CHAPTER : 7 BOOTSTRAP-5

Navs:-

If you want to create a simple horizontal menu, add the .nav class to a <ul> element, followed by .nav-item for each <li> and add the .nav-link class to their links

Example:-

```
<div class="container mt-3">
  <h2>Nav</h2>
  <p>Basic horizontal menu:</p>
  <ul class="nav">
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
  </ul>
</div>
```

Disabled Link:-

.disabled class is used to disable a link.

Example:-

```
<div class="container mt-3">
  <h2>Nav</h2>
  <p>Basic horizontal menu:</p>
  <ul class="nav">
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
    <li class="nav-item">
      <a class="nav-link disabled" href="#">Disabled</a>
    </li>
  </ul>
</div>
```

Aligned Nav:-

Add the .justify-content-center class to center the nav, and the .justify-content-end class to right-align the nav.

Example:-

```
<div class="container mt-3">
  <h2>Nav</h2>
  <p>Left-aligned nav (default):</p>
  <ul class="nav">
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
    <li class="nav-item">
      <a class="nav-link disabled" href="#">Disabled</a>
    </li>
  </ul>

  <p class="text-center">Centered nav:</p>
  <ul class="nav justify-content-center">
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
  <li class="nav-item">
   <a class="nav-link disabled" href="#">Disabled</a>
  </li>
 </ul>

 <p class="text-end">Right-aligned nav:</p>
 <ul class="nav justify-content-end">
  <li class="nav-item">
   <a class="nav-link" href="#">Link</a>
  </li>
  <li class="nav-item">
   <a class="nav-link" href="#">Link</a>
  </li>
  <li class="nav-item">
   <a class="nav-link" href="#">Link</a>
  </li>
  <li class="nav-item">
   <a class="nav-link disabled" href="#">Disabled</a>
  </li>
 </ul>
</div>
```

<u>Vertical Nav:-</u>

Add the .flex-column class to create a vertical nav.

Example:-

```
<div class="container mt-3">
 <h2>Vertical Nav</h2>
 <p>Use the .flex-column class to create a vertical nav:</p>
 <ul class="nav flex-column">
  <li class="nav-item">
   <a class="nav-link" href="#">Link</a>
  </li>
  <li class="nav-item">
   <a class="nav-link" href="#">Link</a>
  </li>
  <li class="nav-item">
   <a class="nav-link" href="#">Link</a>
  </li>
  <li class="nav-item">
   <a class="nav-link disabled" href="#">Disabled</a>
```

```
    </li>
  </ul>
</div>
```

Tabs:-

Turn the nav menu into navigation tabs with the .nav-tabs class. Add the .active class to the active/current link.

Example:-

```
<div class="container mt-3">
  <h2>Navigation Tabs</h2>
  <p>Turn the nav menu into navigation tabs with the .nav nav-tabs class. Add the active class to the active/current link.</p>
  <ul class="nav nav-tabs">
    <li class="nav-item">
      <a class="nav-link active" href="#">Active</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
   </ul>
</div>
```

Pills:-

Turn the nav menu into navigation pills with the .nav-pills class.

Example:-

```
<div class="container mt-3">
  <h2>Navigation Pills</h2>
  <p>Turn the nav menu into navigation pills with the .nav nav-pills class:</p>
  <ul class="nav nav-pills">
    <li class="nav-item">
      <a class="nav-link active" href="#">Active</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" href="#">Link</a>
    </li>
    <li class="nav-item">
```

```
      <a class="nav-link" href="#">Link</a>
    </li>
    <li class="nav-item">
      <a class="nav-link disabled" href="#">Disabled</a>
    </li>
  </ul>
</div>
```

Toggleable / Dynamic Tabs:-

To make the tabs toggleable, add the data-toggle="tab" attribute to each link. Then add a .tab-pane class with a unique ID for every tab and wrap them inside a <div> element with class .tab-content.

If you want the tabs to fade in and out when clicking on them, add the .fade class to .tab-pane

Example:-

```
<div class="container mt-3">
  <h2>Toggleable Tabs</h2>
  <br>
  <!-- Nav tabs -->
  <ul class="nav nav-tabs" role="tablist">
    <li class="nav-item">
      <a class="nav-link active" data-bs-toggle="tab" href="#home">Home</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" data-bs-toggle="tab" href="#menu1">Menu 1</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" data-bs-toggle="tab" href="#menu2">Menu 2</a>
    </li>
  </ul>

  <!-- Tab panes -->
  <div class="tab-content">
    <div id="home" class="container tab-pane active"><br>
      <h3>HOME</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.</p>
    </div>
    <div id="menu1" class="container tab-pane fade"><br>
```

```
      <h3>Menu 1</h3>
      <p>Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.</p>
    </div>
    <div id="menu2" class="container tab-pane fade"><br>
      <h3>Menu 2</h3>
      <p>Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam.</p>
    </div>
  </div>
</div>
```

<u>Toggleable Pills:-</u>

The same code applies to pills; only change the data-toggle attribute to data-toggle="pill".

Example:-

```
<div class="container mt-3">
  <h2>Toggleable Pills</h2>
  <br>
  <!-- Nav pills -->
  <ul class="nav nav-pills" role="tablist">
    <li class="nav-item">
      <a class="nav-link active" data-bs-toggle="pill" href="#home">Home</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" data-bs-toggle="pill" href="#menu1">Menu 1</a>
    </li>
    <li class="nav-item">
      <a class="nav-link" data-bs-toggle="pill" href="#menu2">Menu 2</a>
    </li>
  </ul>

  <!-- Tab panes -->
  <div class="tab-content">
    <div id="home" class="container tab-pane active"><br>
      <h3>HOME</h3>
      <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.</p>
    </div>
    <div id="menu1" class="container tab-pane fade"><br>
```

```
      <h3>Menu 1</h3>
      <p>Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea
commodo consequat.</p>
    </div>
    <div id="menu2" class="container tab-pane fade"><br>
      <h3>Menu 2</h3>
      <p>Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque
laudantium, totam rem aperiam.</p>
    </div>
  </div>
</div>
```

NAVBAR:-

A standard navigation bar is created with the .navbar class, followed by a responsive collapsing class: .navbar-expand-xxl|xl|lg|md|sm (stacks the navbar vertically on xxlarge, extra large, large, medium or small screens).To add links inside the navbar, use either an <ul> element (or a <div>) with class="navbar-nav". Then add <li> elements with a .nav-item class followed by an <a> element with a .nav-link class.

Example:-

```
<nav class="navbar navbar-expand-sm bg-light">
  <div class="container-fluid">
    <ul class="navbar-nav">
      <li class="nav-item">
        <a class="nav-link" href="#">Link 1</a>
      </li>
      <li class="nav-item">
        <a class="nav-link" href="#">Link 2</a>
      </li>
      <li class="nav-item">
        <a class="nav-link" href="#">Link 3</a>
      </li>
    </ul>
  </div>
</nav>

<div class="container-fluid mt-3">
  <h3>Basic Navbar Example</h3>
  <p>A navigation bar is a navigation header that is placed at the top of the page.</p>
  <p>The navbar-expand-xxl|xl|lg|md|sm class determines when the navbar should stack
vertically (on xxlarge, extra large, large, medium or small screens).</p>
</div>
```

<u>Brand/Logo/Icon:-</u>

The .navbar-brand class is used to highlight the brand/logo/project name of your page.

Example:-

```
<nav class="navbar navbar-expand-sm bg-dark navbar-dark">
  <div class="container-fluid">
    <a class="navbar-brand" href="#">
      <img src="img_avatar1.png" alt="Logo" style="width:40px;" class="rounded-pill">
    </a>
  </div>
</nav>

<div class="container-fluid mt-3">
  <h3>Brand / Logo</h3>
  <p>When using the .navbar-brand class with images, Bootstrap 5 will automatically style the
image to fit the navbar.</p>
</div>
```

<u>Collapsible Navbar:-</u>

To create a collapsible navigation bar, use a button with class="navbar-toggler", data-bs-toggle="collapse" and data-bs-target="#*thetarget*". Then wrap the navbar content (links, etc) inside a <div> element with class="collapse navbar-collapse", followed by an id that matches the data-bs-target of the button: "*thetarget*".

Example:-

```
<nav class="navbar navbar-expand-sm bg-dark navbar-dark">
  <div class="container-fluid">
    <a class="navbar-brand" href="#">Logo</a>
    <button class="navbar-toggler" type="button" data-bs-toggle="collapse"
data-bs-target="#collapsibleNavbar">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="collapsibleNavbar">
      <ul class="navbar-nav">
        <li class="nav-item">
```

```
          <a class="nav-link" href="#">Link</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="#">Link</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="#">Link</a>
        </li>
      </ul>
    </div>
  </div>
</nav>

<div class="container-fluid mt-3">
  <h3>Collapsible Navbar</h3>
  <p>In this example, the navigation bar is hidden on small screens and replaced by a button in
the top right corner (try to re-size this window).</p>
  <p>Only when the button is clicked, the navigation bar will be displayed.</p>
  <p>Tip: You can also remove the .navbar-expand-md class to ALWAYS hide navbar links and
display the toggler button.</p>
</div>
```

<u>Navbar with dropdown:-</u>

Navbars can also hold dropdown menus.

Example:-

```
<nav class="navbar navbar-expand-sm bg-dark navbar-dark">
  <div class="container-fluid">
    <a class="navbar-brand" href="#">Logo</a>
    <button class="navbar-toggler" type="button" data-bs-toggle="collapse"
data-bs-target="#collapsibleNavbar">
      <span class="navbar-toggler-icon"></span>
    </button>
    <div class="collapse navbar-collapse" id="collapsibleNavbar">
      <ul class="navbar-nav">
        <li class="nav-item">
          <a class="nav-link" href="#">Link</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="#">Link</a>
        </li>
        <li class="nav-item">
          <a class="nav-link" href="#">Link</a>
        </li>
        <li class="nav-item dropdown">
          <a class="nav-link dropdown-toggle" href="#" role="button"
data-bs-toggle="dropdown">Dropdown</a>
          <ul class="dropdown-menu">
            <li><a class="dropdown-item" href="#">Link</a></li>
            <li><a class="dropdown-item" href="#">Another link</a></li>
            <li><a class="dropdown-item" href="#">A third link</a></li>
          </ul>
        </li>
      </ul>
    </div>
  </div>
</nav>

<div class="container-fluid mt-3">
  <h3>Navbar With Dropdown</h3>
  <p>This example adds a dropdown menu in the navbar.</p>
</div>
```

CAROUSEL:-

.carousel - Creates a carousel
.carousel-indicators - Adds indicators for the carousel. These are the little dots at the bottom of each slide (which indicates how many slides there are in the carousel, and which slide the user are currently viewing)
.carousel-inner - Adds slides to the carousel
.carousel-item - Specifies the content of each slide
.carousel-control-prev - Adds a left (previous) button to the carousel, which allows the user to go back between the slides
.carousel-control-next - Adds a right (next) button to the carousel, which allows the user to go forward between the slides
.carousel-control-prev-icon - Used together with .carousel-control-prev to create a "previous" button
.carousel-control-next-icon - Used together with .carousel-control-next to create a "next" button

Example:-

```
<!-- Carousel -->
<div id="demo" class="carousel slide" data-bs-ride="carousel">

  <!-- Indicators/dots -->
  <div class="carousel-indicators">
    <button type="button" data-bs-target="#demo" data-bs-slide-to="0" class="active"></button>
    <button type="button" data-bs-target="#demo" data-bs-slide-to="1"></button>
    <button type="button" data-bs-target="#demo" data-bs-slide-to="2"></button>
  </div>

  <!-- The slideshow/carousel -->
  <div class="carousel-inner">
    <div class="carousel-item active">
      <img src="la.jpg" alt="Los Angeles" class="d-block" style="width:100%">
    </div>
    <div class="carousel-item">
      <img src="chicago.jpg" alt="Chicago" class="d-block" style="width:100%">
    </div>
    <div class="carousel-item">
      <img src="ny.jpg" alt="New York" class="d-block" style="width:100%">
    </div>
  </div>

  <!-- Left and right controls/icons -->
  <button class="carousel-control-prev" type="button" data-bs-target="#demo"
data-bs-slide="prev">
    <span class="carousel-control-prev-icon"></span>
  </button>
  <button class="carousel-control-next" type="button" data-bs-target="#demo"
data-bs-slide="next">
    <span class="carousel-control-next-icon"></span>
  </button>
</div>

<div class="container-fluid mt-3">
  <h3>Carousel Example</h3>
  <p>The following example shows how to create a basic carousel with indicators and
controls.</p>
</div>
```

MODAL:-

The basic modal function creates a single box with the web application's information. The modal function shows a popup box with unique user interactive data if we click the button. The close button helps to disclose the modal function.

The bootstrap 5 modal uses header, text, and footer data using the "modal-header", "modal-body", and the "modal-footer" classes. This data includes in the "modal-content" class. We can use the close button function using the button's data-bs-dismiss = "modal" element.

Example:-

```
<body class="container">
        <div class="container mt-3">
        <button class="btn btn-primary" data-bs-toggle="modal" data-bs-target="#ex"> CLICK
ME
        </button>
        <div class="modal" id="ex">
                <div class="modal-dialog modal-xl modal-dialog-centered">
                        <div class="modal-content">
                                <div class="modal-header">
                                        <h5 class="modal-title">
                                                LJ University
                                        </h5>
                                        <button class="close" data-bs-dismiss="modal">
                                                &times;
                                        </button>
                                </div>
                                <div class="modal-body">
                                        University with difference
                                </div>
                                <div class="modal-footer">
                                        <button class="btn btn-secondary"
data-bs-dismiss="modal">
                                                Close
                                        </button>
                                </div>
                        </div>
                </div>
        </div>
        </div>
```

```
</body>
```

SCROLLSPY:-

Scrollspy is used to automatically update links in a navigation list based on scroll position.
Add data-bs-spy="scroll" to the element that should be used as the scrollable area (often this is the <body> element).

Then add the data-bs-target attribute with a value of the id or the class name of the navigation bar (.navbar). This is to make sure that the navbar is connected with the scrollable area.

Note that scrollable elements must match the ID of the links inside the navbar's list items (<div id="section1"> matches <a href="#section1">).

Example:-

```
<body data-bs-spy="scroll">
    <nav class="navbar navbar-expand-sm bg-dark navbar-dark fixed-top">
        <div class="container-fluid">
            <ul class="navbar-nav">
                <li class="nav-item">
                    <a class="nav-link" href="#section1">
                        Section 1
                    </a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="#section2">
                        Section 2
                    </a>
                </li>
                <li class="nav-item">
                    <a class="nav-link" href="#section3">
                        Section 3
                    </a>
                </li>
            </ul>
        </div>
    </nav>
        <div id="section1" class="container-fluid bg-success text-white"
style="padding:200px">
        <h1> Section-1 </h1>
        <p> Para </p>
        <pre>
        a
        b
        c
        d
        e
        f
        g
        h
        i
        j
        k
        a
        b
        c
        d
        e
        f
        g
        h
        i
        j
        k
        </pre>
        </div>
        <div id="section2" class="container-fluid bg-info text-white"
style="padding:200px">
        <h1> Section-2 </h1>
        <p> Para </p>
        <pre>
        a
        b
        c
        d
        e
        f
        g
        h
        i
        j
        k
        a
        b
        c
        d
        e
        f
        g
        h
        i
        j
        k
        </pre>
        </div>
        <div id="section3" class="container-fluid bg-warning text-white"
style="padding:200px">
        <h1> Section-3 </h1>
        <p> Para </p>
        <pre>
        a
        b
        c
        d
        e
        f
        g
        h
        i
        j
        k
        a
        b
        c
        d
        e
        f
        g
        h
        i
        j
```

```
          k
          </pre>
          </div>
    </body>
```

FLEX:-

The biggest difference between Bootstrap 3 and Bootstrap 4 & 5 is that Bootstrap 5 now uses flexbox, instead of floats, to handle the layout. The Flexible Box Layout Module, makes it easier to design flexible responsive layout structure without using float or positioning.

Example:-

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

  <h2>Flex</h2>

  <p>To create a flexbox container and transform direct children into flex items, use the d-flex class:</p>

  <div class="d-flex p-3 bg-secondary text-white">

    <div class="p-2 bg-info">Flex item 1</div>

    <div class="p-2 bg-warning">Flex item 2</div>

    <div class="p-2 bg-primary">Flex item 3</div>

  </div>

</div>
```

To create an inline flexbox container, use the **d-inline-flex** class.

Example:-

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

  <h2>Inline Flex</h2>

  <p>To create an inline flexbox container, use the d-inline-flex class:</p>
  <div class="d-inline-flex p-3 bg-secondary text-white">
    <div class="p-2 bg-info">Flex item 1</div>
    <div class="p-2 bg-warning">Flex item 2</div>
    <div class="p-2 bg-primary">Flex item 3</div>
  </div>
</div>
```

Horizontal Direction:-

Use .flex-row to display the flex items horizontally (side by side). This is default.

Note: Use .flex-row-reverse to right-align the horizontal direction:

Example:-

```
<div class="container mt-3">
  <h2>Horizontal Direction</h2>
  <p>Use .flex-row to make the flex items appear side by side (default):</p>
  <div class="d-flex flex-row bg-secondary mb-3">
    <div class="p-2 bg-info">Flex item 1</div>
    <div class="p-2 bg-warning">Flex item 2</div>
    <div class="p-2 bg-primary">Flex item 3</div>
  </div>
  <p>Use .flex-row-reverse to right-align the direction:</p>
  <div class="d-flex flex-row-reverse bg-secondary">
    <div class="p-2 bg-info">Flex item 1</div>
    <div class="p-2 bg-warning">Flex item 2</div>
    <div class="p-2 bg-primary">Flex item 3</div>

  </div>

</div>
```

Vertical Direction:-

Use .flex-column to display the flex items vertically (on top of each other), or .flex-column-reverse to reverse the vertical direction.

Example:-

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

  <h2>Vertical Direction</h2>

  <p>Use .flex-column to display the flex items vertically (on top of each other):</p>

  <div class="d-flex flex-column mb-3">

    <div class="p-2 bg-info">Flex item 1</div>

    <div class="p-2 bg-warning">Flex item 2</div>

    <div class="p-2 bg-primary">Flex item 3</div>

  </div>

  <p>Use .flex-column-reverse to reverse the vertical direction:</p>

  <div class="d-flex flex-column-reverse">

    <div class="p-2 bg-info">Flex item 1</div>

    <div class="p-2 bg-warning">Flex item 2</div>

    <div class="p-2 bg-primary">Flex item 3</div>

  </div>

</div>
```

Justify:-

Use the .justify-content-* classes to change the alignment of flex items. Valid classes are start (default), end, center, between or around

Example:-

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

  <h2>Justify content</h2>

  <p>Use the .justify-content-* classes to change the alignment of flex items. Choose from start (default), end, center, between or around:</p>

  <div class="d-flex justify-content-start bg-secondary mb-3">

    <div class="p-2 bg-info">Flex item 1</div>

    <div class="p-2 bg-warning">Flex item 2</div>

    <div class="p-2 bg-primary">Flex item 3</div>

  </div>

  <div class="d-flex justify-content-end bg-secondary mb-3">

    <div class="p-2 bg-info">Flex item 1</div>

    <div class="p-2 bg-warning">Flex item 2</div>

    <div class="p-2 bg-primary">Flex item 3</div>

  </div>

  <div class="d-flex justify-content-center bg-secondary mb-3">

    <div class="p-2 bg-info">Flex item 1</div>

    <div class="p-2 bg-warning">Flex item 2</div>

    <div class="p-2 bg-primary">Flex item 3</div>

  </div>
  <div class="d-flex justify-content-between bg-secondary mb-3">
    <div class="p-2 bg-info">Flex item 1</div>
    <div class="p-2 bg-warning">Flex item 2</div>
    <div class="p-2 bg-primary">Flex item 3</div>
  </div>
  <div class="d-flex justify-content-around bg-secondary mb-3">
    <div class="p-2 bg-info">Flex item 1</div>
    <div class="p-2 bg-warning">Flex item 2</div>
    <div class="p-2 bg-primary">Flex item 3</div>
  </div>
</div>
```

Fill / Equal Widths:-

Use .flex-fill on flex items to force them into equal widths.

Example:-

```
<div class="container mt-3">
  <h2>Fill / Equal Widths</h2>
  <p>Use .flex-fill on flex items to force them into equal widths:</p>
  <div class="d-flex mb-3">
    <div class="p-2 flex-fill bg-info">Flex item 1</div>
    <div class="p-2 flex-fill bg-warning">Flex item 2</div>
    <div class="p-2 flex-fill bg-primary">Flex item 3</div>
  </div>
  <p>Example without .flex-fill:</p>
  <div class="d-flex mb-3 bg-secondary">
    <div class="p-2 bg-info">Flex item 1</div>
    <div class="p-2 bg-warning">Flex item 2</div>
    <div class="p-2 bg-primary">Flex item 3</div>
  </div>
</div>
```

Grow:-

Use .flex-grow-1 on a flex item to take up the rest of the space.

Example:-

```
<div class="container mt-3">
  <h2>Grow</h2>
  <p>Use .flex-grow-1 on a flex item to take up the rest of the space:</p>
  <div class="d-flex mb-3">
    <div class="p-2 bg-info">Flex item 1</div>
    <div class="p-2 bg-warning">Flex item 2</div>
    <div class="p-2 flex-grow-1 bg-primary">Flex item 3</div>
  </div>
  <p>Example without .flex-grow-1:</p>
  <div class="d-flex mb-3 bg-secondary">
    <div class="p-2 bg-info">Flex item 1</div>
    <div class="p-2 bg-warning">Flex item 2</div>
    <div class="p-2 bg-primary">Flex item 3</div>
  </div>
</div>
```

Wrap:-

Control how flex items wrap in a flex container with .flex-nowrap (default), .flex-wrap or .flex-wrap-reverse.

Example:-

```
<div class="container mt-3">
  <h2>Wrap</h2>
  <p><code>.flex-wrap:</code></p>
  <div class="d-flex flex-wrap bg-light">
    <div class="p-2 border">Flex item 1</div>
    <div class="p-2 border">Flex item 2</div>
    <div class="p-2 border">Flex item 3</div>
    <div class="p-2 border">Flex item 4</div>
    <div class="p-2 border">Flex item 5</div>
  </div>
  <br>
  <p><code>.flex-wrap-reverse:</code></p>
  <div class="d-flex flex-wrap-reverse bg-light">
    <div class="p-2 border">Flex item 1</div>
    <div class="p-2 border">Flex item 2</div>
    <div class="p-2 border">Flex item 3</div>

    <div class="p-2 border">Flex item 4</div>

    <div class="p-2 border">Flex item 5</div>

  </div>

  <br>

  <p><code>.flex-nowrap:</code></p>

  <div class="d-flex flex-nowrap bg-light">

    <div class="p-2 border">Flex item 1</div>

    <div class="p-2 border">Flex item 2</div>

    <div class="p-2 border">Flex item 3</div>

    <div class="p-2 border">Flex item 4</div>

    <div class="p-2 border">Flex item 5</div>

 </div>

  <br>

</div>
```

Responsive Flex Classes:-

All flex classes comes with additional responsive classes, which makes it easy to set a specific flex class on a specific screen size.

The * symbol can be replaced with sm, md, lg, xl or xxl, which represents small, medium, large, xlarge and xxlarge screens.

Example:-

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

  <h2>Flex</h2>
```

```
    <p>Resize the browser window to see the effect.</p>

  <div class="d-flex bg-success">d-flex</div>

  <span class="d-sm-flex bg-success">d-sm-flex</span>

  <span class="d-md-flex bg-success">d-md-flex</span>

  <span class="d-lg-flex bg-success">d-lg-flex</span>

  <span class="d-xl-flex bg-success">d-xl-flex</span>

  <span class="d-xxl-flex bg-success">d-xxl-flex</span>

</div>
```

FORMS:-

Stacked form:-

All textual <input> and <textarea> elements with class .form-control get proper form styling. .form-label class to each label element to ensure correct padding. Checkboxes have different markup. They are wrapped around a container element with .form-check, and labels have a class of .form-check-label, while checkboxes and radio buttons use .form-check-input.

Example:-

```
<div class="container mt-3">
  <h2>Stacked form</h2>
  <form action="/action_page.php">
    <div class="mb-3 mt-3">
      <label for="email">Email:</label>
      <input type="email" class="form-control" id="email" placeholder="Enter email" name="email">
    </div>
    <div class="mb-3">
      <label for="pwd">Password:</label>
      <input type="password" class="form-control" id="pwd" placeholder="Enter password" name="pswd">
    </div>
    <div class="form-check mb-3">
      <label class="form-check-label">
    <input class="form-check-input" type="checkbox" name="remember"> Remember me
   </label>
  </div>
  <button type="submit" class="btn btn-primary">Submit</button>
 </form>
</div>
```

Textarea:-
Example:-

```
<div class="container mt-3">
 <h2>Textarea</h2>
 <p>Use the .form-control class to style textareas as well:</p>
 <form action="/action_page.php">
  <div class="mb-3 mt-3">
   <label for="comment">Comments:</label>
   <textarea class="form-control" rows="5" id="comment" name="text"></textarea>
  </div>
  <button type="submit" class="btn btn-primary">Submit</button>
 </form>
</div>
```

Inline Forms:-

If you want your form elements to appear side by side, use .row and .col

Example:-

```
<div class="container mt-3">
 <h2>Inline Forms</h2>
 <p>If you want your form elements to appear side by side, use .row and .col:</p>
 <form>
  <div class="row">
   <div class="col">
    <input type="text" class="form-control" placeholder="Enter email" name="email">
   </div>
   <div class="col">
    <input type="password" class="form-control" placeholder="Enter password"
name="pswd">
   </div>
  </div>
 </form>
</div>
```

Select Menus:-

To style a select menu in Bootstrap 5, add the .form-select class to the <select> element.

Example:-

```
<div class="form-group">
        <label> Select country
        <select class="form-select">
                <optgroup label="Asia">
                        <option> India </option>
                        <option> China </option>
                </optgroup>
                <optgroup label="Asia">
                        <option> India </option>
                        <option> China </option>
                </optgroup>
        </select>
        </div>
```

Checkboxes:-

Checkboxes are used if you want the user to select any number of options from a list of preset options.

To style checkboxes, use a wrapper element with class="form-check" to ensure proper margins for labels and checkboxes.

Then, add the .form-check-label class to label elements, and .form-check-input to style checkboxes properly inside the .form-check container.

Use the checked attribute if you want the checkbox to be checked by default.

Example:-

```
<div class="container mt-3">
  <h2>Checkboxes</h2>
   <form action="/action_page.php">
    <div class="form-check">
      <input type="checkbox" class="form-check-input" id="check1" name="option1"
value="something" checked>
      <label class="form-check-label" for="check1">Option 1</label>
    </div>
    <div class="form-check">
      <input type="checkbox" class="form-check-input" id="check2" name="option2"
value="something">
      <label class="form-check-label" for="check2">Option 2</label>
    </div>
      <button type="submit" class="btn btn-primary mt-3">Submit</button>
  </form>
</div>
```

Radio Button:-

Radio buttons are used if you want to limit the user to just one selection from a list of preset options.

Example:-

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

  <h2>Radio buttons</h2>

  <p>The form below contains three radio buttons. The first option is checked by default, and the
last option is disabled:</p>

  <form action="/action_page.php">

    <div class="form-check">

      <input type="radio" class="form-check-input" id="radio1" name="optradio"
value="option1" checked>

      <label class="form-check-label" for="radio1">Option 1</label>

    </div>

    <div class="form-check">

      <input type="radio" class="form-check-input" id="radio2" name="optradio"
value="option2">

      <label class="form-check-label" for="radio2">Option 2</label>

    </div>
    <div class="form-check">

      <input type="radio" class="form-check-input" disabled>

      <label class="form-check-label">Option 3</label>

    </div>

    <button type="submit" class="btn btn-primary mt-3">Submit</button>

  </form>

</div>
```

<u>Toggle Switches:-</u>

If you want your checkbox to be styled as a toggle switch, use the .form-switch class together with the .form-check container.

Example:-

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

  <h2>Toggle Switch</h2>

    <form action="/action_page.php">

    <div class="form-check form-switch">

      <input class="form-check-input" type="checkbox" id="mySwitch" name="darkmode" value="yes" checked>

      <label class="form-check-label" for="mySwitch">Dark Mode</label>

    </div>

    <button type="submit" class="btn btn-primary mt-3">Submit</button>

  </form>

</div>
```

Form Validation:-

You can use different validation classes to provide valuable feedback to users. Add either .was-validated or .needs-validation to the <form> element, depending on whether you want to provide validation feedback before or after submitting the form. The input fields will have a green (valid) or red (invalid) border to indicate what's missing in the form. You can also add a .valid-feedback or .invalid-feedback message to tell the user explicitly what's missing, or needs to be done before submitting the form.

Example:-

```
<div class="container mt-3">
  <h3>Form Validation</h3>
  <p>Try to submit the form.</p>

  <form action="/action_page.php" class="was-validated">
    <div class="mb-3 mt-3">
      <label for="uname" class="form-label">Username:</label>
      <input type="text" class="form-control" id="uname" placeholder="Enter username"
name="uname" required>
      <div class="valid-feedback">Valid.</div>
      <div class="invalid-feedback">Please fill out this field.</div>
    </div>
    <div class="mb-3">
      <label for="pwd" class="form-label">Password:</label>
      <input type="password" class="form-control" id="pwd" placeholder="Enter password"
name="pswd" required>
      <div class="valid-feedback">Valid.</div>
      <div class="invalid-feedback">Please fill out this field.</div>
    </div>
    <div class="form-check mb-3">
      <input class="form-check-input" type="checkbox" id="myCheck"  name="remember"
required>
      <label class="form-check-label" for="myCheck">I agree on blabla.</label>
      <div class="valid-feedback">Valid.</div>
      <div class="invalid-feedback">Check this checkbox to continue.</div>
    </div>
  <button type="submit" class="btn btn-primary">Submit</button>
  </form>
</div>
```

<u>Grid system:-</u>

Bootstrap's grid system is built with flexbox and allows up to 12 columns across the page.

If you do not want to use all 12 columns individually, you can group the columns together to create wider columns.

The Bootstrap 5 grid system has six classes:

- .col- (extra small devices - screen width less than 576px)
- .col-sm- (small devices - screen width equal to or greater than 576px)
- .col-md- (medium devices - screen width equal to or greater than 768px)
- .col-lg- (large devices - screen width equal to or greater than 992px)
- .col-xl- (xlarge devices - screen width equal to or greater than 1200px)
- .col-xxl- (xxlarge devices - screen width equal to or greater than 1400px)

Example:-

```
<div class="container-fluid mt-3">
  <h1>Basic Grid Structure</h1>
  <p>Resize the browser window to see the effect.</p>
  <p>The first, second and third row will automatically stack on top of each other when the screen is less than 576px wide.</p>

  <!-- Control the column width, and how they should appear on different devices -->
  <div class="row">
    <div class="col-sm-6 bg-primary text-white">50%</div>
    <div class="col-sm-6 bg-dark text-white">50%</div>
  </div>
  <br>

  <div class="row">
    <div class="col-sm-4 bg-primary text-white">33.33%</div>
    <div class="col-sm-4 bg-dark text-white">33.33%</div>
    <div class="col-sm-4 bg-primary text-white">33.33%</div>
  </div>
  <br>

  <!-- Or let Bootstrap automatically handle the layout -->
  <div class="row">
    <div class="col-sm bg-primary text-white">25%</div>
    <div class="col-sm bg-dark text-white">25%</div>
    <div class="col-sm bg-primary text-white">25%</div>
    <div class="col-sm bg-dark text-white">25%</div>
  </div>
  <br>

  <div class="row">
    <div class="col bg-primary text-white">25%</div>
    <div class="col bg-dark text-white">25%</div>
    <div class="col bg-primary text-white">25%</div>
    <div class="col bg-dark text-white">25%</div>
  </div>
</div>
```