

FRONTEND DEVELOPMENT

Part 3: Bootstrap 5

WHAT IS BOOTSTRAP?

- Bootstrap is a free front-end framework for faster and easier web development
- Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many other, as well as optional JavaScript plugins
- Bootstrap also gives you the ability to easily create responsive designs

WHY USE BOOTSTRAP?

- **Easy to use:** Anybody with just basic knowledge of HTML and CSS can start using Bootstrap
- **Responsive features:** Bootstrap's responsive CSS adjusts to phones, tablets, and desktops
- **Mobile-first approach:** In Bootstrap, mobile-first styles are part of the core framework
- **Browser compatibility:** Bootstrap 5 is compatible with all modern browsers (Chrome, Firefox, Edge, Safari, and Opera).

WHERE TO GET BOOTSTRAP 5?

There are two ways to start using Bootstrap 5 on your own web site.

You can:

- Include Bootstrap 5 from a CDN
- Download Bootstrap 5 from getbootstrap.com

BOOTSTRAP 5 CDN

<!-- Latest compiled and minified CSS -->

```
<link href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.3/dist/css/bootstrap.min.css" rel="stylesheet">
```

<!-- Latest compiled JavaScript -->

```
<script src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.3/dist/js/bootstrap.bundle.min.js"></script>
```


DOWNLOADING BOOTSTRAP 5

- If you want to download and host Bootstrap 5 yourself, go to <https://getbootstrap.com/>, and follow the instructions there.

BOOTSTRAP 5 CONTAINERS

Fixed Container

Use the `.container` class to create a responsive, fixed-width container.

Fluid Container

Use the `.container-fluid` class to create a full width container, that will always span the entire width of the screen (width is always 100%)

FORMAT CONTAINER

https://www.w3schools.com/bootstrap5/bootstrap_containers.php

BOOTSTRAP 5 GRID SYSTEM

- 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 grid system is responsive, and the columns will re-arrange automatically depending on the screen size.
- Make sure that the sum adds up to 12 or fewer (it is not required that you use all 12 available columns).

span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1
span 4				span 4				span 4			
span 4				span 8							
span 6						span 6					
span 12											

MORE ABOUT GRID

https://www.w3schools.com/bootstrap5/bootstrap_grid_basic.php

Examples

https://www.w3schools.com/bootstrap5/bootstrap_grid_examples.php

BOOTSTRAP 5 FLEX

```
<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>
```

https://www.w3schools.com/bootstrap5/bootstrap_flex.php

BOOTSTRAP 5 TEXT/TYPOGRAPHY

Bootstrap 5 Default Settings

- Bootstrap 5 uses a default font-size of 1rem (16px by default), and its line-height is 1.5.
- In addition, all <p> elements have margin-top: 0 and margin-bottom: 1rem (16px by default).

https://www.w3schools.com/bootstrap5/bootstrap_typography.php

BOOTSTRAP 5 COLORS

Text Colors

Bootstrap 5 has some contextual classes that can be used to provide "meaning through colors".

The classes for text colors are: `.text-muted`, `.text-primary`, `.text-success`, `.text-info`, `.text-warning`, `.text-danger`, `.text-secondary`, `.text-white`, `.text-dark`, `.text-body` (default body color/often black) and `.text-light`

BACKGROUND COLORS

The classes for background colors are: .bg-primary, .bg-success, .bg-info, .bg-warning, .bg-danger, .bg-secondary, .bg-dark and .bg-light.

BOOTSTRAP 5 TABLES

A basic Bootstrap 5 table has a light padding and horizontal dividers.

The `.table` class adds basic styling to a table

https://www.w3schools.com/bootstrap5/bootstrap_tables.php

BOOTSTRAP 5 IMAGES

https://www.w3schools.com/bootstrap5/bootstrap_images.php



BOOTSTRAP 5 JUMBOTRON

- A jumbotron was introduced in Bootstrap 3 as a big padded box for calling extra attention to some special content or information.
- Jumbotrons are no longer supported in Bootstrap 5. However, you can use a `<div>` element and add special helper classes together with a color class to achieve the same effect:

EXAMPLE

```
<div class="mt-4 p-5 bg-primary text-white rounded">  
  <h1>Jumbotron Example</h1>  
  <p>Lorem ipsum...</p>  
</div>
```

BOOTSTRAP 5 ALERTS

Alerts are created with the `.alert` class, followed by one of the contextual classes `.alert-success`, `.alert-info`, `.alert-warning`, `.alert-danger`, `.alert-primary`, `.alert-secondary`, `.alert-light` or `.alert-dark`

```
<div class="alert alert-success">  
  <strong>Success!</strong> Indicates a successful or positive  
  action.  
</div>
```

BOOTSTRAP 5 BUTTONS

```
<button type="button" class="btn">Basic</button>
<button type="button" class="btn btn-primary">Primary</button>
<button type="button" class="btn btn-secondary">Secondary</button>
<button type="button" class="btn btn-success">Success</button>
<button type="button" class="btn btn-info">Info</button>
<button type="button" class="btn btn-warning">Warning</button>
<button type="button" class="btn btn-danger">Danger</button>
<button type="button" class="btn btn-dark">Dark</button>
<button type="button" class="btn btn-light">Light</button>
<button type="button" class="btn btn-link">Link</button>
```

https://www.w3schools.com/bootstrap5/bootstrap_buttons.php

BOOTSTRAP 5 BUTTON GROUPS

- Bootstrap 5 allows you to group a series of buttons together (on a single line) in a button group

```
<div class="btn-group">  
  <button type="button" class="btn btn-primary">Apple</button>  
  <button type="button" class="btn btn-primary">Samsung</button>  
  <button type="button" class="btn btn-primary">Sony</button>  
</div>
```

BOOTSTRAP 5 BADGES

Badges are used to add additional information to any content

```
<h1>Example heading <span class="badge bg-secondary">New</span></h1>
```

```
<span class="badge bg-primary">Primary</span>
```

```
<span class="badge rounded-pill bg-primary">Primary</span>
```

```
<button type="button" class="btn btn-primary">
```

```
  Messages <span class="badge bg-danger">4</span>
```

```
</button>
```


BOOTSTRAP 5 PROGRESS BARS

A progress bar can be used to show how far a user is in a process.

```
<div class="progress">  
  <div class="progress-bar" style="width:70%"></div>  
</div>
```

https://www.w3schools.com/bootstrap5/bootstrap_progressbars.php

BOOTSTRAP 5 SPINNERS

- To create a spinner/loader, use the .spinner-border class.

```
<div class="spinner-border"></div>
```

https://www.w3schools.com/bootstrap5/bootstrap_spinners.php

BOOTSTRAP 5 PAGINATION

If you have a web site with lots of pages, you may wish to add some sort of pagination to each page.

```
<ul class="pagination">
  <li class="page-item"><a class="page-link" href="#">Previous</a></li>
  <li class="page-item"><a class="page-link" href="#">1</a></li>
  <li class="page-item"><a class="page-link" href="#">2</a></li>
  <li class="page-item"><a class="page-link" href="#">3</a></li>
  <li class="page-item"><a class="page-link" href="#">Next</a></li>
</ul>
```

https://www.w3schools.com/bootstrap5/bootstrap_pagination.php

BOOTSTRAP 5 LIST GROUPS

The most basic list group is an unordered list with list items

To create a basic list group, use an `` element with class `.list-group`, and `` elements with class `.list-group-item`

EXAMPLE

```
<ul class="list-group">
  <li class="list-group-item">First item</li>
  <li class="list-group-item">Second item</li>
  <li class="list-group-item">Third item</li>
</ul>
```

https://www.w3schools.com/bootstrap5/bootstrap_list_groups.php

BOOTSTRAP 5 CARDS

A basic card is created with the .card class, and content inside the card has a .card-body class.

```
<div class="card">  
  <div class="card-body">Basic card</div>  
</div>
```

https://www.w3schools.com/bootstrap5/bootstrap_cards.php

BOOTSTRAP 5 DROPDOWNS

A dropdown menu is a toggleable menu that allows the user to choose one value from a predefined list.

```
<div class="dropdown">
  <button type="button" class="btn btn-primary dropdown-toggle" data-bs-toggle="dropdown">
    Dropdown button
  </button>
  <ul class="dropdown-menu">
    <li><a class="dropdown-item" href="#">Link 1</a></li>
    <li><a class="dropdown-item" href="#">Link 2</a></li>
    <li><a class="dropdown-item" href="#">Link 3</a></li>
  </ul>
</div>
```

https://www.w3schools.com/bootstrap5/bootstrap_dropdowns.php

BOOTSTRAP 5 COLLAPSE

Collapsibles are useful when you want to hide and show large amount of content

```
<button data-bs-toggle="collapse" data-bs-target="#demo">Collapsible</button>
```

```
<div id="demo" class="collapse">  
Lorem ipsum dolor text....  
</div>
```

https://www.w3schools.com/bootstrap5/bootstrap_collapse.php

BOOTSTRAP 5 NAVS

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

```
<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>
```

https://www.w3schools.com/bootstrap5/bootstrap_navs.php

BOOTSTRAP 5 NAVBARS

A navigation bar is a navigation header that is placed at the top of the page.

EXAMPLE

```
<!-- A grey horizontal navbar that becomes vertical on small screens -->
<nav class="navbar navbar-expand-sm bg-light">

  <div class="container-fluid">
    <!-- Links -->
    <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>
```

https://www.w3schools.com/bootstrap5/bootstrap_navbar.php

BOOTSTRAP 5 CAROUSEL

The Carousel is a slideshow for cycling through elements.

https://www.w3schools.com/bootstrap5/bootstrap_carousel.php

BOOTSTRAP 5 MODAL

The Modal component is a dialog box/popup window that is displayed on top of the current page.

https://www.w3schools.com/bootstrap5/bootstrap_modal.php

BOOTSTRAP 5 FORMS

https://www.w3schools.com/bootstrap5/bootstrap_forms.php

Thank
you

