Bootstrap Framework

External Layout Systems

Next

What is Bootstrap?

Bootstrap

In this module we're going to be learning about the **bootstrap framework.**

And this is one of many **external CSS layout systems**, but this is probably one of the most popular and the one that you'll most likely to come across out in the wild.

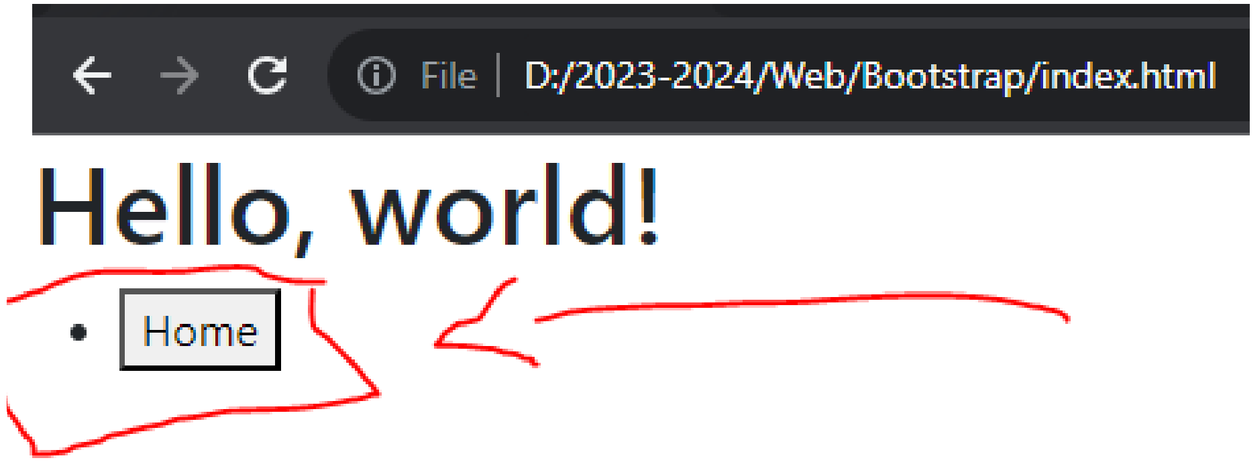
Bootstrap, as I said, is a CSS framework created in **2010** by two Twitter developers **Mark Otto** and **Jacob Thornton.**

Now the power of Bootstrap and the reason why it became so popular is it contained **pre-made CSS files**, which you can simply include into your project in order to use their pre-built components and styling.

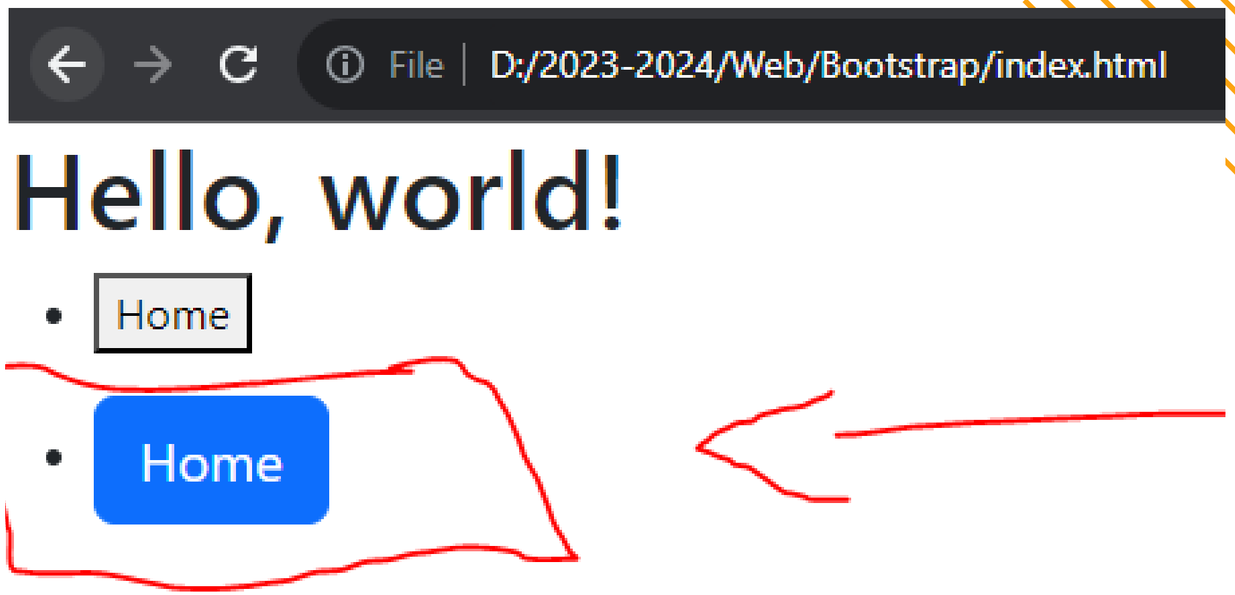
It really easy to **create responsive websites** and websites that simply just work and look great on mobile as well as desktop, the so-called mobile first approach.

So how exactly does it work?

```
<ul class = “”>
 <li>
 <button class= ”>Home
</button>
</li>
</ul>
```



```
 <ul class = “nav nav-
pills”>
    <li>
    <button type="button"
class="btn btn-primary
btn-lg"> Home </button>
    </li>
    </ul>
```



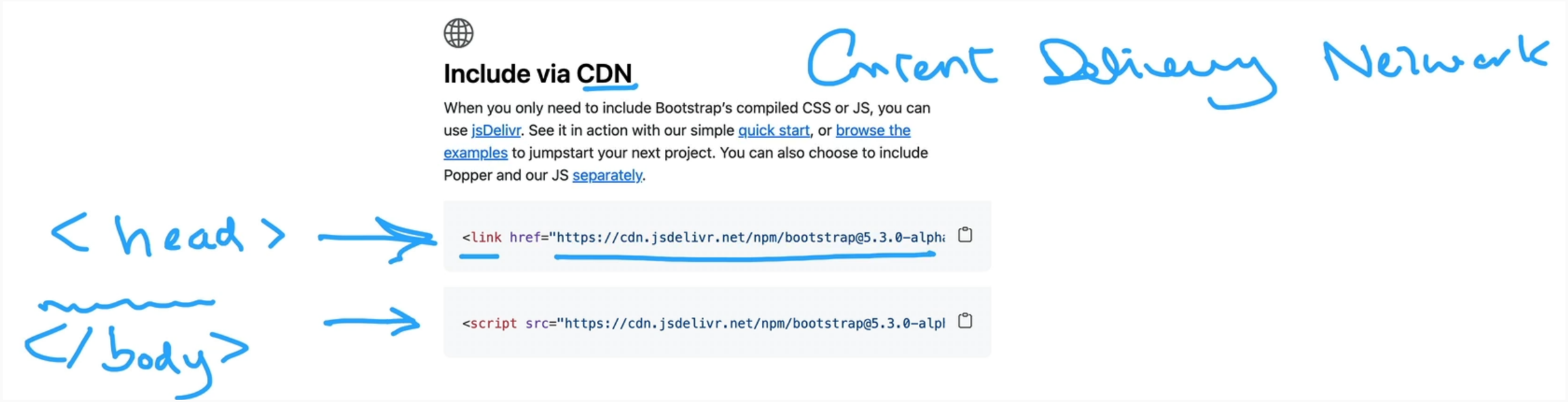
Now, as I mentioned, bootstrap is a type of **CSS framework.**

What exactly are these?

Well, they're pre-made CSS files which you can include into your projects. If we had a look at the bootstrap GitHub and because bootstrap is completely open source, then all of the code is visible and you can see it's got styling defined for all of the different components.

https://github.com/twbs/bootstrap

How to use Bootstrap?



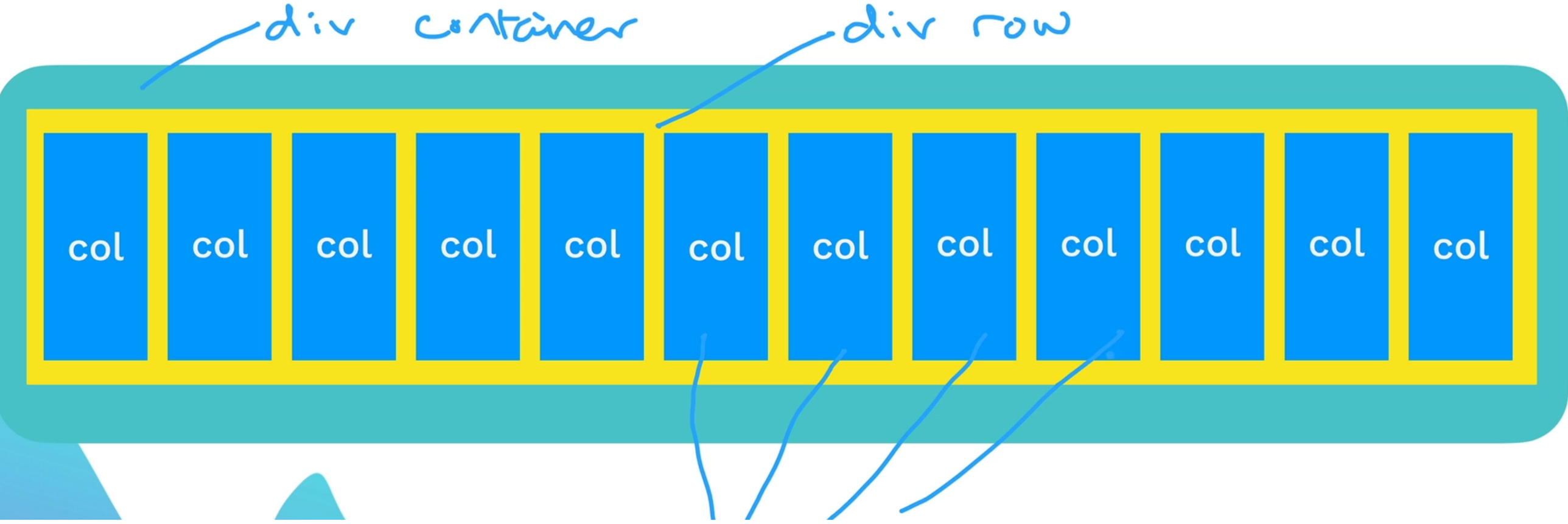
Content Delivery Network.

And what these are is little hubs all across the entire world and it knows where your users are located. So when they load up your website and try to access this particular CSS file that contains all of the bootstrap code, then it can find the closest location with the shortest distance to the server that has that content.

And that just means that even though this has to be downloaded from somewhere, it can be delivered to your user and rendered very, very quickly. And from our point of view as developers, all we need to do is simply include this link into the head section of our HTML.

Bootstrap Layout

12 Column System



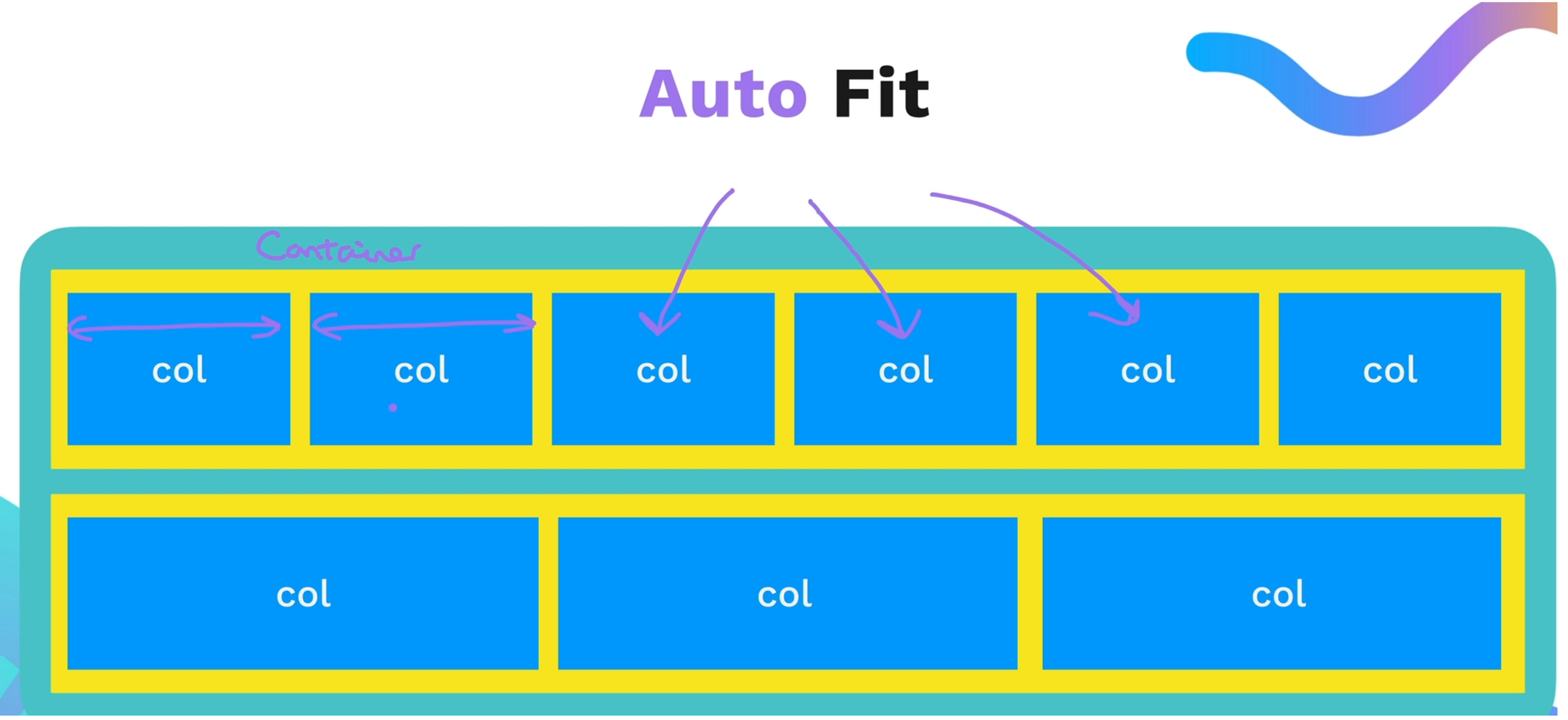
```
<body>
<div class="container">
  <div class = " row">
    <div class="col">Hello</div>


  </div>




</div>
```

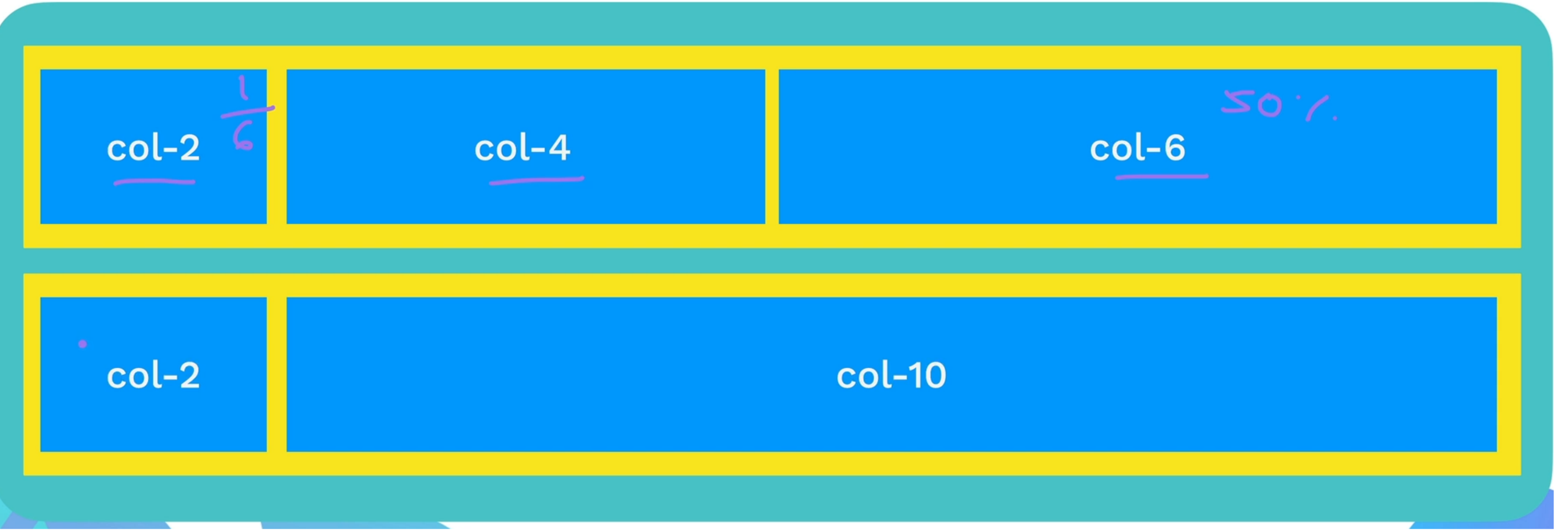
Auto Fit



Bootstrap Container

	Extra small <576px	Small ≥576px	Medium ≥768px	Large ≥992px	X-Large ≥1200px	XX-Large ≥1400px
`.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%

Sized Columns



```
<body>
<div class="container">
    <div class = " row">
        <div class="col-2" style="background-color: coral">Hello</div>
        <div class="col-4" style="background-color: blue">Hello</div>
        <div class="col-6" style="background-color: green">Hello</div>
    </div>

</div>
```

Bootstrap Breakpoints

@ media

Available breakpoints

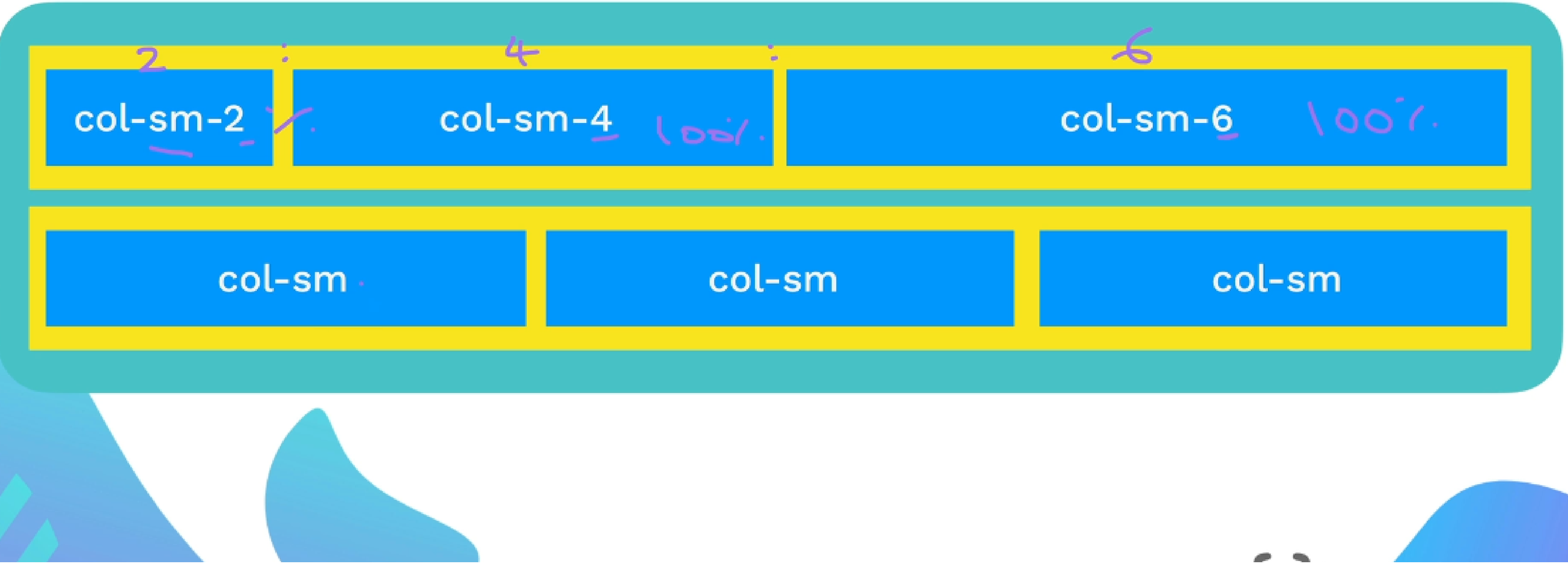
Bootstrap includes six default breakpoints, sometimes referred to as *grid tiers*, for building responsively. These breakpoints can be customized if you're using our source Sass files.

Breakpoint	Class infix	Dimensions
Extra small	*None*	<576px
Small	sm	≥576px
Medium	md	≥768px
Large	lg	≥992px
Extra large	xl	≥1200px
Extra extra large	xxl	≥1400px

Co - sm - 2

greater than

Bootstrap Breakpoints

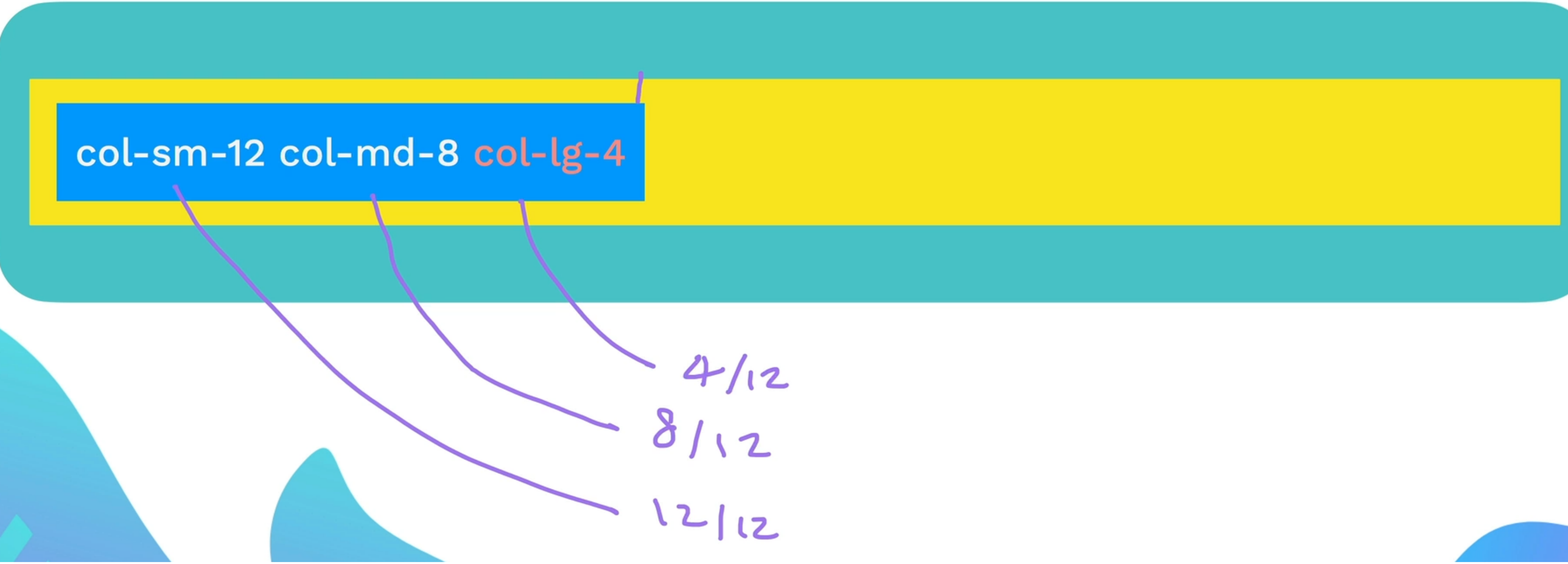


```
<body>
<div class="container">
  <div class = " row">
    <div class="col-sm-2" style="background-color: coral">Hello</div>
    <div class="col-sm-4" style="background-color: blue">Hello</div>
    <div class="col-sm-6" style="background-color: green">Hello</div>
  </div>

<div class = " row">
    <div class="col-sm" style="background-color: coral">Hello</div>
    <div class="col-sm" style="background-color: blue">Hello</div>
    <div class="col-sm" style="background-color: green">Hello</div>
  </div>

</div>
```

Multiple Breakpoints



Exercise

https://appbrewery.github.io/bootstrap-layout/