Bootstrap 5 Get Started

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?

Advantages of 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). Note that if you need support for IE11 and down, you must use either BS4 or BS3.

Containers

Bootstrap 5 also requires a containing element to wrap site contents.

There are two container classes to choose from:

- The .container class provides a responsive fixed width container
- 2. The .container-fluid class provides a full width container, spanning the entire width of the viewport



Fixed Container

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

Note that its width (max-width) will change on different screen sizes:

	Extra small <576px	Small ≥576px	Medium ≥768px	O	Extra Large ≥1200px	XXL ≥1400px
max- width	100%	540px	720 px	960px	1140px	1320px

Responsive Containers

You can also use the .container-sm|md|lg|xl classes to determine when the container should be responsive.

The max-width of the container will change on different screen sizes/viewports:

Class	Extra small <576px	Small ≥576px	Medium ≥768px	Large ≥992px	Extra large ≥1200px	XXL ≥1400px
.container- sm	100%	540px	720px	960px	1140px	1320px
.container- md	100%	100%	720px	960px	1140px	1320px
.container-lg	100%	100%	100%	960px	1140px	1320px
.container-xl	100%	100%	100%	100%	1140px	1320px
.container- xxl	100%	100%	100%	100%	100%	1320px

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:

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							spa	n 8			
span 6				span 6							
span 12											

The grid system is responsive, and the columns will rearrange 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).

Grid Classes

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)

Bootstrap 5 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: .bgprimary, .bg-success, .bg-info, .bg-warning, .bgdanger, .bg-secondary, .bg-dark and .bg-light.

Bootstrap 5 Tables

Basic Table

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

The .table class adds basic styling to a table:

Striped Rows

The .table-striped class adds zebra-stripes to a table

Bordered Table

The .table-bordered class adds borders on all sides of the table and cells:

Hover Rows

The .table-hover class adds a hover effect (grey background color) on table rows:

Hover Rows

The .table-hover class adds a hover effect (grey background color) on table rows:

Dark Striped Table

Combine .table-dark and .table-striped to create a dark, striped table:

Hoverable Dark Table

The .table-hover class adds a hover effect (grey background color) on table rows:

Bootstrap 5 Images

Image Shapes

Rounded Corners:



Circle:



Thumbnail:



Rounded Corners

The .rounded class adds rounded corners to an image:

```
<img src="cinqueterre.jpg" class="rounded" alt="Cinqueterre">
```

Circle

The .rounded-circle class shapes the image to a circle:

Aligning Images

Float an image to the left with the .float-start class or to the right with .float-end:





Example

```
<img src="paris.jpg" class="float-start">
<img src="paris.jpg" class="float-end">
```

Centered Image

Center an image by adding the utility classes .mx-auto (margin:auto) and .d-block (display:block) to the image:



Bootstrap 5 Alerts

Alerts

Bootstrap 5 provides an easy way to create predefined alert messages:



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

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

Closing Alerts

Closing Alerts

Success! This alert box could indicate a successful or positive action.

X

To close the alert message, add a .alert-dismissible class to the alert container. Then add class="btn-close" and data-bs-dismiss="alert" to a link or a button element (when you click on this the alert box will disappear).

```
<div class="alert alert-success alert-dismissible">
  <button type="button" class="btn-close" data-bs-
dismiss="alert"></button>
  <strong>Success!</strong> This alert box could
indicate a successful or positive action.
  </div>
```

Animated Alerts

The .fade and .show classes adds a fading effect when closing the alert message:

<div class="alert alert-danger alert-dismissible fade show">

Bootstrap 5 Buttons

Button Styles

Bootstrap 5 provides different styles of 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>
```

The button classes can be used on <a>, <button>, or <input> elements:

Button Outline

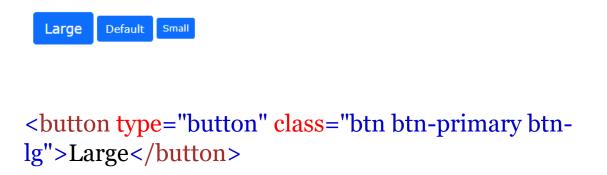
Bootstrap 5 also provides eight outline/bordered buttons.

Move the mouse over them to see an additional "hover" effect:



Button Sizes

Use the .btn-lg class for large buttons or .btn-sm class for small buttons:



Block Level Buttons

To create a block level button that spans the entire width of the parent element, use the .d-grid "helper" class on the parent element:

```
<div class="d-grid">
  <button type="button" class="btn btn-primary btn-
block">Full-Width Button</button>
  </div>
```

If you have many block-level buttons, you can control the space between them with the .gap-* class:

```
Full-Width Button

Full-Width Button

Full-Width Button
```

```
<div class="d-grid gap-3">
  <button type="button" class="btn btn-primary btn-
block">Full-Width Button</button>
  <button type="button" class="btn btn-primary btn-
block">Full-Width Button</button>
  <button type="button" class="btn btn-primary btn-
block">Full-Width Button</button>
  </div>
```

Active/Disabled Buttons

A button can be set to an active (appear pressed) or a disabled (unclickable) state:

```
Active Primary Disabled Primary
```

The class .active makes a button appear pressed, and the disabled attribute makes a button unclickable.

Note that <a> elements do not support the disabled attribute and must therefore use the .disabled class to make it visually appear disabled.

```
<br/>
<br/>
<br/>
<br/>
<br/>
active">Active Primary</button><br/>
<button type="button" class="btn btn-primary" disabled>Disabled Primary</br/>
/button><a href="#" class="btn btn-primary disabled">Disabled Link</a>
```

Spinner Buttons

You can also add "spinners" to a button, which you will learn more about in our <u>BS5 Spinners Tutorial</u>:

```
</button>
<button class="btn btn-primary">
        <span class="spinner-border spinner-border-sm"></span>
        Loading..
        </button>
```

Bootstrap 5 Button Groups Button Groups

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

Use a <div> element with class .btn-group to create 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>
```

Tip: Instead of applying button sizes to every button in a group, use class .btn-group-lg for a large button group or the .btn-group-sm for a small button group:

Vertical Button Groups

Use the class .btn-group-vertical to create a vertical button group:

Button Dropdown Menus

Bootstrap 5 Progress Bars

Basic Progress Bar

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

To create a default progress bar, add a .progress class to a container element and add the .progress-bar class to its child element. Use the CSS width property to set the width of the progress bar:

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

Progress Bar Height

```
<div class="progress" style="height:20px">
  <div class="progress-bar" style="width:40%;"></div>
  </div>
```

Progress Bar Labels

Add text inside the progress bar to show the visible percentage:

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

Colored Progress Bars

Striped Progress Bars

```
<div class="progress">
  <div class="progress-bar progress-bar-
striped" style="width:40%"></div>
  </div>
```

Animated Progress Bar

Add the .progress-bar-animated class to animate the progress bar

```
<div class="progress-bar progress-bar-striped progress-bar-animated" style="width:40%"></div>
```

Multiple Progress Bars

Free Space

Progress bars can also be stacked:

<div class="progress">
 <div class="progress-bar bgsuccess" style="width:40%">
 Free Space
 </div>
 <div class="progress-bar bgwarning" style="width:10%">
 Warning
 </div>
 <div class="progress-bar bgdanger" style="width:20%">
 Danger
 </div>
 </div>
</div>

Bootstrap 5 Spinners

Spinners

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

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

Colored Spinners

Use any text color utilites to add a color to the spinner:



<div class="spinner-border text-danger"></div>

Growing Spinners

Use the .spinner-grow class if you want the spinner/loader to grow instead of "spin":

<div class="spinner-grow text-danger"></div>

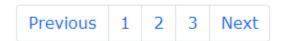
Spinner Size

Use .spinner-border-sm or .spinner-grow-sm to create a smaller spinner:

Bootstrap 5 Pagination

Basic Pagination

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



To create a basic pagination, add the .pagination class to an
 element. Then add the .page-item to each element and a .page-link class to each link inside :

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

Active State

The .active class is used to "highlight" the current page:

```
class="page-item"><a class="page-link" href="#">Next</a>
```

Disabled State

The .disabled class is used for un-clickable links:

```
class="page-item disabled"><a class="page-link" href="#">Previous</a>
```

Pagination Sizing

Add class .pagination-lg for larger blocks or .paginationsm for smaller blocks:

```
<a class="page-link" href="#">Previous</a>
```

Breadcrumbs

Another form for pagination, is breadcrumbs:

The .breadcrumb and .breadcrumb-item classes indicates the current page's location within a navigational hierarchy:

```
    cli class="breadcrumb-
    item"><a href="#">Photos</a>
    <a href="#">Summer</a>
    2017</a>
    <a href="#">Italy</a>
    Rome
```

Basic List Groups

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

```
First item

Second item

Third item
```

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

```
    First item
    Second item
    Third item

    /ul>
```

Active State

Use the .active class to highlight the current item:

List Group With Linked Items

To create a list group with linked items, use <div> instead of and <a> instead of . Optionally, add the .list-group-item-action class if you want a grey background color on hover:

Disabled Item

The .disabled class adds a lighter text color to the disabled item. And when used on links, it will remove the hover effect:

Flush / Remove Borders

Use the .list-group-flush class to remove some borders and rounded corners:

Numbered List Groups

Use the .list-group-numbered class to create list items with numbers in front of them:

```
    class="list-group list-group-numbered">
```

Bootstrap 5 Dropdowns

Basic Dropdown

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>

    <a class="dropdown-item" href="#">Link
1</a>
  <a class="dropdown-item" href="#">Link
2</a>
  <a class="dropdown-item" href="#">Link
2</a>
  <a class="dropdown-item" href="#">Link
3</a>
  </di>
  </di>
  </di>
  </di>
```

The .dropdown class indicates a dropdown menu.

To open the dropdown menu, use a button or a link with a class of .dropdown-toggle and the data-bs-toggle="dropdown" attribute.

Basic Collapsible

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

```
Click Me

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

<br/>
<b
```

Accordion

```
Collapsible Group Item #1

Collapsible Group Item #2

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat.

Collapsible Group Item #3
```

Note: Use the data-bs-parent attribute to make sure that all collapsible elements under the specified parent will be closed when one of the collapsible item is shown.

```
<div id="accordion">
 <div class="card">
  <div class="card-header">
   <a class="btn" data-bs-
toggle="collapse" href="#collapseOne">
    Collapsible Group Item #1
   </a>
  </div>
  <div id="collapseOne" class="collapse show" data-bs-
parent="#accordion">
   <div class="card-body">
    Lorem ipsum..
   </div>
  </div>
 </div>
 <div class="card">
  <div class="card-header">
```

```
<a class="collapsed btn" data-bs-
toggle="collapse" href="#collapseTwo">
    Collapsible Group Item #2
   </a>
  </div>
  <div id="collapseTwo" class="collapse" data-bs-
parent="#accordion">
   <div class="card-body">
    Lorem ipsum..
   </div>
  </div>
 </div>
 <div class="card">
  <div class="card-header">
   <a class="collapsed btn" data-bs-
toggle="collapse" href="#collapseThree">
    Collapsible Group Item #3
   </a>
  </div>
  <div id="collapseThree" class="collapse" data-bs-
parent="#accordion">
   <div class="card-body">
    Lorem ipsum..
   </div>
  </div>
 </div>
</div>
```

Bootstrap 5 Navs

Nav Menus

```
Link Link Disabled
```

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

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

Aligned Nav

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

Vertical Nav

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

Tabs

Turn the nav menu into navigation tabs with the .navtabs class. Add the .active class to the active/current link. If you want the tabs to be togglable, see the last example on this page.

```
    class="nav-item">
    <a class="nav-link active" href="#">Active</a>
    class="nav-item">
    <a class="nav-link disabled" href="#">Disabled</a>
```

Pills

Turn the nav menu into navigation pills with the .navpills class. If you want the pills to be togglable, see the last example on this page.

Tabs with Dropdown

Bootstrap 5 Navbars

Navigation Bars

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

Basic Navbar

With Bootstrap, a navigation bar can extend or collapse, depending on the screen size.

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
 element (or a <div>) with class="navbar-nav".
 Then add elements with a .nav-item class followed by an <a> element with a .nav-link class:

```
<!-- A grey horizontal navbar that becomes vertical on small screens -->
```

<nav class="navbar navbar-expand-sm bg-light">

```
<a class="nav-link" href="#">Link 2</a>

cli class="nav-item">
<a class="nav-link" href="#">Link 3</a>

</div>
</nav>
```

Vertical Navbar

Remove the .navbar-expand-* class to create a navigation bar that will always be vertical:

Centered Navbar

Add the .justify-content-center class to center the navigation bar:

Colored Navbar

Brand / Logo

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

```
<nav class="navbar navbar-expand-sm bg-dark navbar-dark">
    <div class="container-fluid">
        <a class="navbar-brand" href="#">Logo</a>
      </div>
    </nav>
```

Bootstrap 5 Slideshow Slideshow

```
<!-- Carousel -->
<div id="demo" class="carousel slide" data-bs-
ride="carousel">
  <!-- Indicators/dots -->
  <div class="carousel-indicators">
    <button type="button" data-bs-target="#demo"</pre>
data-bs-slide-to="o" class="active"></button>
    <button type="button" data-bs-target="#demo"
data-bs-slide-to="1"></button>
    <button type="button" data-bs-target="#demo"</pre>
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 w-100">
    </div>
    <div class="carousel-item">
```

```
<img src="chicago.jpg" alt="Chicago" class="d-
block w-100">
    </div>
    <div class="carousel-item">
      <img src="ny.jpg" alt="New York" class="d-block</pre>
w-100">
    </div>
  </div>
  <!-- Left and right controls/icons -->
  <button class="carousel-control-prev" type="button"</pre>
data-bs-target="#demo" data-bs-slide="prev">
    <span class="carousel-control-prev-icon"></span>
  </button>
  <button class="carousel-control-next" type="button"</pre>
data-bs-target="#demo" data-bs-slide="next">
    <span class="carousel-control-next-icon"></span>
  </button>
</div>
```

Example explained

A description of what each class from the example above do:

Class	Description
.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- Used together with .carousel-control-next to control-next- create a "next" button

.slide

Adds a CSS transition and animation effect when sliding from one item to the next. Remove this class if you do not want this effect

Add Captions to Slides

Add elements inside <div class="carousel-caption"> within each <div class="carousel-item"> to create a caption for each slide:

```
<div class="carousel-item">
  <img src="la.jpg" alt="Los Angeles">
    <div class="carousel-caption">
      <h3>Los Angeles</h3>
      We had such a great time in LA!
      </div>
</div>
```

Bootstrap 5 Modal

Modals

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

```
<!-- Button to Open the Modal -->
<button type="button" class="btn btn-primary" data-bs-
toggle="modal" data-bs-target="#myModal">
  Open modal
</button>
<!-- The Modal -->
<div class="modal" id="myModal">
  <div class="modal-dialog">
    <div class="modal-content">
      <!-- Modal Header -->
      <div class="modal-header">
        <h4 class="modal-title">Modal Heading</h4>
        <button type="button" class="btn-close" data-</pre>
bs-dismiss="modal"></button>
      </div>
      <!-- Modal body -->
      <div class="modal-body">
        Modal body..
      </div>
      <!-- Modal footer -->
      <div class="modal-footer">
        <button type="button" class="btn btn-danger"</pre>
data-bs-dismiss="modal">Close</button>
      </div>
    </div>
  </div>
 /div>
```

Add animation

Use the .fade class to add a fading effect when opening and closing the modal:

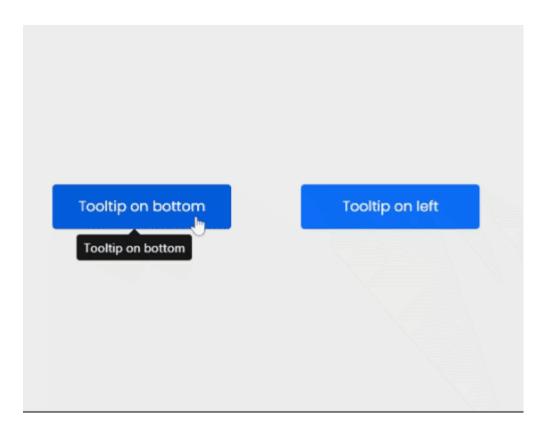
```
<!-- Fading modal -->
<div class="modal fade"></div>
<!-- Modal without animation -->
<div class="modal"></div>
```

Scrolling Modal

When you have a lot of content inside the modal, a scrollbar is added to the page. See the examples below to understand it:

```
<div class="modal-dialog">
```

Bootstrap 5 Tooltip



How To Create a Tooltip

To create a tooltip, add the data-bs-toggle="tooltip" attribute to an element.

Use the title attribute to specify the text that should be displayed inside the tooltip:

Note: Tooltips must be initialized with JavaScript to work.

```
<button type="button" class="btn btn-primary" data-bs-
toggle="tooltip" title="Hooray!">Hover over
me!</button>
```

Bootstrap 5 Scrollspy

Scrollspy

Scrollspy is used to automatically update links in a navigation list based on scroll position.

```
Section 3

Section 3

Try to scroll this section and look at the navigation bar while scrolling! Try to scroll this section and look at the navigation bar while scrolling!

Try to scroll this section and look at the navigation bar while scrolling! Try to scroll this section and look at the navigation bar while scrolling!
```

How To Create a Scrollspy

The following example shows how to create a scrollspy:

```
Try to scroll this page and look at the navigation bar while scrolling!
</div>
</body>
</body>
```

Example Explained

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.

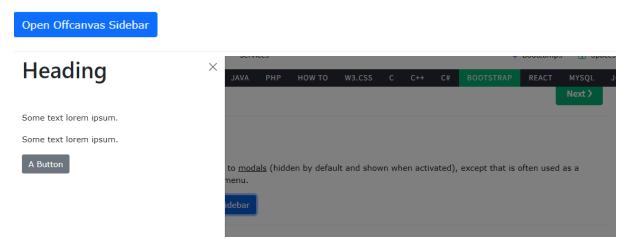
Note that scrollable elements must match the ID of the links inside the navbar's list items (<div id="section1"> matches).

The optional data-bs-offset attribute specifies the number of pixels to offset from top when calculating the position of scroll

Bootstrap 5 Offcanvas

Offcanvas

Offcanvas is similar to <u>modals</u> (hidden by default and shown when activated), except that is often used as a sidebar navigation menu.



How To Create an Offcanyas Sidebar

The following example shows how to create an offcanvas sidebar:

Example Explained

The .offcanvas class creates the offcanvas sidebar.

The .offcanvas-start class positions the offcanvas, and makes it 400px wide. See examples below for more positioning classes.

The .offcanvas-title class ensures proper margins and line-height.

Then, add your content inside the .offcanvas-body class.

To open the offcanvas sidebar, you must use a <button> or an <a> element that points to the id of the .offcanvas container (#demo in our example).

To open the offcanvas sidebar with an <a> element, you can point to #demo with the href attribute, instead of data-bs-target attribute.

Offcanvas Position

Use the .offcanvas-start|end|top|bottom to position the offcanvas to the left, right, top or bottom:

```
<div class="offcanvas offcanvas-end" id="demo">
```

Bootstrap 5 Utilities

Borders

Use the **border** classes to add or remove borders from an element:

```
<span class="border"></span>
<span class="border-top"></span>
<span class="border-end"></span>
<span class="border-bottom"></span>
<span class="border-start"></span>
```

Border Width

Use .border-1 to .border-5 to change the width of the border:

Border Radius

Add rounded corners to an element with the rounded classes:

```
<span class="rounded-circle"></span>
```

Float and Clearfix

Float an element to the right with the .float-end class or to the left with .float-start, and clear floats with the .clearfix class:

```
<div class="clearfix">
  <span class="float-start">Float left</span>
  <span class="float-end">Float right</span>
</div>
```

Spacing

Where *property* is one of:

- m sets margin
- p sets padding

Where *sides* is one of:

- t sets margin-top or padding-top
- b sets margin-bottom or padding-bottom
- s sets margin-left or padding-left
- e sets margin-right or padding-right
- x sets both padding-left and paddingright or margin-left and margin-right
- y sets both padding-top and paddingbottom or margin-top and margin-bottom
- blank sets a margin or padding on all 4 sides of the element

Vertical Align

Use the align- classes to change the alignment of elements (only works on inline, inline-block, inline-table and table cell elements):

```
<span class="align-baseline">baseline</span>
<span class="align-top">top</span>
<span class="align-middle">middle</span>
<span class="align-bottom">bottom</span>
<span class="align-text-top">text-top</span>
<span class="align-text-bottom">text-bottom</span>
```

Bootstrap 5 Flex

Flexbox

The biggest difference between Bootstrap 3 and Bootstrap 4 & 5 is that Bootstrap 5 now uses flexbox, instead of floats, to handle the layout.

To create a flexbox container and to transform direct children into flex items, use the d-flex class:

```
Example

Flex item 1 Flex item 2 Flex item 3
```

```
<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>
```

To create an inline flexbox container, use the d-inlineflex class:

Horizontal Direction

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

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

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

Justify Content

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

```
Flex item 1 Flex item 2 Flex item 3

Flex item 1 Flex item 2 Flex item 3

Flex item 1 Flex item 2 Flex item 3

Flex item 1 Flex item 2 Flex item 3

Flex item 1 Flex item 2 Flex item 3

Flex item 1 Flex item 2 Flex item 3
```

ΑD

```
<div class="d-flex justify-content-start">...</div>
<div class="d-flex justify-content-end">...</div>
<div class="d-flex justify-content-center">...</div>
<div class="d-flex justify-content-between">...</div>
<div class="d-flex justify-content-around">...</div>
```

Fill / Equal Widths

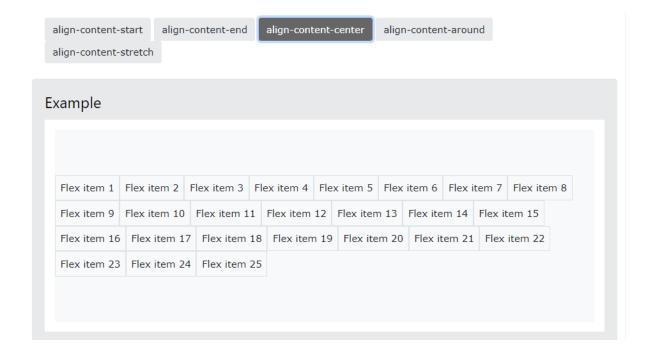
Use .flex-fill on flex items to force them into equal widths:



Align Content

Control the vertical alignment of **gathered** flex items with the .align-content-* classes. Valid classes are .align-content-start (default), .align-content-end, .align-content-end, .align-content-around and .align-content-stretch.

Note: These classes have no effect on single rows of flex items.



```
<div class="d-flex flex-wrap align-content-
start">...</div>

<div class="d-flex flex-wrap align-content-
end">...</div>

<div class="d-flex flex-wrap align-content-
center">...</div>

<div class="d-flex flex-wrap align-content-
around">...</div>

<div class="d-flex flex-wrap align-content-
around">...</div>
</div</pre>

<div class="d-flex flex-wrap align-content-
stretch">...</div>
```

Align Items

Control the vertical alignment of **single rows** of flex items with the .align-items-* classes. Valid classes are .align-items-start, .align-items-end, .align-items-center, .align-items-baseline, and .align-items-stretch (default).

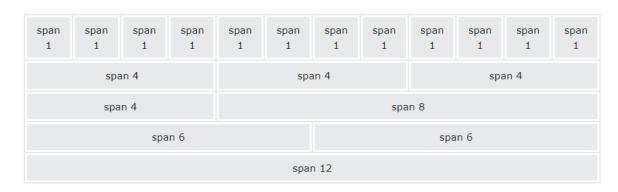
Bootstrap 5 Forms

Bootstrap 5 Grid System

The 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:



Grid Classes

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)

List of components:

- 1. <u>Jumbotron</u>: It simply put extra attention to particular content or information by making it larger and more eye-catching.
- 2. <u>Alerts</u>: It is a popup with a predefined message that appears after a particular action.

- 3. **Buttons**: It is customized buttons that are used to perform an action in the form, dialogue box, etc. They are in multiple states, sizes and have predefined styles.
- 4. **Button group**: It is a group of buttons aligned in a single line and they can be arranged both vertically as well as horizontally.
- 5. **<u>Badge</u>**: It Is a labeling component that is used to add additional information.
- 6. **Progress Bar**: It is used to show the progress of a particular operation with a custom progress bar. They have text labels, stacked bars, and animated backgrounds.
- 7. **Spinner**: The spinner displays the loading state of websites or projects. They are built with HTML, CSS and don't require any JavaScript.
- 8. <u>Scrollspy</u>: It keeps updating the navigation bar to the currently active link based on the scroll position in the viewport.
- 9. <u>List group</u>: It is used to display an unordered series of content in a proper way.
- 10. <u>Card</u>: It provides a customizable, extensible, and flexible content container.
- 11. <u>Dropdown</u>: It is used to drop the menu in the format of a list of links, they are contextual and toggleable overlays.
- 12. <u>Navs</u>: It is used to create a basic and simple navigation menu with a .nav base class.
- 13. **Navbar**: The navigation bar is the headers at the top of a website or webpage.
- 14. **Forms**: Forms are used to take multiple inputs at once from the user. Bootstrap has two layouts available stacked and inline.

- 15. <u>Input groups</u>: They have extended form controls by adding a button, button group or text on either side of inputs.
- 16. **Breadcrumb**: It provides the location of the current page in a navigational hierarchy and also adds separators through CSS.
- 17. <u>Carousel</u>: It is a slide show of image or text content built with CSS 3D and JavaScript.
- 18. <u>Toast</u>: It displays a message for a small amount of time, a few seconds. They are alert messages designed to imitate push notifications popular in desktop and mobile systems.
- 19. <u>Tooltip</u>: It provides small information about the element/link when the mouse hovers over the element.
- 20. **Popovers**: It displays extra information about the element/link when clicked on it.
- 21. <u>Collapse</u>: It is a JavaScript plugin that is used to show or hide the content.
- 22. <u>Modal</u>: It is a small popup window positioned over the actual window.
- 23. <u>Pagination</u>: It is used to easily navigate between different pages, a large block of connected links is used for making them accessible.
- 24. <u>Media Object</u>: The Media object is used for repetitive and complex components like tweets or blogs. The images or videos are placed/aligned to the left or the right of the content.