

# Assignment

## Bootstrap Basic & Advanced

### **1. What are the advantages of Bootstrap?**

- The Top 10 advantages of bootstrap are:
  - Easy initiation.
  - Coding is a hurricane task for a person who is unbeknown to web development.
  - Responsiveness
  - Highly customizable
  - Extremely user-centric
  - Top-notch support
  - Cross-browser compatibility
  - JavaScript plugins to your rescue
  - Far-reaching popularity

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

- Containers are the most basic layout element in Bootstrap and are required when using our default grid system. 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.
- Bootstrap comes with three different containers:
  - container, which sets a max-width at each responsive breakpoint
  - container-fluid, which is width: 100% at all breakpoints
  - container-{breakpoint}, which is width: 100% until the specified breakpoint.

### **3. What are the default Bootstrap text settings?**

- Bootstrap 4 Default Settings.
- 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?

- layout and align content. It's built with flexbox and is fully responsive.  
Below is an example and an in-depth look at how the grid comes together.

One of three columns

One of three columns

One of three columns

```
<div class="container">
```

```
<div class="row">
```

```
<div class="col-sm">
```

One of three columns

```
</div>
```

```
<div class="col-sm">
```

One of three columns

```
</div>
```

```
<div class="col-sm">
```

One of three columns

```
</div>
```

```
</div>
```

```
</div>
```

- The above example creates three equal-width columns on small, medium, large, and extra large devices using our predefined grid classes. Those columns are centered in the page with the parent .container.

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



| BASIC 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).  |
| Colour      | It has limited colours.                | Extra colours added with the looks, A card improved colour 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  | We cannot modify utilities in bootstrap 4  |
| Gutter                | We use .gutter with font size in px  | We use .g* with font size 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 is 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 | advanced grid system is made available, also columns don't have relative positions.  |

|                     |  |   |
|---------------------|--|---|
|                     | to align according to the requirement.           |   |
| 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 OffcanvasComponent (that is it is available now). |

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

- “Button Groups” in Bootstrap is a class of name “btn-group” which is used to create 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">
  <button type="button"
  class="btn">Click</button>
</div>
```
- Buttons have a default border-radius on the first and last buttons of the group.
- Adding Styles on Buttons: Bootstrap allows you to add styles to your buttons using the following classes:
  - .btn-default
  - .btn-primary
  - .btn-success
  - .btn-info
  - .btn-warning
  - .btn-danger
  - .btn-link

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

- Bootstrap helps web developers to create thumbnails that are used to show linked images in grids with the pre-defined classes which help to

reduce codes length. Thumbnails are created to provide a quick preview of images with small images.

- Thumbnail Image: A thumbnail is a small image that represents a larger image. Bootstrap has an easy way to do this with thumbnails. Bootstrap's .thumbnail class is used to show linked images in grids (grid system), a thumbnail is created using class .thumbnail within the element . The class .col-sm-\* and .col-md-\* (where \* represent number ), it is used to create grids of the images.

- Step by step guide for the implementation:

Step 1: Include Bootstrap and jQuery CDN into the <head> tag before all other stylesheets to load our CSS.

```
<link rel="stylesheet"
href="http://maxcdn.bootstrapcdn.com/bootst
rap/3.3.6/css/bootstrap.min.css">
```

```
<script
src="https://ajax.googleapis.com/ajax/libs/jqu
ery/1.12.0/jquery.min.js"></script>
```

```
<script
src="http://maxcdn.bootstrapcdn.com/bootstr
ap/3.3.6/js/bootstrap.min.js"></script>
```

Step 2: Add <div> tag in the HTML body with class row. In that <div> create four div sections to create four images.

Step 3: Add "col-sm-6" and "col-md-3" to four div sections which creates webpage responsive.

Step 4: Add <a> tag with class value thumbnail to define the link of the image in the next line.

```
<a href="#" class="thumbnail">
```

## 8. In Bootstrap 4, what is flexbox?

- In 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?

- Bootstrap provides an easy way to create predefined alert messages:
  - ×Success! This alert box indicates a successful or positive action.
  - ×Info! This alert box indicates a neutral informative change or action.
  - ×Warning! This alert box indicates a warning that might need attention.
  - ×Danger! This alert box indicates a dangerous or potentially negative action.
- Alerts are created with the alert class, followed by one of the four contextual classes alert-success, alert-info, alert-warning or alert-danger:

Example

```
<div class="alert alert-success">  
  <strong>Success!</strong> Indicates a  
  successful or positive action.  
</div>  
<div class="alert alert-info">  
  <strong>Info!</strong> Indicates a neutral  
  informative change or action.  
</div>  
<div class="alert alert-warning">  
  <strong>Warning!</strong> Indicates a  
  warning that might need attention.  
</div>  
<div class="alert alert-danger">  
  <strong>Danger!</strong> Indicates a  
  dangerous or potentially negative action.  
</div>
```

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

- A card is a flexible and extensible content container. It includes options for headers and footers, a wide 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 functionality to those components is available as modifier classes for cards.

➤ Example

Cards are built with as little markup and styles as possible, but still manage to deliver a ton of control and customization. Built with flexbox, they offer easy alignment and mix well with other Bootstrap components. They have no margin by default, so use spacing utilities as needed.

Below is an example of a basic card with mixed content and a fixed width. Cards have no fixed width to start, so they'll naturally fill the full width of its parent element. This is easily customized with our various sizing options.

Image cap

Card title

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

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