



LESSON 16

BOOTSTRAP

FLEXBOX

FRAMEWORKS

A set of pre-made set of HTML / CSS / JS components packaged together.

Think of a framework as a bunch of plugins made by the same team, so they work nice together out of the box.

PROS / CONS

Pro:

- Gives you lots of code
- Grid-based design out of the box
- Easy JS plugin architecture

Con:

- Gives you lots of code
- Bloats your site with stuff you probably won't use.
- Design monotony

COMMON FRAMEWORKS

Bootstrap:

<http://getbootstrap.com/>

Foundation:

<http://foundation.zurb.com/>

Material Design Lite:

<https://getmdl.io/>

MISUNDERSTANDINGS

"Oh man, I'm getting all this code for free so I don't have to spend as much time learning how to do things"

Frameworks will SLOW DOWN you down until you learn how to use them. Careful with how you use these.

BOOTSTRAP

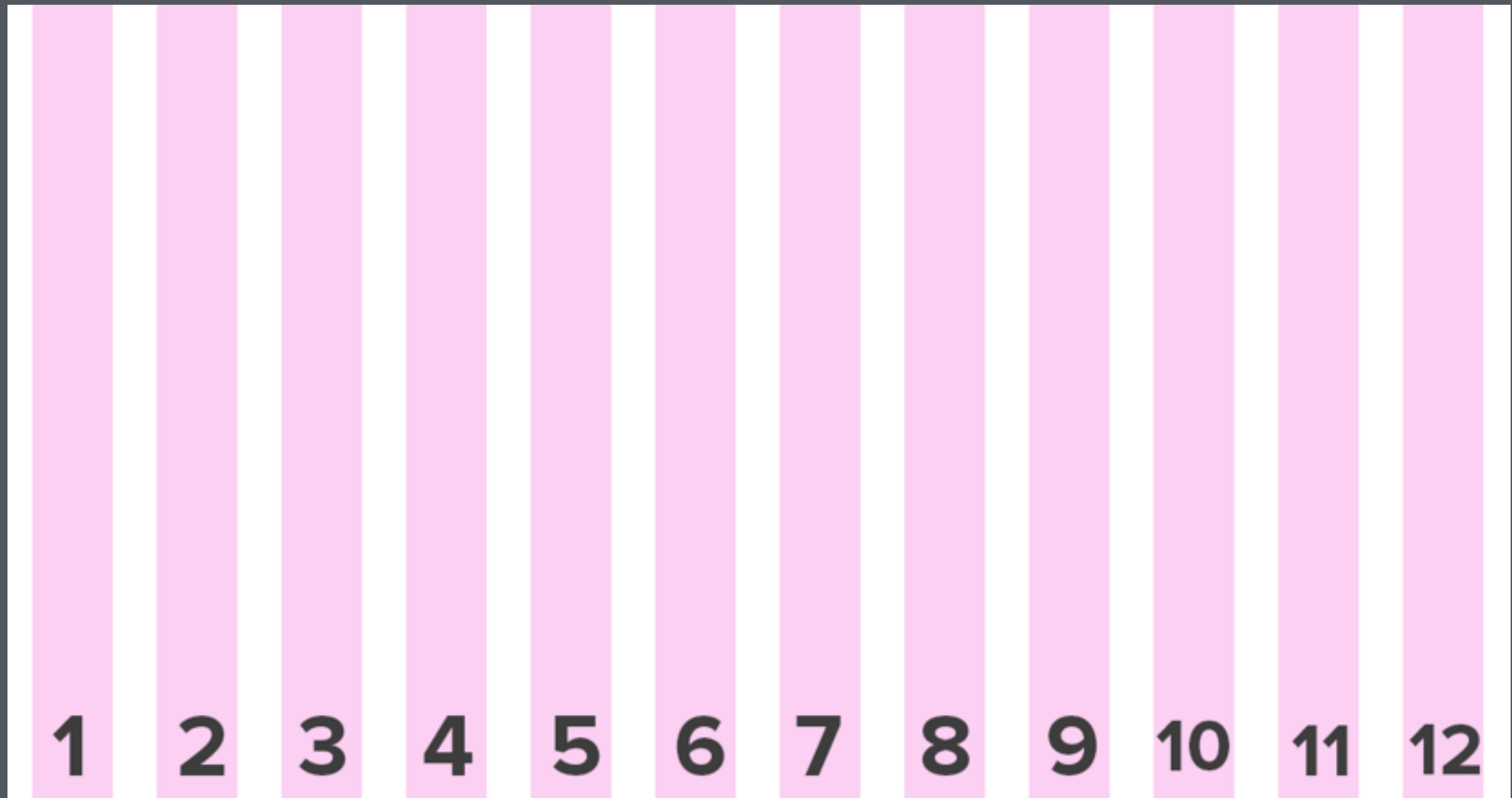


<http://getbootstrap.com>

- The most popular framework
- Known for responsive grid and JS plugins
- Omnipresent around the web

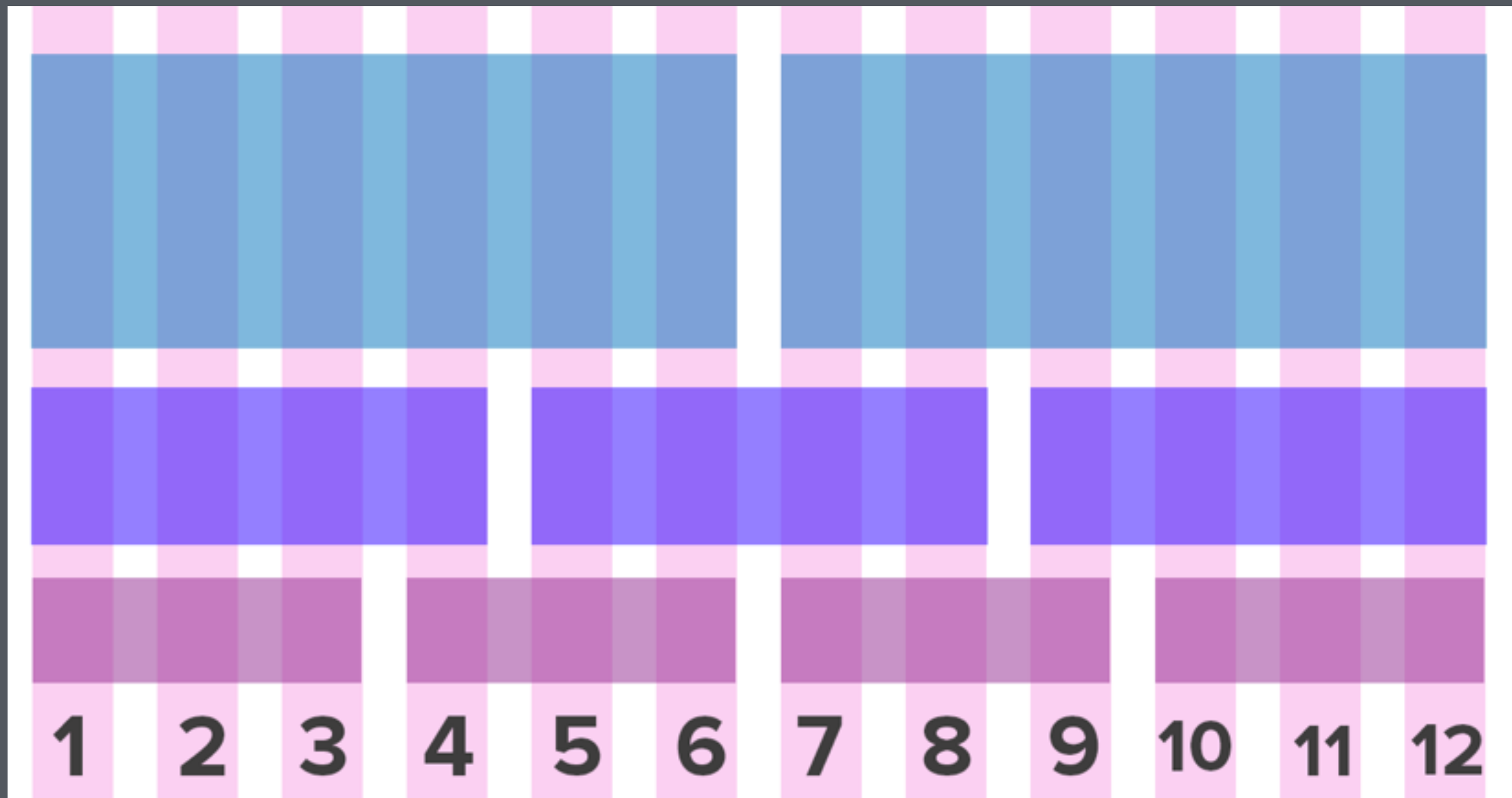
GRID-BASED DESIGN

-Bootstrap sets up a series of 12 columns that automatically respond to screen size.



BOOTSTRAP GRID

- You can create boxes that clip into the grid and take up 1-12 columns



BOOTSTRAP GRID

All content should be placed within grid columns. Build column classes using the following formula:

`col-{screen-size}-{width}`

Examples of Bootstrap column classes:

`<div class="col-md-6">`

⇒ A div for medium-sized screens that is 6-columns wide

`<div class="col-xs-2">`

⇒ A div for x-small screens that is 2-columns wide

BOOTSTRAP RULES

- Boxes must be placed into (`.row`) to create horizontal groups of columns. The boxes column widths must equal 12, same way floated layouts must equal 100% width.

Why?

- `.row` must be placed within a `.container` (fixed-width) or `.container-fluid` (full-width) for proper alignment and padding.

BOOTSTRAP LAYOUT

Structure is very similar to what we've done:

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

⇒ Top-level element; holds all other code

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

⇒ Horizontal row used to hold col's

⇒ Must be children of container's

```
<div class="col-">
```

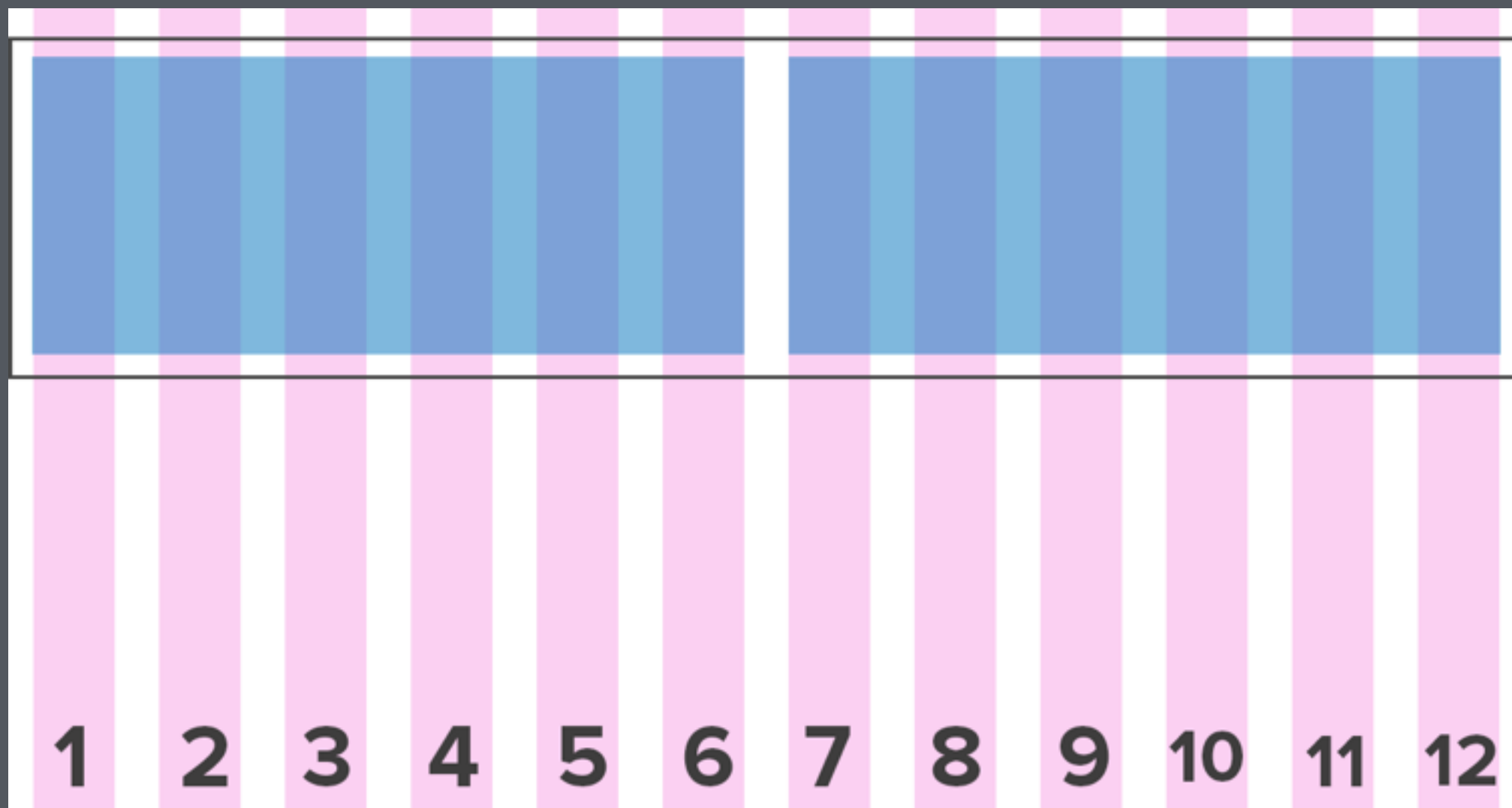
⇒ Used to hold content (text/images/etc.)

⇒ Must be immediate children of row's

ALL TOGETHER

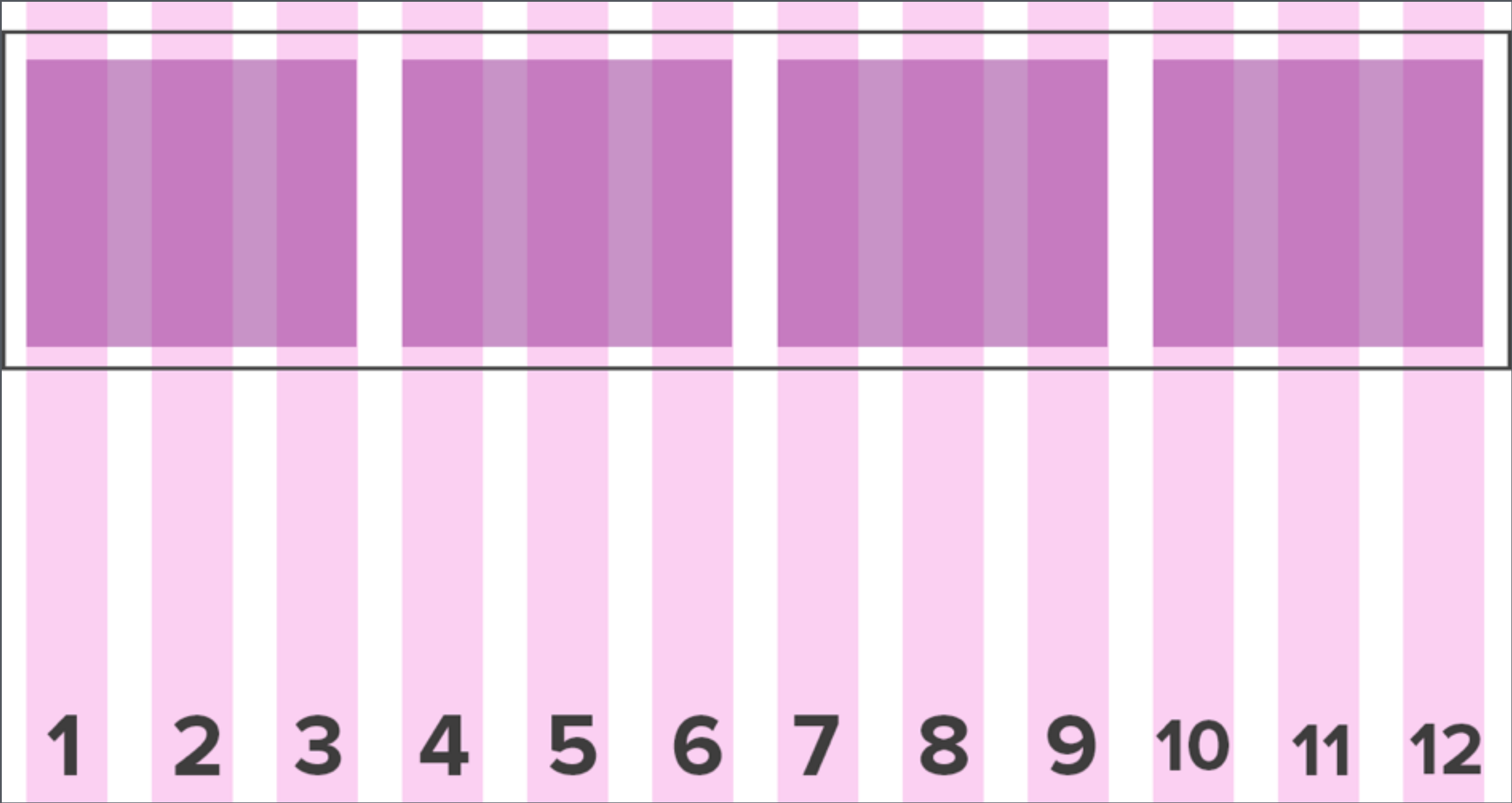
A bit verbose but this is how you Bootstrap:

```
<div class="container">  
  <div class="row">  
    <div class="col-">  
      Your content here.  
    </div>  
  </div>  
</div>
```

```
<div class="container">
  <div class="row">
    <div class="col-md-6">Content here</div>
    <div class="col-md-6">Content here</div>
  </div>
</div>
```

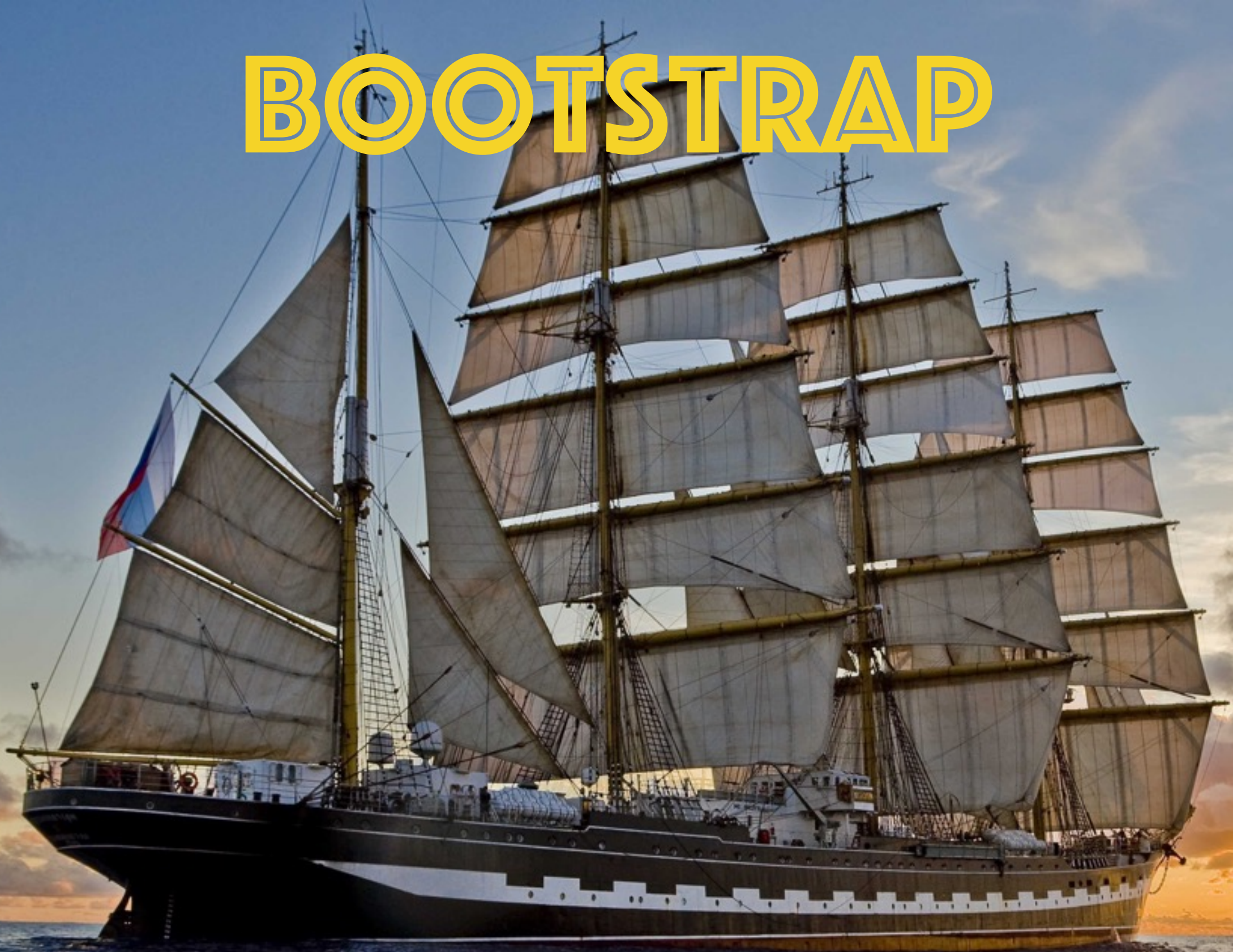
HOW WOULD WE DO IT?



CODE ALONG

Assignment #1

BOOTSTRAP



NAVIGATION

BOOTSTRAP NAV

Bootstrap has some built-in navigation classes that are tricky to get the hang of:
<http://getbootstrap.com/components/#navbar-default>

```
<nav class="navbar navbar-default"
  role="navigation">
  <div class="container">
    ...
  </div>
</nav>
```

BOOTSTRAP NAV

You can stick it to the bottom / top of the page easily:

```
<nav class="navbar navbar-default  
navbar-fixed-bottom"  
role="navigation">  
  <div class="container">  
    ...  
  </div>  
</nav>
```

BOOTSTRAP NAV

You can stick it to the bottom / top of the page easily:

```
<nav class="navbar navbar-default  
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role="navigation">  
  <div class="container">  
    ...  
  </div>  
</nav>
```

CODE ALONG

Assignment #2

RESPONSIVE IMAGES

It's this easy:

```
.img-responsive
```

This gives us the following code:

```
max-width: 100%;  
height: auto;
```

What do those styles do for us?

STYLISTED IMAGES

Check out these puppies:

```
  
  

```

`img-rounded` creates rounded rectangles;
`img-circle` turns images into circles;
`img-thumbnail` puts a nice border on images

BUTTONS



<http://getbootstrap.com/css/#buttons>

```
<!-- Standard button -->  
<button type="button" class="btn  
btn-default">Default</button>
```

We can change button color and size very easily, follow that link.

TRY IT OUT

Assignment #2

SEE BOOTSTRAP JS

Assignment #3 + #4

NEXT TIME

Wed: Analytics, Time for Projects
Final Project JS Draft - WED