Bootstrap Grid System

One of Bootstrap's most important is that it makes your website responsive using its grid system.

The main idea is to divide the screen into twelve equal columns, and this gives us a new unit that works independently from the size of the screen.

There are four types of resolutions (or classes) in Bootstrap:

- xs (for phones - screens less than 768px wide)

- sm (for tablets - screens equal to or greater than 768px wide)

- md (for small laptops - screens equal to or greater than 992px wide)

- lg (for laptops and desktops - screens equal to or greater than 1200px wide)

COL-3	COL-3	COL-3	COL-3
COL-4		COL-4	COL-4
COL-6		COL-6	

COL-2	COL-2	COL-2	COL-2	COL-2	COL-2

COL-1	COL-1	COL-1	COL-1	COL-1	COL-1	COL-1	COL-1	COL-1	COL-1	COL-1	COL-1

How do you use it?

First Step

To apply Bootstrap's grid system to our web page we need to use Bootstrap's container and rows. First thing we need to do is create a div with `class="container"`.It is as essential as the body tag when we're working in Bootstrap.

So, our Bootstrap must be inside the div with the class container. It makes a margin on the right and on the left so that our content is centered.

If we want our page to take up the whole screen, we write `container-fluid`.

```html
<body>

  <div class="container">

    <!-- Some BootStrap Classes here -->

  </div>

</body>
```

How do you use it?

The Second Step

After creating the container, we can add rows.

Inserting a row, like the following picture demonstrates, means a line across the screen. That row will be divided into twelve equal parts where we can put our HTML elements and that will replace the margin and padding.

- HTML

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

  <div class="row" style="background-color:lightblue">

    First row

  </div>

  <hr />

  <div class="row" style="background-color:#e5cf0d">

    Second row

  </div>

  <hr />

  <div class="row" style="background-color:#b30de5">

    Third row

  </div>

</div>
```

- Output

First row

Second row

Third row

How Does It Work?

So, how does the grid system work?

Each row that we add can be divided into 12 equal parts called "columns".

Since the row is divided into 12 columns, if an element gets 12 columns of width it will be as wide as the whole screen. If it takes 6, then it's as wide as half the screen. Here's an example, col-8 will take 8 columns, and col-4 will take 4 columns.

- HTML

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

- Output

col-8	col-4