Introduction

- Bootstrap is the currently most popular open source framework for developing responsive, mobile-first Web application and websites.
- It uses HTML5, CSS3, and JavaScript and jQuery.
- Bootstrap helps you kick start the development of webapps and websites.
- Bootstrap contains HTML and CSS-based design templates for text, forms, buttons, navigation and other components.

History:

- It's developed by Mark Otto and Jacob Thornton at **Twitter** as a framework to encourage consistency across internal tools. It's also referred as Twitter Bootstrap.
- Its first version was released in Aug 2011 and because of the features it provided, in June 2014 Bootstrap was the No.1 project on GitHub.

Advantage of Bootstrap Framework.

- **Mobile-first approach:** Bootstrap 3 is mobile first in the sense that the code for Bootstrap now starts by targeting smaller screens like mobile devices, tablets, and then “expands” components and grids for larger screens such as laptops and desktops.
- **Browser support:** Bootstrap is supported by all popular browsers used on internet.
- **Easy to get started:** You don’t have to be a hard core programmer, with just the knowledge of HTML and CSS anyone can get started with Bootstrap.
- **Responsive web design:** Bootstrap's responsive CSS adjusts to Desktops, Tablets, and Mobile phones.
- Bootstrap provides a **clean and uniform** solution for building an interface for developers.

Major Features of Bootstrap:

- **Built-in Support for** layout, grids, fluid grids, and responsive designs.
- **Pre-built CSS:** Contains global CSS classes for typography, tables, grids, forms, buttons, images, and more
- **Components:** Contains lots of reusable components including Icons, Dropdowns, Navbars, Breadcrumbs, Popovers, Alerts, and many more
- **JavaScript Plugins:** Contains lots of custom jQuery plugins. You can include them all or one by one
- **Customizable Components:** We can customize Bootstrap's components with LESS variables and jQuery plugins to create our own version.

What is Mobile-First Strategy?

- Determine what is most important content?
- Design to smaller widths first…The CSS address mobile device first; then have media queries for tablets, desktops.
- Add elements as screen size increases.

You need to add the **viewport meta tag** to the **<head>** element, to ensure proper rendering and touch zooming on mobile devices.

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

- *width* property controls the width of the device. Setting it to *device-width* will make sure that it is rendered across various devices (mobiles, desktops, tablets...) properly.
- *initial-scale=1.0* ensures that when loaded, your web page will be rendered at a 1:1 scale, and no zooming will be applied out of the box.

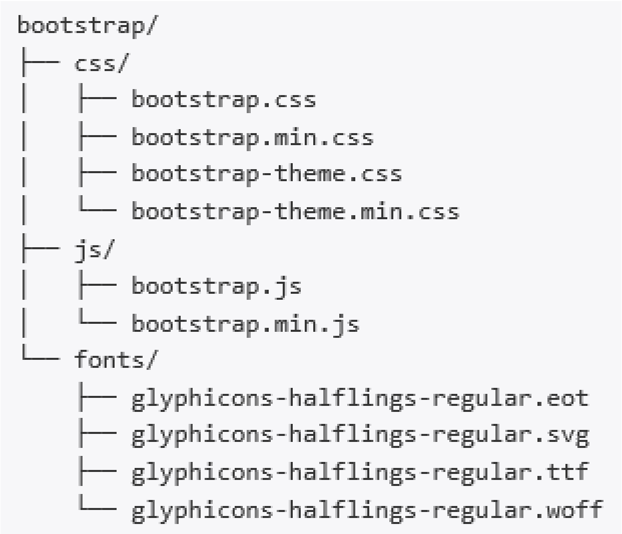
```
<meta name="viewport" content="width=device-width, initial-scale=1.0, maximum-scale=1.0, user-scalable=no">
```

Add **user-scalable=no** to the **content** attribute to disable zooming capabilities on mobile devices as shown below. Normally ***maximum-scale=1.0*** is used along with ***user-scalable=no*.** This may give users an experience more like a native app, hence Bootstrap doesn't recommend using this attribute.

Setting up Environment

Download Zip file from http://getbootstrap.com/getting-started/#download

Directory Structure:



```
bootstrap/
├── css/
│   ├── bootstrap.css
│   ├── bootstrap.min.css
│   ├── bootstrap-theme.css
│   └── bootstrap-theme.min.css
├── js/
│   ├── bootstrap.js
│   └── bootstrap.min.js
└── fonts/
    ├── glyphicons-halflings-regular.eot
    ├── glyphicons-halflings-regular.svg
    ├── glyphicons-halflings-regular.ttf
    └── glyphicons-halflings-regular.woff
```

CDN URL's:

Latest compiled and minified CSS:

```
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.2.0/css/bootstrap.min.css">
```

Optional theme:

```
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.2.0/css/bootstrap-theme.min.css">
```

Latest compiled and minified JavaScript:

```
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.2.0/js/bootstrap.min.js"></script>
```

Bootstrap First Application

```
<!DOCTYPE html>
<html lang="en" xmlns="http://www.w3.org/1999/xhtml">
<head>
  <meta charset="utf-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>Demo Page.</title>
  <!-- Latest compiled and minified CSS -->
  <link rel="stylesheet" href="./css/bootstrap.css">
  <!-- Optional: Include the jQuery library -->
  <script src="jquery-2.1.1.js"></script>
  <!-- Optional: Incorporate the Bootstrap JavaScript plugins -->
  <script src="./js/bootstrap.js"></script>
</head>
<body>
  <div class="container">
    <h1>Hello World!</h1>
    <p>Resize the browser window to see the effect.</p>
    <div class="row">
      <div class="col-sm-6" style="background-color:lavender;">
        <p>Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore
et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea
commodo consequat.</p>
      </div>
      <div class="col-sm-6" style="background-color:lavenderblush;">
```

```
        <p>Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium,
totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt
explicabo.</p>
      </div>
    </div>
  </div>
</body>
</html>
```

- Bootstrap layouts are made up of Grids and it must be placed within a div with class **.container** (fixed-width) or .**container-fluid** (full-width) for proper alignment and padding.
- Neither of these containers are **nestable**.

Bootstrap Grid

In web design, a grid is a very effective method to create a consistent layout rapidly and effectively using HTML and CSS.

Bootstrap includes a responsive, mobile first [fluid] grid system that appropriately scales up to 12 columns as the device or viewport size increases. It includes predefined classes for easy layout options, as well as powerful mixins for generating more semantic layouts.

Grid Rules

- Use rows to create horizontal groups of columns.
- Grid columns are created by specifying the number with a maximum of **twelve** available columns you wish to span.
- Content should be placed only within columns, and only columns may be immediate children of rows.
- Predefined classes like **.row** and **.col-xs-4** are available for quickly making grid layouts.
- Columns create gutters (gaps between column content) via padding. That padding is offset in rows for the first and last column via negative margin on .rows

Basic Structure for Grid:

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

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

	Extra small devices	Small devices	Medium devices	Large devices
	Mobiles (<768px)	**Tablets (>=768px)**	**Desktops (>=992px)**	**Desktops (>=1200px)**
Class prefix	**.col-xs-**	**.col-sm-**	**.col-md-**	**.col-lg-**
Container width	None (auto)	750px	970px	1170px
Grid behavior	Horizontal at all times	Collapsed to start, horizontal above breakpoints		
Column width	Auto	~62px	~81px	~97px
Gutter width	30px (15px on each side of a column)			

```
<style>
    div div div {
        background-color: red;
        border: 2px solid black;
    }
 </style>
<div class="container">
    <div class="row">
        <div class="col-md-1">.col-md-1</div>
        <div class="col-md-1">.col-md-1</div>
        <div class="col-md-1">.col-md-1</div>
        <div class="col-md-1">.col-md-1</div>
        <div class="col-md-1">.col-md-1</div>
        <div class="col-md-1">.col-md-1</div>
        <div class="col-md-1">.col-md-1</div>
        <div class="col-md-1">.col-md-1</div>
        <div class="col-md-1">.col-md-1</div>
        <div class="col-md-1">.col-md-1</div>
        <div class="col-md-1">.col-md-1</div>
        <div class="col-md-1">.col-md-1</div>
    </div>
    <div class="row">
        <div class="col-md-8">.col-md-8</div>
        <div class="col-md-4">.col-md-4</div>
    </div>
    <div class="row">
        <div class="col-md-4">.col-md-4</div>
        <div class="col-md-4">.col-md-4</div>
        <div class="col-md-4">.col-md-4</div>
    </div>
    <div class="row">
        <div class="col-md-6">.col-md-6</div>
        <div class="col-md-6">.col-md-6</div>
    </div>
</div>
```

Note: If more than 12 columns are placed within a single row, each group of extra columns will, as one unit, wrap onto a new line.

Multiple Layout of each device:

If we don't want columns to simply stack in smaller devices, use the extra small and medium device grid classes by adding **.col-xs-* .col-md-*** to columns.

Example:

The following example will result in a 25%/75% split on small devices, a 50%/50% split on medium devices, and a 33%/66% split on large devices:

```
<div class="container">
    <div class="row">
        <div class="col-xs-3 col-sm-6 col-md-4">1</div>
        <div class="col-xs-9 col-sm-6 col-md-8"> 2</div>
    </div>
</div>
```

Column Wrapping: If more than 12 columns are placed within a single row, each group of extra columns will, as one unit, wrap onto a new line.

Offset Columns: Offset can be used to push columns over for more spacing, for example. The **.col-xs=*** classes don't support offsets, but they are easily replicated by using an empty cell.

```
<div class="container-fluid">
  <div class="row">
    <div class="col-sm-4" style="background-color:yellow;border:1px solid red" >11</div>
    <div class="col-sm-8" style="background-color:yellow;border:1px solid red">12</div>
  </div>
  <div class="row">
    <div class="col-sm-2 col-sm-offset-2" style="background-color:yellow;border:1px solid red">21</div>
    <div class="col-sm-8" style="background-color:yellow;border:1px solid red">22</div>
  </div>
  <div class="row">
    <div class="col-sm-6" style="background-color:yellow;border:1px solid red">31</div>
    <div class="col-sm-3 col-sm-offset-3" style="background-color:yellow;border:1px solid red">32</div>
  </div>
</div>
```

Showing and Hiding based on device viewport

Classes	Devices
.visible-xs	Extra small (less than 768px) *visible*
.visible-sm	Small (up to 768 px) *visible*
.visible-md	Medium (768 px to 991 px) *visible*
.visible-lg	Larger (992 px and above) *visible*
.hidden-xs	Extra small (less than 768px) *hidden*
.hidden-sm	Small (up to 768 px) *hidden*
.hidden-md	Medium (768 px to 991 px) *hidden*
.hidden-lg	Larger (992 px and above) *hidden*

```
<div class="row">
    <div class="col-xs-6 col-sm-3" style="background-color: #dedef8;">
      <span class="hidden-xs">Extra small</span>
      <span class="visible-xs">✓ Visible on x-small</span>
    </div>
    <div class="col-xs-6 col-sm-3" style="background-color: #dedef8;">
      <span class="hidden-sm">Small</span>
```

```
        <span class="visible-sm">✓ Visible on small</span>
    </div>
    <div class="clearfix visible-xs"></div>
    <div class="col-xs-6 col-sm-3" style="background-color: #dedef8;">
        <span class="hidden-md">Medium</span>
        <span class="visible-md">✓ Visible on medium</span>
    </div>
    <div class="col-xs-6 col-sm-3" style="background-color: #dedef8;">
        <span class="hidden-lg">Large</span>
        <span class="visible-lg">✓ Visible on large</span>
    </div>
</div>
```

Responsive column resets: With the four tiers of grids available you're bound to run into issues where, at certain breakpoints, your columns don't clear quite right as one is taller than the other. To fix that, use a combination of a **.clearfix** and responsive utility classes.

```
<div class="container">
  <div class="row">
    <div class="col-xs-6 col-sm-3">.col-xs-6 .col-sm-3-1 Resize your viewport or check it out on your phone for an example. </div>
    <div class="col-xs-6 col-sm-3">.col-xs-6 .col-sm-3-2</div>
    <!-- Add the extra clearfix for only the required viewport -->
    <div class="clearfix visible-xs"></div>
    <div class="col-xs-6 col-sm-3">.col-xs-6 .col-sm-3-3</div>
    <div class="col-xs-6 col-sm-3">.col-xs-6 .col-sm-3-4</div>
  </div>
</div>
```

To center content in browser window: Provide offset which is equal from both the ends.

```
<div class="row">
   <div class="col-sm-2 col-sm-offset-3" style="background-color:yellow;border:1px solid red" >11</div>
   <div class="col-sm-2" style="background-color:yellow;border:1px solid red">12</div>
   <div class="col-sm-2" style="background-color:yellow;border:1px solid red">12</div>
 </div>
```

Reordering the Columns (Pushing to right or pulling to left)

```
<div class="row">
<div class="col-sm-4 col-sm-push-8" style="background-color:yellow;border:1px solid red">
  I was on left
</div>
<div class="col-sm-8 col-sm-pull-4" style="background-color:yellow;border:1px solid red">
  I was on right
</div>
</div>
```

Nesting Columns:

- To nest your content with the default grid, add a new .row and set of .col-sm-* columns within an existing .col-sm-* column.
- Nested rows should include a set of columns that add up to 12 or less (it is not required that you use all 12 available columns).

```
<div class="row">
  <div class="col-sm-9">
    Level 1: .col-sm-9
    <div class="row">
      <div class="col-xs-8 col-sm-6">
        Level 2: .col-xs-8 .col-sm-6
      </div>
      <div class="col-xs-4 col-sm-6">
        Level 2: .col-xs-4 .col-sm-6
      </div>
    </div>
  </div>
</div>
```

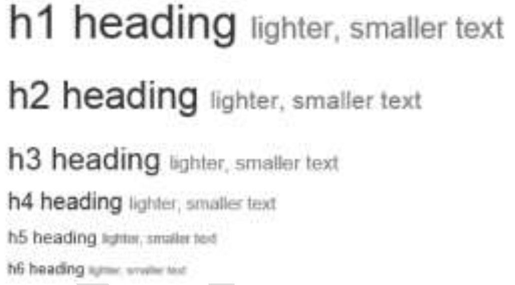
Bootstrap Typography

Bootstrap uses **Helvetica Neue, Helvetica, Arial, and sans-serif** in its default font, font-size of **14px,** and a line-height of **1.428.** In addition, <p> receive a bottom margin of half their computed line-height (10px by default).

Using typography feature of Bootstrap you can create headings, paragraphs, lists and other inline elements.

Headings: Bootstrap formats heading differently from that of browser default.

<small> element will create a lighter, secondary text in any heading

<h1>h1 heading <small>lighter, smaller text</small></h1> <h2>h2 heading <small>lighter, smaller text</small></h2> <h3>h3 heading <small>lighter, smaller text</small></h3> <h4>h4 heading <small>lighter, smaller text</small></h4> <h5>h5 heading <small>lighter, smaller text</small></h5> <h6>h6 heading <small>lighter, smaller text</small></h6>	 h1 heading lighter, smaller text h2 heading lighter, smaller text h3 heading lighter, smaller text h4 heading lighter, smaller text h5 heading lighter, smaller text h6 heading lighter, smaller text

<mark>highlight</mark>
<abbr title="World Health Organization">WHO</abbr>
<del>This is deleted text</del>
<blockquote> <p>This is some descriptive text This is some descriptive text This is some descriptive text This is some descriptive text This is some descriptive text This is some descriptive text This is some descriptive text </p> <footer>From Author Name</footer> </blockquote> **Note**: Add .**blockquote-reverse** for a blockquote to right-aligned content.
<small>This content is within small tag</small>
<strong>This content is within strong tag</strong>
<em>This content is within em tag and is rendered as italics</em>
<p class="lead">This is an example paragraph demonstrating the use of lead body copy.</p>
<p class="text-left">Left aligned text.</p> <p class="text-center">Center aligned text.</p> <p class="text-right">Right aligned text.</p> <p class="text-muted">This content is muted</p> <p class="text-primary">This content carries a primary class</p> <p class="text-success">This content carries a success class</p>

```
<p class="text-info">This content carries a info class</p>
<p class="text-warning">This content carries a warning class</p>
<p class="text-danger">This content carries a danger class</p>

<p class="text-lowercase">Lowercased text.</p>
<p class="text-uppercase">Uppercased text.</p>
<p class="text-capitalize">Capitalized text.</p>
```

```
<address>
  <strong>Some Company Pvt Ltd...</strong><br>
  Street No 007<br>
  Some City, State XXXXX<br>
  <abbr title="Phone">P:</abbr> (123) 456-7890
</address>
<address>
  <strong>James</strong><br>
  <a href="mailto:mailto@somedomain.com">mailto@somedomain.com</a>
</address>
```

```
<h4>Example of Ordered List</h4>
<ol>
  <li>Item 1</li>
  <li>Item 2</li>
</ol>
<h4>Example of Un-Ordered List</h4>
<ul>
  <li>Item 1</li>
  <li>Item 2</li>
</ul>
<h4>Example of Unstyled List</h4>
<ul class="list-unstyled">
  <li>Item 1</li>
  <li>Item 2</li>
</ul>
<h4>Example of Inline List - Place all list items on a single line and some light padding.</h4>
<ul class="list-inline">
  <li>Item 1</li>
  <li>Item 2</li>
```

```
</ul>
<h4>Example of Definition List</h4>
<dl>
  <dt>Description 1</dt>
  <dd>This is description of Item 1</dd>
  <dt>Description 2</dt>
  <dd>This is description of Item 2</dd>
</dl>
<h4>Example of Horizontal Definition List</h4>
<dl class="dl-horizontal">
  <dt>Description 1</dt>
  <dd>This is description of Item 1</dd>
  <dt>Description 2</dt>
  <dd>This is description of Item 2</dd>
</dl>
```

```
<code>&lt;header&gt;</code> is wrapped as an inline element.
```

To display code as a standalone block element use &lt;pre&gt; tag as:

```
<pre>
&lt;article&gt;
  &lt;h1&gt;Article Heading&lt;/h1&gt;
&lt;/article&gt;
public class HomeController : Controller
{
  //
  // GET: /Home/
  public ActionResult Index()
  {
    return View();
  }
}
</pre>
```

Bootstrap Tables

<table> classes:

Class	Description
table	Adds basic styling (light padding and only horizontal dividers) to any <table>
table-striped	Adds alternate row style (not available in IE8)
table-bordered	Adds border on all sides of the table and cells
table-hover	Enables a hover state on table rows within <tbody>
table-condensed	Makes table more compact by cutting cell padding in half
table-responsive	Makes the table responsive to different resolution

Example:

```
<table class="table table-striped table-bordered table-hover">
  <thead>
    <tr>
      <th>#</th>
      <th>Name</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>1</td>
      <td>John</td>
    </tr>
    <tr>
      <td>2</td>
      <td>Ravi</td>
    </tr>
    <tr>
      <td>3</td>
      <td>Srinivas</td>
    </tr>
  </tbody>
</table>
```

<tr>, <th> and <td> Contextual Classes

Use the classes below to color table rows or cells:

Class	Description
active	Applies the hover color to a particular row or cell
success	Indicates a successful or positive action
info	Indicates a neutral informative change or action
warning	Indicates a warning that might need attention
danger	Indicates a dangerous or potentially negative action

Responsive Tables:

By wrapping any *.table* in *.table-responsive* class, you will make the table scroll horizontally up to small devices (under 768px). When viewing on anything larger than 768px wide, you will not see any difference in these tables.

```
<div class="table-responsive">
  <table class="table">
    <caption>Responsive Table Layout</caption>
    <thead>
      <tr>
        <th>Product</th>
        <th>Payment Date</th>
        <th>Status</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <td>Product1</td>
        <td>23/11/2013</td>
        <td>Pending</td>
      </tr>
      <tr>
        <td>Product2</td>
        <td>10/11/2013</td>
        <td> Delivered Delivered Delivered Delivered Delivered Delivered Delivered Delivered Delivered
Delivered Delivered Delivered Delivered Delivered Delivered Delivered Delivered Delivered Delivered Delivered
Delivered Delivered Delivered Delivered Delivered Delivered Delivered </td>
      </tr>
    </tbody>
  </table>
```

```
</div>
```

Bootstrap Form Layout

- Individual form controls automatically receive some global styling.
- All textual <input>, <textarea>, and <select> elements with **.form-control** are set to width: 100%.
- Wrap labels and controls in **.form-group** for optimum spacing.
- Includes support for all HTML5 types: datetime, datetime-local, date, month, time, week, number, email, url, search, tel, and color.

Bootstrap provides you with following types of form layouts:

- Vertical (default) form
- Inline form
- Horizontal form

Vertical or basic form

The basic form structure comes with Bootstrap; individual form controls automatically receive some global styling.

To create a basic form do the following:

- Add a role *form* to the parent <form> element.
- Wrap labels and controls in a <div> with class *.form-group*. This is needed for optimum spacing.
- Add a class of *.form-control* to all textual <input>, <textarea>, and <select> elements.

```
<form role="form">
  <div class="form-group">
    <label for="email">Email address:</label>
    <input type="email" class="form-control" id="email">
  </div>
  <div class="form-group">
    <label for="pwd">Password:</label>
    <input type="password" class="form-control" id="pwd">
  </div>
  <div class="checkbox">
    <label><input type="checkbox"> Remember me</label>
  </div>
  <button type="submit" class="btn btn-default">Submit</button>
</form>
```

In-line Form:

- Makes a <form> left-aligned with inline-block controls.
- This only applies to forms within viewports that are at least 768px wide.
- In the above example, add the attribute class="form-inline".

```
<form role="form" class="form-inline">.
```

Note:

- Inputs, selects, and textareas are 100% wide by default in Bootstrap. To use the inline form, you'll have to set a width on the form controls used within.
- Screen readers will have trouble with your forms if you don't include a label for every input. For these inline forms, you can hide the labels using the **.sr-only** class.

```
<form class="form-inline" role="form">
  <div class="form-group">
    <label class="sr-only" for="email2">Email address</label>
    <input type="email" class="form-control" style="width:200px" id="email2" placeholder="Enter email">
  </div>
  <div class="form-group">
    <label class="sr-only" for="password1">Password</label>
    <input type="password" class="form-control" id="password1" placeholder="Password">
  </div>
  <div class="checkbox">
    <label>
      <input type="checkbox"> Remember me
    </label>
  </div>
  <button type="submit" class="btn btn-default">Sign in</button>
</form>
```

Horizontal Form: We can use Bootstrap's predefined grid classes to Aligns labels and groups of form controls in a horizontal layout.

Note: The class **.form-groups** behaves as grid rows, so no need for **.row**.

```
<form class="form-horizontal" role="form">
  <div class="form-group">
    <label class="control-label col-sm-2" for="email">Email:</label>
    <div class="col-sm-10">
      <input type="email" class="form-control" id="email" placeholder="Enter email">
    </div>
  </div>
  <div class="form-group">
    <label class="control-label col-sm-2" for="pwd">Password:</label>
    <div class="col-sm-10">
      <input type="password" class="form-control" id="pwd" placeholder="Enter password">
    </div>
  </div>
  <div class="form-group">
    <div class="col-sm-offset-2 col-sm-10">
      <div class="checkbox">
        <label><input type="checkbox"> Remember me</label>
      </div>
    </div>
  </div>
  <div class="form-group">
    <div class="col-sm-offset-2 col-sm-10">
      <button type="submit" class="btn btn-default">Submit</button>
    </div>
  </div>
</form>
```

Rendering of Checkbox and Radio

By default all checkbox and radio buttons are rendered vertical.

To show them in-line use the attribute: **checkbox-inline or radio-inline**

```
<form class="form-horizontal" role="form">
  <div class="checkbox">
    <label><input type="checkbox" value="">Option 1</label>
  </div>
  <div class="checkbox disabled">
    <label><input type="checkbox" value="">Option 2</label>
  </div>
  <div class="checkbox">
    <label><input type="checkbox" value="">Option 3</label>
  </div>
  <div>
    <label class="checkbox-inline">
```

```
        <input type="checkbox" id="inlineCheckbox1" value="option1"> Option 1
    </label>
    <label class="checkbox-inline">
        <input type="checkbox" id="inlineCheckbox2" value="option2"> Option 2
    </label>
    <label class="checkbox-inline">
        <input type="checkbox" id="inlineCheckbox3" value="option3"> Option 3
    </label>
  </div>
</form>
```

Use the class ***.form-control-static*** on a <p>, when you need to place plain text next to a form label within a horizontal form.

```
<label class="col-sm-2 control-label">Email</label>
<div class="col-sm-10">
  <p class="form-control-static">email@example.com</p>
</div>
```

Validation States:

To use, simply add the appropriate class **(*.has-warning, .has-error, has-feedback or .has-success*)** to the **parent element**.

```
<div class="form-group has-success">
  <label for="inputSuccess">
    Input with success
  </label>
  <div>
    <input type="text" class="form-control" id="inputSuccess">
  </div>
</div>
```

Disabled inputs and fieldsets:

```
<form role="form">
  <fieldset disabled >
    <div class="form-group">
      <label for="t1">Disabled input</label>
```

```
          <input type="text" id="t1" class="form-control" placeholder="Disabled input">
      </div>
      <div class="form-group">
          <label for="s1">Disabled select menu</label>
          <select id="s1" class="form-control">
              <option>Disabled select</option>
          </select>
      </div>
      <div class="checkbox">
          <label>
              <input type="checkbox"> Can't check this
          </label>
      </div>
      <button type="submit" class="btn btn-primary">Submit</button>
  </fieldset>
</form>
```

Control Height Sizing: Set heights using classes like **.input-lg**

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

Control Width Sizing: set widths using grid column classes like **.col-sm-*.**

```
<form role="form" class="form-horizontal">
  <div class="row">
      <div class="col-sm-2">
          <input type="text" class="form-control" placeholder=".col-sm-2">
      </div>
      <div class="col-sm-3">
          <input type="text" class="form-control" placeholder=".col-sm-3">
      </div>
      <div class="col-sm-4">
          <input type="text" class="form-control" placeholder=".col-sm-4">
      </div>
  </div>
</form>
```

Bootstrap Button

Button can be rendered using one of the following ways:

1. <a class="btn btn-default" href="#" role="button">Link</a>
2. <button class="btn btn-default" type="submit">Button</button>
3. <input class="btn btn-default" type="button" value="Input">
4. <input class="btn btn-default" type="submit" value="Submit">

Its recommended to use <button> over <input> because it ensures matching cross-browser rendering.

Following are the styles we can use for <button>, <input type="button" and <a> tags:

Class	Description
btn	Default/ Standard button.
btn-primary	Provides extra visual weight and identifies the primary action in a set of buttons.
btn-success	Indicates a successful or positive action.
btn-info	Contextual button for informational alert messages.
btn-warning	Indicates caution should be taken with this action.
btn-danger	Indicates a dangerous or potentially negative action.
btn-link	Deemphasize a button by making it look like a link while maintaining button behavior.
btn-sm	Makes a small button
btn-xs	Makes an extra small button
btn-block	Makes a block-level button (spans the full width of the parent element)
active	Makes the button appear pressed
disabled	Makes the button disabled

Examples:

```
<button type="button" class="btn btn-default btn-lg">Default Button</button>
 <button type="button" class="btn btn-primary btn-lg ">Primary button</button>
 <button type="button" class="btn btn-link">Button as Link</button>
 <a href="#" class="btn btn-default btn-lg" role="button">Link as Button</a>
 <a href="#" class="btn btn-primary btn-lg" role="button">Link as Primary Button</a>
```

Working with Images

Class	Description
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 & adds a bit of padding and a gray border
img-responsive	Makes an image responsive (will scale nicely to the parent element)
push-left	To align image towards left of text
push-right	To align image to right side of text

Example:

```
<div class="row" style="background-color:black">
  <img src="/images/gradient_radial.jpg" class="col-sm-offset-3 col-sm-2 img-rounded">
  <img src="/images/gradient_radial.jpg" class="col-sm-2 img-circle ">
  <img src="/images/gradient_radial.jpg" class="col-sm-2 img-thumbnail">
</div>
```

Note that the images restore their original size if the width of browser is reduced (smaller resolution devices).

- To align image to right / left of paragraph use "**pull-right" / "pull left"**
- To resize Image with change of resolution use "**img-responsive"**

```
<img src="/images/Background.jpg" class="col-sm-4 pull-right img-responsive">
This is text around image This is text around image This is text around image This is text around image This is text
around image This is text around image This is text around image This is text around image This is text around
image This is text around image
```

Bootstrap Helpers

Text Classes

.text-muted	This text is styled with class "text-muted"
.text-primary	This text is styled with class "text-primary"
.text-success	This text is styled with class "text-success"
.text-info	This text is styled with class "text-info"
.text-warning	This text is styled with class "text-warning"
.text-danger	This text is styled with class "text-danger"

Background Classes

.bg-primary	This table cell is styled with class "bg-primary"
.bg-success	This table cell is styled with class "bg-success"

.bg-info	This table cell is styled with class "bg-info"
.bg-warning	This table cell is styled with class "bg-warning"
.bg-danger	This table cell is styled with class "bg-danger"

Other classes

Close Icon: Use the generic close icon for dismissing content like modals and alerts

```
<button type="button" class="close">
   &times;
</button>
```

Carets: Use carets to indicate dropdown functionality and direction

```
<span class="caret"></span>
```

Floats

```
<div class="pull-left">Quick Float to left</div>
<div class="pull-right">Quick Float to right</div>
```

Center a block

```
<div class="center-block" style="width:200px;background-color:yellow">This is an example for center-block</div>
```

To clear the float of any element,

```
<div class="clearfix" style="background: #D8D8D8;border: 1px solid #000;padding: 10px;">
   <div class="pull-left" style="background:#58D3F7;">
      Quick Float to left
   </div>
   <div class="pull-right" style="background: #DA81F5;">
      Quick Float to right
   </div>
</div>
```

Show and Hide

```
<div class="show">This is an example for show class</div>
<div class="hidden" >This is an example for hide class</div>
```