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Bootstrap

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What is Bootstrap?

- Bootstrap
 - is a free front-end framework for faster and easier web development
 - 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
 - gives you the ability to easily create responsive designs
 - What is responsive design?
 - Responsive web design is about creating web sites which automatically adjust themselves to look good on all devices, from small phones to large desktops
- We will cover [Bootstrap 5](#)
 - it is mobile-first
 - it is designed to be responsive to mobile devices
 - Mobile-first styles are part of the core framework

Responsive Design: The ViewPort

- The viewport is the user's visible area of a web page.
- The viewport varies with the device, and will be smaller on a mobile phone than on a computer screen.
- Before tablets and mobile phones, web pages were designed only for computer screens, and it was common for web pages to have a static design and a fixed size.
- Then, when we started surfing the internet using tablets and mobile phones, fixed size web pages were too large to fit the viewport.
 - To fix this, browsers on those devices scaled down the entire web page to fit the screen.
 - This was not perfect!! But a quick fix.

- HTML5 introduced a method to let web designers take control over the viewport, through the `<meta>` tag.
- You should include the following `<meta>` viewport element in all your web pages:

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

- This gives the browser instructions on how to control the page's dimensions and scaling.
 - 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=1.0`** part
 - sets the initial zoom level when the page is first loaded by the browser

Let's continue on [w3school](https://w3school.com/)

Here is an example of a web page *without* the viewport meta tag, and the same web page *with* the viewport meta tag:

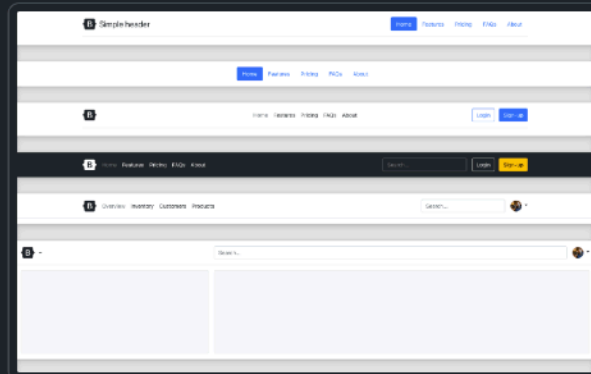


Examples

- <https://getbootstrap.com/docs/5.3/examples/>

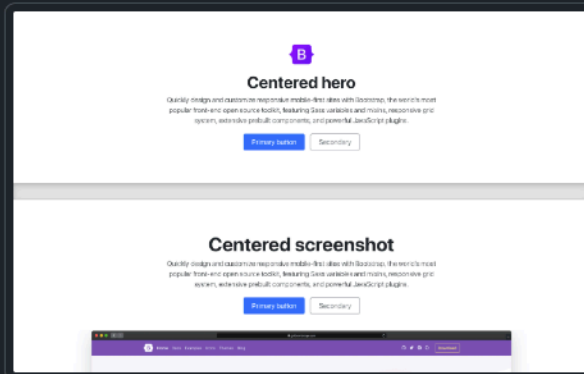
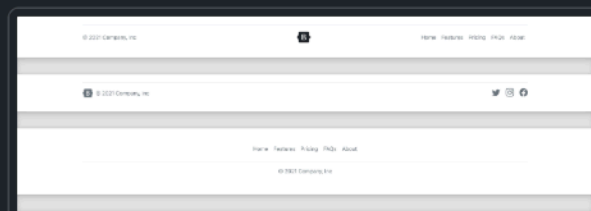
Snippets

Common patterns for building sites and apps that build on existing components and utilities with custom CSS and more.



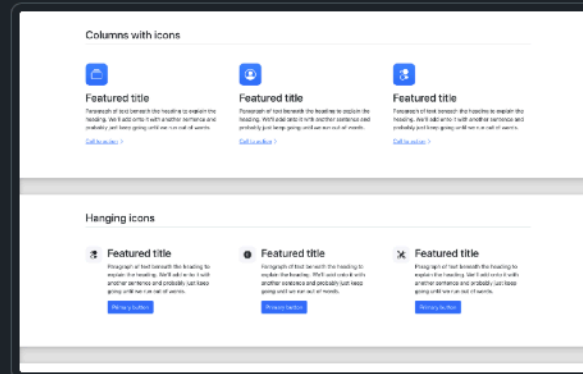
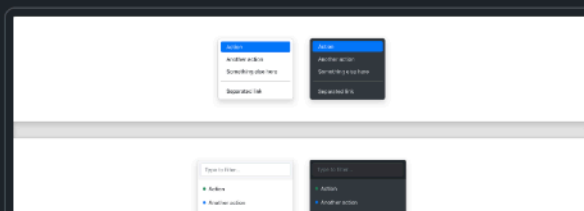
Headers

Display your branding, navigation, search, and more with these header components



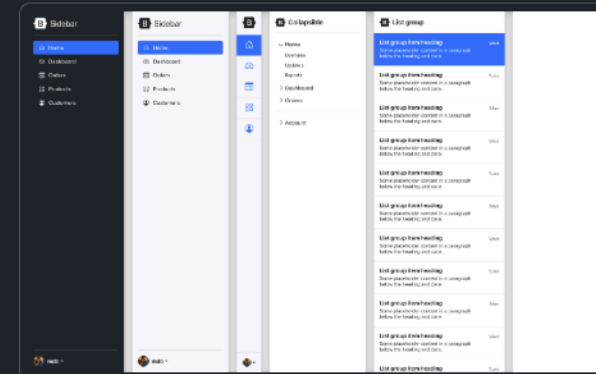
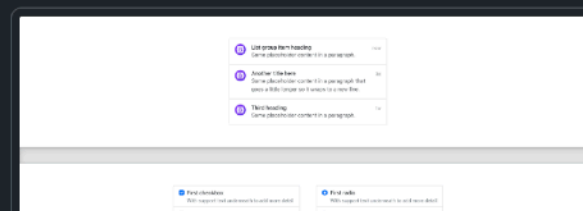
Heroes

Set the stage on your homepage with heroes that feature clear calls to action.



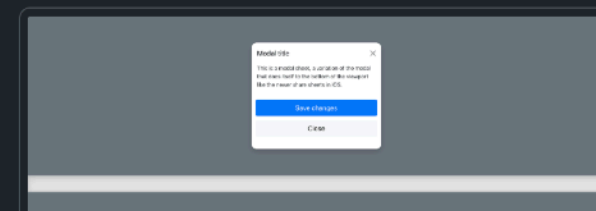
Features

Explain the features, benefits, or other details in your marketing content.



Sidebars

Common navigation patterns ideal for offcanvas or multi-column layouts.



And then let's continue with Bootstrap

- https://www.w3schools.com/bootstrap5/bootstrap_containers.php