

BOOTSTRAP 3.3

**A Guide Book for Beginners
to Learn Web Framework
FAST!**



Kevin Lyn.

Bootstrap 3.3

A Guide Book for Beginners to Learn Web Framework Fast!

Kevin Lyn.

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Table of Contents

[Book Description](#)

[Introduction](#)

[Chapter 1: Definition](#)

[Chapter 2: Getting started with Bootstrap](#)

[Chapter 3: Grid System in Bootstrap](#)

[Chapter 4: Fixed Layout with Bootstrap](#)

[Chapter 5: Tables in Bootstrap](#)

[Chapter 6: Lists in Bootstrap](#)

[Chapter 7: Creating Forms with Bootstrap](#)

[Chapter 8: Styling Images with Bootstrap](#)

[Chapter 9: Buttons in Bootstrap](#)

[Chapter 10: Modals in Bootstrap](#)

[Chapter 11: Accordion in Bootstrap](#)

[Chapter 12: Bootstrap Carousel](#)

[Conclusion](#)

Book Description

This book is all about bootstrap. After reading it, you will know how to use bootstrap for development. You will also know the constituent components of bootstrap. The two types of bootstrap, that is, the compiled and the source code files are explored in detail with emphasis on the difference between the two types.

Here you will learn how to predict the appearance of a web page on different devices and screens depending on the kind of layout you have used. Tables, which are a common feature in web development have been discussed. Adding hover, borders, adding background features and as well as differentiating the rows of a table have been discussed.

The files which are usually found in the bootstrap folder are also explained in terms of what they do. You will also be guided on how to include these bootstrap files in your project and even in the header of your code. The different types of layouts which are available in bootstrap are explored in detail and their effect on devices with different screen sizes.

You will also know how to make responsive tables with bootstrap so that they can appear well on different devices regardless of the screen size. Lists are also explored in this book. The different types of buttons are also explored, and as well as images and forms in bootstrap.

Modals, accordions and carousel, which are advanced features in bootstrap have also been discussed in this book. There are code examples as well as pictures in this book for ease of understanding. The following topics have been discussed:

- Definition
- Getting started
- Grid system in Bootstrap
- Fixed Layout
- Tables
- Lists
- Forms
- Styling Images
- Buttons
- Modals
- Accordion
- Carousel

Introduction

With bootstrap, you can create web pages that will scroll well on any device. Something like a table, which might seem difficult to fit on a cell phone can be made to do this using bootstrap. This explains how powerful bootstrap is. This can also be done without too much coding and in a short period of time.

You might have heard of responsive web design. If not, don't worry for you'll understand what it is after reading this book. You might have realized that some websites are not accessible via cell phones and tablets, but one can only access them via computers. Web pages also do not appear the same on devices with different sizes in terms of the layout and how they scroll.

You know about validation. Instead of using JQuery, with which much coding will be needed, bootstrap can be used for this purpose using less than 5 words. It has numerous controls which are available in HTML such as buttons and text fields. With bootstrap, these can be made beautiful. Image and text sliders can also be made using bootstrap with much less effort in terms of coding.

Chapter 1:

Definition

Ever heard of responsive web design? Bootstrap is a collection of tools which helps developers in creating responsive websites. Most of today's websites are not responsive, meaning that you can only access them via computers. Devices with small screen such as mobile phones and tablets cannot access these websites.

This is why Jacob Thornton and Mark Otto developed bootstrap. With this tool, developers create websites with amazing features and these can be accessed via devices of any screen size. Responsiveness is one of the emerging issues in web development, and this is the reason why you should consider learning bootstrap.

It is compatible with nearly all the browsers currently in use. If you have never used this tool, you will be amazed how it senses the size of the screen of the device and then it adjusts the pages of the web page dynamically. Its documentation has been translated into other languages such as Russian, Spanish and Chinese.

If you have not downloaded it, it is available for free download on Github, so you can get it from there. The process of creating a responsive layout with bootstrap is much easy such that even beginners will find it easy. The tool is based on HTML and CSS.

Some of the interface components that can be created with bootstrap include carousel, buttons, modals, accordion, forms, tables, dropdowns, alerts, navigation and tabs. It also offers Javascript extensions which are optional.

Why you should use Bootstrap

1. Responsive design- with bootstrap, web pages appear well on devices with different screen sizes and resolution. You will not observe any change in markup.
2. Easy to learn and use- provided you know the basics of HTML and CSS, you don't need to learn bootstrap. You only need to get started.
3. Saves time- instead of defining your own classes, you just use the predefined bootstrap classes and templates and then use that doing in doing other development work.
4. Compatibility with Browsers- bootstrap is compatible with most of the current browsers such as Google Chrome, Mozilla Firefox, Safari, Opera and Internet Explorer.
5. Consistency in Design- through a central library, all of the components of this tool share the same design styles and templates which have led to consistency.

6. Open source- bootstrap is available for free download on GitHub.

It is worth to note that some properties such as shadows, rounded corners and gradients which are supported by CSS3 are also supported in Bootstrap. However, when you use older versions of browsers such as the Internet explorer and you have developed these features with bootstrap, they will not be supported.

Chapter 2:

Getting started with Bootstrap

Before you can begin to use bootstrap, it is good to make sure that you understand the basics of both HTML and CSS as these are the building blocks of bootstrap. Also, ensure that your computer has an editor of choice. I don't prefer the basic ones such as notepad. You can download and install Dreamweaver or Notepad++.

Downloading Bootstrap Files

When downloading bootstrap files, you will be availed with two versions, the **Bootstrap source** files and the **Compiled Bootstrap** files. The source version always contains original source files for all Javascript and CSS and a local copy of the documents.

The compiled version contains the minified and compiled versions of Javascript and CSS files. For easy and faster web development, it has icons in font format. In this book, we are going to use the compiled version of bootstrap. It is easy for understanding and saving of time since as the programmer, you will not be needed to include separate files for each functionality.

It also has less HTTP request, hence you will save on bandwidth when moving the site to a

production environment. After download the bootstrap file, it will come a zipped format.

Unzip it and you will find the following files:

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

The above are the components of the compiled version of bootstrap. It has the compiled Javascript and CSS files and a fonts file. The four files contain 200 icons.

Now that you have known the structure of the bootstrap, let us create our first template using it. Consider the following basic HTML code:

```
<html>
```

```
<head>
```

```
<meta charset="utf-8">
```

```
<title>An HTML file</title>
```

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

```
</head>
```

```
<body>
```

```
<h1>Hello world</h1>
```

```
</body>
```

```
</html>
```

We want to enhance the performance of the above by making it a bootstrapped template. To achieve this, we just need to add the CSS and JS files from bootstrap, and we will be done. The Javascript files should be added at the page's bottom. This should be as follows:

```
<!DOCTYPE html>
```

```
<html>
```

```
<head>
```

```
<meta charset="utf-8">
```

```
<title>A Bootstrap Template</title>

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

<link rel="stylesheet" type="text/css" href="css/bootstrap.min.css">

</head>

<body>

<h1>Hello world</h1>

<script src="http://code.jquery.com/jquery.min.js"></script>

<script src="js/bootstrap.min.js"></script>

</body>

</html>
```

Be keen when specifying the path where the bootstrap files are located. Note that we have added three files to develop the template. You can now save the template and give it a name of choice.

Ensure that the name has a .html extension. You can then navigate to the location where you have saved the file and double click on it or right click on it and choosing "Open". It will open with the default browser of your computer. Text written "Hello world" will be printed on the browser. In case the file doesn't open after using the above two methods, just open a browser and drag it there. It will open.

Chapter 3:

Grid System in Bootstrap

This makes it possible for web developers to create different layouts for their web pages.

In Bootstrap 3, this grid system can span up to 12 columns depending on the screen size of the device. This type of grid system is called mobile first fluid grid system.

Developers have used this to create websites which can be accessed using any device regardless of the screen size. This version of bootstrap also has different classes for making layouts of different devices such as tablets, desktops and cell phones.

Creating Layouts with Bootstrap Grid system

With bootstrap, one can determine and control how the pages of the website will look on different devices with different screen sizes. Consider the following devices:



We have presented the four screens each with 12 content boxes. However, the arrangement is not the same on all screens. The first screen illustrates the screen of a cell phone. The content boxes have been arranged vertically and each occupies a row.

The second screen illustrates a device such as a desktop with a large display. The content boxes have been arranged in a 4 * 3 grid layout. The third screen illustrates what we have in a device such as a tablet. The content boxes have been arranged in a 2 * 6 grid layout. The last screen illustrates what we have in a laptop with a medium sized screen. The content boxes have been represented in a 3 * 4 grid layout.

Now that we have the four screens, how can you create a layout to fit in any of the above screens? That's what we going to tackle. Let us start with the device having a medium sized screen such as a laptop. Type the following code and run it on such a device:

```
< html>
```

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

```
<head>
```

```
<title>A 3 grid system with bootstrap</title>
```

```
<link rel="stylesheet" href=" css/bootstrap.min.css">
```

```
<link rel="stylesheet" href=" css/bootstrap-theme.min.css">
```

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>
```

```
<script src=" js/bootstrap.min.js"></script>
```

```
<style type="text/css">
```



```
p{
background: #f2f2f2;

padding: 52px;

font-size: 30px;

text-align: center;

font-weight: bold;

}

</style>

</head>

<body>

  <div class="container">

    <div class="row">

      <div class="col-md-4"><p>1</p></div>

      <div class="col-md-4"><p>2</p></div>

      <div class="col-md-4"><p>3</p></div>

      <div class="col-md-4"><p>4</p></div>

      <div class="col-md-4"><p> 5</p></div>

      <div class="col-md-4"><p> 6</p></div>

      <div class="col-md-4"><p> 7</p></div>

      <div class="col-md-4"><p> 8</p></div>

      <div class="col-md-4"><p> 9</p></div>
```

```
<div class="col-md-4"><p> 10</p></div>
<div class="col-md-4"><p> 11</p></div>
<div class="col-md-4"><p> 12</p></div>
</div>
</div>
</body>
</html>
```

Follow the steps we did in our first example to run the file after saving it. If you use a medium sized device such a laptop, the output will be boxes arranged in a 3 * 4 grid layout, that is, 4 rows and 3 columns. However, you notice that if any of the columns is taller than the others, it will not clear properly. Fix this by adding `.clearfix` and the classes responsible for responsiveness as shown below:

```
<!DOCTYPE html>
<html lang="en">
<head>
<title> A 3 grid system with bootstrap </title>
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.2/css/bootstrap.min.css">
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.2/css/bootstrap-theme.min.css">
```

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>
```

```
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.2/js/bootstrap.min.js">
```

```
</script>
```

```
<style type="text/css">
```

```
  p{
```

```
    font-size: 32px;
```

```
    font-weight: bold;
```

```
    padding: 50px;
```

```
    background: #f2f2f2;
```

```
    text-align: center;
```

```
  }
```

```
</style>
```

```
</head>
```

```
<body>
```

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

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

```
      <div class="col-md-4"><p> 1</p></div>
```

```
      <div class="col-md-4"><p> 2</p></div>
```

```
        <div class="col-md-4"><p> 3</p></div>
```

```
      <div class="clearfix visible-md-block"></div>
```

```
      <div class="col-md-4"><p> 4</p></div>
```

```
<div class="col-md-4"><p> 5</p></div>
<div class="col-md-4"><p> 6</p></div>
<div class="clearfix visible-md-block"></div>
<div class="col-md-4"><p> 7</p></div>
<div class="col-md-4"><p> 8</p></div>
    <div class="col-md-4"><p> 9</p></div>
<div class="clearfix visible-md-block"></div>
<div class="col-md-4"><p> 10</p></div>
<div class="col-md-4"><p> 11</p></div>
<div class="col-md-4"><p> 12</p></div>
</div>
</div>
```

```
</body>
```

```
</html>
```

That’s for a laptop. Let us to the same for a tablet which has 2 * 6 grid layout. The code should be as follows:

```
<!DOCTYPE html>
<html lang="en">
<head>
<title>A 3 grid layout with Bootstrap</title>
<link rel="stylesheet" href=" css/bootstrap.min.css">
```

```
<link rel="stylesheet" href="css/bootstrap-theme.min.css">
```

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>
```

```
<script src="js/bootstrap.min.js"></script>
```

```
<style type="text/css">
```

```
  p{
```

```
    background: #f2f2f2;
```

```
    padding: 50px;
```

```
    font-size: 32px;
```

```
text-align: center;
```

```
    font-weight: bold;
```

```
  }
```

```
</style>
```

```
</head>
```

```
<body>
```

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

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

```
      <div class="col-sm-6 col-md-4"><p> 1</p></div>
```

```
      <div class="col-sm-6 col-md-4"><p> 2</p></div>
```

```
      <div class="col-sm-6 col-md-4"><p> 3</p></div>
```

```
      <div class="clearfix visible-md-block"></div>
```

```
      <div class="col-sm-6 col-md-4"><p> 4</p></div>
```

```
<div class="col-sm-6 col-md-4"><p> 5</p></div>
```

```
<div class="col-sm-6 col-md-4"><p> 6</p></div>
```

```
<div class="clearfix visible-md-block"></div>
```

```
<div class="col-sm-6 col-md-4"><p> 7</p></div>
```

```
<div class="col-sm-6 col-md-4"><p> 8</p></div>
```

```
<div class="col-sm-6 col-md-4"><p> 9</p></div>
```

```
<div class="clearfix visible-md-block"></div>
```

```
<div class="col-sm-6 col-md-4"><p> 10</p></div>
```

```
<div class="col-sm-6 col-md-4"><p> 11</p></div>
```

```
<div class="col-sm-6 col-md-4"><p> 12</p></div>
```

```
</div>
```

```
</div>
```

```
</body>
```

```
</html>
```

Notice that in this case we have used .col-sm-6.

For small devices such as the mobile phones, the clearing will look as follows:

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

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

```
<div class="col-sm-6 col-md-4"><p> 1</p></div>
```

<div class="col-sm-6 col-md-4"><p> 2</p></div>

<div class="clearfix visible-sm-block"></div>

<div class="col-sm-6 col-md-4"><p> 3</p></div>

<div class="clearfix visible-md-block"></div>

<div class="col-sm-6 col-md-4"><p> 4</p></div>

<div class="clearfix visible-sm-block"></div>

<div class="col-sm-6 col-md-4"><p> 5</p></div>

<div class="col-sm-6 col-md-4"><p> 6</p></div>

<div class="clearfix visible-sm-block"></div>

<div class="clearfix visible-md-block"></div>

<div class="col-sm-6 col-md-4"><p> 7</p></div>

<div class="col-sm-6 col-md-4"><p> 8</p></div>

<div class="clearfix visible-sm-block"></div>

<div class="col-sm-6 col-md-4"><p> 9</p></div>

<div class="clearfix visible-md-block"></div>

<div class="col-sm-6 col-md-4"><p> 10</p></div>

<div class="clearfix visible-sm-block"></div>

<div class="col-sm-6 col-md-4"><p> 11</p></div>

<div class="col-sm-6 col-md-4"><p> 12</p></div>

</div>

</div>

Lastly, for large screens such as desktops, the clearing would be as follows:

```
<div class="container">  
  
  <div class="row">  
  
    <div class="col-sm-6 col-md-4 col-lg-3"><p> 1</p></div>  
  
    <div class="col-sm-6 col-md-4 col-lg-3"><p> 2</p></div>  
  
    <div class="clearfix visible-sm-block"></div>  
  
    <div class="col-sm-6 col-md-4 col-lg-3"><p> 3</p></div>  
  
    <div class="clearfix visible-md-block"></div>  
  
    <div class="col-sm-6 col-md-4 col-lg-3"><p> 4</p></div>  
  
    <div class="clearfix visible-sm-block"></div>  
  
    <div class="clearfix visible-lg-block"></div>  
  
    <div class="col-sm-6 col-md-4 col-lg-3"><p> 5</p></div>  
  
    <div class="col-sm-6 col-md-4 col-lg-3"><p> 6</p></div>  
  
    <div class="clearfix visible-sm-block"></div>  
  
    <div class="clearfix visible-md-block"></div>  
  
    <div class="col-sm-6 col-md-4 col-lg-3"><p> 7</p></div>  
  
    <div class="col-sm-6 col-md-4 col-lg-3"><p> 8</p></div>  
  
    <div class="clearfix visible-sm-block"></div>  
  
    <div class="clearfix visible-lg-block"></div>  
  
    <div class="col-sm-6 col-md-4 col-lg-3"><p> 9</p></div>
```


<div class="clearfix visible-md-block"></div>

<div class="col-sm-6 col-md-4 col-lg-3"><p> 10</p></div>

<div class="clearfix visible-sm-block"></div>

<div class="col-sm-6 col-md-4 col-lg-3"><p> 11</p></div>

<div class="col-sm-6 col-md-4 col-lg-3"><p> 12</p></div>

</div>

</div>

Chapter 4:

Fixed Layout with Bootstrap

You can use bootstrap to create pages for a web with a fixed number of pixels. The good thing with this is that it will remain responsive on all devices even though you are not required to include the responsive style sheet. In this case, we start with the class `.container`.

For us to wrap the horizontal groups of columns, we use the `.row` class. For you to ensure that there is a proper padding and alignment, all rows must be placed in the `.container` class. Creation of columns can then be done within the rows using classes such as `.col-sm-*`, `.col-xs-*`, `.col-lg-*` and `.col-md-*` .

Note that `*` stands for the number of grids which can take values from 1 to 12. Let us illustrate this with a code which will create a fixed width page with 750px and it is responsive. This web page should be 750px wide on a device such as a tablet which has a small screen size, 970px wide on a device with a medium sized display such a laptop and 1170px wide on devices with large display size such as large desktops.

On devices such as cell phones whose display is small (<768px), the layout width will be calculated automatically.

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<title>A fixed layout with Bootstrap</title>

<link rel="stylesheet" type="text/css" href="css/bootstrap.min.css">

<link rel="stylesheet" type="text/css" href="css/bootstrap-theme.min.css">

<script type="text/javascript" src="http://code.jquery.com/jquery.min.js"></script>

<script type="text/javascript" src="js/bootstrap.min.js"></script>

</head>

<body>

  <nav id="nbar" class="navbar navbar-default navbar-inverse navbar-fixed-top"
role="navigation">

    <!--To enhance the display on a mobile device -->

    <div class="container">

      <div class="navbar-header">

        <button type="button" class="navbar-toggle" data-toggle="collapse" data-
target="#navbarCollapse">

          <span class="sr-only">Navigating Toggle</span>

          <span class="icon-bar"></span>

          <span class="icon-bar"></span>
```

```
<span class="icon-bar"></span>
```

```
</button>
```

```
<a class="navbar-brand" href="#">Bootstrap book</a>
```

```
</div>
```

```
<!--Collect content for forms, nav links, and others for toggling purpose -->
```

```
<div class="collapse navbar-collapse" id="nbCollapse">
```

```
<ul class="nav navbar-nav">
```

```
<li class="active"><a href="#" target="_blank">Home</a></li>
```

```
<li><a href="#" target="_blank">About</a></li>
```

```
<li><a href="#" target="_blank">Contact</a></li>
```

```
</ul>
```

```
</div>
```

```
</div>
```

```
</nav>
```

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

```
<div class="jumbotron">
```

```
<h1>Learn to use Bootstrap</h1>
```

```
<p>With Bootsrap, one can create a fixed and responsive web </p>
```

```
<p><a href="#" target="_blank" class="btn btn-success btn-lg">Read this book to get  
started</a></p>
```

```
</div>
```

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

```
<div class="col-xs-4">
```

```
<h2>HTML</h2>
```

```
<p>HTML is also good for creating web pages. It is one of the constituent components of bootstrap.</p>
```

```
<p><a href="#" target="_blank" class="btn btn-success">Read More &raquo;</a>
```

```
</p>
```

```
</div>
```

```
<div class="col-xs-4">
```

```
<h2>CSS</h2>
```

```
<p>CSS is a good when it comes to presentation of a web page. On can also add many styles to the web page with this. Colors, padding and indentation can be achieved with CSS, thus, it is a very powerful tool. It is a constituent component of Bootstrap along with HTML</p>
```

```
<p><a href="#" target="_blank" class="btn btn-success">Read more &raquo;</a></p>
```

```
</div>
```

```
<div class="col-xs-4">
```

```
<h2>Bootstrap</h2>
```

```
<p>Bootstrap is a tool for responsive web design, with which a developer can achieve amazing functionalities, and with less effort and within a short period of time. </p>
```

```
<p><a href="#" target="_blank" class="btn btn-success">Read more &raquo;</a></p>
```

```
</div>
```

```
</div>

<hr>

<div class="row">

<div class="col-xs-12">

<footer>

<p>Bootstrap book</p>

</footer>

</div>

</div>

</div>

</div>

</body>

</html>
```

Once you have saved the file with a .html extension, just run it. The first part of the output will be a navigation bar containing menus. The first menu will be written “Bootstrap book”. The other menus will appear as follows:



At the center of the web page should be a description of the title “Learn to use Bootstrap”. The description for HTML, CSS and Bootstrap will also be shown. Notice the color of the buttons used in this example. They are all green. This is because we have used the button

success. There are many other types of buttons and you will learn these as we progress.

Chapter 5:

Tables in Bootstrap

Bootstrap can be used to enhance how your table looks like. This means that one can improve tables from what they can create using pure HTML. Let us begin by creating a simple table using the .table class in bootstrap:

```
<table class="table">  
  
<thead>  
  
<tr>  
  
  <th>Row Number</th>  
  
  <th>FName</th>  
  
  <th>LName</th>  
  
  <th>Email</th>  
  
</tr>  
  
</thead>  
  
<tbody>  
  
<tr>  
  
  <td>1</td>
```

```
<td>Michael</td>

<td>Joseph</td>

<td>michaeljoseph@mail.com</td>

</tr>

<tr>

<td>2</td>

<td>john</td>

<td>Parker</td>

<td>johnparker@mail.com</td>

</tr>

<tr>

<td>3</td>

<td>peter</td>

<td>mary</td>

<td>petermary@mail.com</td>

</tr>

</tbody>

</table>
```

On running the code above, the following output will be displayed on your browser:

Row Number	FName	LName	Email
1	Michael	Joseph	michaeljoseph@mail.com
2	john	Parker	johnparker@mail.com
3	peter	mary	petermary@mail.com

Adding Alternate Background to the Table

You can add additional features to your table such as stripes resembling the ones of a zebra. Run the following code and observe the output:

```
<table class="table table-striped">  
  
  <thead>  
  
    <tr>  
  
      <th>Row Number</th>  
  
      <th>FName</th>  
  
      <th>LName</th>  
  
      <th>Email</th>  
  
    </tr>  
  
  </thead>  
  
  <tbody>  
  
    <tr>  
  
      <td>1</td>
```

```
<td>Peter</td>

<td>mary</td>

<td>petermary@mail.com</td>

</tr>

<tr>

<td>2</td>

<td>john</td>

<td>Parker</td>

<td>johnparker@mail.com</td>

</tr>

<tr>

<td>3</td>

<td>emmanuel</td>

<td>ken</td>

<td>emmanuelken@mail.com</td>

</tr>

</tbody>

</table>
```

After running the above code, the following output will be observed:

Row Number	FName	LName	Email
1	Peter	mary	petermary@mail.com
2	john	Parker	johnparker@mail.com
3	emmanuel	ken	emmanuelken@mail.com

Adding borders to a Table

To add borders to each cell of the table, use the class `.table-bordered`. Add it to the `.table` base class. Run the following code and observe the output:

```
<table class="table table-bordered">  
  
  <thead>  
  
    <tr>  
  
      <th>Row</th>  
  
      <th>First Name</th>  
  
      <th>Last Name</th>  
  
      <th>Email</th>  
  
    </tr>  
  
  </thead>  
  
  <tbody>  
  
    <tr>  
  
      <td>1</td>
```



```
<td>Peter</td>

<td>mary</td>

<td>petermary@mail.com</td>

</tr>

<tr>

<td>2</td>

<td>john</td>

<td>Parker</td>

<td>johnparker@mail.com</td>

</tr>

<tr>

<td>3</td>

<td>emmanuel</td>

<td>ken</td>

<td>emmanuelken@mail.com</td>

</tr>

</tbody>

</table>
```

After running the code, the following table will be displayed on the browser:

Row Number	FName	LName	Email
1	Peter	mary	petermary@mail.com
2	john	Parker	johnparker@mail.com
3	emmanuel	ken	emmanuelken@mail.com

As you can see, a border has been added to each cell.

Hover state on Table Rows

This can be enabled on the rows of the table by simply using the `.table-hover` bootstrap class. This can be added to the `.table` class and within the `<tbody>` element. Write the following code and run it:

```
<table class="table table-hover">  
  
  <thead>  
  
    <tr>  
  
      <th>Row</th>  
  
      <th>First Name</th>  
  
      <th>Last Name</th>  
  
      <th>Email</th>  
  
    </tr>  
  
  </thead>  
  
  <tbody>  
  
    <tr>  
  
      <td>1</td>  
  
      <td>Peter</td>  
  
      <td>mary</td>  
  
      <td>petermary@mail.com</td>
```

```
</tr>

<tr>

<td>2</td>

<td>john</td>

<td>Parker</td>

<td>johnparker@mail.com</td>

</tr>

<tr>

<td>3</td>

<td>emmanuel</td>

<td>ken</td>

<td>emmanuelken@mail.com</td>

</tr>

</tbody>

</table>
```

On running the code above, you will notice that the movement of the cursor on the table is being tracked. This is what we call hover:

Row Number	FName	LName	Email
1	Peter	mary	petermary@mail.com
2	john	Parker	johnparker@mail.com
3	emmanuel	ken	emmanuelken@mail.com

Note that in our example, the cursor is on the second row of the table and that's why it is highlighted.

Condensed Tables

You can choose to save on save by making your table more compact. This can be achieved by using the .table-condensed class which should added to the .table class. Write and run the code below:

```
<table class="table table-condensed">  
  
  <thead>  
  
    <tr>  
  
      <th>Row Number</th>  
  
      <th>FName</th>  
  
      <th>LName</th>  
  
      <th>Email</th>  
  
    </tr>  
  
  </thead>  
  
  <tbody>  
  
    <tr>  
  
      <td>1</td>  
  
      <td>Peter</td>  
  
      <td>mary</td>  
  
      <td>petermary@mail.com</td>
```

```
</tr>
```

```
<tr>
```

```
<td>2</td>
```

```
<td>john</td>
```

```
<td>Parker</td>
```

```
<td>johnparker@mail.com</td>
```

```
</tr>
```

```
<tr>
```

```
<td>3</td>
```

```
<td>emmanuel</td>
```

```
<td>ken</td>
```

```
<td>emmanuelken@mail.com</td>
```

```
</tr>
```

```
</tbody>
```

```
</table>
```

You will notice that the output table will be much condensed compared to what we had in our previous examples. You will have saved on space.

Differentiating Table Rows

You can put emphasis on a particular table row to ensure that it looks unique from the rest of the rows. This will enable you to uniquely identify this row. Consider the example below:

```
<table class="table">
  <thead>
    <tr>
      <th>Row Number</th>
      <th>Your Bill</th>
      <th> Date of Payment </th>
      <th>Payment Status</th>
    </tr>
  </thead>
  <tbody>
    <tr class="active">
      <td>1</td>
      <td>Bank</td>
      <td>08/09/2013</td>
      <td>Call for confirmation</td>
```


</tr>

<tr class="success">

<td>2</td>

<td>Water</td>

<td>02/08/2013</td>

<td>Cleared</td>

</tr>

<tr class="info">

<td>3</td>

<td>Internet</td>

<td>07/08/2013</td>

<td>Plan to be changed</td>

</tr>

<tr class="warning">

<td>4</td>

<td>Electricity</td>

<td>08/07/2013</td>

<td>Awaiting</td>

</tr>

<tr class="danger">

<td>5</td>

```
<td>Telephone</td>

<td>08/09/2013</td>

<td>Overpay</td>

</tr>

</tbody>

</table>
```

Now try to run the code above. The output table will be very amazing as shown below:

Row Number	Your Bill	Date of Payment	Payment Status
1	Bank	08/09/2013	Call for confirmation
2	Water	02/08/2013	Cleared
3	Internet	07/08/2013	Plan to be changed
4	Electricity	08/07/2013	Awaiting
5	Telephone	08/09/2013	Overpay

Responsive Tables with Bootstrap

In most devices and especially the ones with a small display size, tables do not scroll well. With bootstrap, this problem can be solved such that your tables can scroll well even on cell phones. On devices with large displays, you will not notice any display. Write the following code on your editor:

```
<div class="table-responsive">

  <table class="table table-bordered">

    <thead>

      <tr>

        <th>Row Number</th>

        <th>FName</th>

        <th>LName</th>

        <th>Email</th>

        <th>History</th>

      </tr>

    </thead>

    <tbody>

      <tr>

        <td>1</td>

        <td>Peter</td>

        <td>Mark</td>

        <td>petermark@mail.com</td>

        <td>Peter Mark is a great man...</td>

      </tr>

      <tr>

        <td>2</td>
```

```
<td>Victor</td>

<td>Benjamin</td>

<td>victorbenjamin@mail.com</td>

<td>A great friend...</td>

</tr>

<tr>

<td>3</td>

<td>Alphonse</td>

<td>David</td>

<td>alphonsedavid@mail.com</td>

<td>A mathematician...</td>

</tr>

</tbody>

</table>

</div>
```

Once you have written the code above, run it on a device having a large display such as a desktop. Observe how the table is aligned or how it scrolls. Run it on a device with a medium sized display such as a laptop and again, observe how the table behaves.

Chapter 6:

Lists in Bootstrap

Lists are common elements in web design. You might need to use them in the course of programming. With bootstrap, you can create the following types of lists:

1. Ordered Lists- a kind of list where order is really important. The elements in an ordered list are numbered.
2. Unordered List- order in this kind of list does not matter. The elements in this list are marked by use of bullets.
3. Definition List- this is just a set of terms accompanied by their description.

Unordered Lists and Un-styled Ordered Lists

List items usually come with a default styling. However, you might need to do away with this style for some reasons. This can be achieved by using the class `.list-unstyled`. Write the code below and run it:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Unstyled Lists with Bootstrap 3</title>

<link rel="stylesheet" href="bootstrap/css/bootstrap.min.css">

<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>

<script src="bootstrap/js/bootstrap.min.js"></script>

<style type="text/css">

    .ls-example{

        margin: 20px;

    }

</style>

</head>

<body>

<div class="ls-example">

    <h2>Unstyled Unordered List</h2>

    <ul class="list-unstyled">

        <li>Home</li>
```


About

Services

Accessories

Location

Contact

<hr>

<h2>Unstyled Ordered List</h2>

<ol class="list-unstyled">

Home

About

Services

Accessories

Location

Contact

```
</ol>
</div>
</body>
</html>
```

After running the code above, the following will be the output:

Unstyled Unordered List

```
Home
About
  ◦ Services
  ◦ Accessories
Location
Contact
```

Unstyled Ordered List

```
Home
About
  1. Services
  2. Accessories
Location
Contact
```

As you can see, there is no the default styling in both unordered and the ordered list since this is what we have specified.

How to place the items of Unordered and ordered List inline

You visit websites regularly. What you see is a list of menus running horizontally across the screen. These can be created using either ordered or unordered lists. The trick behind this is that all the items of the list should be placed in a single line. The bootstrap class `.list-inline` is used in this case. It is applied to the elements of either the ordered or unordered list. Once you do this, your menu will be amazing. Write the code below and run it:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Inline Lists with Bootstrap</title>

<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">

<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>

<script src=" bootstrap/js/bootstrap.min.js"></script>

<style type="text/css">

    .ls-example{

        margin: 20px;
```

```
}  
  
</style>  
  
</head>  
  
<body>  
  
<div class="ls-example">  
  
    <ul class="list-inline">  
  
        <li>Home</li>  
  
        <li>About Us</li>  
  
        <li>Services</li>  
  
        <li>Location</li>  
  
        <li>Contact Us</li>  
  
    </ul>  
  
</div>  
  
</body>  
  
</html>
```

The following should form the output of the code after running it:

Home About Us Services Location Contact Us

It is an amazing menu. If you have never created one, I know you feel after getting the

above. Just modify it in case you want to use for your site, but the most important this is to understand how to create it.

Horizontal Definition Lists with Bootstrap

You might need to create a list of terms accompanied by their description. This is much easy with bootstrap. The bootstrap's class `.dl-horizontal` is used for this purpose and it does automatic adjustment if the content doesn't fit well. Write the following code and run it:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title> Horizontal Definition Lists with Bootstrap</title>

<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">

<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>

<script src=" bootstrap/js/bootstrap.min.js"></script>

<style type="text/css">

    .ls-example{

        margin: 20px;
```

```
}  
  
</style>  
  
</head>  
  
<body>  
  
<div class="ls-example">  
  
  <h2>Horizontal Definition Lists</h2>  
  
  <dl class="dl-horizontal">  
  
    <dt>Bootstrap</dt>  
  
    <dd>A combination of both HTML and CSS to create responsive web pages</dd>  
  
    <dt>CSS</dt>  
  
    <dd>CSS is a language used to define how web pages will appear. It is a very powerful  
tool with which can add colors and other styles to the web page.</dd>  
  
    <dt>PHP</dt>  
  
    <dd>A powerful language that can be used to add functionality to an HTML layout.  
</dd>  
  
  </dl>  
  
</div>  
  
</body>  
  
</html>
```

Once you run the code, the output will just be the list of terms we have specified accompanied by the description on what they are:

Horizontal Definition Lists

Bootstrap	A combination of both HTML and CSS to create responsive web pages
CSS	CSS is a language used to define how web pages will appear. It is a very powerful tool with which can add colors and other styles to the web page.
PHP	A powerful language that can be used to add functionality to an HTML layout.

It is a very amazing feature and you might require to use it somewhere in the course of programming.

List Groups in Bootstrap

You can use bootstrap's list groups if you want to group your list items and make them beautiful by adding some extra features to them. Write the code below and run it:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title> List Groups with Bootstrap</title>

<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">

<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>
```

```
<script src="bootstrap/js/bootstrap.min.js"></script>
```

```
<style type="text/css">
```

```
  .list-group{
```

```
    width: 200px;
```

```
  }
```

```
  .ls-example{
```

```
    margin: 19px;
```

```
  }
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div class="ls-example">
```

```
  <ul class="list-group">
```

```
    <li class="list-group-item">Home</li>
```

```
    <li class="list-group-item">About Us</li>
```

```
    <li class="list-group-item">Services</li>
```

```
    <li class="list-group-item">Contact Us</li>
```

```
  </ul>
```

```
</div>
```

```
</body>
```

```
</html>
```


The output of the code will be as follows:

Home
About Us
Services
Contact Us

It is so amazing compared to what we had in our previous examples. If you such features on your website, it will be amazing to the people who visit it. The list items have been put in cells. Hyperlinks can also be added to the above list items if you need to do so. This is as shown below:

```
<!DOCTYPE html>
```

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

```
<head>
```

```
<meta charset="UTF-8">
```

```
<title> Linked List Groups with Bootstrap</title>
```

```
<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">
```

```
<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">
```

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>
```

```
<script src=" bootstrap/js/bootstrap.min.js"></script>
```

```
<style type="text/css">
```

```
  .list-group{
```

```
    width: 200px;
```

```
  }
```

```
  .ls-example{
```

```
    margin: 20px;
```

```
  }
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div class="ls-example">
```

```
  <div class="list-group">
```

```
    <a href="#" class="list-group-item">
```

```
      <span class="glyphicon glyphicon-file"></span> Go to Documents <span  
class="badge">140</span>
```

```
    </a>
```

```
    <a href="#" class="list-group-item active">
```

```
      <span class="glyphicon glyphicon-camera"></span> Go to Pictures <span  
class="badge">20</span>
```

```
    </a>
```

```
<a href="#" class="list-group-item">
  <span class="glyphicon glyphicon-film"></span> Go to Videos <span
class="badge">10</span>
</a>
<a href="#" class="list-group-item">
  <span class="glyphicon glyphicon-music"></span> Go to Music <span
class="badge">45</span>
</a>
</div>
</div>
</body>
</html>
```

Once you run the code above, you will observe the following output:



The above list items have hyperlinks with them. Icons have also been added to them. If you a regular computer user, the icons used above exactly match what we have on real

computers and this shows how powerful bootstrap is. You should take advantage of these functionalities to create amazing web pages.

Paragraphs and headings can also be added to a list to enhance the look how of your web page as shown below:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title> Bootstrap Linked List Groups</title>

<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">

<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>

<script src=" bootstrap/js/bootstrap.min.js"></script>

<style type="text/css">

    .ls-example{

        margin: 20px;

    }

</style>

</head>

<body>
```

```
<div class="ls-example">
```

```
  <div class="list-group">
```

```
    <a href="#" class="list-group-item">
```

```
      <h4 class="list-group-item-heading">What is CSS?</h4>
```

```
      <p class="list-group-item-text"> CSS is a language used to define how web pages will  
appear. It is a very powerful tool with which can add colors and other styles to the web  
page.</p>
```

```
    </a>
```

```
    <a href="#" class="list-group-item active">
```

```
      <h4 class="list-group-item-heading">What is JQuery?</h4>
```

```
      <p class="list-group-item-text">Jquery is a language used in web design. It has so  
many frameworks which enable developers to achieve their functionalities. One can  
develop a fully functional website using JQuery</p>
```

```
    </a>
```

```
    <a href="#" class="list-group-item">
```

```
      <h4 class="list-group-item-heading">What is PHP?</h4>
```

```
      <p class="list-group-item-text"> A powerful language that can be used to add  
functionality to an HTML layout. Stands for Cascading Style Sheet</p>
```

```
    </a>
```

```
  </div>
```

```
</div>
```

```
</body>
```

</html>

Once you run the code above, you will observe the following output:



We advanced what we had in our previous example to this. The way the above example looks is good for enhancing the look of your website.

Adding Contextual States to List Groups

This can be done so as to add extra features and emphasis on a list group just like it is done on other elements. The result is always a good looking list with features that can be liked by most people. These range from coloring to other complex features. Write the code below and run it:

```
<!DOCTYPE html>
```

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

```
<head>
```

```
<meta charset="UTF-8">
```

```
<title> List Group Contextual Classes with Bootstrap</title>
```

```
<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">
```

```
<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">
```

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>
```

```
<script src=" bootstrap/js/bootstrap.min.js"></script>
```

```
<style type="text/css">
```

```
  .ls-example{
```

```
    margin: 20px;
```

```
  }
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div class="ls-example">
```

```
  <ul class="list-group">
```

```
    <li class="list-group-item list-group-item-success">A server is used to service requests  
from a client machine.</li>
```

```
    <li class="list-group-item list-group-item-info">The work of the client is to only  
request for services from the server machine.</li>
```

```
    <li class="list-group-item list-group-item-warning">In case the server is not available,  
the client is notified of this.</li>
```

```
    <li class="list-group-item list-group-item-danger">Clients can also make mistakes
```

while making requests. The server will not provide any service then.

</div>

</body>

</html>

Once you run the above code, the following will be the observed output:



As you can see, the output looks beautiful. The background text, text color look very beautiful and attractive. This is the work of bootstrap. If you want to use this feature on the linked list group, use the .active class as shown below:

```
<!DOCTYPE html>
```

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

```
<head>
```

```
<meta charset="UTF-8">
```



```
<title> List Group Contextual Classes with Bootstrap</title>

<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">

<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>

<script src=" bootstrap/js/bootstrap.min.js"></script>

<style type="text/css">

    .ls-example{

        margin: 20px;

    }

</style>

</head>

<body>

<div class="ls-example">

    <ul class="list-group">

        <li class="list-group-item list-group-item-success">A server is used to service requests
from a client machine.</li>

        <li class="list-group-item list-group-item-info">The work of the client is to only
request for services from the server machine.</li>

        <li class="list-group-item list-group-item-warning">In case the server is not available,
the client is notified of this.</li>

        <li class="list-group-item list-group-item-danger">Clients can also make mistakes
while making requests. The server will not provide any service then.</li>

    </ul>

</div>

</body>

</html>
```

```
</ul>
```

```
</div>
```

```
</body>
```

```
</html>
```

After running the above code, you will realize that the only difference with the previous example is that the latter has some links unlike what we have in the previous example.

Chapter 7:

Creating Forms with Bootstrap

Forms are regularly used on web pages. They usually prompt users to provide some information or they might be outputting data to the users. Styling forms using CSS alone is very tedious and this is why bootstrap came in. You can create amazing form controls using bootstrap. Bootstrap offers three kinds of layout for your forms which include the following:

1. Vertical form.
2. Horizontal form.
3. Inline form.

Vertical Form with Bootstrap

This is the form which is created by default in bootstrap if you don't specify the kind of form that you want. The styles are also added by default in case no styles are added to the base class. Consider the code below for creating a form:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title> Vertical Form with Bootstrap</title>

<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">

<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>

<script src=" bootstrap/js/bootstrap.min.js"></script>

<style type="text/css">

    .ls-example{

        margin: 20px;

    }

</style>

</head>

<body>

<div class="ls-example">

    <form>

        <div class="form-group">

            <label for="userName">UserName</label>

            <input type="text" class="form-control" id="userName" placeholder="userName">

        </div>

    </form>

</div>

</body>

</html>
```

```
</div>

<div class="form-group">

<label for="password">Password</label>

<input type="password" class="form-control" id="Password"
placeholder="password">

</div>

<div class="checkbox">

<label><input type="checkbox"> Remember me</label>

</div>

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

</form>

</div>

</body>

</html>
```

Once you run the above code, the following will be the output:

UserName

Password

Remember me

Login

The fields for entering text are rounded at the corners, which is a default style in bootstrap. They look amazing. The purpose of the placeholder is to guide the user, and especially the novice ones while entering the text. Once you start typing inside the text field, the placeholder text will disappear. The width of all form controls like text area and text fields are usually set at 100% wide in bootstrap. If you don't need them to be like this, you need to change to your favorite size.

Horizontal Forms with Bootstrap

In these kinds of forms, labels are right-aligned. For the sake of making them appear in the same line as other form controls, they are floated to the left. However, with this form, you will need to make a lot of changes to it so that it can appear different from what we have in the default form. The following steps are necessary for you to create an horizontal form:

1. In the `<form>` element, include the `.form-horizontal` element.
2. Wrap the form controls including labels in a `<div>` element. Add the `.form-group` to this.

3. Align form controls and labels using the bootstrap grid classes.
4. To the <label> element, add the class .control-label.

Write the code below and run it:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title> Horizontal Form Layout with Bootstrap</title>

<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">

<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>

<script src=" bootstrap/js/bootstrap.min.js"></script>

<style type="text/css">

    .ls-example{

        margin: 20px;

    }

    /* use bootstrap to solve the problem of aligning labels on devices with small display
size such as cell phones */

    .form-horizontal .control-label{
```

```
padding-top: 8px;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div class="ls-example">
```

```
  <form class="form-horizontal">
```

```
    <div class="form-group">
```

```
      <label for="userName" class="control-label col-xs-2">userName</label>
```

```
      <div class="col-xs-10">
```

```
        <input type="text" class="form-control" id="userName" placeholder="userName">
```

```
      </div>
```

```
    </div>
```

```
    <div class="form-group">
```

```
      <label for="password" class="control-label col-xs-2">Password</label>
```

```
      <div class="col-xs-10">
```

```
        <input type="password" class="form-control" id="password"
```

```
placeholder="password">
```

```
      </div>
```

```
    </div>
```

```
  <div class="form-group">
```

```
<div class="col-xs-offset-2 col-xs-10">
<div class="checkbox">
<label><input type="checkbox"> Remember me</label>
</div>
</div>
</div>
<div class="form-group">
<div class="col-xs-offset-2 col-xs-10">
<button type="submit" class="btn btn-primary">Login</button>
</div>
</div>
</form>
</div>
</body>
</html>
```

Once you run the code above, the following output will be observed:

userName

Password

Remember me

[Login](#)

Inline Forms with Bootstrap

This is used when one needs to place the form controls side-by-side. The resulting layout will be compacted and hence much space will be saved. We use `.form-inline` which is a bootstrap class inside the `<form>` element. Write the code below and run it:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title> Inline Form Layout with Bootstrap</title>

<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">

<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>

<script src=" bootstrap/js/bootstrap.min.js"></script>

<style type="text/css">

    .ls-example{

        margin: 20px;

    }

</style>

</head>
```

```
<body>
```

```
<div class="ls-example">
```

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

```
    <div class="form-group">
```

```
      <label class="sr-only" for="userName">userName</label>
```

```
      <input type="userName" class="form-control" id="userName"  
placeholder="userName">
```

```
    </div>
```

```
    <div class="form-group">
```

```
      <label class="sr-only" for="password">password</label>
```

```
      <input type="password" class="form-control" id="password"  
placeholder="password">
```

```
    </div>
```

```
    <div class="checkbox">
```

```
      <label><input type="checkbox"> Remember me</label>
```

```
    </div>
```

```
    <button type="submit" class="btn btn-primary">Login</button>
```

```
  </form>
```


```
<br>
```

```
</div>
```

```
</body>
```

```
</html>
```

The following code should form the output after running it:



The image shows a horizontal login form. It consists of two text input fields: the first is labeled 'userName' and the second is labeled 'password'. To the right of the password field is a checkbox with the text 'Remember me' next to it. Further to the right is a blue rectangular button with the text 'Login' in white.

As you can see, the controls of the form have been placed side-by-side. Much space has been saved with this layout. Note that if the device you use to run the above code has a display with less than 768px, the form will be displayed in the default vertical style. To see the power of bootstrap in terms of responsiveness, just minimize the size of the browser and observe what will happen. It will display it vertically. This is exactly what will happen if the device has a small display such as a cell phone.

Chapter 8:

Styling Images with Bootstrap

In web design, it is a common practice to use images. They need to be displayed using the necessary styles and even at the right location. This can be achieved with bootstrap.

Consider the code below:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title> Image Styling with Bootstrap</title>

<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">

<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>

<script src=" bootstrap/js/bootstrap.min.js"></script>

<style type="text/css">

  imag{

  margin: 10px;
```

```
}  
  
.ls-example{  
  
    margin: 20px;  
  
}  
  
</style>  
  
</head>  
  
<body>  
  
<div class="ls-example">  
  
      
  
      
  
      
  
</div>  
  
</body>  
  
</html>
```

Specifying correctly the path of the images to be used. Now run the code. The output will be your images being modified. The first one will be made round, the second one will be made circular while the last image will be made a thumbnail. It will remain square. This shows how bootstrap can be used to modify the style of an image.

Thumbnails in Bootstrap

Sometimes, you might need to create grids of videos, pictures or even portfolios.

Thumbnails are a good application for this. Consider the following example on how to create thumbnails:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title> Thumbnails with Bootstrap</title>

<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">

<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>

<script src=" bootstrap/js/bootstrap.min.js"></script>

<style type="text/css">

    .ls-example{

        margin: 20px;

    }

</style>

</head>

<body>

<div class="ls-example">

    <div class="container">
```

```
<div class="row">

<div class="col-xs-3">

<a href="#" class="thumbnail">



</a>

</div>

<div class="col-xs-3">

<a href="#" class="thumbnail">



</a>

</div>

<div class="col-xs-3">

<a href="#" class="thumbnail">



</a>

</div>

<div class="col-xs-3">

<a href="#" class="thumbnail">



</a>

</div>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
</body>
```

```
</html>
```

Again, make sure that you specify the correct location of your images, otherwise you will get an undesired output. Run the code:

The output will be images displayed horizontally. Each of the images will have a text

Written 125 * 125. Each image will be placed on a square with slightly-rounded corners.

Media Objects in Bootstrap

You might need to display an image to the right or left of a text such as a comment. This image might represent the owner of the text or comment. Consider the code below:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title> Media Objects with Bootstrap</title>

<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">

<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>

<script src=" bootstrap/js/bootstrap.min.js"></script>

<style type="text/css">

    .ls-example{

        margin: 20px;

    }

</style>

</head>
```

```
<body>
```

```
<div class="ls-example">
```

```
  <div class="media">
```

```
    <a href="#" class="pull-left">
```

```
      
```

```
    </a>
```

```
    <div class="media-body">
```

```
      <h4 class="media-heading">Peter John <small><i>Posted on March 6, 2015</i>
```

```
</small></h4>
```

```
  <p>It is true that with bootstrap one can achieve so much. An amazing web page can be  
created. This chapter deals with media objects</p>
```

```
</div>
```

```
</div>
```

```
<hr />
```

```
<div class="media">
```

```
  <a href="#" class="pull-right">
```

```
    
```

```
  </a>
```

```
  <div class="media-body">
```

```
    <h4 class="media-heading">Peter John <small><i>Posted on March 6, 2015</i>
```

```
</small></h4>
```

```
  <p> It is true that with bootstrap one can achieve so much. An amazing web page can
```


be created. This chapter deals with media objects.</p>

</div>

</div>

</div>

</body>

</html>

On running the code above, the observed output will be:



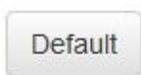
What we have done is that we have demonstrated by using a single image. In the first case, the image has been placed at the beginning of the text and in the second case, it has been placed at the end of the text.

Chapter 9:

Buttons in Bootstrap

Buttons are highly used when it comes to web design, especially in creating forms. In bootstrap, there exist many types of buttons, so you use the right button to indicate the intended status. The following are the available buttons in bootstrap:

1. Default- represented by use of a gray color. Belongs to the class btn btn-default.



2. Success- represented by use of a green color. Belongs to the class btn btn-success. Use it to indicate that an action was successful.



3. Primary- use this button to put emphasis on a primary button if you have used many buttons. Belongs to the class btn btn-primary.



4. Danger- uses red color to indicate the danger associated with an action. Belongs to the class btn btn-danger.



5. Warning- cautions the user before carrying out a certain action. Has a yellow color and it belongs to the class btn btn-warning.



6. Info- Use it as an alternative to the default button. Belongs to the class btn btn-info.



7. Link- makes the button look like a link heading to somewhere.

Write and run the code below:

```
<!DOCTYPE html>
```

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

```
<head>
```

```
<meta charset="UTF-8">
```

```
<title> Buttons in Bootstrap</title>
```

```
<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">
```

```
<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">
```

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>
```

```
<script src=" bootstrap/js/bootstrap.min.js"></script>
```

```
<style type="text/css">
```

```
.ls-example{
    margin: 20px;
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div class="ls-example">
```

```
  <button type="button" class="btn btn-default">Default</button>
```

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

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

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

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

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

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

```
<hr>
```

```
<input type="button" class="btn btn-default" value="Default">
```

```
<input type="button" class="btn btn-info" value="Info">
```

```
<input type="button" class="btn btn-success" value="Success">
```

```
<input type="button" class="btn btn-primary" value="Primary">
```

```
<input type="button" class="btn btn-warning" value="Warning">
```

```
<input type="button" class="btn btn-link" value="Link">
```

```
<input type="button" class="btn btn-danger" value="Danger">
```

```
<hr>
```

```
<a href="#" class="btn btn-default">Default</a>
```

```
<a href="#" class="btn btn-primary">Primary</a>
```

```
<a href="#" class="btn btn-info">Info</a>
```

```
<a href="#" class="btn btn-success">Success</a>
```

```
<a href="#" class="btn btn-warning">Warning</a>
```

```
<a href="#" class="btn btn-danger">Danger</a>
```

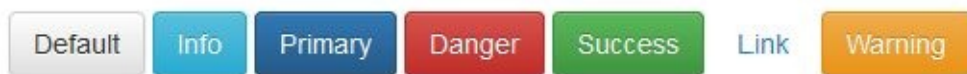
```
<a href="#" class="btn btn-link">Link</a>
```

```
</div>
```

```
</body>
```

```
</html>
```

After running the above code, the following will form the output:



Chapter 10:

Modals in Bootstrap

Modals are kind of windows which pop up on the screen and provide information to the user before moving on. They are kind of a dialog box, and with bootstrap, one can easily create them. They contain header, body and a footer. Write the code below and run it to illustrate the use of modals:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Bootstrap Modals</title>

<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">

<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>

<script src=" bootstrap/js/bootstrap.min.js"></script>

<script type="text/javascript">

    $(document).ready(function(){
```

```
        $("#modal").modal('show');

    });
</script>

</head>

<body>

<div id="modal" class="modal fade">

    <div class="modal-dialog">

        <div class="modal-content">

            <div class="modal-header">

                <button type="button" class="close" data-dismiss="modal" aria-
hidden="true">&times;</button>

                <h4 class="modal-title">Verification</h4>

            </div>

            <div class="modal-body">

                <p>Do you want to save any changes made to this document?</p>

                <p class="text-warning"><small>If you fail to do so they will be lost.</small></p>

            </div>

            <div class="modal-footer">

                <button type="button" class="btn btn-default" data-dismiss="modal">Close</button>

                <button type="button" class="btn btn-primary">Save </button>

            </div>

        </div>

    </div>

</body>

</html>
```

</div>

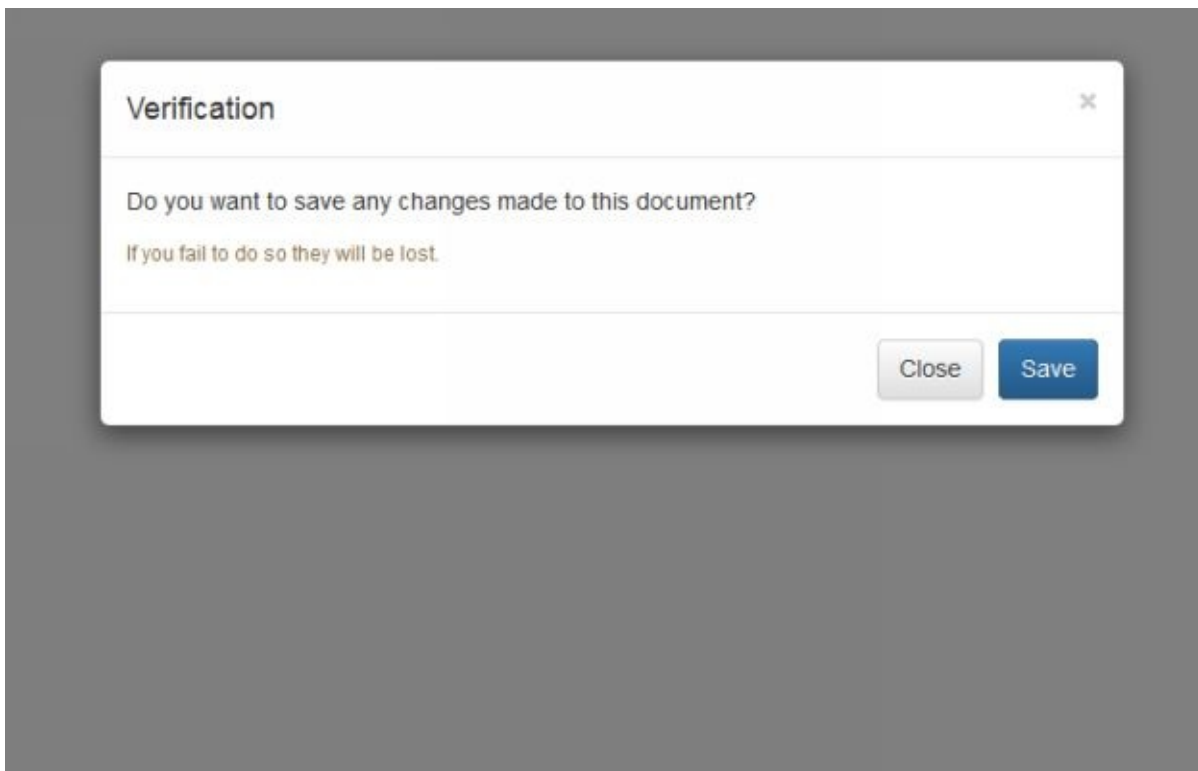
</div>

</div>

</body>

</html>

On running the above code, a pop up will be shown. The background will be fade so that emphasis can be put on the modal as shown below:



Chapter 11:

Accordion in Bootstrap

You may find that you have too much text to be represented on your webpage. You then need to present text and hide the extra one which can be accessed by clicking on some text. This can be achieved by use of accordions. Write the code below and run it:

```
<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<title>Bootstrap Accordion</title>

<link rel="stylesheet" href=" bootstrap/css/bootstrap.min.css">

<link rel="stylesheet" href=" bootstrap/css/bootstrap-theme.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>

<script src=" bootstrap/js/bootstrap.min.js"></script>

<style type="text/css">

    .ls-example{

        margin: 20px;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div class="ls-example">
```

```
  <div class="panel-group" id="accordion">
```

```
    <div class="panel panel-default">
```

```
      <div class="panel-heading">
```

```
        <h4 class="panel-title">
```

```
          <a data-toggle="collapse" data-parent="#accordion" href="#colone">1. What is  
Bootstrap?</a>
```

```
        </h4>
```

```
      </div>
```

```
    <div id="colone" class="panel-collapse collapse in">
```

```
      <div class="panel-body">
```

```
        <p>Bootstrap is just a combination of both HTML and CSS for web development.
```

```
Pages developed with bootstrap respond well on screens of different sizes . <a href="#"  
target="_blank">Read more.</a></p>
```

```
      </div>
```

```
    </div>
```

```
  </div>
```

```
</div class="panel panel-default">
```



```
<div class="panel-heading">
```

```
<h4 class="panel-title">
```

```
<a data-toggle="collapse" data-parent="#accordion" href="#coltwo">2. What is PHP?
```

```
</a>
```

```
</h4>
```

```
</div>
```

```
<div id="coltwo" class="panel-collapse collapse">
```

```
<div class="panel-body">
```

```
<p>PHP is a language which is used to add functionality web pages. Buttons and other components need to do something on click, and this is the purpose of PHP. <a href="#" target="_blank">Read more.</a></p>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<div class="panel panel-default">
```

```
<div class="panel-heading">
```

```
<h4 class="panel-title">
```

```
<a data-toggle="collapse" data-parent="#accordion" href="#colthree">3. What is CSS?</a>
```

```
</h4>
```

```
</div>
```

```
<div id="collapseThree" class="panel-collapse collapse">
```

```
<div class="panel-body">
```

```
<p>It is one of the constituent components of bootstrap. For instance, most of bootstrap functionalities have been achieved with CSS. Mainly used for adding styles to web pages. Stands for Cascading Style Sheet <a href="#" target="_blank">Read more.</a></p>
```

```
</div>
```

```
</div>
```

```
</div>
```

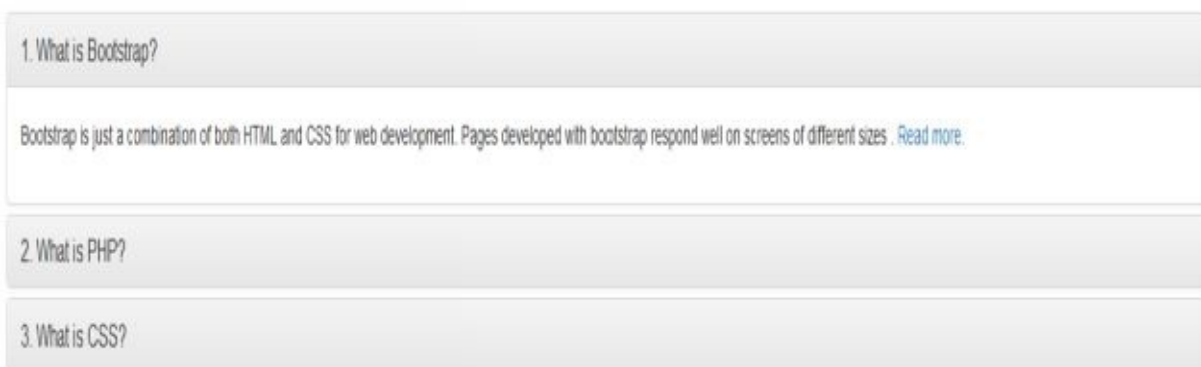
```
</div>
```

```
</div>
```

```
</body>
```

```
</html>
```

Once you run the above code, the following will be the output:



On clicking on any title, the others will collapse in and the description of the clicked one will collapse out. You have then hidden the extra text which could not fit on the screen. The amount of text used here doesn't matter, as it be of any size. This shows how an

accordion is important.

Chapter 12:

Bootstrap Carousel

Sometimes after visiting websites, you just see some sliding images or text on the web pages. In bootstrap, these sliding images and text can be created using the carousel. The images and text can also be combined to slide together. This also helps in preserving the available space on a web page and as well as making the web pages look beautiful. Write and run the code below:

```
<!DOCTYPE html>
```

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

```
<head>
```

```
<meta charset="UTF-8">
```

```
<title>Example of Bootstrap 3 Carousel</title>
```

```
<link rel="stylesheet"
```

```
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.2/css/bootstrap.min.css">
```

```
<link rel="stylesheet"
```

```
href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.2/css/bootstrap-theme.min.css">
```

```
<script src="https://ajax.googleapis.com/ajax/libs/jquery/1.11.2/jquery.min.js"></script>
```

```
<script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.2/js/bootstrap.min.js">
```

```
</script>
```

```
<style type="text/css">
```

```
h2{
```

```
    margin: 0;
```

```
    color: #666;
```

```
    padding-top: 90px;
```

```
    font-size: 52px;
```

```
    font-family: "trebuchet ms", sans-serif;
```

```
}
```

```
.item{
```

```
    background: #333;
```

```
    text-align: center;
```

```
    height: 300px !important;
```

```
}
```

```
.carousel{
```

```
    margin-top: 20px;
```

```
}
```

```
.bs-example{
```

```
    margin: 20px;
```

```
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div class="bs-example">
```

```
  <div id="myCarousel" class="carousel slide" data-interval="3000" data-ride="carousel">
```

```
    <!-- Carousel indicators -->
```

```
    <ol class="carousel-indicators">
```

```
      <li data-target="#myCarousel" data-slide-to="0" class="active"></li>
```

```
      <li data-target="#myCarousel" data-slide-to="1"></li>
```

```
      <li data-target="#myCarousel" data-slide-to="2"></li>
```

```
    </ol>
```

```
    <!-- Carousel items -->
```

```
    <div class="carousel-inner">
```

```
      <div class="active item">
```

```
        <h2></h2>
```

```
        <div class="carousel-caption">
```

```
          <h3></h3>
```

```
          <p>our first slide image.</p>
```

```
        </div>
```

```
      </div>
```

```
    <div class="item">
```



```
<h2></h2>
```

```
<div class="carousel-caption">
```

```
<h3></h3>
```

```
<p>Seond slide image</p>
```

```
</div>
```

```
</div>
```

```
<div class="item">
```

```
<h2></h2>
```

```
<div class="carousel-caption">
```

```
<h3></h3>
```

```
<p>This is the third slide image.</p>
```

```
</div>
```

```
</div>
```

```
</div>
```

```
<!-- Carousel nav -->
```

```
<a class="carousel-control left" href="#myCarousel" data-slide="prev">
```

```
<span class="glyphicon glyphicon-chevron-left"></span>
```

```
</a>
```

```
<a class="carousel-control right" href="#myCarousel" data-slide="next">
```

```
<span class="glyphicon glyphicon-chevron-right"></span>
```

```
</a>
```

```
</div>
```

```
</div>
```

```
</body>
```

```
</html>
```

On running the above code, the output will be a sequence of sliding images. You will also be providing with two means of sliding the next images manually. These will be two arrows and three buttons:



Conclusion

It can then be concluded that bootstrap is a tool used in web development. It is a combination of both HTML and CSS. The HTML has been used for the purpose of provide the controls such as buttons, text fields and other controls which are necessary for web development. The CSS has been used to enhance the look of these controls. This involves the use of styles which make developers create very amazing websites.

Responsiveness is one of the current trends and emerging trends in web development. This refers to how web pages behave on different devices with different display sizes. A responsive design involves creating web pages which scroll well on all devices regardless of their display size. Bootstrap is a good tool in this.

One can create a responsive website using bootstrap with a lot of ease and also quickly. This explains why you should consider learning bootstrap. Complex and beautiful buttons can be created with bootstrap. Unlike with pure HTML, tables created using bootstrap will scroll well even on cell phones. Phones can also be created with amazing controls which also respond automatically on different devices.

Three different types of layouts for forms are also available on forms, so you can choose the layout of your choice. Lists are also supported in bootstrap. One can use these to create amazing menus for their web pages, and then add links to these list items.

Accordions are a component of bootstrap. If you want to represent too much text such that you find it crowding the screen, use accordion to hide this text. To put emphasis on a particular thing, a modal can be used. This will pop up on the screen and the user will divert his or her attention to the modal. This should happen mostly when carrying out dangerous actions.

You can also use bootstrap to slide your images and text if you need to do so. This is for the purpose of saving on space or enhancing the beauty of your website.