

# ■ Basic CSS vs Tailwind CSS

## Essential Styling Properties Cheat Sheet

### ■ ■ Layout & Positioning

CSS Property	Tailwind Class	Description
<code>display: block</code>	<code>block</code>	Element takes full width, starts new line
<code>display: inline</code>	<code>inline</code>	Element only takes necessary width
<code>display: inline-block</code>	<code>inline-block</code>	Inline element with block properties
<code>display: none</code>	<code>hidden</code>	Element is completely hidden
<code>display: flex</code>	<code>flex</code>	Creates a flex container
<code>display: grid</code>	<code>grid</code>	Creates a grid container
<code>position: static</code>	<code>static</code>	Default positioning
<code>position: relative</code>	<code>relative</code>	Positioned relative to normal position
<code>position: absolute</code>	<code>absolute</code>	Positioned relative to nearest positioned parent
<code>position: fixed</code>	<code>fixed</code>	Positioned relative to viewport
<code>position: sticky</code>	<code>sticky</code>	Switches between relative and fixed
<code>float: left</code>	<code>float-left</code>	Element floats to the left
<code>float: right</code>	<code>float-right</code>	Element floats to the right
<code>clear: both</code>	<code>clear-both</code>	Clears floated elements on both sides

### ■ Spacing (Margin & Padding)

CSS Property	Tailwind Class	Description
<code>margin: 0</code>	<code>m-0</code>	No margin on all sides
<code>margin: 1rem</code>	<code>m-4</code>	1rem margin on all sides
<code>margin-top: 0.5rem</code>	<code>mt-2</code>	0.5rem margin on top
<code>margin-bottom: 1rem</code>	<code>mb-4</code>	1rem margin on bottom

CSS Property	Tailwind Class	Description
<code>margin-left: 2rem</code>	<code>ml-8</code>	2rem margin on left
<code>margin-right: 2rem</code>	<code>mr-8</code>	2rem margin on right
<code>margin: 0 auto</code>	<code>mx-auto</code>	Horizontal centering
<code>padding: 0</code>	<code>p-0</code>	No padding on all sides
<code>padding: 1rem</code>	<code>p-4</code>	1rem padding on all sides
<code>padding-top: 0.5rem</code>	<code>pt-2</code>	0.5rem padding on top
<code>padding-bottom: 1rem</code>	<code>pb-4</code>	1rem padding on bottom
<code>padding-left: 2rem</code>	<code>pl-8</code>	2rem padding on left
<code>padding-right: 2rem</code>	<code>pr-8</code>	2rem padding on right
<code>padding: 1rem 2rem</code>	<code>px-8 py-4</code>	Horizontal and vertical padding

## ■ Sizing (Width & Height)

CSS Property	Tailwind Class	Description
<code>width: 100%</code>	<code>w-full</code>	Full width
<code>width: 50%</code>	<code>w-1/2</code>	Half width
<code>width: 25%</code>	<code>w-1/4</code>	Quarter width
<code>width: auto</code>	<code>w-auto</code>	Auto width
<code>width: 100px</code>	<code>w-24</code>	Fixed width (100px ≈ 6rem)
<code>max-width: 100%</code>	<code>max-w-full</code>	Maximum width 100%
<code>min-width: 0</code>	<code>min-w-0</code>	Minimum width 0
<code>height: 100%</code>	<code>h-full</code>	Full height
<code>height: 100vh</code>	<code>h-screen</code>	Full viewport height
<code>height: 50%</code>	<code>h-1/2</code>	Half height
<code>height: auto</code>	<code>h-auto</code>	Auto height
<code>max-height: 100vh</code>	<code>max-h-screen</code>	Maximum height of viewport
<code>min-height: 100vh</code>	<code>min-h-screen</code>	Minimum height of viewport

## ■ Typography & Text

CSS Property	Tailwind Class	Description
<code>color: black</code>	<code>text-black</code>	Black text color
<code>color: white</code>	<code>text-white</code>	White text color
<code>color: red</code>	<code>text-red-500</code>	Red text color
<code>font-size: 12px</code>	<code>text-xs</code>	Extra small font size
<code>font-size: 14px</code>	<code>text-sm</code>	Small font size
<code>font-size: 16px</code>	<code>text-base</code>	Base font size (default)
<code>font-size: 18px</code>	<code>text-lg</code>	Large font size
<code>font-size: 24px</code>	<code>text-2xl</code>	Extra large font size
<code>font-weight: normal</code>	<code>font-normal</code>	Normal font weight
<code>font-weight: bold</code>	<code>font-bold</code>	Bold font weight
<code>text-align: left</code>	<code>text-left</code>	Left align text
<code>text-align: center</code>	<code>text-center</code>	Center align text
<code>text-align: right</code>	<code>text-right</code>	Right align text
<code>text-decoration: underline</code>	<code>underline</code>	Underlined text
<code>text-decoration: none</code>	<code>no-underline</code>	Remove text decoration
<code>line-height: 1.5</code>	<code>leading-6</code>	Line height 1.5
<code>letter-spacing: 1px</code>	<code>tracking-wide</code>	Wide letter spacing

## ■ Background & Borders

CSS Property	Tailwind Class	Description
<code>background-color: white</code>	<code>bg-white</code>	White background
<code>background-color: black</code>	<code>bg-black</code>	Black background
<code>background-color: blue</code>	<code>bg-blue-500</code>	Blue background
<code>background-color: transparent</code>	<code>bg-transparent</code>	Transparent background
<code>border: 1px solid black</code>	<code>border border-black</code>	1px solid black border
<code>border: 2px solid red</code>	<code>border-2 border-red-500</code>	2px solid red border
<code>border: none</code>	<code>border-none</code>	No border
<code>border-radius: 4px</code>	<code>rounded</code>	Rounded corners

CSS Property	Tailwind Class	Description
<code>border-radius: 8px</code>	<code>rounded-lg</code>	Large rounded corners
<code>border-radius: 50%</code>	<code>rounded-full</code>	Fully rounded (circle)
<code>box-shadow: 0 4px 6px rgba(0,0,0,0.1)</code>	<code>shadow-md</code>	Medium shadow
<code>box-shadow: none</code>	<code>shadow-none</code>	No shadow
<code>opacity: 0.5</code>	<code>opacity-50</code>	50% opacity
<code>opacity: 1</code>	<code>opacity-100</code>	Full opacity

### ■ Common Patterns & Examples:

#### Center a Div:

CSS: `margin: 0 auto; width: fit-content;`

Tailwind: `mx-auto w-fit`

#### Card Component:

CSS: `background: white; padding: 1rem; border-radius: 8px; box-shadow: 0 4px 6px rgba(0,0,0,0.1);`

Tailwind: `bg-white p-4 rounded-lg shadow-md`

#### Button Style:

CSS: `background: blue; color: white; padding: 0.5rem 1rem; border: none; border-radius: 4px;`

Tailwind: `bg-blue-500 text-white py-2 px-4 border-none rounded`

#### Full Height Container:

CSS: `min-height: 100vh; display: flex; flex-direction: column;`

Tailwind: `min-h-screen flex flex-col`

#### Responsive Text:

CSS: `font-size: 1rem;` + media queries

Tailwind: `text-base md:text-lg lg:text-xl`

#### Hide on Mobile:

CSS: `@media (max-width: 768px) { display: none; }`

Tailwind: `hidden md:block`

#### Hover Effects:

CSS: `transition: all 0.3s ease; &:hover { transform: scale(1.05); }`

Tailwind: `transition-all duration-300 hover:scale-105`

## ■ Tips & Best Practices:

### Getting Started with Tailwind:

- Add Tailwind CDN: `<script src="https://cdn.tailwindcss.com"></script>`
- Or install via npm: `npm install tailwindcss`
- Classes are applied directly in HTML: `<div class="bg-blue-500 text-white p-4">`

### Spacing Scale:

- **0** = 0px, **1** = 0.25rem (4px), **2** = 0.5rem (8px), **4** = 1rem (16px)
- **8** = 2rem (32px), **16** = 4rem (64px), **32** = 8rem (128px)
- Use consistent spacing: `p-4 m-2 gap-4` for harmonious layouts

### Color System:

- Colors range from 50 (lightest) to 950 (darkest)
- **blue-100** (very light) to **blue-900** (very dark)
- Use **500** as the default shade for most colors

### Responsive Design:

- **sm**: ≥640px, **md**: ≥768px, **lg**: ≥1024px, **xl**: ≥1280px
- Mobile-first: start with base classes, add breakpoint prefixes
- Example: `text-sm md:text-base lg:text-lg`

### Common Mistakes:

- Don't mix CSS and Tailwind classes unnecessarily
- Use `space-x*` and `space-y*` for consistent spacing between children
- Remember: Tailwind classes are purged in production (unused classes removed)

### Debugging:

- Add background colors to visualize layouts: `bg-red-200`
- Use browser dev tools to see applied styles
- Tailwind CSS IntelliSense extension for VS Code is very helpful