

Bootstrap: Week 2

Workshop Presentation





Today's Agenda

Activity	Estimated Duration
Check-In & Set-Up	15 mins
Review	60 mins
Workshop Assignment Task 1	45 mins
Break	15 mins
Workshop Assignment Task 2	60 mins
Workshop Assignment Task 3	30 mins
Check-Out (Feedback & Wrap-Up)	15 mins



Review: Color & Spacing Utility Classes

Discuss together:

- What does ml-3 do?

Adds a left margin to an element of size 3 (1rem / 16px default)

- What does p-5 do?

Adds a padding all around an element of size 5 (3rem / 48px default)

- What does py-1 do?

Adds a Top and Bottom padding to an element of size 1 (.25rem / 4px default)

- What does mx-auto do?

Horizontally center an element within its parent element

Note: Element must be fixed-width and block level (**display: block** and **width** set)

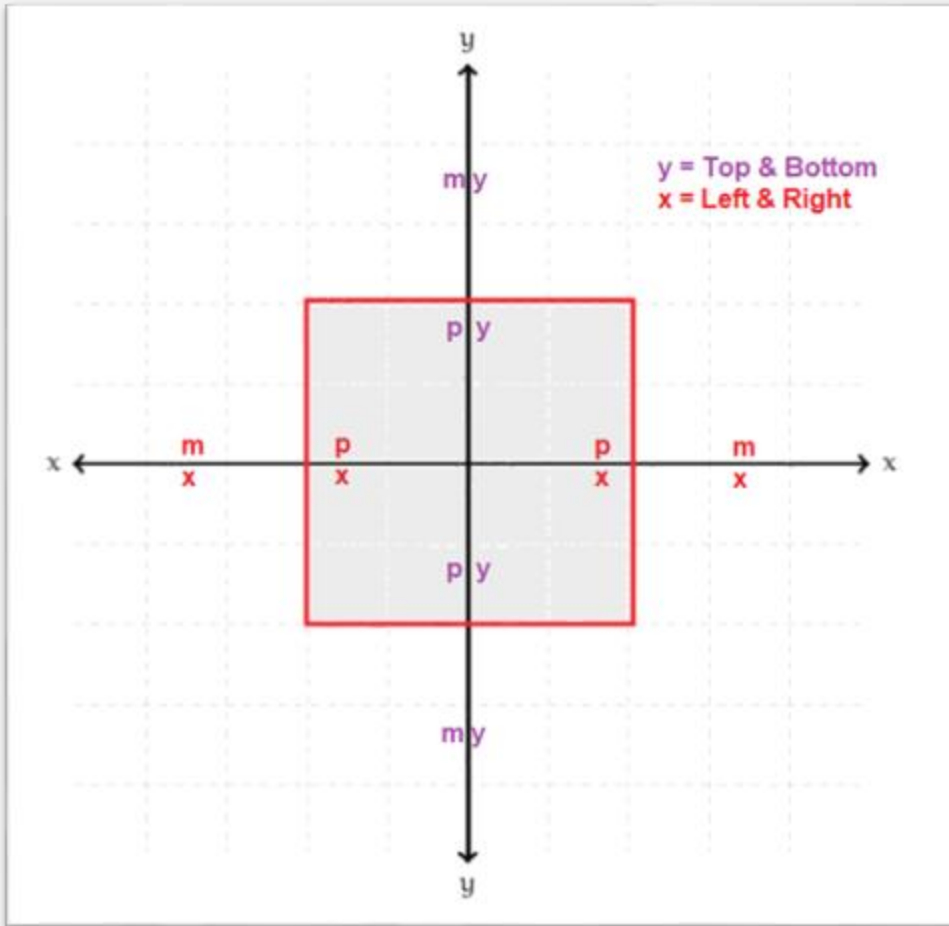
- When is it better to use these classes to set the margin and padding, versus using your custom stylesheet (styles.css), and vice versa?

Use a combination starting with Bootstrap classes and then override it with custom classes to get exactly what you're looking for

Note: These types of questions are not meant to make you feel as if you need to memorize the answers, but to continue to get you accustomed to finding information from the documentation! If you can't answer this in-class by memory, by all means, look it up.



Review: MX, MY, PX, PY



As on a graph:

y = Top and Bottom

x = Left and Right

m = Margin (outside the element)

p = Padding (inside the element)

- `0` - sets `margin` or `padding` to `0`
- `1` - sets `margin` or `padding` to `.25rem` (4px if font-size is 16px)
- `2` - sets `margin` or `padding` to `.5rem` (8px if font-size is 16px)
- `3` - sets `margin` or `padding` to `1rem` (16px if font-size is 16px)
- `4` - sets `margin` or `padding` to `1.5rem` (24px if font-size is 16px)
- `5` - sets `margin` or `padding` to `3rem` (48px if font-size is 16px)
- `auto` - sets `margin` to `auto`

Note: margins can also be negative, by adding an "n" in front of *size*:

- `n1` - sets `margin` to `-.25rem` (-4px if font-size is 16px)
- `n2` - sets `margin` to `-.5rem` (-8px if font-size is 16px)
- `n3` - sets `margin` to `-1rem` (-16px if font-size is 16px)
- `n4` - sets `margin` to `-1.5rem` (-24px if font-size is 16px)
- `n5` - sets `margin` to `-3rem` (-48px if font-size is 16px)



Review: Navbar

```
<button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#nucampNavbar">
  <span class="navbar-toggler-icon"></span>
</button>
<div class="collapse navbar-collapse" id="nucampNavbar">
  <ul class="navbar-nav">
    <li class="nav-item active"><a class="nav-link" href="#"><i class="fa fa-home fa-lg"></i>
    <li class="nav-item"><a class="nav-link" href="aboutus.html"><i class="fa fa-info fa-lg">
    <li class="nav-item"><a class="nav-link" href="#"><i class="fa fa-list fa-lg"></i> Sites<
    <li class="nav-item"><a class="nav-link" href="contactus.html"><i class="fa fa-address-ca
  </ul>
</div>
```

Discuss:

- What does the `.navbar-expand-sm` class do?

States to **expand** the navbar on small+ viewports

- What happens to a Navbar if you use the class `.navbar-expand` without specifying any breakpoint?

It would keep the navbar **expanded** in any viewport (even mobile)

- What happens to a Navbar if you leave out any `.navbar-expand` class completely?

The navbar would be **collapsed** in all viewports (default behavior of navbar without this class)

- What does the `data-target` attribute in a navbar's `<button>` element with a class of `.navbar-toggler` need to contain?

Needs to contain the `"id"` value of the parent `<div>` element that wraps the `.navbar-nav` list and `.nav-item` items



Review: Breadcrumbs

Discuss:

- Three types of breadcrumbs:
 - Location
 - Attribute
 - Path (history trail)

Location	Static and show WHERE the page is located in the website hierarchy (i.e. Library > Events) - MOST COMMON
Attribute	Give information that CATEGORIZES the current page based on attributes chosen by the user (<i>filtered results</i> usually) (i.e. Rugs > Round)
Path	Shows the users steps they too to get to the current page - also known as " <i>history trail</i> ". Tends to be confusing and the least used. Not based on hierarchy but user clicks/nav history



Review: Icon Fonts

- Icon Fonts and SVG icons are the modern-day answer to icons.

Discuss: What are some advantages of using Icon Fonts over a Raster image (i.e. PNG of an icon)?

Size	Smaller in size
Performance	Since smaller in size, they will load faster (SVG's render faster than icon fonts)
Flexibility	Can change color, shadow and other features using only CSS or editing SVG attributes
Scalability	Scale in quality much better (doesn't degrade quality)



Review: Font-Awesome

KEY POINTS:

- Font-Awesome is an extremely popular font and icon toolkit.
- Has a free version and a pro version.
- Easy to use, quick grab and paste icon styles.

- Use with `` or `<i>` elements, both are OK:

`<i class="fa fa-phone"></i>`

``





Review: Buttons

- The Button component uses the `.btn` base class along with more classes for color and size.



```
<button type="button" class="btn btn-primary">Primary</button>
<button type="button" class="btn btn-secondary">Secondary</button>
<button type="button" class="btn btn-success">Success</button>
<button type="button" class="btn btn-danger">Danger</button>
<button type="button" class="btn btn-warning">Warning</button>
<button type="button" class="btn btn-info">Info</button>
<button type="button" class="btn btn-light">Light</button>
<button type="button" class="btn btn-dark">Dark</button>

<button type="button" class="btn btn-link">Link</button>
```



Review: Buttons

Discuss:

- What are the three HTML elements most often used for a Button component?

Select the three most common HTML elements that can be made into buttons using Bootstrap classes.

☒ button ✓

☒ input ✓

☒ a ✓

- Which one should you use?

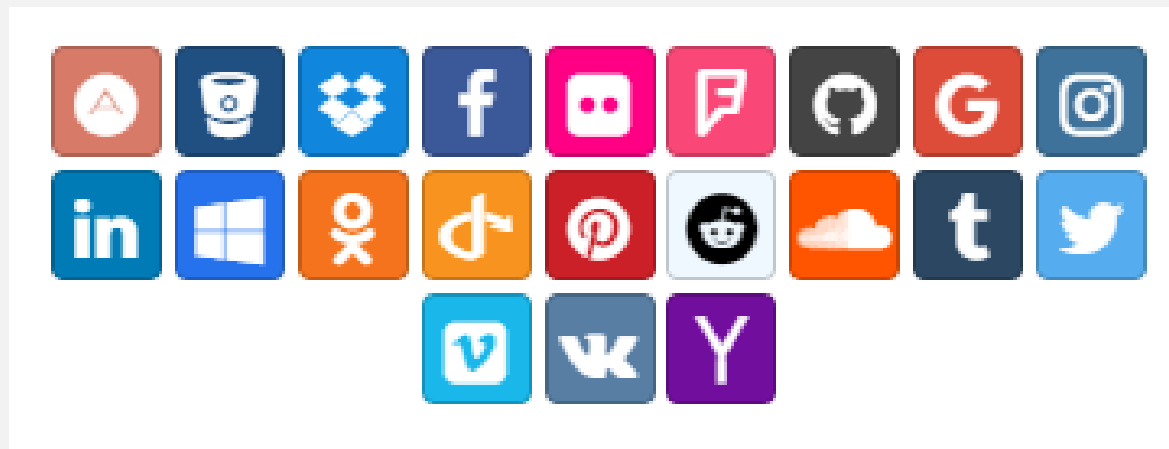
Which one?

So should you use an anchor, input or button? When you're navigating the user to a page or resource, use an anchor. Otherwise, both inputs and buttons are valid. Personally, I prefer to use inputs for submitting and resetting forms and buttons for custom behavior because I think it makes the intent clearer. However, the element you use is entirely up to you. Go nuts!



Review: Bootstrap-Social

- Bootstrap-Social buttons are an icon font toolkit (installable via npm package) specifically used with Bootstrap's Button component along with Font-Awesome's social icons to create colorful, attractive, clickable social buttons.





Review: Forms

Discuss:

- What form class do you need to add before you can use the `.form-control-lg` and `.form-control-sm` classes?

The `.form-control` BASE class is also needed if you are going to use the `.form-control-lg` and `.form-control-sm` classes

- What Bootstrap Form class helps you improve the layout and behavior of a checkbox or radio input type?

The `.form-check-input` class applies layout styles for `checkbox` and `radio button` input types



Review: Tables

- Tables are built with the `<table>` HTML element.
- Tables should not be used for page layout – we're not in 1995! :)
- Build Bootstrap Tables by adding the `.table` base class to the `<table>` start tag.
- Optional styling classes include: `.table-striped`, `.table-bordered`, `.table-sm`, `.table-dark`, `.table-hover`, more.

NOTE: The documentation for Bootstrap Tables is found in the **Content** section

Discuss: What is the purpose of the `table-responsive` class?

`.table-responsive`

This is only used to **enable a horizontal scroll bar if the table data cannot be fully seen.**

Applied to a `<div>` wrapper element that wraps around the `<table>` element.

Without this `<div>` wrapper and class, you would rely on the Browsers horizontal scroll at the bottom which is VERY INCONVENIENT

```
<div class="table-responsive">      Parent Element (wrapper)
  <table class="table table-striped"> Child Element (table)
    <thead>
```



Review: Cards

- There is **no** `<card>` HTML element.
- Cards are built using the `<div>` element and other HTML elements.
- Cards have no margin and no fixed width to start, and stretch to fill their parent element.
- The optional `card-body` class will add a padded section.
- Other useful, optional Card classes include:
 - `card-title` (can use with heading elements such as `h3`)
 - `card-header`
 - `card-footer`

<code>.card-group</code>	Applied to a <code><div></code> Wrapper that encapsulates multiple ATTACHED cards you would like to group. These cards will appear one after another with minimal margin between each card
<code>.card-deck</code>	Applied to a <code><div></code> Wrapper that encapsulates multiple DETACHED cards you would like to group. These cards will have a generous margin between each card
<code>.card-columns</code>	Applied to a <code><div></code> Wrapper that encapsulates multiple cards you would like to group. These cards will flex and fill in spaces depending on the other card sizes in the group. Looks kind of like <u>pinterest</u> / masonry-like (not uniform)

Discuss: Name a few other Card classes and describe what they do.



Review: Cards

Discuss:

What card classes is the card below using?

The image shows a 'Reserve a Table' card with the following components and annotations:

- .card**: A red bracket on the left side of the card, indicating the overall container class.
- .card-header**: A red bracket on the right side of the orange header bar, indicating the header class.
- .card-body**: A purple bracket on the right side of the main content area, indicating the body class.

The card content includes:

- Header**: 'Reserve a Table' in white text on an orange background.
- Form Fields**:
 - Number of Guests**: A label followed by radio buttons for 1, 2, 3, 4, 5, and 6.
 - Date and Time**: A label followed by two input fields. The first field has a calendar icon and is labeled 'Date'. The second field has a clock icon and is labeled 'Time'.
- Action**: A blue 'Reserve' button at the bottom.



Review: Images

- Check that everyone was able to download and extract the img zip file
- Check that everyone has the img folder saved correctly (as **/nucampsite/img/** and **not** as **/nucampsite/img/img/** for example)
- Note: Like Tables, the documentation on Images is in the **Content** section of Bootstrap's docs rather than the Components section
- The **.img-fluid** Bootstrap class makes images responsive by applying these two styles:

max-width: 100%;
height: auto;

Expand the image width to the size of the containing element

Scale the image height in relation to the width



Review: Media Object

- The Media Object's purpose is to help easily lay out content next to a media file when you don't want the content wrapping around the media file.
- Only two classes are required: the **media** class that wraps around everything (including the media, e.g. a photo) and the **media-body** class for the content (e.g., text about the photo) **you want to align with the image.**

Note: The Bootstrap Media Object's documentation is in the **Layout** section, not the Components section.



Review: Media Object

Discuss:

- Can media objects be nested?

Yes, by adding a `<div class="media">` element inside the `<div class="media-body">` element

- How do you vertically center-align media in a Media Object?

Use the `.align-self-center` class on the media (e.g. ``)

- What the difference between “**align-self**” and “**align-items**”?

When you want to align an individual child element you would use the `.align-self-*` class on the element itself

When you want to align **ALL child elements** you would use the `.align-items-*` on the containing parent element

Note: This parent element must be a flex item (e.g. have a class "d-flex", "row", etc)



Review: Code Challenge

Review the Week 2 code challenge together.



Week 2 Workshop Assignment

- All students should aim to finish and submit your assignment before you leave today.
- Work in pairs, or groups of three. Talk to each other and figure things out together!
- 10-minute rule during workshops: If you and your paired partner have spent more than 10 minutes trying to figure something out, ask your instructor for help.



Week 2 Workshop Assignment -Task 1

10:15am

To

11:00am



Week 2 – Break Time! (15 min)





Week 2 Workshop Assignment -Task 1

10:15am

To

11:00am



Week 2 Workshop Assignment -Task 2

11:15am

To

12:15pm



Week 2 Workshop Assignment -Task 3

12:15pm

To

12:45pm



Week 2 - Portfolios

- Did everyone post their portfolio idea report and review your classmates'?
- You can either work on your own project or team up with others.



Review: Week 2 Quiz

Select the three most common HTML elements that can be made into buttons using Bootstrap classes.

Select one or more:

☐ a. submit

☐ b. i

☒ c. button ✓

☐ d. label

☒ e. input ✓

☒ f. a ✓

☐ g. img

☐ h. div



Review: Week 2 Quiz

When you have a label element with a **for** attribute set to the value of "someInput", then the corresponding input element will need to have what attribute set to the value of "someInput" as well?

Select one:

- ☐ a. placeholder
- ☒ b. id ✓
- ☐ c. class
- ☐ d. label
- ☐ e. name

Using a Bootstrap spacing utility class, how would you set the left margin of an element to 0 (none)? (Your answer should be the class you would use.)

Answer:

ml-0 ✓



Review: Week 2 Quiz

Bootstrap cards are built using the `<card>` HTML element.

Select one:

- ☐ True
- ☒ False ✓

What Bootstrap positioning utility class would you use to cause a Navbar component to be fixed to the top?

Answer:

fixed-top ✓

Happy learning!
