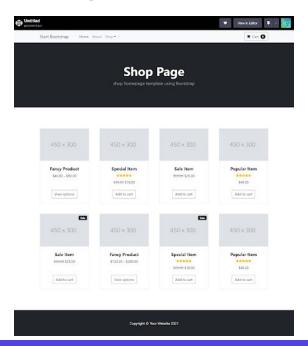
Introduction to Bootstrap 1





App Feature we will be Building Today is Create a Shop Page using Bootstrap





What does it take to Build it

- What is Bootstrap
- Advantages of using Bootstrap
- What you can do with Bootstrap
- Required Skills
- What Bootstrap package contains
- How to add Bootstrap to HTML
- Box Model in Practice
- CSS layouts
- What is Flexbox and How is it Different from Floats?



What is Bootstrap

- Bootstrap is the most popular HTML, CSS, and JavaScript framework for developing responsive and mobile-friendly websites.
- Responsive web design is the creation of websites that are automatically tailored to look great on all devices, from small phones to large desktops.
- Bootstrap includes user interface components, layouts and JS tools along with the framework for implementation.
- It is absolutely free to download and use.
- It can also use JavaScript plug-ins.



Advantages of using Bootstrap

- Save a lot of time
- Responsive Features
- Unified Design
- Ease of use
- Browser Compatible
- Open Source



What you can do with Bootstrap

There are many things you can do with Bootstrap.

- Responsive websites are easy to build.
- You can quickly create multi-column layouts using predefined classes.
- You can guickly create different types of form layouts.
- You can guickly create different variations of the navigation bar.
- You can easily create components such as accordions and modals without writing JS code.
- You can easily create dynamic tabs to manage large amounts of content.
- You can easily create tooltips and popovers to display advice text.
- Easily create carousels or image sliders to showcase your content.
- You can quickly create different types of notification panels.



Required skills

- You should be familiar with HTML, CSS, and basic Javascript.
- Some backend developer experience is an add on.
- You should have an understanding of the MVC backend framework.
- Basic level of web app and designing.
- Any other library is an add on such as Jquery, 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)
- Components (components built to provide iconography, dropdowns, navigation, alerts, pop-overs etc.)
- Javascript Plugins (Bootstrap contains over a dozen custom jQuery plugins.)
- Customize (customize Bootstrap's components, LESS variables, and jQuery plugins)



Bootstrap Buttons

Bootstrap consists of different varieties of buttons as follows:

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



Accordion

• The accordion uses an internal collapse to make it bendable. To expand an accordion, add .open class on the .accordion.

Navigation Bars

The navbar is a navigation header located at the top of the page:

- With Bootstrap, the navbar can expand or shrink, depending on the size of the screen.
- A standard navigation bar created with <nav class="navbar navbar-default">.

Alerts

Bootstrap alerts are used to provide an easy way to create predefined alert messages. Alert
adds style to your messages to make them more appealing to your users. There are four
classes used for warnings in <div> elements.

Containers

- Bootstrap requires a container element to wrap website content and host our grid system.
- They apply padding around the content, they give it a max width, dependent on the device or browser width, and they can also center your content, on the page in a central column as well.



Pseudo Classes

A pseudo-class is used to define an element's particular status.

It can, for example, be used to:

- 1. When a user hovers their mouse over an element, it is styled.
- 2. Visited and unvisited links are styled differently.
- 3. When an element receives a lot of attention, it's time to style it.



Progress Bar

- A progress bar can be used to display how far a user has progressed through a process.
- Add the.progress class to a container element and the.progress-bar class to its child element to make a default progress bar. To make the progress bar wider, use the CSS width property



Containers

- Bootstrap requires a containing element to wrap site contents and house our grid system.
- You may choose one of two containers to use in your projects.
- Due to padding or more, neither container nestable.
- Use .container for a responsive fixed width container
- Use .container-fluid for a full width container, spanning the entire width of your viewport.

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 includes <u>predefined classes</u> for easy layout options, as well as powerful <u>mixins for generating</u> <u>more semantic layouts</u>.
- Grid systems are used for creating page layouts through a series of rows and columns that house your content.

Bootstrap's Default Settings

- Bootstrap's global default font-size is 14px, with a line-height of 1.428.
- This is applied to the <body> element and all paragraphs ().
- All elements have a bottom margin that equals half their computed line-height (10px by default)



How to add Bootstrap to HTML?

- The most recent version of Bootstrap is Bootstrap 5.
- The steps you need to follow to add Bootstrap to HTML differ slightly based on the version you
 desire to use.
- Using the Bootstrap CDN is a great way to deliver the content from your website to your users
 quickly and efficiently based on their geographic location and improve your website server's
 performance.

Box Model

Box Model:

Right now you would be having a basic understanding of box model, let's start using the box model in this session.

Margins and Paddings:

You can always use some padding in order to create some space between the content and the outside of an element.

That's because remember padding is basically just space, that is inside of the element.

Copy the below document in you code editor and save it as a HTML file.



CSS Layouts

Float:

The float property is used for positioning and formatting content e.g. let an image float left to the text in a container.

The float property can have one of the following values:

- left- The element floats to the left of its container.
- right- The element floats to the right of its container
- none- The element does not float (will be displayed just where it occurs in the text). This is default
- inherit- The element inherits the float value of its parent.



CSS Layouts

Flex:

Before the Flexbox Layout module, there were four layout modes:

- Block, for sections in a webpage
- Inline, for text
- Table, for two-dimensional table data
- Positioned, for explicit position of an element

The Flexible Box Layout Module makes it easier to design flexible responsive layout structures without using float or positioning.

What is Flexbox and How is it Different from Floats?

- In Bootstrap 3 and for the majority of websites, the only way to build multi-column layouts was to set column widths and use floats.
- Then on mobile, you would just remove the float and width property so that it would change to be one column.
- If you are familiar with an UL and LI relationship, flexbox is very similar to how it has sub items or flexbox items inside a parent wrapping container.
- But since flexbox is a display property it can be applied to any parent and child HTML elements and does not have its own HTML element like <flexbox>.



JS Fiddle link for Bootstrap Examples

https://codepen.io/relevel/pen/BamgqGr



Let's create an e-commerce shop page

https://codepen.io/relevel/pen/mdqZBVr



Practice Homework

E Commerce app product details and product card page



Thank You!

