# **Web Development Module (Bootstrap Basic & Advanced) - 8**

**Q1: What are the advantages of Bootstrap?**

**Ans**: Bootstrap is widely used front-end framework that helps developers to build website faster.

* Some of the main advantages are listed below.
* **Responsive Design:** Bootstrap Provides you Grid system and flex classes that can work in mobile without any modifications. And Most of the classes are mobile friendly, that can be directly used.**->** Some of the main advantages are listed below.
* **Pre-Designed Components:** Bootstrap Provides Pre-Designed Component that are common in nearly all websites for e.g. Success Button (Buttons), Errors, Dialogue Boxes, Header (Navbar), Modals. These Component are built from Bootstrap to provide consistency through Website.
* **Easy to Use:** Bootstrap is easy to use for developers that are familiar with CSS, even beginners can also start learning Bootstrap with their official documentation.
* **Mobile First Approach:** Lot of Developers Prefer mobile first approach, so Bootstrap have classes that can help you with building mobile first website and, we can make some changes in classes for desktop devices and we are ready to go.

Overall, Bootstrap is Powerful and versatile framework that offers numerous advantages for web development, making it a preferred choice for many developers and organizations.

**Q2: What is a Bootstrap Container, and how does it work?**

**Ans:** In Bootstrap, a container is a fundamental building block used to wrap the content of a webpage. The container class is responsible for providing a consistent and centred page content area, ensuring proper alignment and padding.

* There are two main types of containers in Bootstrap: “container” and “container-fluid”.
* container class provides fixed width container and margin from left and right
* container-fluid provides full width container, spanning the entire width of the viewport with no margin from left and right.

**Q3: What are the default Bootstrap text settings?**

**Ans:** Bootstrap provides a set of utility classes for text manipulation, allowing developers to easily control the appearance of text in their web applications.

**Text-alignment:**

* **‘text-left’**: align text to left.
* **‘text-right’**: Align text to right.
* **‘text-center’**: Center text horizontally.
* **‘text-justify’**: Center text vertically.
* **‘text-nowrap’**: Prevents text from wrapping to the next line.

**Text-transformation:**

* **‘text-lowercase’**: converts text to lowercase.
* **‘text-uppercase’**: converts text to uppercase.
* **‘text-capitalize’**: capitalize the first letter of each word.

**Text-color:**

* **‘text-primary’**, ‘text-secondary’, ‘text-danger’, ‘text-success’, ‘text-warning’, ‘text-info’.

**Text-size:**

* **‘text-xs’**, ‘text-sm’, ‘text-md’, ‘text-lg’, ‘text-xl’.

**Q4: What do you know about the Bootstrap Grid System?**

**Ans:** Bootstrap grid system is built with flexbox, and allows up to 12 columns across the page.

The grid system is fully responsive and the columns will re-arrange depending on the screen size. If we don’t require all of the columns, we can meagre columns and make it as we want with the help of “col-(number)” class provided by bootstrap.

**Q5: What is the difference between Bootstrap 4 and Bootstrap 5**.

**Ans**: Some of major differences between Bootstrap 4 and Bootstrap 5 are listed below

**jQuery Dependency**

* Bootstrap 4 relies on jQuery for some of its functionalities
* Bootstrap 5 has removed jQuery dependency, making it lightweight and modern framework.

**Improved Documentation**

* Bootstrap 5 comes with improved documentation, making it easier for developers to find information.

**Utility Classes**

* Bootstrap 5 has expanded its set of utility classes for spacing, typography, and color, providing more options for styling elements without the need for custom CSS.

**Q6: What is a Button Group, and what is the class for a basic Button Group?**

**Ans:** Button group is series of buttons group together (on a single line)

Bootstrap gives us class called “btn-group”, which we can add to parent element and can add button elements in that element.

Bootstrap 5 gives us vertical button group class also: ‘btn-group-vertical’

**Q7: How can you use Bootstrap to make thumbnails?**

**Ans:** To create thumbnails, Bootstrap 5 provides us “img-thumbnail” class. Which give us rounded image and rounded border around image (like thumbnail)

<img src="image.jpg" class="img-thumbnail" alt="home" width="500" height="400">

**Q8: In Bootstrap 4, what is flexbox?**

**Ans**: Flexbox is modern CSS layout used to create more efficient and predictable layouts for web applications

In the context of Bootstrap 4, the Flexbox model is used as the underlying layout system for the grid system and various components. Some key features and concepts of Flexbox in Bootstrap 4 include:

**Flex Containers and Flex Items:**

* **Flex Containers:** An Element with the class “d-flex” becomes a flex container, and its Childrens become flex items.
* **Flex Item:** Elements within a flex container are flex items. The flex class is applied to make an element a flex item, allowing it to participate in the flex layout.

**Flex Directions:**

* **“flex-row”**: This class used to set the direction of the flex container to a horizontal row.
* **“flex-column”**: This class used to set the direction of the flex container to a vertical column.

**Alignments:**

* **“justify-content”**: is used to align flex items along the main axis.
* **“align-items”**: is used to align flex items along the cross axis.

**Q9: How can one create an alert in Bootstrap?**

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

To make alert, “.alert” class is provided by bootstrap

Aling with “.alert” class we can give contextual classes like “.alert-success” which looks like success message, similarly we have “.alert-danger”, “.alert-warning”, “.alert-info”, “.alert-primary”, “.alert-secondary”, “.alert-light”, “.alert-dark”.

e.g.

<div class="alert alert-success">

<strong>Success! </strong> Indicates a successful or positive action.

</div>

**Q10: What is a bootstrap card and how would you create one**

**Ans**: Bootstrap card created in “card.html”.t size and color.