

What are the advantages of Bootstrap?

Top 10 Advantages of Bootstrap for Web Development

1. Easy initiation

Coding is a hurricane task for a person who is unbeknownst to web development. But the greatest use of Bootstrap in web development is it makes coding hassle-free. Bootstrap handles everything for you. Despite having no extensive knowledge of coding, one can design an enticing landing page using Bootstrap. The only criterion is to have moderate experience of CSS and HTML. Alongside this, the integration process of Bootstrap is easy on existing and newer websites. In your current CSS, you can incorporate diverse platforms, frameworks, elements of Bootstrap without any hassles.

2. Responsiveness

[Statistics](#) highlight over 6.4 billion smartphone users worldwide. This study infers smartphone penetration of over 80 percent. And the numbers do not stop here; in fact, they are rising rapidly. Due to this extensive demand, having a mobile-responsive website has become a prerequisite, and this task is a cakewalk with Bootstrap by your side. It has a fluid grid layout, which adapts as per the screen resolution.

3. Highly customizable

You can find an array of templates in Bootstrap. However, if you find them unappealing, you can concoct your customization using the CSS file. Besides, if you cannot spare time to start everything from scratch, you can blend the customization with the existing code and enhance the functionality. All this can be undertaken under the customization page.

4. Extremely user-centric

While creating landing pages, it is very important to design from the user's point of view. If a landing page is engaging, only then does it appeal to the audience. One of the prominent advantages of Bootstrap is you can design landing pages complementing the audience's requirements. It comes up with suggestions regarding elements like photos, Call-to-actions (CTA) that look best for your audience and enhance user experience. Moreover, it helps in making easy edits to the landing page elements for reaching out to more audiences.

5. Top-notch support

When using Bootstrap, the only requirement is basic knowledge of coding. However, as a newbie, you might come across an array of problems. It might lead to hesitancy when using Bootstrap. To overcome this problem, Bootstrap comes with a huge support community. Having a support community is a blessing in disguise when using any technology. You get answers to every query. You share the query, and the community will actively help in solving it.

Besides, the creators are always on their toes updating Bootstrap to offer a better experience to the users. With this, you can always avail the best assistance in every circumstance.

6. Cross-browser compatibility

Every user is different, and so is their device. Along with the device, they use varied browsers too. Bootstrap is compatible with the latest versions of all modern browsers and platforms. One of the biggest advantages of using Bootstrap is compatibility across browsers. With Bootstrap by your side, heave a sigh of relief when it comes to displaying your landing page across multiple browsers. Its compatibility with Google Chrome, Firefox, Safari, and Internet Explorer makes it more versatile.

7. JavaScript plugins to your rescue

To make the pages more interactive, one needs elements, like sliders, drop-down menus, tabs, etc. The hunt begins to find complementing plugins to include these elements. But with Bootstrap by your side, you can easily incorporate these components as numerous JavaScript plugins are bundled in the Bootstrap package. Also, adding these functionalities is easy as you just need to write a few lines of code and you are all set. Moreover, with the customization option, you have the liberty to choose particular plugins, helping to maintain minimize file size.

8. Far-reaching popularity

The most crucial advantage of using Bootstrap is its widespread presence. A multinational and global company like Apple utilizes Bootstrap for its Apple Maps and Apple Music web apps. Not just this, but Dropbox, Coursera, and Airbnb have acknowledged the prowess of Bootstrap and are using it to maintain robustness.

9. Ample documentation

When using a framework, the support from the community is priceless, but some prefer referring to written notes. Fortunately, Bootstrap satiates this requirement by providing easy-to-read and efficient documentation on the Bootstrap website. The framework is easy, and the documentation makes it easier to work on UI designing.

10. Updates at the doorstep

Staying updated is the core of any technology. The same thumb rule applies to Bootstrap, which is fully attuned. Its core developers constantly keep the framework updated. They keep a close eye on future web requirements and make changes accordingly. Whenever there is a new update, Bootstrap considers the users to get hold of the latest and most advanced technology available in the industry.

• What is a Bootstrap Container, and how does it work?

In Bootstrap, container is used to set the content's margins dealing with the responsive behaviors of your layout. It contains the row elements and the row elements are the container of columns (known as grid system).

The **container class** is used to create boxed content.

There are two container classes in Bootstrap:

1. Container

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

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet"
        integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztCQTWfSpd3yD65VohhpuuCOmLASjC" crossorigin="anonymous">
</head>

<body>
  <div class="container">
    Lorem, ipsum dolor sit amet consectetur adipisicing elit. Perspiciatis quod nihil qui perferendis dolorum cum
    provident aliquam facilis corporis assumenda. Odio amet voluptas, quibusdam repellat neque sunt alias iusto
    molestias!
  </div>
</body>

</html>
```

2. container-fluid

```

<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet"
    integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTWFSpd3yD65VohhpuuCOMLASjC" crossorigin="anonymous">
</head>

<body>
  <div class="container-fluid">
    Lorem, ipsum dolor sit amet consectetur adipisicing elit. Perspiciatis quod nihil qui perferendis dolorum cum
    provident aliquam facilis corporis assumenda. Odio amet voluptas, quibusdam repellat neque sunt alias iusto
    molestias!
  </div>
</body>

</html>

```

- What are the default Bootstrap text settings?

Bootstrap 5 uses a default **font-size** of 1rem (16px by default), and its **line-height** is 1.5.

In addition, all **<p>** elements have **margin-top: 0** and **margin-bottom: 1rem** (16px by default).

```

<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet"
    integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTWFSpd3yD65VohhpuuCOMLASjC" crossorigin="anonymous">
</head>

<body>
  <p class="h1">ABC</p>
  <p class="h2">ABC</p>
  <p class="h3">ABC</p>
  <p class="h4">ABC</p>
  <p class="h5">ABC</p>
  <p class="h6">ABC</p>
</body>

</html>

```

- What do you know about the Bootstrap Grid System?

Bootstrap's grid system allows up to 12 columns across the page.

If you do not want to use all 12 column individually, you can group the columns together to create wider columns:

span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1
span 4				span 4				span 4			
span 4				span 8							
span 6						span 6					
span 12											

Bootstrap's grid system is responsive, and the columns will re-arrange depending on

the screen size: On a big screen it might look better with the content organized in three

columns, but on a small screen it would be better if the content items were stacked on top of each other.

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

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet"
        integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjc" crossorigin="anonymous">
</head>

<body>
  <div class="row">
    <div class="col-12 col-sm-12 col-md-6 col-lg-3">1</div>
    <div class="col-12 col-sm-6 col-md-6 col-lg-3">2</div>
    <div class="col-12 col-sm-6 col-md-6 col-lg-3">3</div>
    <div class="col-12 col-sm-12 col-md-6 col-lg-3">4</div>
  </div>
</body>

</html>
```

- What is the difference between Bootstrap 4 and Bootstrap 5

BASIS OF	BOOTSTRAP 4	BOOTSTRAP 5
Grid System	It has 5 tier (xs, sm, md, lg, xl).	It has 6 tier (xs, sm, md, lg, xl, xxl).
Color	It has limited colors.	Extra colors added with the looks, A card improved color palette. there are various shades available to choose.
Jquery	It has jquery and all related plugins.	Jquery is removed and switched to vanilla JS with some working plugins
Internet Explorer	Bootstrap 4 supports both IE 10 and 11.	Bootstrap 5 doesn't support IE 10 and 11.
Form elements	Radio buttons, checkboxes have different look in different OS and browsers. The form uses whatever default browsers provide.	The look of form elements will not change, on different OS or browser. The forms can be customized and form controls can be added, they would not depend on browser.
Utilities API	We cannot modify utilities in bootstrap 4	Bootstrap 5 gave freedom to modify and also create our own utility
Gutter	We use .glutter with fontsize in px	We use .g* with fontsize in rem
Vertical Classes	Columns can be positioned relative	Columns cannot be positioned relative
Bootstrap Icons	Bootstrap 4 doesn't have its own SVG icons, we have to use font-awesome for icons.	Bootstrap 5 have its own SVG icons

BASIS OF	BOOTSTRAP 4	BOOTSTRAP 5
Jumbotron	It supports.	It doesn't support jumbotron.
Card deck	The card deck is used to create a set of cards with equal width and height.	Card deck class is removed in bootstrap
Navbar	We have inline-block property and we will get white dropdown as default for dropdown-menu-dark class.	Inline-block property is removed and we will get black dropdown as default for dropdown-menu-dark class.
Static Site Generator	Bootstrap 4 uses Jekyll software.	Bootstrap 5 uses Hugo software as it is fast static site generator.
flexbox grid	this makes easier to implement vertical designs, and the columns and rows can easily be implemented. the classes justify-center-content can directly be used to align according to the requirement.	advanced grid system is made available , also columns don't have relative positions.
RTL Support	It does not enable RTL(Right to Left) switching.	It enables RTL(Right to Left) switching.
Offcanvas Component	It does not support Offcanvas Component.	It supports Offcanvas Component(that is it is available now).

• What is a Button Group, and what is the class for a basic Button Group?

"Button Groups" in Bootstrap is a class of name "btn-group" which is used to create a series of buttons in groups (without spaces) vertically or horizontally. Buttons have a default border-radius on the first and last buttons of the group.

Adding Styles on Buttons *Bootstrap* allows you to add styles to your buttons using the following classes:

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

• How can you use Bootstrap to make thumbnails?

This chapter discusses about Bootstrap thumbnails. A lot of sites need a way to lay out images,

videos, text, etc, in a grid, and Bootstrap has an easy way to do this with thumbnails. To create thumbnails using Bootstrap –

- Add an <a> tag with the class of **.thumbnail** around an image.
- This adds four pixels of padding and a gray border.
- On hover, an animated glow outlines the image.

The following example demonstrates a default thumbnail –


```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet"
    integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOMLASjC" crossorigin="anonymous">
</head>
<body>
  <div class = "row">
    <div class = "col-sm-6 col-md-3">
      <a href = "#" class = "thumbnail">
        <img src = "/bootstrap/images/kittens.jpg" alt = "Generic placeholder thumbnail">
      </a>
    </div>

    <div class = "col-sm-6 col-md-3">
      <a href = "#" class = "thumbnail">
        <img src = "/bootstrap/images/kittens.jpg" alt = "Generic placeholder thumbnail">
      </a>
    </div>

    <div class = "col-sm-6 col-md-3">
      <a href = "#" class = "thumbnail">
        <img src = "/bootstrap/images/kittens.jpg" alt = "Generic placeholder thumbnail">
      </a>
    </div>

    <div class = "col-sm-6 col-md-3">
      <a href = "#" class = "thumbnail">
        <img src = "/bootstrap/images/kittens.jpg" alt = "Generic placeholder thumbnail">
      </a>
    </div>
  </div>
</body>
</html>

```

- In Bootstrap 4, what is flexbox?

The biggest difference between Bootstrap 3 and Bootstrap 4 is that Bootstrap 4 now uses flexbox, instead of floats, to handle the layout.

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

```

<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet"
        integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTwFspd3yD65VohhpuuCOmLASjc" crossorigin="anonymous">
</head>
<body>
  <div class="d-flex p-3 bg-secondary text-white">
    <div class="p-2 bg-info">Flex item 1</div>
    <div class="p-2 bg-warning">Flex item 2</div>
    <div class="p-2 bg-primary">Flex item 3</div>
  </div>
</body>
</html>

```

- How can one create an alert in Bootstrap?

Alerts

Provide contextual feedback messages for typical user actions with the handful of available and flexible alert messages.

Examples

Alerts are available for any length of text, as well as an optional dismiss button.

For proper styling, use one of the eight **required** contextual classes (e.g., `.alert-success`). For inline dismissal, use the [alerts](#)

This is a primary alert—check it out!

This is a secondary alert—check it out!

This is a success alert—check it out!

This is a danger alert—check it out!

This is a warning alert—check it out!

This is a info alert—check it out!

This is a light alert—check it out!

This is a dark alert—check it out!

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Document</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css" rel="stylesheet"
    integrity="sha384-EVSTQN3/azprG1Anm3QDgpJLIm9Nao0Yz1ztcQTWFspD3yD65VohhpUuCOmLASjC" crossorigin="anonymous">
</head>
<body>
  <div>
    <div class="alert alert-primary" role="alert">
      This is a primary alert-check it out!
    </div>
    <div class="alert alert-secondary" role="alert">
      This is a secondary alert-check it out!
    </div>
    <div class="alert alert-success" role="alert">
      This is a success alert-check it out!
    </div>
    <div class="alert alert-danger" role="alert">
      This is a danger alert-check it out!
    </div>
    <div class="alert alert-warning" role="alert">
      This is a warning alert-check it out!
    </div>
    <div class="alert alert-info" role="alert">
      This is a info alert-check it out!
    </div>
    <div class="alert alert-light" role="alert">
      This is a light alert-check it out!
    </div>
    <div class="alert alert-dark" role="alert">
      This is a dark alert-check it out!
    </div>
  </div>
</body>

```

- What is a bootstrap card and how would you create one

A card is a flexible and extensible content container. It includes options for headers and footers, a wide variety of content, contextual background colors, and powerful display options.

If you're familiar with Bootstrap 3, cards replace our old panels, wells, and thumbnails.