

Last lecture reminder

We learned about:

- The difference between inline and block elements
- How to use positioning and what are the different options that we have (static, relative, absolute and sticky)
- What is responsive design and why it is important
- What are media queries and how to use them for responsiveness
- How to use Flexbox
- How to use CSS Grid and how it's different from Flexbox





Introduction to Bootstrap 4

Bootstrap is the world's most popular framework for building responsive, mobile-first sites, with jsDelivr and a template starter page - <u>Bootstrap Website</u>





Introduction to Bootstrap 4

Why we want to use Bootstrap:

- Time-saving Bootstrap gives you ready-made blocks built ready for you to use them. With using Bootstrap you don't have to build everything from start but just modify
- Easy to use No matter whether you are an expert or a beginner in web technologies, you can swiftly do the Bootstrap installation for yourself without any hassle
- Responsive Grid System Bootstrap gives you a ready-made responsive grid system so you can easily apply it to your website for responsiveness
- Customizable Every Bootstrap element is fully customizable and can be changes to your needs
- Open-Source Bootstrap is 100% free, so you don't need to spend money on subscription to start using it for your projects



Bootstrap - Installation

For using Bootstrap we just need to import the Bootstrap link from the website to our project We should put this link in the <head> section just like any other import file

CSS

Copy-paste the stylesheet link> into your <head> before all other stylesheets to load our CSS.

```
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.0/dist/css/bootstrap.min.css" ret=</pre>
```

After we added the Bootstrap link to our file we can start using Bootstrap style by applying

classes names to our HTML elements

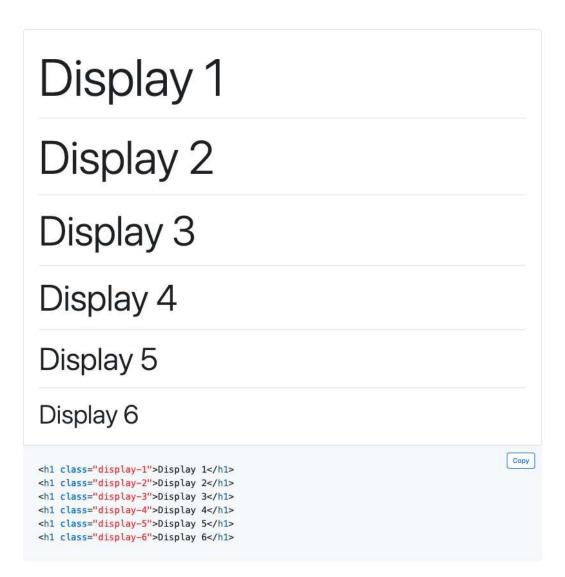


Use .h1 through .h6 classes when you want to match the font styling of a heading but cannot use the associated HTML element

```
h1. Bootstrap heading
h2. Bootstrap heading
h3. Bootstrap heading
h4. Bootstrap heading
h5. Bootstrap heading
h6. Bootstrap heading
                                                      Copy
h1. Bootstrap heading
h2. Bootstrap heading
h3. Bootstrap heading
h4. Bootstrap heading
h5. Bootstrap heading
h6. Bootstrap heading
```



display-1: When you need a heading to stand out, consider using the display class



list-unstyled: Remove the default list-style and left margin on list items

Note: This only applies to immediate children list items, meaning you will need to add the class for any nested lists as well



list-inline: Remove a list's bullets and apply some light margin Use it with combination of two classes - **.list-inline** and **.list-inline-item**



text-center: Use the alignment classes when you need to change the text alignment



Basic Bootstrap - Colors

text-success: Colorize text with color utilities

.text-primary	
.text-secondary	
.text-success	
.text-danger	
.text-warning	
.text-info	
.text-light	
.text-dark	
.text-body	
.text-muted	
.text-white	
.text-black-50	
.text-white-50	
<pre>.text-primary</pre>	Сору
<pre>.text-secondary</pre>	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	
<pre>.text-danger</pre>	
<pre>.text-warning</pre>	
<pre>.text-info</pre>	
<pre>.text-light</pre>	
<pre>.text-dark</pre>	
<pre>.text-body</pre>	
<pre>.text-muted</pre>	
<pre>.text-white</pre>	
<pre><pre><pre><pre><pre><pre><pre><pre></pre></pre></pre></pre></pre></pre></pre></pre>	
<pre>.text-white-50</pre>	

Basic Bootstrap - Spacing

With the spacing classes we can assign responsive-friendly margin or padding values to an HTML elements

The classes are named using the format {property}{sides}-{size} for xs and {property}{sides}-{breakpoint}-{size} for sm, md, lg, xl, and xxl

Properties we can use with this format:

- m for classes that set margin
- p for classes that set padding
- t for classes that set margin-top or padding-top
- b for classes that set margin-bottom or padding-bottom
- x set both margin/padding-left and margin/padding-right
- y set both margin/padding-top and margin/padding-bottom
- s (start) margin-left or padding-left
- e (end) margin-right or padding-right
- blank for classes that set a margin or padding on all 4 sides of the element



Basic Bootstrap - Spacing

Regarding the size - we can choose one of the options below:

- 0 for classes that eliminate the margin or padding by setting it to 0
- 1 (by default) for classes that set the margin or padding to \$spacer * .25
- 2 (by default) for classes that set the margin or padding to \$spacer * .5
- 3 (by default) for classes that set the margin or padding to \$spacer
- 4 (by default) for classes that set the margin or padding to \$spacer * 1.5
- 5 (by default) for classes that set the margin or padding to \$spacer * 3
- . auto for classes that set the margin to auto

Note: \$spacer is a Bootstrap sass variable that represent 1rem (16px)



Basic Bootstrap - Spacing

Spacing Bootstrap classes - behind the scene:

```
.mt-0 {
  margin-top: 0 !important;
}

.ms-1 {
  margin-left: ($spacer * .25) !important;
}

.px-2 {
  padding-left: ($spacer * .5) !important;
  padding-right: ($spacer * .5) !important;
}

.p-3 {
  padding: $spacer !important;
}
```



Basic Bootstrap - Sizing

Width and height utilities Includes support for 25%, 50%, 75%, 100%, and auto by default The percentages are relevant to the parent element size

```
Width 25%
 Width 50%
 Width 75%
 Width 100%
 Width auto
                                                                                      Copy
<div class="w-25 p-3" style="background-color: #eee;">Width 25%</div>
<div class="w-50 p-3" style="background-color: #eee;">Width 50%</div>
<div class="w-75 p-3" style="background-color: #eee;">Width 75%</div>
<div class="w-100 p-3" style="background-color: #eee;">Width 100%</div>
<div class="w-auto p-3" style="background-color: #eee;">Width auto</div>
```



Basic Bootstrap - Sizing

Width and height utilities Includes support for 25%, 50%, 75%, 100%, and auto by default The percentages are relevant to the parent element size





Basic Bootstrap - Border

Use border utilities to quickly style the border and border-radius of an element

The **border** class will add a border to a element, we can also specify the side we want to add the border to

```
<span class="border"></span>
<span class="border-top"></span>
<span class="border-end"></span>
<span class="border-bottom"></span>
<span class="border-start"></span>
```



Basic Bootstrap - Border

Using the border utilities we can also easily add colors to our border

For example: **border-success** will add a border with green color

```
Copy
<span class="border border-primary"></span>
<span class="border border-secondary"></span>
<span class="border border-success"></span>
<span class="border border-danger"></span>
<span class="border border-warning"></span>
<span class="border border-info"></span>
<span class="border border-light"></span>
<span class="border border-dark"></span>
<span class="border border-white"></span>
```



Basic Bootstrap - Border

Using the **border-#number** we can determine our border width

```
<span class="border border-1"></span>
<span class="border border-2"></span>
<span class="border border-3"></span>
<span class="border border-4"></span>
<span class="border border-5"></span>
<span class="border border-5"></span>
```



Basic Bootstrap - Radius

We can easily make our elements rounded by using the **rounded** classes

Use the **rounded-#number** classes for getting larger or smaller rounded corners

```
75x75
            75x75
                      75x75
                               75x75
                                         75x75
                                                   75x75
                                                                 150x75
                                                                                  Сору
<img src="..." class="rounded" alt="...">
<img src="..." class="rounded-top" alt="...">
<img src="..." class="rounded-end" alt="...">
<img src="..." class="rounded-bottom" alt="...">
<img src="..." class="rounded-start" alt="...">
<img src="..." class="rounded-circle" alt="...">
<img src="..." class="rounded-pill" alt="...">
                                   75x75
  75x75
             75x75
                        75x75
                                                                                            Copy
<img src="..." class="rounded-0" alt="...">
<img src="..." class="rounded-1" alt="...">
<img src="..." class="rounded-2" alt="...">
<img src="..." class="rounded-3" alt="...">
```

Class Exercise - Bootstrap Basic Design

Instructions:

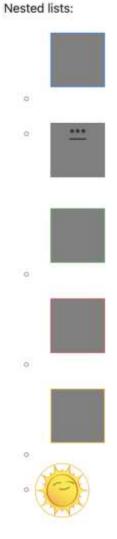
By using only Bootstrap design create the design shown in the next slide

Note: You can use some basic CSS style but whenever you can achieve the design with Bootstrap commands, make sure to use it instead.



This is a list.

Do not use your own CSS
Insert border in every nested list
Every border should have a different color
The second box should have *** in the middle and underline
In the last one insert image rounded border





Class Exercise - Bootstrap Basic Design



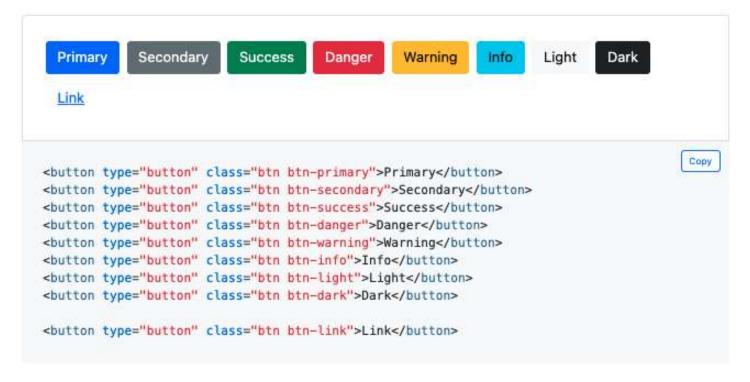
Bootstrap - Components





Bootstrap includes several predefined button styles, each serving its own semantic purpose Each button will have its already configured hover style effect

Regular buttons:





Button tags:

```
Link Button Input Submit Reset

<a class="btn btn-primary" href="#" role="button">Link</a>
<button class="btn btn-primary" type="submit">Button</button>
<input class="btn btn-primary" type="button" value="Input">
<input class="btn btn-primary" type="submit" value="Submit">
<input class="btn btn-primary" type="reset" value="Reset">
```



Outline buttons:





Button sizes:





Disabled state:



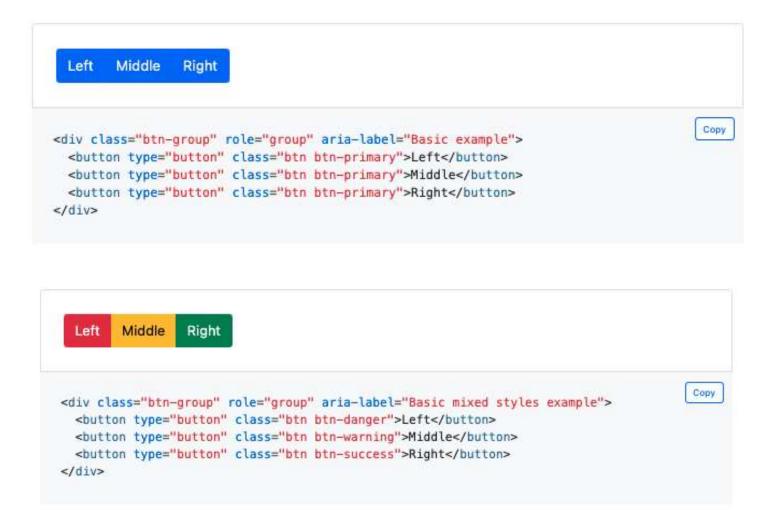
Toggle st





Bootstrap - Button Group

Group a series of buttons together on a single line or stack them in a vertical column





Instructions:

- You will be provided with basic HTML code with no styling and a documentation containing all the relevant bootstrap classes for simple navbar
- Your mission is to create a simple bootstrap navbar using the Bootstrap classes provided to you
- Your page should be responsive and fit to all devices viewport
- If you don't know / remember how to do something you should look for a solution

online



Bootstrap navbar classes documentation:

- .navbar uses to give your <nav> element the Bootstrap navbar style, this class is mandatory in order to create a proper Bootstrap navbar
- .navbar-expand{-sm|-md|-lg|-xl|-xxl} uses for responsive and collapsing navbar
- .bg-#color uses to give your navbar a background color
- .navbar-brand uses to identify your company brand from the other navbar links
- .navbar-nav uses for a full-height and lightweight navigation (use it on your navbar link list)
- .nav-item uses to give the navbar item style for the navbar elements / links (use it on your navbar list items)

Note: To help you with your task you can also use the <u>Bootstrap navbar documentation</u>, youtube videos or other websites



My Brand

Home About Contacts Info

My Brand



Home

About

Contacts

Info



Class Exercise - Bootstrap navbar Solution

