

BOOTSTRAP

Bootstrap is the most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first websites.

Bootstrap is completely free to download and use!

Bootstrap CDN

If you don't want to download and host Bootstrap yourself, you can include it from a CDN (Content Delivery Network).

MaxCDN provides CDN support for Bootstrap's CSS and JavaScript. You must also include jQuery:

MaxCDN:

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

```
<link rel="stylesheet"
```

```
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/css/bootstrap.min.css">
```

```
<!-- jQuery library -->
```

```
<script
```

```
src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
```

```
<!-- Latest compiled JavaScript -->
```

```
<script
```

```
src="https://maxcdn.bootstrapcdn.com/bootstrap/3.4.1/js/bootstrap.min.js"></script>
```

1. GRID

The Bootstrap grid system has four classes:

xs (for phones - screens less than 768px wide)

sm (for tablets - screens equal to or greater than 768px wide)

md (for small laptops - screens equal to or greater than 992px wide)

lg (for laptops and desktops - screens equal to or greater than 1200px wide)

2. TABLES

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

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

Striped Rows

* The `.table-striped` class adds zebra-stripes to a table:

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

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

The contextual classes that can be used are:

Class	Description
-------	-------------

<code>.active</code>	Applies the hover color to the table row or table cell
----------------------	--

<code>.success</code>	Indicates a successful or positive action
-----------------------	---

<code>.info</code>	Indicates a neutral informative change or action
--------------------	--

<code>.warning</code>	Indicates a warning that might need attention
-----------------------	---

<code>.danger</code>	Indicates a dangerous or potentially negative action
----------------------	--

3. IMAGES

* Rounded Corners:

The `.img-rounded` class adds rounded corners to an image (IE8 does not support rounded corners):

* Circle

The `.img-circle` class shapes the image to a circle (IE8 does not support rounded corners):

* Thumbnail

The `.img-thumbnail` class shapes the image to a thumbnail:

* Responsive Images

Images come in all sizes. So do screens. Responsive images automatically adjust to fit the size of the screen. Create responsive images by adding an `.img-responsive` class to the `` tag. The image will then scale nicely to the parent element.

The `.img-responsive` class applies `display: block;` and `max-width: 100%;` and `height: auto;` to the image:

4. JUMBOTRONE Creating a Jumbotron

A jumbotron indicates a big box for calling extra attention to some special content or information.

A jumbotron is displayed as a grey box with rounded corners. It also enlarges the font sizes of the text inside it.

Tip: Inside a jumbotron you can put nearly any valid HTML, including other Bootstrap elements/classes.

Use a `<div>` element with class `.jumbotron` to create a jumbotron:

5. WELL

The `.well` class adds a rounded border around an element with a gray background color and some padding:

6. PROGRASE Example: `<div class="progress">`

```
<div class="progress-bar" role="progressbar" aria-valuenow="70"
aria-valuemin="0" aria-valuemax="100" style="width:70%">
  <span class="sr-only">70% Complete</span>
</div>
</div>
```

7. PAGINATION

```
<ul class="pagination">
<li><a href="#">1</a></li>
<li><a href="#">2</a></li>
<li><a href="#">3</a></li>
<li><a href="#">4</a></li>
<li><a href="#">5</a></li>
</ul>
```

8. PAGER Pager is also a form of pagination (as described in the previous chapter).

Pager provides previous and next buttons (links).

To create previous/next buttons, add the `.pager` class to an `` element:

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

Example

```

<div class="dropdown">
  <button class="btn btn-primary dropdown-toggle" type="button"
data-toggle="dropdown">Dropdown Example
  <span class="caret"></span></button>
  <ul class="dropdown-menu">
    <li><a href="#">HTML</a></li>
    <li><a href="#">CSS</a></li>
    <li><a href="#">JavaScript</a></li>
  </ul>
</div>

```

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

Example:

```

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

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

```

11. Tabs tabs are created with <ul class="nav nav-tabs">:

Tip: Also mark the current page with <li class="active">.

The following example creates navigation tabs:

Example

```

<ul class="nav nav-tabs">
  <li class="active"><a href="#">Home</a></li>
  <li><a href="#">Menu 1</a></li>
  <li><a href="#">Menu 2</a></li>
  <li><a href="#">Menu 3</a></li>
</ul>

```

12. NAVBAR

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

A standard navigation bar is created with <nav class="navbar navbar-default">.

The following example shows how to add a navigation bar to the top of the page:

Example

```

<nav class="navbar navbar-default">
  <div class="container-fluid">
    <div class="navbar-header">
      <a class="navbar-brand" href="#">WebSiteName</a>
    </div>
    <ul class="nav navbar-nav">
      <li class="active"><a href="#">Home</a></li>
      <li><a href="#">Page 1</a></li>
      <li><a href="#">Page 2</a></li>
      <li><a href="#">Page 3</a></li>
    </ul>
  </div>
</nav>

```

```
    </ul>
  </div>
</nav>
```

13. FORMS

Bootstrap provides three types of form layouts:

Vertical form (this is default)

Horizontal form

Inline form

Standard rules for all three form layouts:

Wrap labels and form controls in `<div class="form-group">` (needed for optimum spacing)

Add class `.form-control` to all textual `<input>`, `<textarea>`, and `<select>` elements

14. INPUTS

Bootstrap supports the following form controls:

```
input
textarea
checkbox
radio
select
```

15. MEDIA OBJECTS

Bootstrap provides an easy way to align media objects (like images or videos) to the left or to the right of some content. This can be used to display blog comments, tweets and so on:

Example

```
<!-- Left-aligned -->
```

```
<div class="media">
  <div class="media-left">
    
  </div>
  <div class="media-body">
    <h4 class="media-heading">John Doe</h4>
    <p>Lorem ipsum...</p>
  </div>
</div>
```

```
<!-- Right-aligned -->
```

```
<div class="media">
  <div class="media-body">
    <h4 class="media-heading">John Doe</h4>
    <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor
incididunt ut labore et dolore magna aliqua.</p>
  </div>
  <div class="media-right">
    
  </div>
</div>
```

Example explained

Use a `<div>` element with the `.media` class to create a container for media objects.

Use the `.media-left` class to align the media object (image) to the left, or the `.media-right` class to align it to the right.

Text that should appear next to the image, is placed inside a container with `class="media-body"`.

Additionally, you can use `.media-heading` for headings.

16. CAROUSEL The Carousel plugin is a component for cycling through elements, like a carousel (slideshow).

Tip: Plugins can be included individually (using Bootstrap's individual "carousel.js" file), or all at once (using "bootstrap.js" or "bootstrap.min.js").

17. MODAL The Modal plugin is a dialog box/popup window that is displayed on top of the current page:

18. TOOLTIP The Tooltip plugin is small pop-up box that appears when the user moves the mouse pointer over an element:

19. POPOVER The Popover plugin is similar to tooltips; it is a pop-up box that appears when the user clicks on an element. The difference is that the popover can contain much more content.

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

21. AFFIX The Affix plugin allows an element to become affixed (locked) to an area on the page. This is often used with navigation menus or social icon buttons, to make them "stick" at a specific area while scrolling up and down the page.

The plugin toggles this behavior on and off (changes the value of CSS position from static to fixed), depending on scroll position.

22. FILTER Bootstrap does not have a component that allows filtering. However, we can use jQuery to filter / search for elements.

```
<script>
```

```
$(document).ready(function() {  
    $("#myInput").on("keyup", function() {  
        var value = $(this).val().toLowerCase();  
        $("#myTable tr").filter(function() {  
            $(this).toggle($(this).text().toLowerCase().indexOf(value) > -1)  
        });  
    });  
});
```

</script>

Grid Options

The following table summarizes how the Bootstrap grid system works across multiple devices:

	Extra small				
<768px	Small				
>=768px	Medium				
>=992px	Large				
>=1200px					
Class prefix	.col-xs-	.col-sm-	.col-md-	.col-lg-	
Suitable for	Phones	Tablets	Small Laptops	Laptops & Desktops	
Grid behaviour	Horizontal at all times	Collapsed to start, horizontal above breakpoints	Collapsed to start, horizontal above breakpoints	Collapsed to start, horizontal above breakpoints	
Container width	None (auto)	750px	970px	1170px	
# of columns	12	12	12	12	
Column width	Auto	~62px	~81px	~97px	
Gutter width	30px (15px on each side of a column)	30px (15px on each side of a column)	30px (15px on each side of a column)	30px (15px on each side of a column)	
Nestable	Yes	Yes	Yes	Yes	
Offsets	Yes	Yes	Yes	Yes	
Column ordering	Yes	Yes	Yes	Yes	