

## Tailwind CSS

### 1. Tailwind Installation

- Utility first library
- `npm install tailwindcss @tailwindcss/vite`
- Inside `vite.config.js`

```
import tailwindcss from "@tailwindcss/vite";

// https://vite.dev/config/
export default defineConfig({
  plugins: [tailwindcss()],
});
```
- Inside `index.css`
  - `@import "tailwindcss";`

### 2. Tutorials

- Colors
  - `<p class="text-red-500">Red text</p>`
  - `<div class="bg-blue-300">Background</div>`
- Padding: `p-`
  - `<div class="p-4 bg-gray-100">Padding 4</div>`
- Margin: `m-`
  - `<div class="m-2">Margin 2</div>`
- Font
  - `<p class="text-xl font-bold">Big Bold Text</p>`
  - `<p class="text-sm italic">Small Italic Text</p>`
- Border and radius
  - `<div class="border border-black rounded-lg p-4">Box</div>`
- Width and height
  - `<div class="w-40 h-20 bg-yellow-300"></div>`
- Flexbox

```
<div class="flex gap-4">
  <div class="bg-red-400">A</div>
  <div class="bg-blue-400">B</div>
</div>
```
- Centering with flex
  - `<div class="h-screen flex justify-center items-center">
 <p>Centered Box</p>
</div>`
- Grid
  - `<div class="grid grid-cols-3 gap-4">
 <div class="bg-green-300">1</div>
 <div class="bg-green-300">2</div>
 <div class="bg-green-300">3</div>
</div>`

j. Responsive Design

Prefix Screen

- i. sm:  $\geq 640\text{px}$
- ii. md:  $\geq 768\text{px}$
- iii. lg:  $\geq 1024\text{px}$
- iv. xl:  $\geq 1280\text{px}$
- v. Eg:

```
<p class="text-sm md:text-lg lg:text-2xl">
```

Responsive text

```
</p>
```

k. Hover

- i. 

```
<button class="bg-blue-500 hover:bg-blue-700">
```

Hover me

```
</button>
```

l. Focus

- i. 

```
<input class="border focus:border-blue-500" />
```

m. Tailwind Positioning

- i. 

```
<div class="relative">
```

```
<div class="absolute top-0 left-0">
```

Positioned box

```
</div>
```

```
</div>
```

n. Shadows and Effects

- i. 

```
<div class="shadow-lg p-4 rounded">Shadow Box</div>
```

o. Gradients

- i. 

```
<div class="bg-gradient-to-r from-purple-500 to-pink-500 p-6"></div>
```

p. Custom Fonts

- i. In `tailwind.config.js`

```
theme: {
```

```
  fontFamily: {
```

```
    poppins: ['Poppins', 'sans-serif']
```

```
  }
```

```
}
```

- ii. using:

```
<p class="font-poppins">Hello</p>
```

q. Custom colors

- i. In `tailwind.config.js`

```
extend: {
```

```
  colors: {
```

```
    brand: "#4F46E5",
```

```
  },
```

```
}
```

- ii. using:

1. 

```
<div class="bg-brand text-white">Brand Box</div>
```

r. Dark Mode

- i. In `tailwind.config.js`

```
darkMode: "class"
```

- ii. using:

1. `<div class="bg-white dark:bg-black"></div>`
- s. Creating components using `@apply`
  - i. `/* inside index.css */`  
`.btn-primary {`  
 `@apply bg-blue-500 text-white px-4 py-2 rounded-lg`  
 `hover:bg-blue-700;`  
`}`
  - ii. Using:
    1. `<button class="btn-primary">Click</button>`
  - iii. Used in:
    1. Buttons, Cards, Inputs, Modals, Badges, Alerts
- t. Tailwind Plugins
  - i. `npm install @tailwindcss/forms`
  - ii. In `tailwind.config.js`:  
`plugins: [require('@tailwindcss/forms')]`