Module 8) Bootstrap Basic & Advanced

# 1What are the advantages of Bootstrap?

Ans: **Bootstrap is Easy to Use:** Bootstrap is very easy and quite simple to use for designing and development. Being a new framework there is a lot to learn from it. It can be used with CSS, LESS or SaaS etc.

**An Alliance is Quite Easy:**Bootstrap is a framework which is easily integrated with bulk frameworks uninterrupted with existing sites or the new one.

**Fast and Time-Saving Framework:**Bootstrap is an agile framework which is quite faster than other frameworks. It saves time due to its standard ready-made coding blocks, responsiveness, and cross-browser capabilities.

**Reinforcement of Grids:** One more recommendable feature is that bootstrap holds 12 column grid styles and supports responsiveness, counterbalance, and embedded elements.

**Adhere to Basics:** Bootstrap is a framework which holds base styling HTML elements like, tables, typography, buttons, forms, images, lists, and icons etc.

**A Pack of JavaScript Fundamentals:** Bootstrap supports Javascript Components so one don't require knowledge of scripting. It comprises JavaScript components like, tooltips, modal windows, alerts etc. to add functionalities easily.

**Support is Amazing:**Bootstrap is well-known for its big support community and agile response or online solution for the problems or queries. It also offers a great documentation along with examples and demo. It provides solutions to freshers and veterans alike.

**Bootstrap is totally Customizable:** It is developer friendly and can be customized as per the project requirements. Common CSS, utilities, Javascript Components, and components can compose the appearance to create ease for developers.

**Agile Responsive:** Bootstrap is a fully responsive platform supporting fluid grid layout. It crafts a mobile ready site smoothly and easily and sets web design as per the dimensions of the particular device.

**Bootstrap's Consistency:**Websites or mobile applications made with bootstrap technology can make you feel the awesome pairing of developers and designers ensuring consistency.

**Frequent Updates:** It provides regular updates and makes the whole eco-system hefty and robust according to the time.

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

Ans: **Bootstrap Containers** are the most basic layout element in Bootstrap. Bootstrap **Containers**are very essential and basic building blocks of bootstrap that wrap a page’s content. It’s responsible for setting and aligning content within it according to viewport or given device. Containers are defined within the container class **(.container)**. In other words, we can say that containers are established the width for the layout to give the content. Elements and content are added within the container.

**Containers are used for many purposes such as –**

It requires use with the default grid system.

To establish width for the layout to give web content.

To provide responsive fixed behavior of any web project.

To sets the content margin dealing with the responsive behavior of your layout.

Bootstrap has the default class or predefined class is ***“.container”***& ***“.container-fluid”***class for  layout. 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.

Basically, there are three types of container classes available in bootstrap:

# 3• What are the default Bootstrap text settings?

Ans: Bootstrap 4 uses a default font-size of 16px, and its line-height is 1.5. The default font-family is "Helvetica Neue", Helvetica, Arial, sans-serif. 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 arrange and align content. It’s built with [flexbox](https://mdbootstrap.com/docs/standard/layout/flexbox/) and is fully responsive. Below is an example and detailed explanation of how the grid system works.

The above bootstrap grid example creates three equal-width columns across all devices and viewports using our predefined grid classes. Those columns are centered in the page with the parent .container.

Taking it step by step:

Container

Bootstrap requires a containing element to wrap site contents and house our grid system. Without a container, the grid won't work properly.

Row

Rows create horizontal groups of columns. Therefore, if you want to split your layout horizontally, use .row.

Columns

Bootstrap's grid system allows up to 12 columns across the page.

# 5• What is the difference between Bootstrap 4 and Bootstrap 5?

Ans: FeaturesBootstrap 4 versionBootstrap 5 version**Released date**Bootstrap 4 was released in January 2018, and it marked a significant advance over previous versions.Bootstrap 5 was released in May 2021. This version came after multiple iterations of alpha and beta releases, and as a result, it had a slew of important additions and new features.**Links**<link rel = "stylesheet" href = "https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/css/bootstrap.min.css">  
<script src = "https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/js/bootstrap.bundle.min.js"> </script><link href = "https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel = "stylesheet">  
<script src = "https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js"> </script>**Grid System**Bootstrap 4 has five levels: xs, sm, md, lg, and xl.Bootstrap 5 has six levels: xs, sm, md, lg, xl, and xxl.**Jquery plug-in**Bootstrap 4 includes jquery and all associated plug-ins.Jquery has been deleted and replaced with vanilla JS and several functional plug-ins in Bootstrap 5.**Color**Bootstrap 4 provides a few colors for a web page.Extra colors insert into the looks, and the card's color palette was upgraded. There are a variety of colors to pick from the Bootstrap 5 framework.**Internet explorer**Bootstrap 4 is compatible with both Internet Explorer 10 and 11.Bootstrap 5 does not support Internet Explorer 10 and 11.**Elements of Form**Radio buttons and checkboxes appear differently in different operating systems and browsers. The form takes advantage of whatever basic browser features are available.The appearance of form elements will not change while using a different operating system or browser. The forms alternate and add form controls; they are not browser-dependent.**API for Utilities**We are unable to alter utilities in Bootstrap 4.Bootstrap 5 provided us the ability to tweak and develop our utility.**Utilize a gutter.**Bootstrap 4 uses glutter in a px font size.Use .g\* with font size set to rem in bootstrap 5.**Vertical Groups**Columns can be positioned relative to one another.Columns cannot be positioned relative to one another.**Icons for Bootstrap**Bootstrap 4 lacks SVG icons; we must rely on font-awesome for icons.Bootstrap 5 has its own set of SVG icons.**Jumbotron**Bootstrap 4 compatible with jumbotron.It is not compatible with jumbotron.**deck of cards**The card deck is used to make an isset of cards with the same width and height.The card deck class has been removed from bootstrap.**Navbar**We have the inline-block attribute, and the white dropdown will be the default for the dropdown-menu-dark class.The inline-block property has been removed, and the dropdown-menu-dark class now has a black dropdown as the default.**Generator of Static Websites**Bootstrap 4 makes use of the Jekyll software.Bootstrap 5 uses a fast static generator which is Hugo.**grid flexbox**It makes vertical designs easier to construct, and columns and rows can be simply implemented. The justify-center-content classes use directly to align according to the requirement.A more complex grid system is offered, and columns do not have relative locations.**CSS usability**Bootstrap 4 uses fewer CSS properties.Bootstrap 4 uses more CSS properties.**offcanvas component**There is no off-canvas element.The offcanvas component is now available.**RTL support**Languages do not enable RTL (right to the left) switching.It enables RTL (right to the left) language switching.

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

Ans: “Button Groups” in [Bootstrap](https://www.geeksforgeeks.org/bootstrap/) is a class of name “btn-group” which is used to create a series of buttons in groups (without spaces) vertically or horizontally.

**Syntax:**

<div class="btn-group">

<button type="button" class="btn">Click</button>

</div>

# 7• How can you use Bootstrap to make thumbnails?

Ans: Bootstrap's thumbnails are used to show linked images in grids with very minimum required markup, a thumbnail is created using class .thumbnail within the element <a>, The column grids are created using class .col-sm-\* and .col-md-\*, it is used to create grids of the images

# 8• In Bootstrap 4, what is flexbox?

Ans: In [Bootstrap 4](https://www.javatpoint.com/bootstrap-4), flex box is used to control the layout and alignment specification of Bootstrap 4 components. This box makes it easier to design flexible responsive layout structures without using float or positioning attributes.

# 9• How can one create an alert in Bootstrap?

Ans: Bootstrap Alerts are used to provide an easy way to create predefined alert messages. Alert adds a style to your messages to make it more appealing to the users.

There are four classes that are used within <div> element for alerts.

* .alert-success
* .alert-info
* .alert-warning
* .alert-danger

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

Ans: Cards

A card in Bootstrap 4 is a bordered box with some padding around its content. It includes options for headers, footers, content, colors, etc.

Basic Card

A basic card is created with the .card class, and content inside the card has a .card-body class:

Basic card

Example

<div class="card">  
  <div class="card-body">Basic card</div>  
</div>

[Try it Yourself »](https://www.w3schools.com/bootstrap4/tryit.asp?filename=trybs_card&stacked=h)

If you are familiar with Bootstrap 3, cards replace old panels, wells, and thumbnails.

Header and Footer

Header

Content

Footer

The .card-header class adds a heading to the card and the .card-footer class adds a footer to the card:

Example

<div class="card">  
  <div class="card-header">Header</div>  
  <div class="card-body">Content</div>  
  <div class="card-footer">Footer</div>  
</div>

[Try it Yourself »](https://www.w3schools.com/bootstrap4/tryit.asp?filename=trybs_card_header&stacked=h)