What is Bootstrap

- o Bootstrap is the most popular HTML, CSS and JavaScript framework for developing a responsive and mobile friendly website.
- o It is absolutely free to download and use.
- o It is a front-end framework used for easier and faster web development.
- o It includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, image carousels and many others.
- o It can also use JavaScript plug-ins.
- o It facilitates you to create responsive designs.

History of Bootstrap

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

In June 2014 Bootstrap was the No.1 project on GitHub.

Why use Bootstrap

Following are the main advantage of Bootstrap:

- o It is very easy to use. Anybody having basic knowledge of HTML and CSS can use Bootstrap.
- o It facilitates users to develop a responsive website.
- o It is compatible on most of browsers like Chrome, Firefox, Internet Explorer, Safari and Opera etc.

What is a responsive website

A website is called responsive website which can automatically adjust itself to look good on all devices, from smart phones to desktops etc.

What Bootstrap package contains

Scaffolding: Bootstrap provides a basic structure with Grid System, link styles, and background.

CSS: Bootstrap comes with the feature of global CSS settings, fundamental HTML elements style and an advanced grid system.

Components: Bootstrap contains a lot of reusable components built to provide iconography, dropdowns, navigation, alerts, pop-overs, and much more.

JavaScript Plugins: Bootstrap also contains a lot of custom jQuery plugins. You can easily include them all, or one by one.

Customize: Bootstrap components are customizable and you can customize Bootstrap's components, LESS variables, and jQuery plugins to get your own style.

What is Bootstrap 4?

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

Bootstrap 3 vs. Bootstrap 4

Bootstrap 4 has some new components, faster stylesheet, more buttons, effects and more responsiveness.

Bootstrap 4 supports some the latest, stable releases of all major browsers and platforms.

Note: Internet Explorer 9 and down is not supported by Bootstrap 4. Although Internet Explorer 8-9 supported Bootstrap 3. So, if you have Internet Explorer 8-9, you should use Bootstrap 3. Bootstrap 3 is the most stable version of Bootstrap, and it is still supported by the team for critical bugfixes and documentation changes.

Is Bootstrap Best?

Bootstrap is more than efficient to create a responsive and mobile first website but it is not the best in the industry. There is an alternative of Bootstrap named W3.CSS which is smaller, faster, and easier to use.

First Bootstrap Example

Add the HTML 5 doctype: Bootstrap uses HTML elements and CSS properties, so you have to add the HTML 5 doctype at the beginning of the page with lang attribute and correct character set.

Ex:

```
<!DOCTYPE html>
<html lang="en">
<head><meta http-equiv="Content-Type" content="text/html; charset=windows-1252">

<title>Any title</title>
</head>
<body>
//write code
```

```
</body>
</html>
```

Bootstrap is mobile friendly: Bootstrap 3 is designed to be responsive to mobile devices.

Mobile-first styles are part of the core framework of Bootstrap.You have to add the following <meta> tag inside the <head> element for proper rendering and touch zooming:

```
<meta name="viewport" content="width=device-width, initial-scale=1">
```

Note: The **"width=device-width"** part is used to set the width of the page to follow the screen-width of the device (vary according to the devices).

The **initial-scale=1** part is used to set the initial zoom level when the page is first loaded by the browser.

Containers: container is used to wrap the site contents. There are two container classes.

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

Note: A container cannot be placed inside a container.

First Bootstrap Example (with responsive fixed width container)

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>This is a Bootstrap example</title>

<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">
</head>
<body>
<div class="container">
<h1> First Bootstrap web page</h1>
<p>Write your text here..</p>
</div>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.0/jquery.min.js"></script>
```

```
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js"></script>
</body>
</html>
```

Bootstrap Container

In Bootstrap, container is used to set the content's margins dealing with the responsive behaviors of your layout. It contains the row elements and the row elements are the container of columns (known as grid system).

The **container class** is used to create boxed content.

There are two container classes in Bootstrap:

1. container
2. container-fluid

See the basic layout of a container:

```
<html>
 <body>
  <div class="container">
   <div class="row">
     <div class="col-md-xx"></div>
      ...
    </div>
    <div class="row">
     <div class="col-md-xx"></div>
      ...
    </div>
   </div>
  </body>
 </html>
```

Bootstrap container example

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Job</title>
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css"/>
```

```
</head>
<body>

<div class="container">
<h1>Container</h1>
<p>container content</p>
</div>

<div class="container-fluid">
<h1>Container-fluid</h1>
<p>container-fluid content</p>
</div>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/js/bootstrap.min.js"></script>
</body>
</html>
```

Bootstrap Jumbotron

A Bootstrap jumbotron specifies a big box for getting extra attention to some special content or information. It is displayed as a grey box with rounded corners. It can also enlarge the font sizes of the text inside it.

You can put any valid HTML or other Bootstrap elements/ classes inside a jumbotron.

The **class .jumbotron** within the <div> element is used to create a jumbotron.

Jumbotron Inside Container

The Inside container is used in jumbotron, if you want the jumbotron to not extend to the edge of the screen.

Put the jumbotron inside the <div class="container">.

Example:

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Bootstrap Example</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
```

```
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">
</head>
<body>

<div class="container">
<div class="jumbotron">
<h1>This is Jumbotron inside container!</h1>
<p>Jumbotron specifies a big box for getting extra attention to some special content or information.</p>
</div>
<p>This is some text.</p>
<p>This is another text.</p>
</div>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.0/jquery.min.js"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js"></script>
</body>
</html>
```

Jumbotron Outside Container

It is used when you want the jumbotron to extend to the screen edges.

Put the jumbotron outside the <div class="container">.

Example:

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Bootstrap Example</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">
</head>
<body>

<div class="jumbotron">
<h1>This is Jumbotron outside container!</h1>
<p>Jumbotron specifies a big box for getting extra attention to some special content or information.</p>
```

```
</div>

<div class="container">
<p>This is some text.</p>
<p>This is another text.</p>
</div>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.0/jquery.min.js">
</script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js"></script>
</body>
</html>
```

Full-width Jumbotron

To get a jumbotron without rounded borders, you have to add the .jumbotron-fluid class and a .container or .container-fluid inside it.

Example:

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>Bootstrap Example</title>
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/css/bootstrap.min.css">
<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.6/umd/popper.min.js"></script>
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"></script>
</head>
<body>

<div class="jumbotron jumbotron-fluid">
<div class="container">
<h1>Full-width Jumbotron</h1>
<p>Jumbotron specifies a big box for getting extra attention to some special content or information.</p>
</div>
```

```
<div class="container">
<p>This is some text.</p>
<p>This is another text.</p>
</div>

</body>
</html>
```

Bootstrap Page Header

A page header is like a section divider. It adds a horizontal line under the heading.

The **.page-header class** is used to create a page header.

Example:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">
</head>
<body>

<div class="container">
  <div class="page-header">
    <h1>Example Page Header</h1>
  </div>
  <p>This is some text.</p>
  <p>This is another text.</p>
</div>

  <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.0/jquery.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js"></script>
</body>
</html>
```

Bootstrap Buttons

There are seven styles to add a button in Bootstrap. Use the following classes to achieve the different button styles:

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

Bootstrap Button Example: specifying seven styles

```html
<!DOCTYPE html>
<html lang="en">
 <head>
   <title>Job</title>
   <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css"/>
 </head>
 <body>
  <h1>Button Example!</h1>

<button class="btn btn-default">default</button>
<button class="btn btn-primary">primary</button>
<button class="btn btn-danger">danger</button>
<button class="btn btn-success">success</button>
<button class="btn btn-info">info</button>
<button class="btn btn-warning">warning</button>
<button class="btn btn-link">Link</button>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js">
</script>
 <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/js/bootstrap.min.js"></script>
 </body>
</html>
```

There are 3 types of new buttons added in Bootstrap 4 along with 7 buttons given in Bootstrap 3.

These 3 buttons are:

- o Secondary
- o Dark
- o Light

The following classes are used to specify them respectively:

```html
<button type="button" class="btn btn-secondary">Secondary</button>
<button type="button" class="btn btn-dark">Dark</button>
<button type="button" class="btn btn-light">Light</button>
```

Example:

Let's see all buttons supported in Bootstrap 4.

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.6/umd/popper.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Button Styles</h2>
  <button type="button" class="btn">Basic</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-success">Success</button>
  <button type="button" class="btn btn-info">Info</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-dark">Dark</button>
  <button type="button" class="btn btn-light">Light</button>
  <button type="button" class="btn btn-link">Link</button>
```

```
        </div>

        </body>
        </html>
```

Bootstrap Button Size

In Bootstrap, you can choose a button according to your requirement. It provides four button sizes.

The following classes define the different sizes:

- o .btn-lg
- o .btn-md
- o .btn-sm
- o .btn-xs

Example:

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.0/jquery.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Button Sizes</h2>
  <button type="button" class="btn btn-primary btn-lg">Large</button>
  <button type="button" class="btn btn-primary btn-md">Medium</button>
  <button type="button" class="btn btn-primary btn-sm">Small</button>
  <button type="button" class="btn btn-primary btn-xs">XSmall</button>
</div>

</body>
</html>
```

Bootstrap Enable/Disable Buttons

You can set a button disable or unclickable state.

The **.active class** is used to make a button appear pressed, and the **class .disabled** makes a button unclickable:

Example:

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.0/jquery.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Button States</h2>
  <button type="button" class="btn btn-primary">Primary Button</button>
  <button type="button" class="btn btn-primary active">Active Primary</button>
  <button type="button" class="btn btn-primary disabled">Disabled Primary</button>
</div>

</body>
</html>
```

Bootstrap Block level buttons

The block level button covers the entire width of the parent element.

The **.btn-block class** is used to create a block level button:

Example:

```html
<!DOCTYPE html>
<html lang="en">
```

```
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.0/jquery.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Block Level Buttons</h2>
  <button type="button" class="btn btn-primary btn-block">Button 1</button>
  <button type="button" class="btn btn-default btn-block">Button 2</button>

  <h2>Large Block Level Buttons</h2>
  <button type="button" class="btn btn-primary btn-lg btn-block">Button 1</button>
  <button type="button" class="btn btn-default btn-lg btn-block">Button 2</button>

  <h2>Small Block Level Buttons</h2>
  <button type="button" class="btn btn-primary btn-sm btn-block">Button 1</button>
  <button type="button" class="btn btn-default btn-sm btn-block">Button 2</button>
</div>

</body>
</html>
```

Button Classes with other elements

You can use button classes with other tags i.e. <a>, <button>, or <input> element etc.

Example:

```
<!DOCTYPE html>
<html lang="en">
<head>
```

```
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
beta.2/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js">
</script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.6/umd/popper
.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
beta.2/js/bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Button Classes with other Elements</h2>
  <a href="#" class="btn btn-info" role="button">Link Button</a>
  <button type="button" class="btn btn-info">Button</button>
  <input type="button" class="btn btn-info" value="Input Button">
  <input type="submit" class="btn btn-info" value="Submit Button">
</div>

</body>
</html>
```

Button Outline/ Bordered buttons

Bootstrap 4 provides eight outline/bordered buttons:

Example

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
beta.2/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js">
</script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.6/umd/popper
.min.js"></script>
```

```
    <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
    beta.2/js/bootstrap.min.js"></script>
    </head>
    <body>

    <div class="container">
      <h2>Button Outline/ Bordered Buttons</h2>
      <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-info">Info</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-dark">Dark</button>
      <button type="button" class="btn btn-outline-light text-
    dark">Light</button>
    </div>

    </body>
    </html>
```

Bootstrap Grid

Wikipedia says:

"In graphic design, a grid is a structure (usually two-dimensional) made up of a series of intersecting straight (vertical, horizontal) lines used to structure the content. It is widely used to design layout and content structure in print design. In web design, it is a very effective method to create a consistent layout rapidly and effectively using HTML and CSS."

Bootstrap Grid System

The Bootstrap Grid System allows up to 12 columns across the page. You can use all 12 columns individually or you can groups the columns together to create wider columns.

 Bootstrap Grid System is responsive and the columns are re-arranged automatically according to the screen size.

Grid Classes:

There are four classes in Bootstrap Grid System:

- o   xs (for phones)
- o   sm (for tablets)

- md (for desktops)
- lg (for larger desktops)

You can combine the above classes to create more dynamic and flexible layouts.

Basic Structure of a Bootstrap Grid:

```
<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>
```

Follow the below instructions while creating a Bootstrap Grid:

- Create a row (<div class="row">).
- Add the number of columns, you want in the grid (tags with appropriate .col-*-* classes).
- Note that numbers in .col-*-* should always add up to 12 for each row.

Bootstrap Grid Example

For equal columns:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Job</title>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css"/>
  </head>
  <body>

<div class="container">
  <h1>Grid Example</h1>

  <div class="row">
    <div class="col-md-3"style="background-color:lavender;">Rahul</div>
```

```
    <div class="col-md-3"style="background-color:lavenderblush;">Vijay</div>
    <div class="col-md-3"style="background-color:lavender;">Kartik</div>
    <div class="col-md-3"style="background-color:lavenderblush;">Ajeet</div>
  </div>

</div>
 <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js">
</script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/js/bootstrap.min
.js"></script>
  </body>
</html>
```

For unequal columns:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Job</title>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6
/css/bootstrap.min.css"/>
  </head>
  <body>

<div class="container">
  <h1>Grid Example</h1>

<div class="row">
  <div class="col-md-1"style="background-color:lavender;">Rahul</div>
  <div class="col-md-2"style="background-color:lavenderblush;">Vijay</div>
  <div class="col-md-4"style="background-color:lavender;">Kartik</div>
  <div class="col-md-5"style="background-color:lavenderblush;">Ajeet</div>
</div>

</div>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js">
</script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/js/bootstrap.min
.js"></script>
  </body>
</html>
```

Bootstrap 4 Grid Classes

There are 5 classes in Bootstrap 4 grid system.

- o **.col-** (extra small devices - screen width less than 576px)
- o **.col-sm-** (small devices - screen width equal to or greater than 576px)
- o **.col-md-** (medium devices - screen width equal to or greater than 768px)
- o **.col-lg-** (large devices - screen width equal to or greater than 992px)
- o **.col-xl-** (xlarge devices - screen width equal to or greater than 1200px)

You can also combine the above classes to create more dynamic and flexible layouts.

Structure of Bootstrap 4 Grid

See the basic structure of Bootstrap 4 grid:

```
<!-- Control the column width, and how they should appear on different devices -->
<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>

<!-- Or let Bootstrap automatically handle the layout -->
<div class="row">
  <div class="col"></div>
  <div class="col"></div>
  <div class="col"></div>
</div>
```

First create a row (<div class="row">) then add the desired number of columns (tags with appropriate .col-*-* classes).

Here: In .col-*-* , the first star (*) represents the responsiveness: sm, md, lg or xl, while the second star represents a number, which should add up to 12 for each row.

Equal Columns Example

Let's take an example to see how to create an equal width column on all devices and screen widths:

Example

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.6/umd/popper.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"></script>
</head>
<body>

<div class="container-fluid">
  <h2>Three equal-width columns</h2>
  <div class="row">
    <div class="col" style="background-color:lavender;">.col</div>
    <div class="col" style="background-color:orange;">.col</div>
    <div class="col" style="background-color:lavender;">.col</div>

  </div>
</div>

</body>
</html>
```

Unequal Column Example

Let's take an example to see how to create an unequal width column which supports tablets and scaling to large extra desktops:

Example:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
```

```
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
beta.2/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js">
</script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.6/umd/popper
.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
beta.2/js/bootstrap.min.js"></script>
</head>
<body>

<div class="container-fluid">
  <h1>Unequal Columns</h1>
  <p>Resize the browser window to see the effect.</p>
  <p>The columns will automatically stack on top of each other when the screen is
less than 576px wide.</p>
  <div class="row">
    <div class="col-sm-4" style="background-color:lavender;">.col-sm-4</div>
    <div class="col-sm-8" style="background-color:lavenderblush;">.col-sm-
8</div>
  </div>
</div>

</body>
</html>
```

Bootstrap Tables

We can create different types of Bootstrap tables by using different classes to style them.

Bootstrap Basic Table:

The basic Bootstrap table has a light padding and only horizontal dividers. The **.table class** is used to add basic styling to a table.

Example:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Job</title>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6
/css/bootstrap.min.css"/>
```

```
  </head>
  <body>

<div class="container">
  <h1>Basic Table Example</h1>

<table class="table">
  <tr><th>Id</th><th>Name</th><th>Age</th></tr>
  <tr><td>101</td><td>Rahul</td><td>23</td></tr>
  <tr><td>102</td><td>Umesh</td><td>22</td></tr>
  <tr><td>103</td><td>Max</td><td>29</td></tr>
  <tr><td>104</td><td>Ajeet</td><td>21</td></tr>
</table>

</div>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js">
</script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/js/bootstrap.min
.js"></script>
  </body>
</html>
```

Bootstrap Striped Rows Table:

The **.table-striped class** is used to add zebra-stripes to a table:

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Job</title>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6
/css/bootstrap.min.css"/>
  </head>
  <body>

<div class="container">
  <h1>Striped Table Example</h1>

<table class="table table-striped">
  <tr><th>Id</th><th>Name</th><th>Age</th></tr>
  <tr><td>101</td><td>Rahul</td><td>23</td></tr>
  <tr><td>102</td><td>Umesh</td><td>22</td></tr>
  <tr><td>103</td><td>Max</td><td>29</td></tr>
```

```html
    <tr><td>104</td><td>Ajeet</td><td>21</td></tr>
    </table>

    </div>

    <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js">
    </script>
      <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/js/bootstrap.min
    .js"></script>
      </body>
    </html>
```

Bootstrap Bordered table:

The **.table-bordered class** is used to add borders on all sides of the table and cells:

```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Job</title>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6
/css/bootstrap.min.css"/>
  </head>
  <body>

<div class="container">
  <h1>Bordered Table Example</h1>

<table class="table table-striped table-bordered">
  <tr><th>Id</th><th>Name</th><th>Age</th></tr>
  <tr><td>101</td><td>Rahul</td><td>23</td></tr>
  <tr><td>102</td><td>Umesh</td><td>22</td></tr>
  <tr><td>103</td><td>Max</td><td>29</td></tr>
  <tr><td>104</td><td>Ajeet</td><td>21</td></tr>
</table>

</div>

  <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"
></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/js/bootstrap.min
.js"></script>
  </body>
</html>
```

Bootstrap Hover rows Table:

The **.table-hover class** is used to enable a hover state on table rows:

```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Job</title>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css"/>
  </head>
  <body>

<div class="container">
  <h1>Hower rows Table Example</h1>

<table class="table table-hover">
  <tr><th>Id</th><th>Name</th><th>Age</th></tr>
  <tr><td>101</td><td>Rahul</td><td>23</td></tr>
  <tr><td>102</td><td>Umesh</td><td>22</td></tr>
  <tr><td>103</td><td>Max</td><td>29</td></tr>
  <tr><td>104</td><td>Ajeet</td><td>21</td></tr>
</table>

</div>

  <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/js/bootstrap.min.js"></script>
  </body>
</html>
```

Bootstrap Condensed table:

The **.table-condensed class** is used to make a table more compact by cutting cell padding in half:

```html
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Job</title>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css"/>
  </head>
```

```
<body>

<div class="container">
  <h1>Condensed Table Example</h1>

<table class="table table-condensed">
  <tr><th>Id</th><th>Name</th><th>Age</th></tr>
  <tr><td>101</td><td>Rahul</td><td>23</td></tr>
  <tr><td>102</td><td>Umesh</td><td>22</td></tr>
  <tr><td>103</td><td>Max</td><td>29</td></tr>
  <tr><td>104</td><td>Ajeet</td><td>21</td></tr>
</table>

</div>


  <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"
></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/js/bootstrap.min
.js"></script>
  </body>
</html>
```

Bootstrap Contextual classes:.

Contextual classes are used to color table rows (<tr>) or table cells (<td>):

Following are the different contextual classes:

Class	Description
.active	It is used to apply the hover color to the table row or table cell
.success	It indicates a successful or positive action
.info	It indicates a neutral informative change or action
.warning	It specifies a warning that might need attention
.danger	It indicates a dangerous or potentially negative action

Example:

```html
<!DOCTYPE html>
<html lang="en">
 <head>
   <title>Job</title>
   <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css"/>
 </head>
 <body>

<div class="container">
 <h1>Contextual classes</h1>

<table class="table">
 <tr class="success"><th>Id</th><th>Name</th><th>Age</th></tr>
 <tr class="active"><td>101</td><td>Rahul</td><td>23</td></tr>
 <tr class="danger"><td>102</td><td>Umesh</td><td>22</td></tr>
 <tr class="info"><td>103</td><td>Max</td><td>29</td></tr>
 <tr class="warning"><td>104</td><td>Ajeet</td><td>21</td></tr>
</table>

</div>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js"></script>
 <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/js/bootstrap.min.js"></script>
 </body>
</html>
```

Responsive tables:

The .table-responsive class is used to create a responsive table. You can open the responsible table even on small devices (under 768px). Then the table will be scrolled horizontally. Displays larger than 768px wide, there is no difference.

See this example:

```html
<!DOCTYPE html>
<html lang="en">
 <head>
   <title>Job</title>
   <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css"/>
```

```
  </head>
  <body>

<div class="container">
  <h1>Contextual classes</h1>
<div class="table-responsive">

<table class="table">
  <tr class="success"><th>Id</th><th>Name</th><th>Age</th></tr>
  <tr class="active"><td>101</td><td>Rahul</td><td>23</td></tr>
  <tr class="danger"><td>102</td><td>Umesh</td><td>22</td></tr>
  <tr class="info"><td>103</td><td>Max</td><td>29</td></tr>
  <tr class="warning"><td>104</td><td>Ajeet</td><td>21</td></tr>
</table>

</div>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js">
</script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/js/bootstrap.min
.js"></script>
  </body>
</html>
```

Some newly added tables in Bootstrap 4:

Black/Dark Table

The .table-dark class is used to add a black background to the table:

Example

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
beta.2/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js">
</script>
```

```html
  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.6/umd/popper
.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
beta.2/js/bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Black/Dark Table</h2>
  <p>The .table-
dark class is used to add a black background to the table:</p>
  <table class="table table-dark">
    <thead>
      <tr>
        <th>Firstname</th>
        <th>Lastname</th>
        <th>Email</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <td>Ajeet</td>
        <td>Kumar</td>
        <td>ajeet@jtp.com</td>
      </tr>
      <tr>
        <td>Mahesh</td>
        <td>Sharma</td>
        <td>mahesh@jtp.com</td>
      </tr>
      <tr>
        <td>Sonoo</td>
        <td>Jaiswal</td>
        <td>sonoo@jtp.com</td>
      </tr>
    </tbody>
  </table>
</div>

</body>
</html>
```

Dark Striped Table

Combine the .table-dark class and .table-striped class to create a dark, striped table:

Example

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.6/umd/popper.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Dark Striped Table</h2>
  <p>Combine the .table-dark class and .table-striped class to create a dark, striped table: </p>
  <table class="table table-dark table-striped">
    <thead>
    <tr>
      <th>Firstname</th>
      <th>Lastname</th>
      <th>Email</th>
    </tr>
    </thead>
    <tbody>
    <tr>
      <td>Ajeet</td>
      <td>Kumar</td>
      <td>ajeet@jtp.com</td>
    </tr>
    <tr>
      <td>Mahesh</td>
      <td>Sharma</td>
```

```
        <td>mahesh@jtp.com</td>
      </tr>
      <tr>
        <td>Sonoo</td>
        <td>Jaiswal</td>
        <td>sonoo@jtp.com</td>
      </tr>
    </tbody>
   </table>
  </div>

  </body>
</html>
```

Hoverable Dark Table

The .table-hover class is used to add a hover effect (grey background color) on table rows:

Example

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.6/umd/popper.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Hoverable Dark Table</h2>
  <p>The .table-hover class is used to add a hover effect (grey background color) on table rows:</p>
  <table class="table table-dark table-hover">
```

```
    <thead>
      <tr>
        <th>Firstname</th>
        <th>Lastname</th>
        <th>Email</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <td>Ajeet</td>
        <td>Kumar</td>
        <td>ajeet@jtp.com</td>
      </tr>
      <tr>
        <td>Mahesh</td>
        <td>Sharma</td>
        <td>mahesh@jtp.com</td>
      </tr>
      <tr>
        <td>Sonoo</td>
        <td>Jaiswal</td>
        <td>sonoo@jtp.com</td>
      </tr>
    </tbody>
  </table>
</div>

</body>
</html>
```

Bootstrap 4 Contextual Table

Contextual classes can be used to color the whole table (<table>), the table rows (<tr>) or table cells (<td>).

The classes that can be used are:

.table-primary, .table-success, .table-info, .table-warning, .table-danger, .table-active, .table-secondary, .table-light and .table-dark:

Let's take an example to see the usage of all contextual classes in a Bootstrap 4 table.

Example

```
<!DOCTYPE html>
<html lang="en">
```

```html
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.6/umd/popper.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Contextual Classes Example</h2>
  <table class="table">
    <thead>
      <tr>
        <th>Firstname</th>
        <th>Lastname</th>
        <th>Email</th>
      </tr>
    </thead>
    <tbody>
      <tr>
        <td>Default</td>
        <td>A</td>
        <td>a@jtp.com</td>
      </tr>
      <tr class="table-primary">
        <td>Primary</td>
        <td>B</td>
        <td>b@jtp.com</td>
      </tr>
      <tr class="table-success">
        <td>Success</td>
        <td>C</td>
        <td>c@jtp.com</td>
      </tr>
      <tr class="table-danger">
        <td>Danger</td>
        <td>D</td>
```

```html
      <td>d@jtp.com</td>
    </tr>
    <tr class="table-info">
      <td>Info</td>
      <td>E</td>
      <td>e@jtp.com</td>
    </tr>
    <tr class="table-warning">
      <td>Warning</td>
      <td>F</td>
      <td>f@jtp.com</td>
    </tr>
    <tr class="table-active">
      <td>Active</td>
      <td>G</td>
      <td>g@jtp.com</td>
    </tr>
    <tr class="table-secondary">
      <td>Secondary</td>
      <td>H</td>
      <td>h@jtp.com</td>
    </tr>
    <tr class="table-light">
      <td>Light</td>
      <td>I</td>
      <td>j@jtp.com</td>
    </tr>
    <tr class="table-dark text-dark">
      <td>Dark</td>
      <td>K</td>
      <td>k@jtp.com</td>
    </tr>
  </tbody>
 </table>
</div>

</body>
</html>
```

Table Head Colors

You can change the background color of the table header by using .thead-dark class to add a black background to table headers, and the .thead-light class to add a grey background to table headers.

Example:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.6/umd/popper.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Table Head Colors</h2>
  <table class="table">
    <thead class="thead-dark">
     <tr>
       <th>Firstname</th>
       <th>Lastname</th>
       <th>Email</th>
     </tr>
    </thead>
    <tbody>
        <tr>
       <th>Firstname</th>
       <th>Lastname</th>
       <th>Email</th>
     </tr>
    </thead>
    <tbody>
     <tr>
```

```html
      <td>Ajeet</td>
      <td>Kumar</td>
      <td>ajeet@jtp.com</td>
    </tr>
    <tr>
      <td>Mahesh</td>
      <td>Sharma</td>
      <td>mahesh@jtp.com</td>
    </tr>
    <tr>
      <td>Sonoo</td>
      <td>Jaiswal</td>
      <td>sonoo@jtp.com</td>
    </tr>
  </tbody>
</table>
<table class="table">
  <thead class="thead-light">
    <tr>
      <th>Firstname</th>
      <th>Lastname</th>
      <th>Email</th>
    </tr>
  </thead>
  <tbody>
      <tr>
      <th>Firstname</th>
      <th>Lastname</th>
      <th>Email</th>
    </tr>
  </thead>
  <tbody>
    <tr>
      <td>Ajeet</td>
      <td>Kumar</td>
      <td>ajeet@jtp.com</td>
    </tr>
    <tr>
      <td>Mahesh</td>
      <td>Sharma</td>
      <td>mahesh@jtp.com</td>
    </tr>
    <tr>
      <td>Sonoo</td>
```

```
        <td>Jaiswal</td>
        <td>sonoo@jtp.com</td>
      </tr>

    </tbody>
  </table>
</div>

</body>
</html>
```

Small Table

The .table-sm class is used to make the table smaller by cutting cell padding in half.

Example:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/css/bootstrap.min.css">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
  <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.6/umd/popper.min.js"></script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Small Table Example</h2>
  <p>The .table-
sm class is used to make the table smaller by cutting cell padding in half.</p>
  <table class="table table-bordered table-sm">
    <thead>
      <tr>
        <th>Firstname</th>
        <th>Lastname</th>
        <th>Email</th>
```

```
        </tr>
      </thead>
      <tbody>
        <tr>
          <td>Ajeet</td>
          <td>Kumar</td>
          <td>ajeet@jtp.com</td>
        </tr>
        <tr>
          <td>Mahesh</td>
          <td>Sharma</td>
          <td>mahesh@jtp.com</td>
        </tr>
        <tr>
          <td>Sonoo</td>
          <td>Jaiswal</td>
          <td>sonoo@jtp.com</td>
        </tr>

      </tbody>
    </table>
  </div>

</body>
</html>
```

Bootstrap Forms

In Bootstrap, there are three types of form layouts:

- o   Vertical form (this is default)
- o   Horizontal form
- o   Inline form

Bootstrap Form Rules

There are three standard rules for these 3 form layouts:

- o   Always use <form role="form"> (helps improve accessibility for people using screen readers)
- o   Wrap labels and form controls in <div class="form-group"> (needed for optimum spacing)

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

1) Bootstrap Vertical Form (Default)

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Bootstrap example</title>
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css"/>
  </head>
  <body>

<div class="container">
  <h1>Vertical Form Example</h1>

<form style="width:300px">
  <div class="form-group">
    <label for="exampleInputEmail1">Email address</label>
    <input type="email" class="form-control" id="exampleInputEmail1" placeholder="Email">
  </div>
  <div class="form-group">
    <label for="exampleInputPassword1">Password</label>
    <input type="password" class="form-control" id="exampleInputPassword1" placeholder="Password">
  </div>

  <button type="submit" class="btn btn-default">Login</button>
</form>

</div>

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.3/jquery.min.js">
</script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.5/js/bootstrap.min.js"></script>
  </body>
</html>
```

2) Bootstrap Inline Form

In Bootstrap Inline forms, all elements are inline, left-aligned, and the labels are alongside.

This example is only applied to forms within viewports that are at least 768px wide!

Example:

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">

</head>
<body>

<div class="container">
  <h2>Inline form Example</h2>
  <form class="form-inline" role="form">
    <form style="width:300px">
  <div class="form-group">
    <label for="exampleInputEmail1">Email address</label>
    <input type="email" class="form-control" id="exampleInputEmail1" placeholder="Email">
  </div>
  <div class="form-group">
    <label for="exampleInputPassword1">Password</label>
    <input type="password" class="form-control" id="exampleInputPassword1" placeholder="Password">
  </div>

  <button type="submit" class="btn btn-default">Login</button>
</form>

</div>
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.0/jquery.min.js">
</script>
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js"></script>
```

```
  </body>
  </html>
```

3) Bootstrap Horizontal Form

You have to add some additional rules if you want to create a horizontal form.

Additional rules for a horizontal form:

- o Add class .form-horizontal to the <form> element
- o Add class .control-label to all <label> elements

Example:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <title>Bootstrap Example</title>
  <meta charset="utf-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css">

</head>
<body>

<div class="container">
  <h2>Horizontal form Example</h2>
  <form class="form-horizontal" role="form">
    <form style="width:300px">
  <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">
       <button type="submit" class="btn btn-default">Submit</button>
      </div>
    </div>
   </form>
 </div>
 <script src="https://ajax.googleapis.com/ajax/libs/jquery/1.12.0/jquery.min.js">
 </script>
 <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.j
s"></script>

 </body>
 </html>
```

Bootstrap 4 Forms

In Bootstrap4, form controls automatically receive some global styling with Bootstrap.

All textual <input>, <textarea>, and <select> elements with class .form-control have a width of 100%.

Stacked (full-width) form:

Bootstrap 4 provides full width stacked forms.

Example:

Let's take an example to create a stacked form with two input fields, one checkbox, and a submit button.

```
<!DOCTYPE html>
<html lang="en">
<head>
 <title>Bootstrap Example</title>
 <meta charset="utf-8">
 <meta name="viewport" content="width=device-width, initial-scale=1">
 <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-
beta.2/css/bootstrap.min.css">
 <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js">
</script>
 <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.6/umd/popper
.min.js"></script>
```

```html
  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta.2/js/bootstrap.min.js"></script>
</head>
<body>

<div class="container">
  <h2>Stacked form</h2>
  <form>
    <div class="form-group">
      <label for="email">Email:</label>
      <input type="email" class="form-control" id="email" placeholder="Enter email">
    </div>
    <div class="form-group">
      <label for="pwd">Password:</label>
      <input type="password" class="form-control" id="pwd" placeholder="Enter password">
    </div>
    <div class="form-check">
      <label class="form-check-label">
        <input class="form-check-input" type="checkbox"> Remember me
      </label>
    </div>
    <button type="submit" class="btn btn-primary">Submit</button>
  </form>
</div>

</body>
</html>
```