



Basics of bootstrap

What is Bootstrap?

- Bootstrap is a free front-end framework for faster and easier web development
- Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many other, as well as optional JavaScript plugins
- Bootstrap also gives you the ability to easily create responsive designs

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.



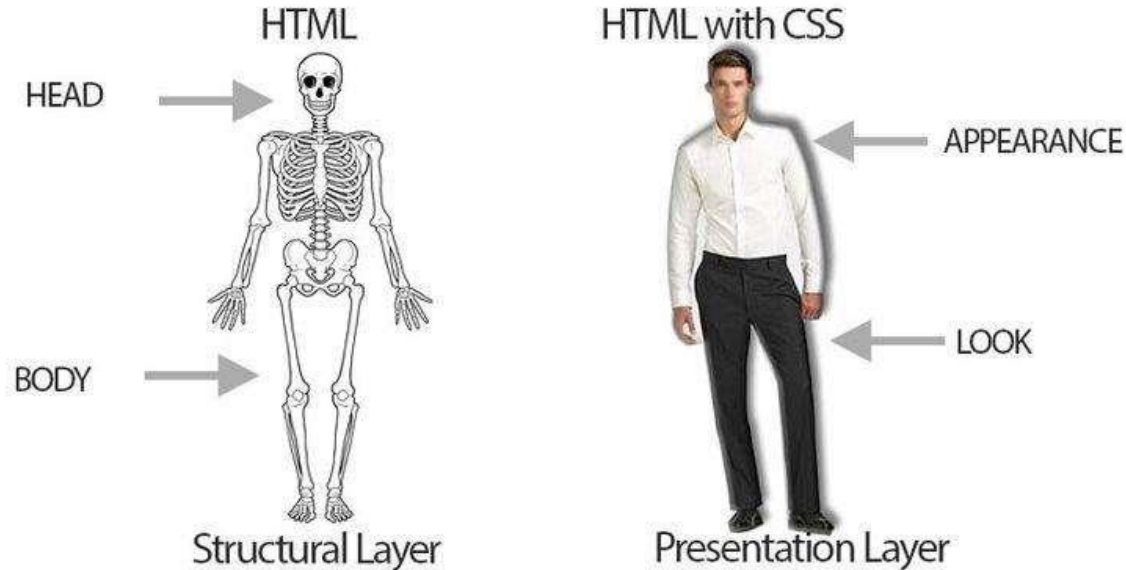
Bootstrap History

Bootstrap was developed by Mark Otto and Jacob Thornton at Twitter, and released as an open source product in August 2011 on GitHub.

Advantages of Bootstrap:

- Easy to use: Anybody with just basic knowledge of HTML and CSS can start using Bootstrap
- Responsive features: Bootstrap's responsive CSS adjusts to phones, tablets, and desktops
- Mobile-first approach: In Bootstrap 3, mobile-first styles are part of the core framework
- Browser compatibility: Bootstrap is compatible with all modern browsers (Chrome, Firefox, Internet Explorer, Edge, Safari, and Opera)

Basic Difference between HTML, CSS, BOOTSTRAP



Bootstrap



Example

Login With HTML Only Login With HTML & CSS

Email:

Password:


Login


EMAIL:


PASSWORD:


Login

Create an account

Email address 

Password 

Name your first app 

Company name (optional) 

Signing up signifies that you have read and agree to the Terms of Service and Privacy Policy.

Where to get bootstrap?

There are two ways to start using Bootstrap on your own website.

You can:

- Download Bootstrap from getbootstrap.com
- Include Bootstrap from a CDN

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.

Create First Web Page With Bootstrap

1. Add the HTML5 doctype

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

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

```
<!DOCTYPE html>

<html lang="en">

  <head>

    <meta charset="utf-8">

  </head>

</html>
```


2. Bootstrap 3 is mobile-first

Bootstrap 3 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">
```

The `width=device-width` part sets the width of the page to follow the screen-width of the device (which will vary depending on the device).

The `initial-scale=1` part sets the initial zoom level when the page is first loaded by the browser.

3. Containers

Bootstrap also requires a containing element to wrap site contents.

There are two container classes to choose from:

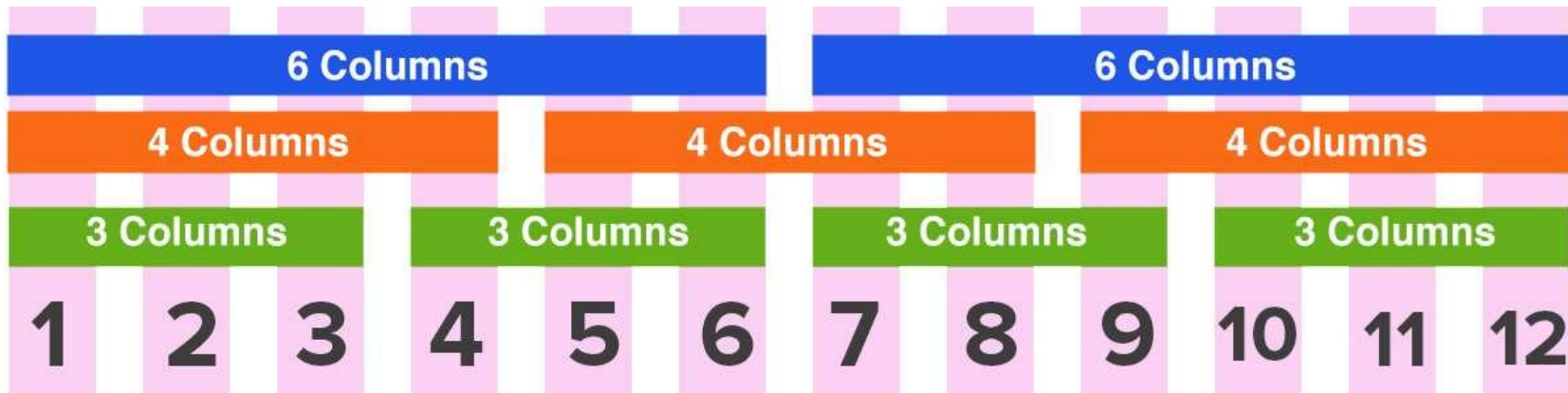
1. The `.container` class provides a responsive fixed width container
2. The `.container-fluid` class provides a full width container, spanning the entire width of the viewport

Bootstrap Grid System

Bootstrap's 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

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

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)

Responsive design all devices

`col-xs-*`

- Extra small devices
- Mobile devices

`col-sm-*`

- Small devices
- tablets

`col-md-*`

- medium devices
- laptops , desktops

`col-lg-*`

- extra large desktops devices

Basic Structure of a Bootstrap Grid

- ```
<div class="row">
 <div class="col-*-*"></div>
 <div class="col-*-*"></div>
</div>
<div class="row">
 <div class="col-*-*"></div>
 <div class="col-*-*"></div>
 <div class="col-*-*"></div>
</div>
<div class="row">
 ...
</div>
```

# Basic Structure of a Bootstrap Grid

First; create a row (`<div class="row">`). Then, add the desired number of columns (tags with appropriate `.col-*-*` classes). Note that numbers in `.col-*-*` should always add up to 12 for each row.

```
<div class="row">

 <div class="col-*-*"></div>

 <div class="col-*-*"></div>

</div>
```

# Three Equal Columns

.col-sm-4

.col-sm-4

.col-sm-4

```
<div class="row">
```

```
 <div class="col-sm-4">.col-sm-4</div>
```

```
 <div class="col-sm-4">.col-sm-4</div>
```

```
 <div class="col-sm-4">.col-sm-4</div>
```

```
</div>
```



# Bootstrap Text/Typography

## Bootstrap's Default Settings

Bootstrap's global default font-size is 14px, with a line-height of 1.428.

This is applied to the `<body>` element and all paragraphs (`<p>`).

In addition, all `<p>` elements have a bottom margin that equals half their computed line-height (10px by default).

# Bootstrap Basic Table

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

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

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

# Bootstrap Image Shapes

## Rounded Corners

The `.img-rounded` class adds rounded corners to an image.

## Circle

The `.img-circle` class shapes the image to a circle.

## 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 `<img>` 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

# Image Gallery

You can also use Bootstrap's grid system in conjunction with the `.thumbnail` class to create an image gallery.

# Contextual Colors and Backgrounds

Bootstrap also has some contextual classes that can be used to provide "meaning through colors".

The classes for text colors are: `.text-muted`, `.text-primary`, `.text-success`, `.text-info`, `.text-warning`, and `.text-danger`

The classes for background colors are: `.bg-primary`, `.bg-success`, `.bg-info`, `.bg-warning`, and `.bg-danger`

# Display Headings

Display headings are used to stand out more than normal headings (larger font-size and lighter font-weight), and there are four classes to choose from:

`.display-1`, `.display-2`, `.display-3`, `.display-4`

# Badges

Badges are numerical indicators of how many items are associated with a link.

News 5

Comments 10

Updates 2

The numbers (5, 10, and 2) are the badges.

Use the `.badge` class within `<span>` elements to create badges

```
News 5

Comments 10

Updates 2
```



# Bootstrap Progress Bars

A progress bar can be used to show a user how far along he/she is in a process.

Bootstrap provides several types of progress bars.

To create a default progress bar, add a `.progress` class to a `<div>` element.

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

Basic Progress Bar



# Bootstrap Buttons

Bootstrap provides different styles of buttons:

- `.btn`
- `.btn-default`
- `.btn-primary`
- `.btn-success`
- `.btn-info`
- `.btn-warning`
- `.btn-danger`
- `.btn-link`



# Bootstrap Buttons

Bootstrap provides four button sizes:

- `.btn-lg`
- `.btn-sm`
- `.btn-xs`

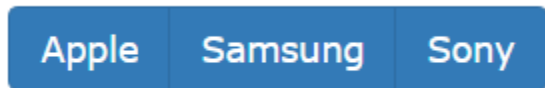
## Button Groups

Bootstrap allows you to group a series of buttons together (on a single line) in a button group

Use a `<div>` element with class `.btn-group` to create a button group

# Button Groups

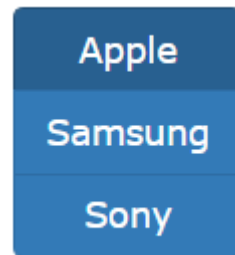
- ```
<div class="btn-group">  
  <button type="button" class="btn btn-primary">Apple</button>  
  <button type="button" class="btn btn-primary">Samsung</button>  
  <button type="button" class="btn btn-primary">Sony</button>  
</div>
```



Vertical Button Groups

Bootstrap also supports vertical button groups:

Use the class `.btn-group-vertical` to create a vertical button group.



```
<div class="btn-group-vertical">  
  <button type="button" class="btn btn-primary">Apple</button>  
  <button type="button" class="btn btn-primary">Samsung</button>  
  <button type="button" class="btn btn-primary">Sony</button>  
</div>
```

Basic List Groups

The most basic list group is an unordered list with list items.

To create a basic list group, use an `` element with class `.list-group`, and `` elements with class `.list-group-item`.

```
<ul class="list-group">
  <li class="list-group-item">First item</li>
  <li class="list-group-item">Second item</li>
  <li class="list-group-item">Third item</li>
</ul>
```

First item

Second item

Third item