**Module – 6 (Bootstrap Basic & Advanced)**

1. What are the advantages of Bootstrap?

**Answer :-**

* 1. Easy initiation
  2. Responsiveness
  3. Highly customizable
  4. Extremely user-centric
  5. Top-notch support
  6. Cross-browser compatibility
  7. JavaScript plugins to your rescue
  8. Far-reaching popularity
  9. Ample documentation
  10. Updates at the doorstep

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

**Answer :-**

* 1. In Bootstrap, container is used to set the content's margins dealing with the responsive behaviors of a layout.
  2. It contains the row elements and the row elements are the container of columns (known as grid system).
  3. The container class is used to create boxed content.
  4. Bootstrap comes with three different containers:
     + .container, which sets a max-width at each responsive breakpoint
     + .container-{breakpoint}, which is width: 100% until the specified breakpoint
     + .container-fluid, which is width: 100% at all breakpoints
  5. The table below illustrates how each container's max-width compares to the original .container and .container-fluid across each breakpoint.

1. What are the default Bootstrap text settings?

**Answer :-**

* 1. Bootstrap uses a default font-size of 16px, and its line-height is 1.5.
  2. The default font-family is "Helvetica Neue", Helvetica, Arial, sans-serif.
  3. In addition, all < p > elements have margin-top: 0 and margin-bottom: 1rem (16px by default).

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

**Answer :-**

* 1. Bootstrap's grid system uses a series of containers, rows, and columns to layout and align content.
  2. It's built with flexbox and is fully responsive.
  3. There are 12 template columns available per row, allowing you to create different combinations of elements that span any number of columns.
  4. Column classes indicate the number of template columns to span (e.g., col-4 spans four). widths are set in percentages so you always have the same relative sizing.

#### Below is the syntax of a simple "container" example

* 1. <div class="container">
  2. <div class="row">
  3. <div class="col">
  4. Column
  5. </div>
  6. </div>
  7. </div>

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

**Answer :-**

| **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 |
| Gutter | We use .glutter 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 in 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. |
| 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). |

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

**Answer :-**

* 1. “Button Groups” in Bootstrap is a class of name “btn-group” which is used to create a series of buttons in groups (without spaces) vertically or horizontally.
  2. The button group class where each button has its own class of “btn”.

#### Below is the syntax of Button Group

* 1. <div class="btn-group">
  2. <button type="button" class="btn">Click</button>
  3. </div>

1. How can you use Bootstrap to make thumbnails?

**Answer :-**

#### To create thumbnails using Bootstrap

* 1. Add an <a> tag with the class of .thumbnail around an image.
  2. This adds four pixels of padding and a gray border.
  3. On hover, an animated glow outlines the image.

1. In Bootstrap 4, what is flexbox?

**Answer :-**

* 1. Bootstrap 4 is built with flexbox, but not every element's display has been changed to display: flex as this would add many unnecessary overrides and unexpectedly change key browser behaviors.
  2. Most of our components are built with flexbox enabled.
  3. Should you need to add display: flex to an element, do so with .d-flex or one of the responsive variants (e.g., .d-sm-flex).
  4. You'll need this class or display value to allow the use of our extra flexbox utilities for sizing, alignment, spacing, and more.

1. How can we create an alert in Bootstrap?

**Answer :-**

#### Below is the procedure to implement a simple warning alert in Bootstrap.

* 1. Include Bootstrap and jQuery CDN into the tag before all other stylesheets to load CSS.
  2. Add the .alert and the warning alert contextual classes (e.g., .alert-warning).

#### Here a list of contextual classes below :-

* + - primary-alert
    - secondary-alert
    - success-alert
    - danger-alert
    - warning-alert
    - info-alert
    - light-alert
    - dark-alert

#### Syntax of alert

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

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

**Answer :-**

* 1. A Bootstrap card is a .card class with the .card-body class nested inside.
  2. This creates a card with a rounded border inside which you can place text, images, links, and other Bootstrap elements.

#### Below is the syntax of bootstrap card

<div class="card" style="width: 18rem;">

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

<div class="card-body">

<h5 class="card-title">Card title</h5>

<p class="card-text">Some quick example text</p>

<a href="#" class="btn btn-primary">Go somewhere</a>

</div>

</div>