**FRAMEWORK is Conceptual structure intended to serve as a support**

**Bootstrap 3 vs. Bootstrap 4**

* Bootstrap 4 is the newest version of Bootstrap; with new components, faster stylesheet and more responsiveness.
* Bootstrap 4 supports the latest, stable releases of all major browsers and platforms. However, Internet Explorer 9 and down is not supported.
* If you require IE8-9 support, use Bootstrap 3. It is the most stable version of Bootstrap

**What is Bootstrap?**

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

**Advantages of Bootstrap:**

* Easy to use: Anybody with just basic knowledge of HTML and CSS can start using Bootstrap
* Responsive features: Bootstrap's responsive CSS adjusts to phones, tablets, and desktops
* Mobile-first approach: In Bootstrap, mobile-first styles are part of the core framework
* Browser compatibility: Bootstrap 4 is compatible with all modern browsers (Chrome, Firefox, Internet Explorer 10+, Edge, Safari, and Opera)

**BOOTSTRAP REQUIREMENTS:**

* Bootstrap 4 uses HTML elements and CSS properties that require the HTML5 doctype.
* Bootstrap 4 is mobile-first. So, It is designed to be responsive to mobile devices. Mobile-first styles are part of the core framework. To ensure proper rendering and touch zooming, add the following <meta> tag is important

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

**CONTAINERS:** It is use to wrap webpage contents

* 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

**BOOTSTRAP 4 GRID SYSTEM:**

* Bootstrap's grid system is built with flexbox and allows up to 12 columns across the page.

<https://getbootstrap.com/docs/5.0/layout/grid/>

* The Bootstrap 4 grid system has five classes:
  + .col-xs- (extra small devices - screen width less than 576px)
  + .col-sm- (small devices - screen width equal to or greater than 576px)
  + .col-md- (medium devices - screen width equal to or greater than 768px)
  + .col-lg- (large devices - screen width equal to or greater than 992px)
  + .col-xl- (xlarge devices - screen width equal to or greater than 1200px)

**The <blockquote> tag specifies a section that is quoted from another source.**

**MOBILE-FIRST APPROACH:**

The mobile-first approach is exactly as it sounds: designing for the smallest screen and working your way up.

**ADVANTAGES MOBILE-FIRST APPROACH:**

* It will help us create mobile-friendly design
* More economical than creating specific mobile apps
* Helps prioritize content
* Increases your organization’s mobile productivity

**What are the key components of Bootstrap?**

* CSS : It comes with plenty of CSS files
* Scaffolding : It provides a basic structure with Grid system , link styles and background
* Layout Components : List of layout components
* JavaScript Plugins: It contains many jQuery and JavaScript plugins

**What are the types of layout available in Bootstrap?**

In Bootstrap there are two types of Layout available

* Fluid Layout: Fluid layout is used when you want to create a app that is 100% wide and use up all the width of the screen
* Fixed Layout: For a standard screen you will use fixed layout (940 px) option

**GRID SYSTEM:**

Bootstrap includes a responsive, mobile first fluid grid system that appropriately scales up to 12 columns as the device or viewport size increases. It’s built with flexbox and is fully responsive

\* {

            box-sizing: border-box;

        }

        body {

            background-color: var(--main-bg-color, coral, red);

        }

        .row {

            display: flex;

            flex-wrap: wrap;

        }

        [class^="col-"] {

            padding-top: .75rem;

            padding-bottom: .75rem;

            background-color: rgba(39, 41, 43, 0.03);

            border: 1px solid rgba(39, 41, 43, 0.1)

        }

        .col-6 {

            flex: 0 0 auto;

            width: 50%;

        }

**OFFSETTING COLUMNS**

You can offset grid columns in two ways: our responsive .offset- grid classes and our margin utilities. Grid classes are sized to match columns while margins are more useful for quick layouts where the width of the offset is variable.

* Offset classes: Move columns to the right using .offset-md-\* classes. These classes increase the left margin of a column by \* columns. For example, .offset-md-4 moves .col-md-4 over four columns.

**What is the use of Jumbotron in Bootstrap?**

In bootstrap, Jumbotron is generally used for content that you want to highlight like some slogan or marketing headline etc. in other words it is used to enlarge the size of the headings and to add a margin for landing page content

To use the Jumbotron in Bootstrap: Create a container <div> with the class of .jumbotron

**Explain what is the use of Bootstrap Carousel plugin?**

The Carousel plugin is used to add a slider to your site.

**MIXIN:**

A **mixin** lets you make groups of **CSS** declarations that you want to reuse throughout your site.

One of the most powerful features of the CSS preprocessor Sass is the mixin, an abstraction of a common pattern into a semantic and reusable chunk.

**What are Glyphicons?**

Glyphicons are icon fonts which you can use in your webpage.

**IMPORTANT QUESTIONS**

* <https://www.w3schools.com/css/css3_flexbox.asp>