

TECHNICAL DOCUMENTATION GE04

HTML CSS Bootstrap

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RESOURCES

Containers

Containers are used for creating elements with a responsive width to the size of the window.

Two types of container classes:

.container which you give a fixed width on your page and it is responsive to the page change.

.container-fluid class simply makes its width the entire size of the window and adjusts as the size of the window does.

For the .container class you may add modifiers such as -sm -md -lg -xl -xxl to adjust the size of the container. To apply these parameters to an element simply define the elements class to one of these predesigned classes.

https://www.w3schools.com/bootstrap5/bootstrap_containers.php

Colors

Colors are pretty straight forward - there's a bunch of text color classes in the link before including primary text, secondary text, success/danger text, etc. You can override these with different colors if you'd like.

You can also change the opacity and colorize text either through the built in colors or your own custom colors. Theme colors are often put into maps to be able to loop over colors and their values.

Colors have utility classes that can be declared in the Utility API (also linked below)

<https://getbootstrap.com/docs/5.2/utilities/colors/>

<https://getbootstrap.com/docs/5.2/utilities/api/#using-the-api>

Lists

Two types of lists: unordered (which is bullet point) and ordered (which is numbered). Example code of how to create:

```
<ul> //Start of unordered list
  <li>Coffee</li> //List items
  <li>Tea</li>
</ul> : Unordered list <ul> //End of unordered list
<ol> //Start of ordered list
  <li>Coffee</li>
  <li>Tea</li>
</ol> : Ordered list using <ol> //End of unordered list
```

https://www.w3schools.com/html/html_lists.asp

Dropdowns

Dropdowns reveal hidden content by toggling the *.show* class of the parent item, the item you initially see. Making the user click on the dropdown parent item to show the child options is an intentional design as opposed to a hover and click.

The actual code for programmers to use is pretty simple and uses the dropdown menu class: “`<div class="dropdown-menu">`”

You can make single buttons, link buttons, split buttons (where the dropdown button is separate from the button text). You can change the size of the buttons from small to large. You can make them drop down, up, left, or right. The content under the dropdown can be a link or just text, you can change the alignment, separate the content, change if the link is active, and can even include a form, like a username and password.

Video about navbar and dropdowns ~10 minutes:

<https://www.youtube.com/watch?v=E-nxGwGYRXY>

Dropdown explanation from bootstrap, in moderate detail including the actual code:

<https://getbootstrap.com/docs/4.3/components/dropdowns/>

Brief explanation of dropdowns and their design:

<https://markdotto.com/2012/02/27/bootstrap-explained-dropdowns/>

Tutorialspoint css dropdowns explanation with code:

https://www.tutorialspoint.com/css/css_dropdowns.htm

Helpful methods (from resource two) :

Method	Description
<code>\$('.dropdown('toggle')</code>	Toggles the dropdown menu of a given navbar or tabbed navigation.
<code>\$('.dropdown('show')</code>	Shows the dropdown menu of a given navbar or tabbed navigation.

<code>\$().dropdown('hide')</code>	Hides the dropdown menu of a given navbar or tabbed navigation.
<code>\$().dropdown('update')</code>	Updates the position of an element's dropdown.
<code>\$().dropdown('dispose')</code>	Destroys an element's dropdown.

Navigation menu

The navbar class is meant to be used to create a navigation menu. This class must be applied to a nav element where you may also add modifiers to describe how the nav bar will expand and to what size. I.E. use the .navbar-expand-xxl class with modifiers -|xl|lg|md|sm to change the size of expansion you want the bar to have. If you want the nav bar to have links you need to add them in as a list, and put each bullet in the list in the class "nav-item"

https://www.w3schools.com/bootstrap5/bootstrap_navbar.php

Buttons

https://www.youtube.com/watch?v=_2wARy-oevQ which is a simple tutorial showing how to make a button. You just do <button>my button</button> which creates a simple button. You can get sophisticated and adjust the size and style.

https://www.w3schools.com/tags/tag_button.asp shows how you can adjust the button attributes.

Other Resources

The dos/donts of accessibility from Deb's lecture:

<https://accessibility.blog.gov.uk/2016/09/02/dos-and-donts-on-designing-for-accessibility/>

Website design best practices:

<https://www.upwork.com/resources/website-design-best-practices>

Relevant ones: Easy navigation, text minimization, consistent color, whitespace.

Responsive web design basics, ~10 minutes:

<https://www.youtube.com/watch?v=zF6Vsky4Slc>
