet eu vel.	col	col

Nested Columns:

Two column layout, with another two columns inside one of the columns.

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

col-8		col-4
col-6	col-6	