



Front End UI Framework

Bootstrap



Front End UI Framework

- Collection of ready-to-use HTML, CSS and Javascript templates.
 - Provides templates for forms, button, Alerts, navigations

Why?

- Faster productivity
- Cross browser compatibility
- Responsive Web design



Popular Front End UI Framework

- Bootstrap
- Semantic UI
- Pure
- UI Kit

Bootstrap

1. Download Bootstrap files from getbootstrap.com and include these files in your html file.
2. Bootstrap CDN (content delivery network)

MaxCDN:

```
<!-- Latest compiled and minified CSS -->
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">

<!-- jQuery library -->
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>

<!-- Latest compiled JavaScript -->
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/js/bootstrap.min.js">
</script>
```

Responsive Web design

1. User access website from different devices which has different screen sizes.
2. One size fits all is not possible.
3. Adapt to the user **viewport**

Viewport

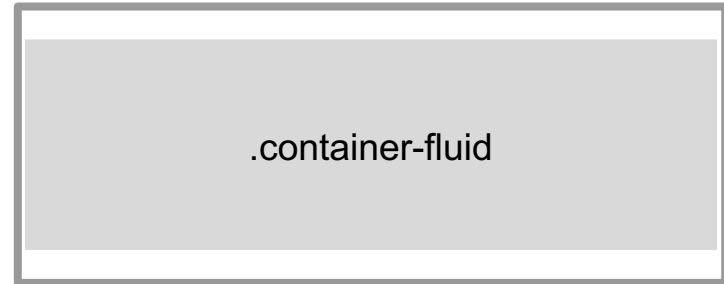
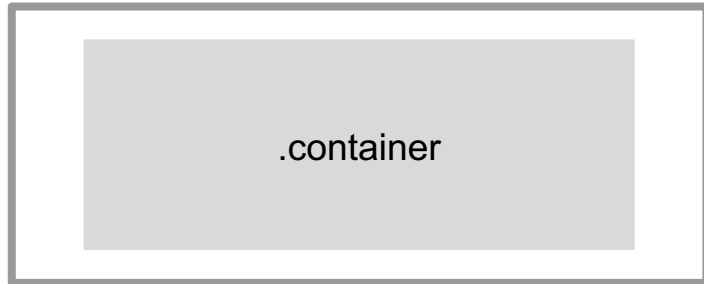
- Inside <head> element

<meta name="viewport" content="width=device-width, initial-scale=1">

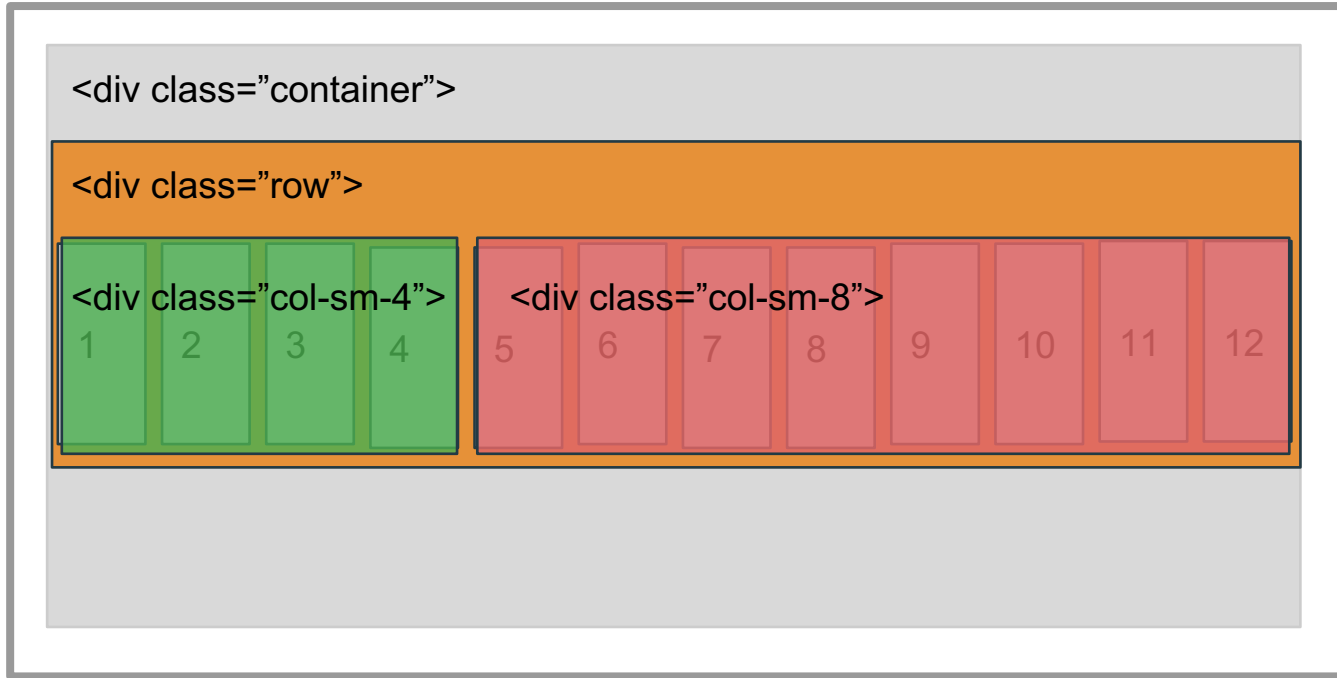
- Ensures screen width is set to the device width and content is rendered with this width
- initial-scale=1, sets the initial zoom level

Bootstrap Grid System

- Design the website to be responsive to the size of the viewport
- **Containers**
 - Container for all the content of the site



Bootstrap Grid System



Bootstrap Grid System

1. It provides four classes
 - xs - extra small
 - sm - small
 - md - medium
 - lg - large screen sizes
2. Use `.col-xs-*`, `.col-sm-*`, `.col-md-*` and `.col-lg-*` for defining screen layout
3. Specify how many columns each piece of content will use, all sum upto 12

Column class

Extra small screen

```
<div class="col-xs-12  
col-sm-5">
```

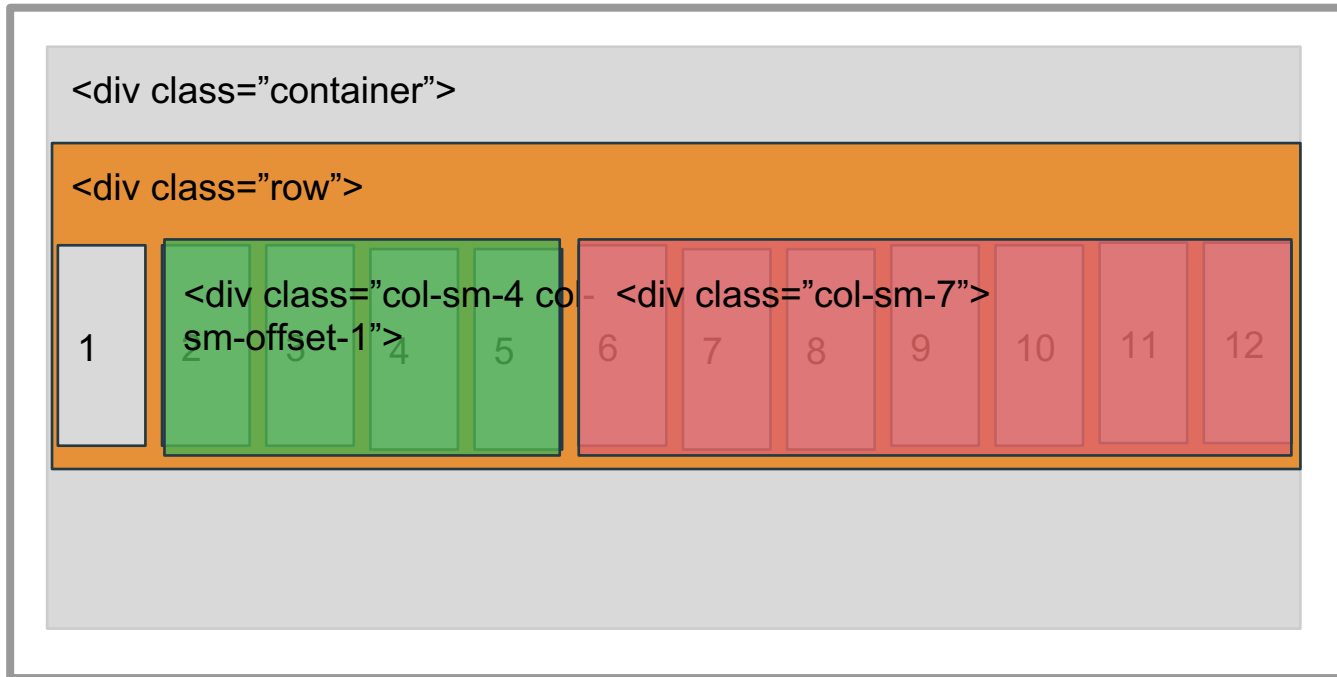
```
<div class="col-xs-12  
col-sm-7">
```

Small, Medium and large screens

```
<div class="col-xs-12  
col-sm-5">
```

```
<div class="col-xs-12 col-sm-  
7">
```

Column offsets



Jumbotron

- `<div class="jumbotron">... </div>`
- It is used for showcasing key content: company name, logo and information.
- Can be used outside the container to use the entire screen width.

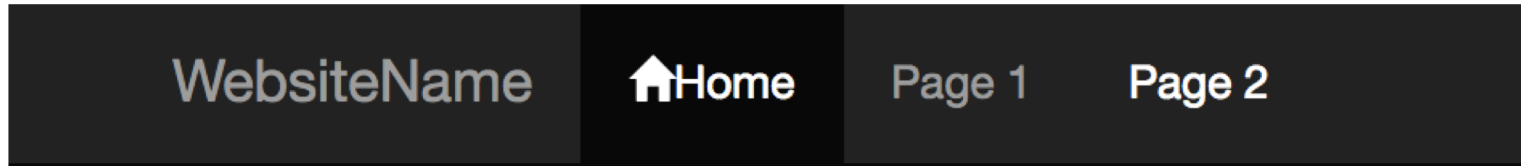
Exercise

1. Beautify exercise 2
2. Add bootstrap headers in the <head>, notice change in webpage
3. Add **jumbotron** class to the header and notice change
4. Add container class to the inner div inside header
5. Add class row to the nested div after container class
6. Add col-xs-12 col-sm-8 for the first div and col-xs-12 col-sm-4 for the second div

Format Content

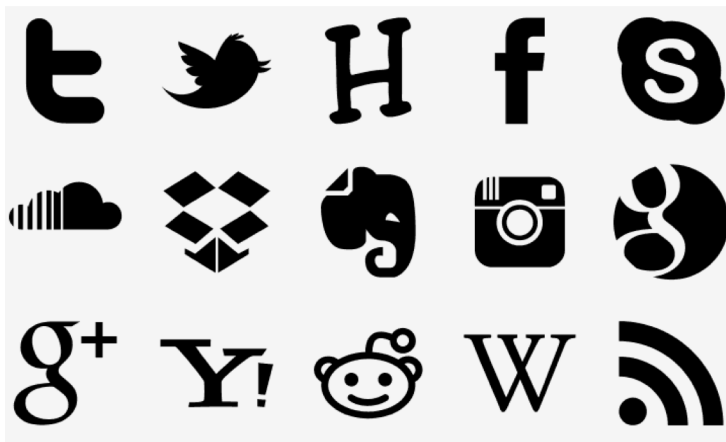
1. Add container class to the `<div>` after header
2. Add row class to the inner divs
3. And, specify `col` for `xs` and `sm` for header and content within each row.
4. Similarly, use it for footer.

Navigation Bar



Glyphicons

- ``
- 250 glyphs are available in bootstrap



Other bootstrap Features

Rounded Corners:



Circle:



Thumbnail:

