

Assignment: 5

Bootstrap

1. What are the advantages of Bootstrap?

Ans. Bootstrap is an open source, sleek, intuitive, and powerful, mobile first front-end framework for faster and easier web development.

The following are the benefits of using Bootstrap –

- Bootstrap 3, framework consists of Mobile first styles throughout the entire library instead them of in separate files.
- It is supported by all popular browsers.
- With just the knowledge of HTML and CSS, anyone can get started with Bootstrap.
- Bootstrap's responsive CSS adjusts to Desktops, Tablets, and Mobiles.

2. What is a Bootstrap Container, and how does it work?

Ans. Containers are the most basic layout element in Bootstrap and are required when using our default grid system. Containers are used to contain, pad, and (sometimes) center the content within them. While containers can be nested, most layouts do not require a nested container.

Bootstrap comes with three different containers:

- .container, which sets a max-width at each responsive breakpoint
- .container-fluid, which is width: 100% at all breakpoints
- .container-{breakpoint}, which is width: 100% until the specified breakpoint

3. What are the default Bootstrap text settings?

Ans. Bootstrap 5 uses a default font-size of 1rem (16px by default), and its line-height is 1.5. In addition, all <p> elements have margin-top: 0 and margin-bottom: 1rem (16px by default).

4. What do you know about the Bootstrap Grid System?

Ans. Bootstrap's grid system uses a series of containers, rows, and columns to layout and align content. It's built with flexbox and is fully responsive. Below is an example and an in-depth look at how the grid comes together.

5. What is the difference between Bootstrap 4 and Bootstrap 5?

Ans.

BASIS OF	BOOTSTRAP 4	BOOTSTRAP 5
Grid System	It has 5 tier (xs, sm, md, lg, xl).	It has 6 tier (xs, sm, md, lg, xl, xxl).
Color	It has limited colors.	Extra colors added with the looks, A card improved color palette. there are various shades available to choose.
Jquery	It has jquery and all related plugins.	Jquery is removed and switched to vanilla JS with some working plugins
Internet Explorer	Bootstrap 4 supports both IE 10 and 11.	Bootstrap 5 doesn't support IE 10 and 11.
Form elements	Radio buttons, checkboxes have different look in different OS and browsers. The form uses whatever default browsers provide.	The look of form elements will not change, on different OS or browser. The forms can be customized and form controls can be added, they would not depend on browser.
Utilities API	We cannot modify utilities in bootstrap 4	Bootstrap 5 gave freedom to modify and also create our own utility

BASIS OF	BOOTSTRAP 4	BOOTSTRAP 5
Gutter	We use .gutter with fontsize in px	We use .g* with fontsize in rem
Vertical Classes	Columns can be positioned relative	Columns cannot be positioned relative
Bootstrap Icons	Bootstrap 4 doesn't have its own SVG icons, we have to use font-awesome for icons.	Bootstrap 5 have its own SVG icons
Jumbotron	It supports.	It doesn't support jumbotron.
Card deck	The card deck is used to create a set of cards with equal width and height.	Card deck class is removed in bootstrap
Navbar	We have inline-block property and we will get white dropdown as default for dropdown-menu-dark class.	Inline-block property is removed and we will get black dropdown as default for dropdown-menu-dark class.
Static Site Generator	Bootstrap 4 uses Jekyll software.	Bootstrap 5 uses Hugo software as it is fast static site generator.
flexbox grid	this makes easier to implement vertical designs, and the columns and rows can easily be implemented. the classes justify-center-content can directly be used to align according to the requirement.	advanced grid system is made available , also columns don't have relative positions.

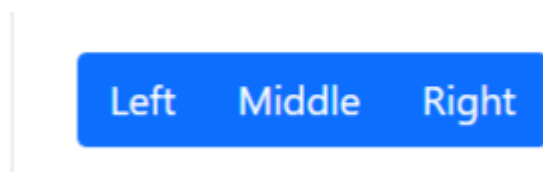
BASIS OF	BOOTSTRAP 4	BOOTSTRAP 5
RTL Support	It does not enable RTL(Right to Left) switching.	It enables RTL(Right to Left) switching.
Offcanvas Component	It does not support Offcanvas Component.	It supports Offcanvas Component(that is it is available now).

6. what is a Button Group, and what is the class for a basic Button Group?

Ans. “Button Groups” in Bootstrap is a class of name “btn-group” which is used to create series of buttons in groups (without spaces) vertically or horizontally.

This is the basic syntax of the button group class where each button has its own class of “btn”.

```
<div class="btn-group" role="group" aria-label="Basic example">
  <button type="button" class="btn btn-primary">Left</button>
  <button type="button" class="btn btn-primary">Middle</button>
  <button type="button" class="btn btn-primary">Right</button>
</div>
```



Buttons have a default border-radius on the first and last buttons of the group.

7. How can you use Bootstrap to make thumbnails?

Ans. A lot of sites need a way to lay out images, videos, text, etc, in a grid, and Bootstrap has an easy way to do this with thumbnails. To create thumbnails using Bootstrap –

- Add an <a> tag with the class of .thumbnail around an image.

- This adds four pixels of padding and a gray border.
- On hover, an animated glow outlines the image.

8. In Bootstrap 4, what is flexbox?

Ans. The biggest difference between Bootstrap 3 and Bootstrap 4 is that Bootstrap 4 now uses flexbox, instead of floats, to handle the layout.

The Flexible Box Layout Module, makes it easier to design flexible responsive layout structure without using float or positioning.

Quickly manage the layout, alignment, and sizing of grid columns, navigation, components, and more with a full suite of responsive flexbox utilities. To create a flexbox container and to transform direct children into flex items, use the d-flex class:

9. How can one create an alert in Bootstrap?

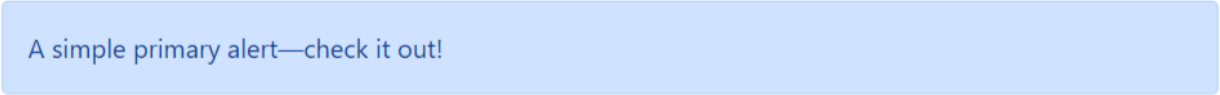
Ans. Bootstrap provides an easy way to create predefined alert messages:

Alerts are created with the .alert class, followed by one of the four contextual classes .alert-success, .alert-info, .alert-warning or .alert-danger:

```
<div class="alert alert-primary" role="alert">
```

```
A simple primary alert—check it out!
```

```
</div>
```



A simple primary alert—check it out!

Add the alert-link class to any links inside the alert box to create "matching colored links":

```
<div class="alert alert-success" role="alert">
```

A simple success alert with `an example link`. Give it a click if you like.

`</div>`

A simple success alert with [an example link](#). Give it a click if you like.

To close the alert message, add a `.alert-dismissible` class to the alert container. Then add `class="close"` and `data-dismiss="alert"` to a link or a button element (when you click on this the alert box will disappear).

`<div class="alert alert-warning alert-dismissible fade show" role="alert">`

`Holy guacamole! You should check in on some of those fields below.`

`<button type="button" class="btn-close" data-bs-dismiss="alert" aria-label="Close"></button>`

`</div>`

Holy guacamole! You should check in on some of those fields below.



10. What is a bootstrap card and how would you create one?

Ans.

A card is a flexible and extensible content container. It includes options for headers and footers, a wide variety of content, contextual background colors, and powerful display options. If you're familiar with Bootstrap 3, cards replace our old panels, wells, and thumbnails. Similar functionality to those components is available as modifier classes for cards.

Cards are built with as little markup and styles as possible, but still manage to deliver a ton of control and customization. Built with flexbox, they offer easy

alignment and mix well with other Bootstrap components. They have no margin by default, so use spacing utilities as needed.

Below is an example of a basic card with mixed content and a fixed width. Cards have no fixed width to start, so they'll naturally fill the full width of its parent element. This is easily customized with our various sizing options.

```
<div class="card" style="width: 18rem;">
  
  <div class="card-body">
    <h5 class="card-title">Card title</h5>
    <p class="card-text">Some quick example text to build on the card title and
make up the bulk of the card's content.</p>
    <a href="#" class="btn btn-primary">Go somewhere</a>
  </div>
</div>
```

We can create a normal card using `class card` at parent div and inside the parent div we can add class `card-body` following with `card-title` and `card-text`.

