

Bootstrap Assignment

1.) What are the advantages of Bootstrap?

Ans => One of the main advantages of Bootstrap is that it saves you time and effort. You don't have to write a lot of code from scratch, as Bootstrap offers a variety of predefined elements, such as buttons, forms, cards, navbars, and more.

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

Ans => Containers are a fundamental building block of Bootstrap that contain, pad, and align your content within a given device or viewport.

3.) What are the default Bootstrap text settings?

Ans => Bootstrap uses a default font-size of 16px and its line-height is 1.5.

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

Ans => Bootstrap's grid system uses a series of containers, rows, and columns to layout and align content. It's built with flexbox and is fully responsive, also it has twelve column system, six default responsive tiers, Sass variables and mixings, and dozens of predefined classes.

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

Ans => (1) in bootstrap4 there are all components are made in jquery, while in bootstrap5 all component is made in vanilla js.

(2) there are only 5 responsive tiers in bootstrap4, while 6 in bootstrap5.

(3) jumbotron is removed from bootstrap5.

(4) colours shades added in bootstrap5.

(5) new components are available in bootstrap5. like a off canvas, list group behaviour, accordion etc.

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

Ans => Group a series of buttons together on a single line or stack them in a vertical column.

The class for the basic button group is “btn” in “btn-group”.

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

Ans => we can use bootstrap to make thumbnails by using bootstrap thumbnails or by using card system.

```
<!DOCTYPE html>
<html lang="en">

<head>
  <link rel="stylesheet"
href="http://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css" />
  <script
src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.0/jquery.min.js">
  </script>
  <script
src="http://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js">
  </script>
</head>

<body>
  <h3 style="color: blue">
    <b>Bootstrap Thumbnails with Captions and Button</b>
  </h3>
  <div class="row">
    <div class="col-sm-6 col-md-3">
      <a href="#" class="thumbnail">
        
      </a>
      <div class="caption">
        <h3 style="color: royalblue">Web-Development</h3>
        <p>
          Web development refers to the building,
          creating, maintaining of
          websites.
        </p>
      </div>
    </div>
  </div>
```

```

        <p>
            <a href="#" class="btn btn-primary">
                Learn More
            </a>
        </p>
    </div>
</div>
<div class="col-sm-6 col-md-3">
    <a href="#" class="thumbnail">
        
    </a>
    <div class="caption">
        <h3 style="color: royalblue"> Machine Learning</h3>
        <p>
            Machine Learning is the study to
            learn without being explicitly
            programmed.
        </p>
        <p>
            <a href="#" class="btn btn-primary">
                Learn More
            </a>
        </p>
    </div>
</div>
<div class="col-sm-6 col-md-3">
    <a href="#" class="thumbnail">
        
    </a>
    <div class="caption">
        <h3 style="color: royalblue">Programming</h3>

        <p>
            Competitive Programming enables you
            to code a given problem under
            provided constraints.
        </p>
        <p>
            <a href="#" class="btn btn-primary">
                Learn More
            </a>
        </p>
    </div>
</div>
</div>

```

```

        <div class="col-sm-6 col-md-3">
            <a href="#" class="thumbnail">
                
            </a>
            <div class="caption">
                <h3 style="color: royalblue">Java</h3>
                <p>
                    Java is one of the most popular
                    and widely used programming
                    language.
                </p>
                <p>
                    <a href="#" class="btn btn-primary">
                        Learn More
                    </a>
                </p>
            </div>
        </div>
    </div>
</body>
</html>

```

8.) In Bootstrap 4, what is flexbox?

Ans => 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.

```

<! DOCTYPE html>
<html lang="en">

<head>
    <title> Bootstrap 4 Flex Box Example </title>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/css/bootstrap.min.css">
    <script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js">
</script>

```

```

    <script
src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.16.0/umd/popper.min.js
"> </script>
    <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.5.2/js/bootstrap.min.js">
</script>
</head>
<style>
    h2 {
        position: relative;
        padding: 10;
        margin: 10;
        font-family: "Raleway", sans-serif;
        font-weight: 300;
        font-size: 40px;
        color: white;
        text-align: center;
        -webkit-transition: all 0.4s ease 0s;
        -o-transition: all 0.4s ease 0s;
        transition: all 0.4s ease 0s;
    }

    body {
        background-size: 400% 400%;
        margin: 2rem;
        background: linear-gradient(-45deg, #ee7752, #e73c7e, #23a6d5,
#23d5ab);
        animation: gradient 15s ease infinite;
        height: 100vh;
    }

    @keyframes gradient {
        0% {
            background-position: 0% 50%;
        }

        50% {
            background-position: 100% 50%;
        }

        100% {
            background-position: 0% 50%;
        }
    }
</style>

<body>
    <div class="container mt-3">

```

```

<h2> Bootstrap 4 Flexbox Auto Margins </h2>
<div class="d-flex mb-3 bg-secondary">
  <div class="p-2 mr-auto bg-info"> Flexbox box 1</div>
  <div class="p-2 bg-warning"> Flex box 2 </div>
  <div class="p-2 bg-primary"> Flex box 3 </div>
</div>
<div class="d-flex mb-3 bg-secondary">
  <div class="p-2 bg-info"> Flex box 1 </div>
  <div class="p-2 bg-warning"> Flex box 2 </div>
  <div class="p-2 ml-auto bg-primary"> Flex box 3 </div>
</div>
</div>
</body>

</html>

```

9.) How can one create an alert in Bootstrap?

Ans => To create a bootstrap alert message, use the element with the alert class in bootstrap. A simple alert message is created by using the bootstrap alert class with the type of alert messages you want like alert-primary, alert-secondary, alert-success, alert-danger, alert-warning, alert-info, alert-light, and alert-dark.

```

<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1,
  shrink-to-fit=no">
  <!-- Bootstrap CSS -->
  <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css">
  <title>Bootstrap - Alerts</title>
</head>

<body>
  <h2>To create bootstrap alert message use alert class with alert
type.</h2>
  <div class="alert alert-primary"><b>Primary:</b> This is a primary
alert.</div>
  <div class="alert alert-secondary"><b>Secondary:</b> This is a primary
alert.</div>
  <div class="alert alert-success"><b>Success:</b> This is a danger
alert.</div>

```

```

    <div class="alert alert-danger"><b>Danger:</b> This is a danger
alert.</div>
    <div class="alert alert-warning"><b>Warning:</b> This is a warning
alert.</div>
    <div class="alert alert-info"><b>Info:</b> This is a info alert.</div>
    <div class="alert alert-light"><b>Light:</b> This is a light alert.</div>
    <div class="alert alert-dark"><b>Dark:</b> This is a dark alert.</div>

    <script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"></script>
    <script
src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"></s
cript>
    <script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js"><
/script>
</body>

</html>

```

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

Ans => Bootstrap's cards provide a flexible and extensible content container with multiple variants and options. A card is a flexible and extensible content container. It includes options for headers and footers, a wide variety of content, contextual background colours, and powerful display options.

```

<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <title>Document</title>
    <link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css">
</head>

<body>
    <div class="card" style="width: 18rem;">
        
        <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>
<script src="https://code.jquery.com/jquery-3.5.1.slim.min.js"></script>
<script
src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"></s
cript>
<script
src="https://stackpath.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js"><
/script>
</body>

</html>
```