Tailwind CSS Utility-first CSS

CONCEPTS

Utilities are single-purpose classes you combine in markup. Variants are prefixes: md:, hover:, dark:. Unprefixed means every size (mobile first).

Write class names in full. Tailwind scans for literal strings, so "bg-" + color is never found; use a lookup of complete names instead.

SETUP AND BUILD

`npm install tailwindcss @tailwindcss/cli`
Install with the standalone CLI

`npm install tailwindcss @tailwindcss/vite`
Install the Vite plugin

`@import "tailwindcss";`
Pull in Tailwind (preflight, theme, utilities)

`npx @tailwindcss/cli -i <in> -o <out>`
Build the CSS once

`npx @tailwindcss/cli -i <in> -o <out> --watch`
Rebuild on change

`npx @tailwindcss/cli -i <in> -o <out> --minify`
Minified production build

LAYOUT

`flex`
Flex container

`flex-col`
Stack children vertically

`items-center`
Align items on the cross axis

`justify-between`
Spread items along the main axis

`gap-4`
Gap between children (1 unit = 0.25rem)

`grid grid-cols-3`
Three-column grid

`relative / absolute / fixed / sticky`
Positioning

SPACING AND SIZING

`p-4`
Padding on all sides

`px-4 py-2`
Horizontal and vertical padding

`m-4`
Margin on all sides

`mx-auto`
Centre a block horizontally

`w-full`
Width 100%

`w-64`
Fixed width (16rem)

`max-w-md`
Cap the width

TYPOGRAPHY

`text-lg`
Font size (sm, base, lg, xl, 2xl…)

`font-bold`
Font weight

`text-gray-700`
Text colour

COLOUR AND EFFECTS

`bg-white`
Background colour

`bg-blue-500`
Palette colour (50 to 950)

`rounded-lg`
Rounded corners

VARIANTS

`hover:bg-sky-700`
On hover

`sm: md: lg: xl: 2xl:`
Min-width breakpoints (40/48/64/80/96rem)

`dark:bg-gray-800`
Dark mode

CUSTOM VALUES AND THEME

`w-[17px]`
Arbitrary value

`@theme { --color-brand: #f00; }`
Add a design token (bg-brand)