

Tailwind css

Introduction to Tailwind CSS:

- Tailwind CSS is a utility-first CSS framework created by Adam Wathan, Jonathan Reinink, David Hemphill, and Steve Schoger.
- It was first released in November 2017, aiming to provide a pragmatic approach to styling web applications.

Advantages of Tailwind CSS:

- A utility-first CSS framework for rapidly building custom designs.
- Tailwind CSS is a highly customizable CSS framework.
- With Tailwind, you style elements by applying pre-existing classes directly in your HTML.
- No need for huge CSS files with custom CSS
- Easy to make design changes right from the view files
- Better developer experience
- Mobile-first designs from the start
- Easily customizable with the config files

Core Concepts:

- **Utility Classes:** Tailwind CSS is built around utility classes, which are small, single-purpose classes that apply a specific style to an element.
- **Responsive Design:** Tailwind allows you to create responsive designs easily using its responsive utility classes. These classes apply styles at specific breakpoints.
- **Configuration:** Tailwind is highly configurable. You can customize the default theme, add new utility classes, or remove existing ones according to your project's needs.
- **Plugins:** Tailwind can be extended using plugins to add additional functionality or styles.

Browser Support:

- Tailwind CSS supports all modern and older browsers.

Installation:

- **Official Tailwind CSS Documentation:** <https://tailwindcss.com>

- Tailwind CDN : [<script src="https://cdn.tailwindcss.com"></script>](https://cdn.tailwindcss.com)

```
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4   <meta charset="UTF-8">
5   <meta name="viewport" content="width=device-width, initial-scale=1.0">
6   <title>Document</title>
7   <script src="https://cdn.tailwindcss.com"></script>
8 </head>
9 <body>
10 </body>
11 </html>
12
```

Screen Break points :

Breakpoint	Description	Minimum Width
sm	Small screens	640px
md	Medium screens	768px
lg	Large screens	1024px
xl	Extra-large screens	1280px
2xl	2x large screens	1536px

Width and Height :

All of the numbers in Tailwind are based around the rem unit of measurement. 1 rem is equal to the size of the base font of the document. As an example, if the base font size is 16px then 1 rem is equal to 16px and we can deduce that 1.25 rem is equal to 20px . To help with these fractional numbers,Tailwind's numbered classes are multiplied by 4 to avoid having numbers with decimal places.

<https://tailwindcss.com/docs/width>

Pixels	rem	Tailwind
0px	0 rem	0
4px	0.25 rem	1
8px	0.5 rem	2
12px	0.75 rem	3
16px	1 rem	4
20px	1.25 rem	5
24px	1.5 rem	6
32px	2 rem	8
40px	2.5 rem	10

```

<body>
  <div class="w-10"></div>
  <div class="w-[40px]"></div>

  <div class="w-full"></div>
  <div class="w-screen"></div>
  <div class="w-[100%]"></div>

  <div class="max-w-10"></div>
  <div class="max-w-[1000px]"></div>

</body>

```

```

<body>
  <div class="h-10"></div>
  <div class="h-[40px]"></div>

  <div class="h-auto"></div>
  <div class="h-full"></div>
  <div class="h-screen"></div>

</body>

```

TextColor:

<https://tailwindcss.com/docs/text-color>

```
<body>
  <div class="text-rose-600">Ws Cube Tech jodhpur</div>
  <div class="text-[red]">Ws Cube Tech jaipur</div>
  <div class="text-[#BD133D]">Ws Cube Tech udaipur</div>
</body>
```

Background Color:

<https://tailwindcss.com/docs/background-color>

```
<body>
  <div class="bg-red-500">Ws Cube Tech jodhpur</div>
  <div class="bg-[red]">Ws Cube Tech jaipur</div>
  <div class="bg-[#BD133D]">Ws Cube Tech jaipur</div>
  <div class="bg-[yellow]">Ws Cube Tech jodhpur</div>
</body>
```

Font Size:

<https://tailwindcss.com/docs/font-size>

```
<body>

  <p class="text-sm">Ws Cube Tech </p>
  <p class="text-base">Ws Cube Tech </p>
  <p class="text-lg">Ws Cube Tech </p>
  <p class="text-xl">Ws Cube Tech </p>
  <p class="text-2xl">Ws Cube Tech </p>
  <p class="text-[22px]">Ws Cube Tech </p>
  <p class="text-[28px]">Ws Cube Tech </p>

</body>
```

Font Weight:

<https://tailwindcss.com/docs/font-weight>

```
<body>

  <p class="font-thin">Ws Cube Tech </p>
  <p class="font-normal">Ws Cube Tech </p>
  <p class="font-medium">Ws Cube Tech </p>
```

```
<p class="font-semibold">Ws Cube Tech </p>
<p class="font-bold">Ws Cube Tech </p>

</body>
```

Letter Spacing:

<https://tailwindcss.com/docs/letter-spacing>

```
<p class="tracking-tight">The quick brown fox ...</p>
<p class="tracking-normal">The quick brown fox ...</p>
<p class="tracking-wide">The quick brown fox ...</p>
```

Text Decorations:

<https://tailwindcss.com/docs/text-decoration>

```
<p class="underline">The quick brown fox ...</p>
<p class="overline">The quick brown fox ...</p>
<p class="line-through">The quick brown fox ...</p>
<p class="no-underline">The quick brown fox ...</p>
```

Text Transform:

<https://tailwindcss.com/docs/text-transform>

```
<p class="normal-case">The quick brown fox ...</p>
<p class="uppercase">The quick brown fox ...</p>
<p class="lowercase">The quick brown fox ...</p>
<p class="capitalize">The quick brown fox ...</p>
```

Border :

<https://tailwindcss.com/docs/border-width>

```
<div class="border border-sky-500"></div>
<div class="border-2 border-sky-500"></div>
<div class="border-4 border-sky-500"></div>
<div class="border-8 border-sky-500"></div>
```

Border Radius:

<https://tailwindcss.com/docs/border-radius>

```
<div class="rounded"></div>
<div class="rounded-md"></div>
```

```
<div class="rounded-lg ..." ></div>
<div class="rounded-full ..." ></div>
```

Flex ,Justify Content ,Align Items :

```
<body>
  <div class="w-[500px] h-[500px] flex justify-center items-center">
    <div class="w-[200px] h-[200px] bg-[red] " ></div>
    <div class="basis-[50%] h-[200px] bg-[red] " ></div>
  </div>
</body>
```

Justify Content:

Class	Properties
justify-normal	justify-content: normal;
justify-start	justify-content: flex-start;
justify-end	justify-content: flex-end;
justify-center	justify-content: center;
justify-between	justify-content: space-between;
justify-around	justify-content: space-around;
justify-evenly	justify-content: space-evenly;
justify-stretch	justify-content: stretch;

Align Items:

Class	Properties
items-start	align-items: flex-start;
items-end	align-items: flex-end;
items-center	align-items: center;
items-baseline	align-items: baseline;
items-stretch	align-items: stretch;

Padding:

```
<body>
  <div class="p-2"> Ws Cube Tech</div>

  <div class="pt-2"> Ws Cube Tech</div>
  <div class="pb-2"> Ws Cube Tech</div>
  <div class="ps-2"> Ws Cube Tech</div>
  <div class="pe-2"> Ws Cube Tech</div>

  <div class="p-[8px]"> Ws Cube Tech</div>
  <div class="px-[8px]"> Ws Cube Tech</div>
  <div class="py-[8px]"> Ws Cube Tech</div>
</body>
```

Margin:

```
<div class="m-2"> Ws Cube Tech</div>

<div class="mt-2"> Ws Cube Tech</div>
<div class="mb-2"> Ws Cube Tech</div>
<div class="ms-2"> Ws Cube Tech</div>
<div class="me-2"> Ws Cube Tech</div>

<div class="m-[8px]"> Ws Cube Tech</div>
<div class="mx-[8px]"> Ws Cube Tech</div>
<div class="my-[8px]"> Ws Cube Tech</div>
```

Grid :

<https://tailwindcss.com/docs/grid-template-columns>

Introduction to Grid Columns Utility:

- Grid Columns utility in Tailwind CSS facilitates the creation of grid-based layouts by defining the number of columns for an element.
- This utility provides flexibility in designing responsive grid systems without the need for writing custom CSS.

Basic Usage:

- The grid columns utility is applied using the `grid-cols-{number}` class, where `{number}` represents the desired number of columns.
- For example, `grid-cols-3` creates a grid layout with three columns.

Responsive Grids:

- Tailwind CSS supports responsive grid layouts by providing responsive variants for the grid columns utility.
- Responsive classes such as `sm:`, `md:`, `lg:`, and `xl:` can be prefixed to the `grid-cols-{number}` class to define different column layouts based on screen size breakpoints.
- For example, `sm:grid-cols-1 md:grid-cols-2 lg:grid-cols-3 xl:grid-cols-4` sets the number of columns to 1 on small screens, 2 on medium screens, 3 on large screens, and 4 on extra-large screens.

Gap between Columns:

- The gap between grid columns can be customized using the `gap-{value}` utility class.
- Adding a gap between columns improves visual clarity and enhances the aesthetics of the grid layout.
- For example, `gap-4` adds a gap of 1rem (16px) between grid columns.

```
<div class="w-[1000px] mx-auto grid grid-cols-4 gap-[5px]">
  <div class="h-[200px] bg-[red]"></div>
  <div class="h-[200px] bg-[blue]"></div>
  <div class="h-[200px] bg-[red]"></div>
  <div class="h-[200px] bg-[blue]"></div>
</div>
```

```
<div class="w-[1000px] mx-auto grid grid-cols-[25%_25%_25%_25%]">
  <div class="bg-[pink]">Ws Cube Tech</div>
  <div class="bg-[red]">Ws Cube Tech</div>
  <div class="bg-[pink]">Ws Cube Tech</div>
  <div class="bg-[red]">Ws Cube Tech</div>
</div>
```



```
<div class="w-[1000px] mx-auto grid grid-cols-[25%_25%_35%_auto]">
  <div class="bg-[pink]">Ws Cube Tech</div>
  <div class="bg-[red]">Ws Cube Tech</div>
  <div class="bg-[pink]">Ws Cube Tech</div>
  <div class="bg-[red]">Ws Cube Tech</div>
</div>
```

Responsive :

```
<div class="w-[1000px] mx-auto grid xl:grid-cols-5 lg:grid-cols-4
md:grid-cols-3 sm:grid-cols-2 grid-cols-1 gap-4">
  <div class="h-[200px] bg-[red]">Ws Cube Tech</div>
  <div class="h-[200px] bg-[blue]">Ws Cube Tech</div>
  <div class="h-[200px] bg-[red]">Ws Cube Tech</div>
  <div class="h-[200px] bg-[blue]">Ws Cube Tech</div>
</div>
```

Hover :

```
<button class="bg-sky-500 hover:bg-sky-700 duration-[2s]">
  Save changes
</button>
```

```
<div class="w-[500px] h-[500px] mx-auto border-2 bg-[red] flex
justify-center items-center">
  <div class="w-[200px] h-[200px] bg-[white] rounded-[50%]
hover:bg-[pink] duration-[1s]"></div>
</div>
```

Making Custom class :

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

```

    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <title>Document</title>
    <script src="https://cdn.tailwindcss.com"></script>
    <style type="text/tailwindcss">
        @layer utilities {
            .myCustomClass{
                width: 200px;
                color: red;
                height: 200px;
                background-color: blue;
            }
        }
    </style>
</head>
<body>
    <div class="w-[1000px] mx-auto border-2 h-[500px] flex
justify-center items-center">
        <div class="myCustomClass">hello ws </div>
    </div>
</body>
</html>

```

Customize Configuration:

```

<!doctype html>
<html>
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width,
initial-scale=1.0">
    <script src="https://cdn.tailwindcss.com"></script>
    <script>
        tailwind.config = {
            theme: {
                extend: {
                    colors: {
                        wsCubeColor: '#ccc',
                    }
                }
            }
        }
    </script>

```

```

    }
  </script>
</head>
<body>
  <h1 class="text-3xl font-bold underline text-wsCubeColor">
    Hello world!
  </h1>
</body>
</html>

```

Position:

<https://tailwindcss.com/docs/position>

Class	Properties
static	position: static;
fixed	position: fixed;
absolute	position: absolute;
relative	position: relative;
sticky	position: sticky;

```

<div class="relative ">
  <p>Relative parent</p>
  <div class="absolute bottom-0 left-0 ">
    <p>Absolute child</p>
  </div>
</div>

```

```

<body>
  <div class="w-[500px] h-[500px] bg-red-800 mx-auto relative">
    <div class="w-[200px] h-[200px] bg-pink-800 rounded-full
absolute top-[55px] left-[50px] "></div>
  </div>
</body>

```

Animation :

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">

```

```
<meta name="viewport" content="width=device-width,
initial-scale=1.0">
<title>Document</title>
<script src="https://cdn.tailwindcss.com"></script>
<script>
  tailwind.config = {
    theme: {
      extend: {
        keyframes:{
          pradeep:{
            '0%':{color:"red"},
            '25%':{color:"blue"},
            '50%':{color:"pink"},
            '75%':{color:"white"},
            '100%':{color:"yellow"},
          }
        }
      }
    }
  }
</script>
</head>
<body>
  <div class="w-[300px] h-[300px] mx-auto bg-[red]
animate-[pradeep_2s_1s_infinite_linear] text-[20px]">
    <p>
      Lorem ipsum dolor sit amet, consectetur adipisicing elit.
      Temporibus minus consequuntur, laborum dolorem illo ex repellendus
      culpa veniam quia illum a omnis maxime, neque tempore at dolores libero
      hic. Corporis!
    </p>
  </div>
</body>
</html>
```