**(Module : 8) :- Bootstrap Basic & Advanced**

1) What are the advantages of Bootstrap?

Ans>

Bootstrap is a popular open-source CSS framework used to build responsive, mobile-first websites. Here are some of the advantages of using Bootstrap:

Responsiveness: Bootstrap is designed to be responsive, which means that it automatically adjusts to the screen size of the device used to view the website. This helps ensure that your website looks great on all devices, including desktops, tablets, and smartphones.

Consistency: Bootstrap provides a consistent set of styles and components that can be used across your entire website, giving it a polished and professional look.

Customizability: Bootstrap is highly customizable, allowing you to modify the look and feel of your website to match your branding or design requirements.

Time-saving: Bootstrap provides a number of pre-built components and styles, which can save you time and effort when building a website from scratch.

Cross-browser compatibility: Bootstrap is designed to work across all modern browsers, ensuring that your website will look and function as intended regardless of the browser used to access it.

Active community: Bootstrap has a large and active community of developers who contribute to the framework, providing ongoing support and updates. This means that any issues or bugs are quickly identified and resolved, ensuring that your website remains stable and up-to-date.

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

Ans>

In Bootstrap, a container is a wrapper element that is used to contain and align the content of a web page. The container provides a fixed-width layout for your content and ensures that it is centered and properly spaced on the page.

Bootstrap provides two types of containers:

1. .container: This is a responsive container that is fixed-width and centers the content on the page. It is the most commonly used container in Bootstrap.

2. .container-fluid: This is a full-width container that spans the entire width of the viewport. It does not have any padding or margins and is useful when you want your content to fill the entire width of the screen.

3) What are the default Bootstrap text settings?

Ans>

In Bootstrap, there are several default text settings that you can use to style your content. These include:

.text-muted: This is used to create subtle, muted text that is less prominent than regular text. It is often used for disclaimers, footnotes, or other text that is not the main focus of the page.

.text-primary: This is used to create text that is visually prominent and draws attention to important content. It is often used for headings, titles, or call-to-action buttons.

.text-secondary: This is used to create text that is less prominent than primary text but still serves as an important visual element. It is often used for subheadings or other supporting text.

.text-success: This is used to create text that indicates success or positive feedback. It is often used for confirmation messages or other text that indicates a successful operation.

.text-danger: This is used to create text that indicates danger or error. It is often used for error messages or other text that indicates a failed operation.

.text-warning: This is used to create text that indicates a warning or caution. It is often used for alerts or other text that indicates a potential issue or concern.

.text-info: This is used to create text that provides information or context. It is often used for explanatory text or other information that helps the user understand the content on the page.

In addition to these default text settings, Bootstrap also provides classes for changing the size, weight, and alignment of text, as well as classes for creating text with a background color or border.

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

Ans>

The grid system in Bootstrap is a responsive layout system that helps developers create flexible and responsive web page layouts that can adjust to different screen sizes and devices. It is based on a 12-column grid system, which can be customized to create layouts with different numbers of columns.

The grid system works by dividing the page into rows and columns. Rows are horizontal groups of columns, and columns are vertical containers that hold content. Each column can be assigned a width between 1 and 12, representing the number of columns it should span. For example, a column with a width of 6 will take up half of the available width in a row.

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

Ans> Here are some of the key differences between Bootstrap 4 and Bootstrap 5:

Smaller file size: Bootstrap 5 has a smaller file size compared to Bootstrap 4. This is achieved through the removal of jQuery as a dependency, which reduces the overall size of the framework.

New utility classes: Bootstrap 5 introduces several new utility classes that make it easier to customize the look and feel of your website. These include classes for color schemes, gradients, and borders.

Enhanced grid system: The grid system in Bootstrap 5 has been enhanced with new features such as vertical spacing, column wrapping, and the ability to align columns within a row.

Removal of IE 10 and 11 support: Bootstrap 5 drops support for Internet Explorer 10 and 11, allowing for more streamlined development and improved performance.

New JavaScript plugins: Bootstrap 5 introduces several new JavaScript plugins, including a date picker, range slider, and accordion.

Updated typography: Bootstrap 5 includes updated typography with improved font sizes, line heights, and spacing.

Improved accessibility: Bootstrap 5 has made several improvements to accessibility, including better color contrast and improved keyboard navigation.

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

Ans> A button group in Bootstrap is a set of related buttons that are grouped together for a common purpose, such as triggering the same action or navigating between related pages. A button group can contain any number of buttons, and can be styled and aligned to suit the design of your website.

To create a basic button group in Bootstrap, you can use the .btn-group class.

7)How can you use Bootstrap to make thumbnails?

Ans> Bootstrap provides a simple way to create image thumbnails using the .img-thumbnail class.By default, thumbnails created using the .img-thumbnail class have a border and a slightly rounded shape. You can also customize the style of the thumbnail using CSS, such as changing the border color, width, and radius.

8)In Bootstrap 4, what is flexbox?

Ans> In Bootstrap 4, flexbox is a layout mode that allows you to create flexible and responsive layouts using a set of CSS properties. Flexbox provides a simple and powerful way to create complex layouts without having to use floats or positioning.

9) How can one create an alert in Bootstrap?

Ans> The .alert class is used to create the alert, and the .alert-primary class is used to specify the color of the alert.You can also add additional classes to the alert to customize its appearance and behavior, such as .alert-dismissible to add a close button, or .fade and .show to add fade-in and fade-out animations.

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

Ans> In Bootstrap, a card is a flexible and extensible content container. It is a versatile component that can be used to display a wide range of content, such as images, text, links, buttons, and more.

Here's an example of how to create a basic card in Bootstrap:

<div class="card">

<img src="image.jpg" class="card-img-top" alt="...">

<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>

In this example, the .card class is used to create the card container. The card contains an image (<img> tag) and a body (<div> tag with .card-body class) that includes a title (<h5> tag with .card-title class), some text (<p> tag with .card-text class), and a button (<a> tag with .btn and .btn-primary classes).