

Bootstrap

- Bootstrap is the most popular and powerful front-end (HTML, CSS, and JavaScript) framework
- For faster and easier responsive web development.

Bootstrap

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

```
<link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/css/bootstrap.min.css">
```

<!-- jQuery library -->

```
<script
src="https://cdn.jsdelivr.net/npm/jquery@3.6.0/dist/jquery.slim.min.js"></script>
```

<!-- Popper JS -->

```
<script
src="https://cdn.jsdelivr.net/npm/popper.js@1.16.1/dist/umd/popper.min.js"></script>
```

<!-- Latest compiled JavaScript -->

```
<script
src="https://cdn.jsdelivr.net/npm/bootstrap@4.6.1/dist/js/bootstrap.bundle.min.js"
></script>
```



Starter template

- Be sure to have your pages set up with the latest design and development standards.
- That means using an HTML5 doctype and including a viewport meta tag for proper responsive behaviors.

Advantages

- **Save lots of time** — You can save lots of time and efforts using the Bootstrap predefined design templates and classes and concentrate on other development work.
- **Responsive features** — Using Bootstrap you can easily create responsive websites that appear more appropriately on different devices and screen resolutions without any change in markup.



Advantages(contd.)

- **Consistent design** — All Bootstrap components share the same design templates and styles through a central library, so the design and layout of your web pages will be consistent.
- **Easy to use** — Bootstrap is very easy to use. Anybody with the basic working knowledge of HTML, CSS and JavaScript can start development with Bootstrap.



Advantages(contd.)

- **Compatible with browsers** — Bootstrap is created with modern web browsers in mind and it is compatible with all modern browsers such as Chrome, Firefox, Safari, Internet Explorer, etc.
- **Open Source** — And the best part is, it is completely free to download and use.



Grid system

- Bootstrap grid system provides the quick and convenient way to create responsive website layouts.
- The Bootstrap grid system that appropriately scales up to 12 columns as the device or viewport size increases.
- If you do not want to use all 12 columns individually, you can group the columns together to create wider columns:



Grid classes

- xs (for phones - screens less than 768px wide)
- sm (for tablets - screens equal to or greater than 768px wide)
- md (for small laptops or desktops - screens equal to or greater than 992px wide)
- lg (for larger desktops - screens equal to or greater than 1200px wide)



Typography

- The styling and formatting of text content like headings, paragraphs, blockquotes, etc. with Bootstrap.
 - Headings
 - Display headings
 - Text coloring, formatting, transformation
 - Blockquotes

Bootstrap Buttons

- **Styles** - Different classes are available in Bootstrap for styling the buttons as well as to indicate the different states or semantic.
- **Outline** - You can also create outline buttons by replacing the button modifier classes.
- **Size** - Bootstrap gives you option further to scaling a button up or down. You can make buttons larger or smaller through adding an extra class `.btn-lg` or `.btn-sm`

Bootstrap Buttons

- **Block level buttons** - You can also create block level buttons (buttons that covers the full width of the parent elements) by adding an extra class `.btn-block` to the buttons,
- **Disabled buttons** - Buttons created through `<button>` or `<input>` or `<a>` tag can be disabled by adding the `disabled` attribute to the respective element

Bootstrap Buttons

- **Active buttons** - You can also apply the class `.active` to force the buttons look like active (i.e. pressed). Usually you don't need to add this class to the buttons, as their active state is automatically styled by the Bootstrap using CSS `:active` pseudo-class
- **Spinner buttons** - With Bootstrap you can easily include spinner icon in a button to indicate the loading state in your application.

Dropdowns

- The Bootstrap dropdown has basically two components — the dropdown trigger element which can be a hyperlink or button, and the dropdown menu itself.
- The `.dropdown` class specifies a dropdown menu.
- The `.dropdown-toggle` class defines the trigger element, whereas the attribute `data-toggle="dropdown"` is required on the trigger element to toggle the dropdown menu.

Dropdowns

- The `<div>` element with the class `.dropdown-menu` is actually building the dropdown menu that typically contains the related links or actions.
 - Simple dropdown
 - Button dropdown
 - Split button dropdown
 - Dropdown inside button groups
 - Dropup, dropleft, dropright menus
 - Dropdown divider
 - Dropdown disable and active items

Bootstrap lists

- **Unstyled Ordered and Unordered Lists** - remove the default styling from the list items. You can do this by simply applying the class `.list-unstyled` to the respective `` or `` elements.
- **Placing Ordered and Unordered List Items Inline** - If you want to create a horizontal menu using ordered or unordered list you need to place all list items in a single line i.e. side by side. You can do this by simply applying the class `.list-inline` to the respective `` or ``, and the class `.list-inline-item` to the `` elements.

Bootstrap lists

- **List groups(vertical/horizontal)** - To create a basic list group, use an `` element with class `.list-group`, and `` elements with class `.list-group-item`:
- **List group using `<a>` tag** - Use `<div>` instead of `` and `<a>` instead of ``
- **Disabled/active items**
- **Contextual classes**
-

Bootstrap lists

- **Remove borders** - Use the `.list-group-flush` class to remove some borders

Bootstrap tables

- **Simple table** - The `.table` class adds basic styling to a table.
- **Bordered table** - Add an extra Bootstrap's class `.table-bordered` to the `.table` base class.
- **Borderless table** - Use the class `.table-borderless` on the `.table` element
- **Striped rows** - Creating table with alternate background like zebra-stripes by simply adding the Bootstrap's class `.table-striped` to the `.table` base class.

Bootstrap tables

- **Dark table** - Adding an extra class `.table-dark` to the table.
- **Hoverable table** - Adding the Bootstrap's class `.table-hover` to the `.table` base class.
- **Compact table** - Adding an extra class `.table-sm` to the `.table` base class.
- **Table head colors** - Using the modifier classes `.thead-light` or `.thead-dark` on the `<thead>` element.

Bootstrap tables

- **Contextual classes** - There are some contextual classes to emphasize the row or individual cells data like success, warning, danger, etc. through coloring its background.
- **Responsive table** - Place the table inside a `<div>` element and apply the class `.table-responsive` on it. It adds a scrollbar to the table when needed.
 - `.table-responsive-sm` < 576px
 - `.table-responsive-md` < 768px
 - `.table-responsive-lg` < 992px
 - `.table-responsive-xl` < 1200px

Bootstrap images

- `.rounded` class adds rounded corners
- `.rounded-circle` class shapes the image to a circle
- `.img-thumbnail` class shapes the image to a thumbnail
- `.img-fluid` class is used for responsive images

Bootstrap image gallery

- Bootstrap's grid system in conjunction with the `.thumbnail` class to create an image gallery.
- `.img-rounded` class adds rounded corners
- `.img-circle` class shapes the image to a circle
- `.img-thumbnail` class shapes the image to a thumbnail