

Assignment: 5

Bootstrap

1. What are the advantages of Bootstrap?

Ans. Bootstrap is a popular front-end development framework that provides a set of HTML, CSS, and JavaScript components for creating responsive and mobile-first web applications.

Some of the advantages of using Bootstrap include.

1. Consistency: Bootstrap provides a consistent and unified look and feel across web applications, which can improve the user experience and make it easier to develop and maintain web applications.
2. It is supported by all popular browsers.
3. Bootstrap's responsive CSS adjusts to Desktops, Tablets, and Mobiles.

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

Ans. In Bootstrap, a container is a class used to create a fixed layout for HTML content. The purpose of the container class is to provide a constant and responsive layout for web pages, nevertheless of the screen size or device.

The motive of the container class is to provide a consistent and responsive layout for web pages, While containers can be fixed and most layouts do not require a fixed container.

Bootstrap comes with three different containers:

- .container, which sets a maximum width at each flexible breakpoint
- .container-fluid, which is width: 100% at all breakpoints
- .container-{breakpoint}, which is width: 100% until the specific 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).

text-left: Aligns text to the left.

.text-center: Centers text horizontally.

.text-right: Aligns text to the right.

These classes can be applied to any HTML element containing text, such as headings, paragraphs, and list items.

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 is built with Flexbox and it is fully responsive. it's different from HTML grid and more easy to use.

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

Ans.

FEATURES	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.

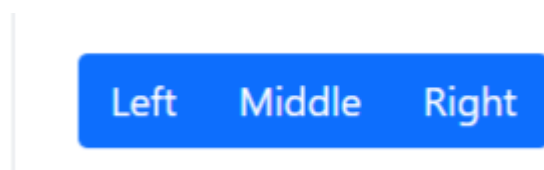
FEATURES	BOOTSTRAP 4	BOOTSTRAP 5
Jquery	It has jquery and all related plugins.	Jquery is removed and switched to vanilla JS with some working plugins
Internet Explorer	Bootstrap 4 supports both IE 10 and 11.	Bootstrap 5 doesn't support IE 10 and 11.
Form elements	Radio buttons, checkboxes have different 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
Gutter	We use .glutter with fontsize in px	We use .g* with fontsize in rem
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
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.

FEATURES	BOOTSTRAP 4	BOOTSTRAP 5
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.
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).
CSS use	Bootstrap 4 uses less CSS properties.	Bootstrap 5 uses more CSS properties.

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

Ans. Bootstrap's button group is a class called "btn-group" that is used to create a 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 start and end buttons of the group.

7. How can you use Bootstrap to make thumbnails?

Ans. Bootstrap provides several built-in classes and components for creating thumbnails. A lot of sites need a way to lay out images, videos, text, etc, in a grid, and Bootstrap provides an easy way to do this with thumbnails. To create thumbnails using Bootstrap use below steps:-

- 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 that, to handle the layout Bootstrap 4 now uses flexbox, instead of floats.

The flexible box layout module makes it easy to design flexible layout structures without using floats.

It quickly manages the layout, placement, and resizing of grid columns, etc, and more with a full suite of flexbox tools.

9. How can one create an alert in Bootstrap?

Ans. Bootstrap manages an easy way to create prior defined 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 <a href="#" class="alert-link">an example  
  link</a>. 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">
```

```
  <strong>Holy guacamole!</strong> 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 content container. It includes options for headers and footers, a huge 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 functions to these components are also available.

Cards are prepared with a few tags and styles as possible, but still manages to provide a lot of control and customization. By default, they have no margin, so use the spacing tools as needed.

Below is an example of a mixed content, fixed width base card. Tabs don't have a fixed width to begin with, so they originally fill the entire width of the parent element. This can be easily customized with our different size 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`.

Image cap

Card title

Some quick example text to build on the card title and make up the bulk of the card's content.

[Go somewhere](#)