



Bootstrap



- Bootstrap is the most popular HTML, CSS and JS framework for building responsive , mobile first websites.
- Bootstrap includes HTML and CSS based design templates for typography , forms , buttons , tables, navigations , modals , forms and many other
- Most of the Bootstrap elements are responsive by default

Bootstrap4 is the newest version of Bootstrap with new components, faster stylesheets, and more responsiveness.

Advantages of bootstrap

- Easy to use
- Responsive features
- Mobile-first approach
- Browser compatibility

- There are two ways you can use Bootstrap on your web site
 - Using CDN
 - Downloading Bootstrap
- It is always advisable to use CDN , because most of the users have already downloaded bootstrap locally on to their browsers when they browse other websites.
- It is advisable to use the starter template given by Bootstrap to quick start
- You can download Bootstrap from
<https://getbootstrap.com/>

- Containers are the most basic layout element in Bootstrap
- Containers are required when using default grid system.

There are two types of containers

- Container
 - Max-width changes at each break point
- Container-fluid
 - Full width container, spanning the entire width of the viewport

- Navbar is Bootstrap's powerful, responsive navigation header.
- It includes the support for branding , navigation , support for collapse plugin
- Navbars require a wrapping `.navbar` with `.Navbar-expand{-sm/-md/-lg/-xl}` for responsive collapsing and color schemes

- The carousel is a slideshow for cycling through a series of content, built with CSS 3D transforms and a bit of JavaScript.
- It works with a series of images, text, or custom markup. It also includes support for previous/next controls and indicators.
- Carousels don't automatically normalize slide dimensions.
- As such, you may need to use additional utilities or custom styles to appropriately size content.
- The `.active` class needs to be added to one of those slides otherwise the carousel will not be visible.

Jumbotron component

Lightweight, flexible component for showcasing hero unit style content.

```
<div class="jumbotron">
  <h1 class="display-4">Hello, world!</h1>
  <p class="lead">This is a simple hero unit, a simple jumbotron-style component for calling extra a
  <hr class="my-4">
  <p>It uses utility classes for typography and spacing to space content out within the larger conta
  <a class="btn btn-primary btn-lg" href="#" role="button">Learn more</a>
</div>
```


- 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. Below is an example and an in-depth look at how the grid comes together

To create 3 column grid layout in bootstrap we use the following Bootstrap classes

- extra small devices (col-4)
- small devices (col-sm-4)
- medium devices (col-md-4)
- large devices (col-lg-4)
- extra large devices (col-xl-4)

To make this 3 column grid responsive , we adjust the no of column based on the devices

To create 4 column grid layout in bootstrap we use the following Bootstrap classes

- extra small devices (col-3)
- small devices (col-sm-3)
- medium devices (col-md-3)
- large devices (col-lg-3)
- extra large devices (col-xl-3)

To make this 4 column grid responsive , we adjust the no of column based on the devices

Bootstrap forms by default comes with default styling and layout

- All form controls (input elements) receive some global styling with Bootstrap

Bootstrap provides 3 types of form layouts

- Vertical (default)
- Horizontal
- Inline form
- We need to wrap labels and form control in a div with class “form-group”
- We need to add “form-control” css class to all textual input elements

Input elements sizing

We can set the heights using classes like `.form-control-lg` and `.form-control-sm`

`.form-control-lg`

Default input

`.form-control-sm`

```
<input class="form-control form-control-lg" type="text" placeholder=".form-control-lg">  
<input class="form-control" type="text" placeholder="Default input">  
<input class="form-control form-control-sm" type="text" placeholder=".form-control-sm">
```

- Bootstrap includes several predefined button styles, each serving its own semantic purpose, with a few extras thrown in for more control.
- The .btn classes are designed to be used with the <button> element.
- We can use the following classes for buttons



```
<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-danger">Danger</button>
<button type="button" class="btn btn-warning">Warning</button>
<button type="button" class="btn btn-info">Info</button>
<button type="button" class="btn btn-light">Light</button>
<button type="button" class="btn btn-dark">Dark</button>

<button type="button" class="btn btn-link">Link</button>
```

The Bootstrap modal plugin is a dialog box / popup window that is displayed on top of the current page

- Modals are built with HTML, CSS, and JavaScript.
- Clicking on the modal “backdrop” will automatically close the modal.
- Bootstrap only supports one modal window at a time.
- Modal uses position:fixed



THANK YOU