**Bootstrap 4**

**Introduction:**

It is an open source framework.

One framework, every device

Mobile First - First this is designed for mobile devices. Then(desktop, tablet and other devices)

**Components:**

Bootstrap contains many components.

Using component based on class name.

**Advantage:**

Speed

Time efficiency

**Users:**

NASA

FIFA

**Components**

**Containers:**

**Classes:**

**.**container - cover particular level of width

**.**container-fluid - cover the 100% width

**Grid System:**

|  | **Extra small <576px** | **Small ≥576px** | **Medium ≥768px** | **Large ≥992px** | **Extra large ≥1200px** |
| --- | --- | --- | --- | --- | --- |
| **Grid behavior** | Horizontal at all times | Collapsed to start, horizontal above breakpoints | | | |
| **Max container width** | None (auto) | 540px | 720px | 960px | 1140px |
| **Class prefix** | .col- | .col-sm- | .col-md- | .col-lg- | .col-xl- |
| **Number of columns** | 12 | | | | |
| **Gutter width** | 30px (15px on each side of a column) | | | | |
| **Nestable** | Yes | | | | |
| **Column ordering** | Yes | | | | |

**Typography:**

Heading - h1,h2,h3,h4,h5,h6

Heading classes - .h1,.h2,.h3,.h4,.h5,.h6

Sub Heading - <h1><small></small></h1>

Display Heading - .display-1,.display-2,.display-3,.display-4

Lead Text - .lead

Marked Text - <mark>

Abbreviations - <abbr title=””></abbr>

Initialism - <abbr title=”” class=”initialism”>

Blockquotes - <blockquote class=”blockquote”>

Alignment - .text-center, .align-right

Lists - .list-unstyled , {.list-inline (.list-inline-item)}

Description lists - <dl><dt><dd></dd></dt></dl>

Others - <code> , <kbd> , <pre> , <samp> , <var>

**Tables:**

**<table>**

Basic Table - .table

Inverse Table - “ .table-inverse

Striped Table - “ .table-striped

Bordered Table - “ .table-bordered

Hover rows - “ .table-hover

Small Table - “ .table-sm

Responsive Table - “ .table-responsive

**Tables Head Style:**

**<thead>**

.thead-default

.thead-inverse

**Contextual Classes:**

.table-active

.table-success

.table-info

.table-warning

.table-danger

**Forms:**

**Basic Form:**

<input>,<textarea>,<select> - .form-control

.form-control-sm

.form-control-lg

<fieldset> - .form-group

<form> - .form-inline

<label> - .col-form-label

Input type**=”ratio ”:**

<div> - .form-check

.form-check disabled(“disabled”)

.form-check form-check-inline

<label> - .form-check-label

<input> - .form-check-input

Help Text :

<span> - .form-text text-muted

Static Control:

<p> - .form-control-static

| **Classes** | **Used for** | **Supported variations** |
| --- | --- | --- |
| .form-group | Any group of form controls | Use with any block-level element like <fieldset> or <div> |
| .form-control | Textual inputs | text, password, datetime-local, date, month, time, week, number, email, url, search, tel, color |
| Select menus | multiple, size |
| Textareas | N/A |
| .form-control-file | File inputs | File |
| .form-check .form-check-inline .form-check-label .form-check-input | Checkboxes and radios | N/A |
| .col-form-label | Labels within horizontal forms. | N/A |
| .col-form-legend | Legends within horizontal forms. | N/A |

**Custom Forms:**

**Checkboxes:**

<label class="**custom-control custom-checkbox**">

<input type="checkbox" class="**custom-control-input**">

<span class="**custom-control-indicator**"></span>

<span class="**custom-control-description**">Boots</span>

</label>

**Ratio Button:**

<label class="**custom-control custom-radio**">

<input id="radio1" name="radio" type="radio" class="**custom-control-input**">

<span class="**custom-control-indicator**"></span>

<span class="**custom-control-description**">Boots</span>

</label>

**Stacked Control:**

<div class="**custom-controls-stacked**">

<label class="**custom-control custom-radio**">

</label>

<label class="**custom-control custom-radio**">

</label>

</div>

**Select control:**

<select class="**custom-select**">

<option selected>Choose One...</option>

<option value="1">Boots</option>

</select>

**File Upload:**

<label class="**custom-file**">

<input type="file" id="file" class="**custom-file-input**">

<span class="**custom-file-control**"></span>

</label>

**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-info**">Info</button>

<button type="button" class="**btn btn-success**">Success</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-light**">Light</button>

<button type="button" class="**btn btn-dark**">Dark</button>

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

**Button Outline:**

<button type="button" class="**btn btn-outline-primary**">Primary</button>

<button type="button" class="**btn btn-outline-secondary**">Second</button>

<button type="button" class="**btn btn-outline-info**">Info</button>

<button type="button" class="**btn btn-outline-success**">Success</button>

<button type="button" class="**btn btn-outline-warning**">Warning</button>

<button type="button" class="**btn btn-outline-danger**">Danger</button>

<button type="button" class="**btn btn-outline-light**">Light</button>

<button type="button" class="**btn btn-outline-dark**">Dark</button>

**Button Size:**

<button type="button" class="**btn btn-success btn-sm**">Small</button>

<button type="button" class="**btn btn-success**">Default</button>

<button type="button" class="**btn btn-success btn-lg**">Large</button>

**Block level Button:**

<button type="button" class="**btn btn-danger btn-lg btn-block**">Block level button</button>

**Toggle Checkbox & Ratio Button:**

**Checkbox:**

<div class="btn-group" data-toggle="buttons">

<label class="btn btn-primary active">

<input type="checkbox" checked autocomplete="off"> Boots

</label>

<label class="btn btn-primary">

<input type="checkbox" autocomplete="off"> Shoes

</label>

<label class="btn btn-primary">

<input type="checkbox" autocomplete="off"> Feet

</label>

**Ratio:**

<div class="btn-group" data-toggle="buttons">

<label class="btn btn-primary active">

<input type="checkbox" checked autocomplete="off"> Boots

</label>

<label class="btn btn-primary">

<input type="checkbox" autocomplete="off"> Shoes

</label>

<label class="btn btn-primary">

<input type="checkbox" autocomplete="off"> Feet

</label>

**Images:**

**Responsive images:**

<img src="/pix/samples/22l.jpg" class="**img-fluid**" alt="Sample photo">

**Corner and Thumbnails:**

* Rounded , rounded-top , rounded-right , rounded-bottom , rounded-left ,

Rounded-circle ,rounded-0

<img src="/pix/samples/8s.jpg" class="**rounded**" alt="Sample image">

<img src="/pix/samples/9s.jpg" class="**rounded-circle**" alt="Sample image">

<img src="/pix/samples/10s.jpg" class="**img-thumbnail**" alt="Sample image">

<img src="/pix/samples/11s.jpg" class="**rounded-top**" alt="Sample image">

**Image Alignment:**

**Left -** float-left,float-sm-left,float-md-left,float-lg-left,float-xl-left

**Right -** float-right,float-sm-right,float-md-right,float-lg-right,float- xl-right