Bootstrap:

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

Bootstrap is a free and open-source front-end library for designing websites and web applications. It contains HTML- and CSS-based design templates for typography, forms, buttons, navigation and other interface components, as well as optional JavaScript extensions.

Initial release date: August 2011

Original author(s): Mark Otto, Jacob Thornton

Stable release: 4.0.0 / January 18, 2018

- Bootstrap 4 is the newest version of Bootstrap, which is the most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first websites.

- Bootstrap 4 is completely free to download and use!

What is Responsive Web Design?

Responsive web design is about creating web sites which automatically adjust themselves to look good on all devices, from small phones to large desktops.

Advantages of Bootstrap:

- Easy to use

- Responsive features

- Mobile-first approach

- Browser compatibility

There are two ways to start using Bootstrap 4 on own web site.

- ➢ Include Bootstrap 4 from a CDN (**Content delivery network**)

- ➢ Download Bootstrap 4 from getbootstrap.com

1. Add doctype:

2. Bootstrap 4 uses HTML elements and CSS properties that require the HTML5 doctype.

3. Always include the HTML5 doctype at the beginning of the page, along with the lang attribute and the correct character set:

4. ```
   <!DOCTYPE html>
   <html lang="en">
    <head>
     <meta charset="utf-8">
    </head>
   </html>
   ```

Bootstrap 4 is designed to be responsive to mobile devices. Mobile-first styles are part of the core framework.

To ensure proper rendering and touch zooming, add the following <meta> tag inside the <head> element:

<meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

Grid System

Grid system 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.

Bootstrap's grid system is responsive, and the columns will re-arrange automatically depending on the screen size.

Grid Classes

1 - xs   for phone

2 - sm for tablet

3 - md for desktop

4 - lg   for large desktop

xs (<=576px),

sm (>=576px),

md (>=768px),

lg (>=992px),

xl (>=1200px)

Container:

Container is used to create boxed content.

.container

The .container class provides a **responsive fixed width** container

.container-fluid

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

Jumbotron

A Jumbotron is displayed as a grey box with rounded corners.

it also large font sizes of text inside it.

use <div> element with class.

.jumbotron

Images:

.img-rounded	Adds rounded corners to an image (not available in IE8)
.img-circle	Shapes the image to a circle (not available in IE8)
.img-thumbnail	Shapes the image to a thumbnail
.img-responsive	Makes an image responsive (will scale nicely to the parent element)

Table

Bootstrap table has a light padding and only horizontal dividers.

Classes:

.table

.table-bordered

.table-hover

.table-striped

.table-condensed

.table-dark

.table-sm

.thead-dark   //.thead-light

On-Rows(tr) / on-cells(td,th)

.table-active

.table-primary

.table-secondary

.table-success

.table-danger

.table-warning

.table-info

.table-light

.table-dark

On-rows(tr) / on-cells(td,th)

.bg-primary

.bg-success

.bg-warning

.bg-danger

.bg-info

TYPOGRAPHY:

- bootstrap includes simple and easy customized typography for heading, body text.

- Bootstrap 4 uses a default font-size of 16px, and its line-height is 1.5.

- The default font-family is "Helvetica Neue", Helvetica, Arial, sans-serif.

- In addition, all <p> elements have margin-top:0 and margin-bottom: 1rem (16px by default)

- text-center

- text-right

- text-left

-

- text-primary

- text-success

- text-info

- text-danger

- text-warning

- text-muted

- text-white

-

- bg-primary

- bg-success

- bg-info

- bg-danger

- bg-warning

Text transform

- `<p class="text-lowercase">Lowercased text.</p>`

- `<p class="text-uppercase">Uppercased text.</p>`

- `<p class="text-capitalize">CapiTaliZed text.</p>`

LIST:

Bootstrap supports ordered lists, unordered lists, and definition lists

list-unstyled

LIST group:

List groups are a flexible and powerful component for displaying a series of content.

```
<ul class="list-group">
 <li class="list-group-item">HTML </li>
 <li class="list-group-item">CSS</li>
 <li class="list-group-item">JS</li>
</ul>
```

Class:

List-group   //list-group-flush

List-group-item

Active

Disabled

List-group-item-action   //not use .btn

Buttons

Bootstrap provides seven styles of buttons

classes:

.btn

.btn-default

.btn-primary

.btn-success

.btn-info

.btn-warning

.btn-danger

.btn-link

.btn-lg

.btn-sm

.btn-xs

.btn-block

.disabled

.active

.btn-group


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

alert

Bootstrap provide an easy way to create predefined alert messages. Alert created with

classes:

.alert

.alert-success

.alert-info

.alert-warning

.alert-danger

Closing Alert

to close the alert message, add a alert-dismissable class to the alert container.

class:

.alert-dismissable

Breadcrump:

Indicate the current page's location within a navigational hierarchy that automatically adds separators via CSS.

<ol class="breadcrumb">

** <li class="breadcrumb-item active">Home
**

** **

** <ol class="breadcrumb">**

** <li class="breadcrumb-item">Home
**

** <li class="breadcrumb-item active">HTML
**

** **

** <ol class="breadcrumb">**

** <li class="breadcrumb-item">Home
**

** <li class="breadcrumb-item">HTML
**

** <li class="breadcrumb-item active">Table
**

** **

Aria-label = "breadcrumb"

Class = "breadcrumb"

Class = "breadcrumb-item"

Class = "active"

FORMS:

form control styles, layout options, and custom components for creating a wide variety of forms.

.form-group

.form-check

.form-controls   //Textual form controls—like <input>, <select>, and <textarea>—are
                        with the .form-control class. Included are styles for general appearance,
                              focus state, sizing, and more.

- • For file inputs use .form-control-file instead of .form-control

- • **For size of text box:**

- •   .form-control-lg

- .form-control
- .form-control-sm
- **For form styled as plain text**
- .form-control-plaintext
- **For single line form inputs**
- .form-inline