**BOOTSTRAP Concept:**

**What is Bootstrap?**

* Bootstrap is a free front-end framework for faster and easier web development
* Bootstrap includes HTML and CSS based design templates for typography, forms, buttons, tables, navigation, modals, images and many other, as well as optional JavaScript plugins
* Bootstrap also gives you the ability to easily create responsive designs
* Bootstrap also supports JavaScript extensions.
* Bootstrap is a powerful toolkit - a collection of HTML, CSS, and JavaScript tools for creating and building web pages and web applications.
* It is a free and open source project, hosted on GitHub, and originally created by (and for) Twitter.

**What is Responsive Web Design?**

* Responsive web design is nothing but creating web sites which automatically adjust themselves to look good on all devices, from small phones to large desktops.

**Why do we need Bootstrap?**

* Software engineers use Bootstrap for a number of different reasons. It is easy to set up and master, it has a lot of components, a good grid system, styling for many HTML elements ranging from typography to buttons, as well as support of JavaScript plugins, making it even more flexible.

**Why Use Bootstrap?**

**Advantages of Bootstrap:**

**Easy to use:**

* Anybody with just basic knowledge of HTML and CSS can start using Bootstrap.

**Responsive features:**

* Bootstrap's responsive CSS adjusts to phones, tablets, and desktops automatically based on screen width.

**Mobile-first approach:**

* In Bootstrap, mobile-first styles are part of the core framework

**Browser compatibility:**

* Bootstrap is compatible with all modern browsers (Chrome, Firefox, Internet Explorer 10+, Edge, Safari, and Opera)

**How we get bootstrap lines code**

1. Goto w3schools.com
2. Goto bootstrap
3. Select any one concept like tables concept
4. Click on "Try It Yourself"
5. Copy all lines which are inside <head> tag
6. Past all the bootstrap lines in our example inside <head> tag.

**For example:**

**demo.html**

**<html>**

**<head>**

**<title> Demo Page</title>**

**bootstrap libraries adding here**

**</head>**

**<body>**

**<h1> Welcome to Bootsratp styles </h1>**

**</body>**

**</html>**

**For example :**

<html>

<head>

<title> Demo Page</title>

<meta charset="utf-8">

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

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css">

<script src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js"></script>

<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js"></script>

<script src="https://maxcdn.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js"></script>

</head>

<body>

<h1> Welcome to Bootsratp styles </h1>

</body>

</html>

**Create First Web Page With Bootstrap :**

**1. Add the HTML5 doctype:**

* Bootstrap uses HTML elements and CSS properties that require the HTML5 doctype.
* Always include the HTML5 doctype at the beginning of the page, along with the lang attribute and the correct character set:

**<!DOCTYPE html>**

**<html lang="en">**

**<head>**

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

**</head>**

**</html>**

**2. Bootstrap is mobile-first:**

* To ensure proper rendering and touch zooming, add the following <meta> tag inside the <head> element.
* <meta name="viewport" content="width=device-width, initial-scale=1">

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

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

**3. Containers:**

* Bootstrap also requires a containing element to wrap site contents.
* There are two types of container classes to choose from:
* The **.container** class provides a responsive fixed width container
* The **.container-**fluid class provides a full width container, spanning the entire width of the viewport

**Text Colors:**

* Bootstrap has some contextual classes that can be used to provide "meaning through colors".
* The classes for text colors are: .text-primary, .text-success, .text-info, .text-warning, .text-danger,

**For example:** <p class="text-success">hello</p>

**Background Colors:**

* The classes for background colors are: .bg-primary, .bg-success, .bg-info, .bg-warning, .bg-danger, .bg-secondary, .bg-dark and .bg-light.
* Note that background colors do not set the text color,

**For example:** <p class="text-success bg-success">hello</p>

**Button Colors:**

* If you want to provide a bootsrap styles to buttons then we can use bootsrap button related classes.
* use .btn class mandatory and add some other classes also if you want.

**For example,**

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

<button type="button" class="btn btn-danger">Register</button>

<button type="button" class="btn btn-primary btn-sm">Register</button>

* Note: Here by using btn-lg class we can get little bigger button.By using "btn-sm" class we can get little small button.