The Ultimate Guide to Mastering Tailwind CSS

1. Colors

Background Color

Classes: bg-{color}-{number}
Options: bg-red-500, bg-blue-700, bg-green-300
Example:
<div class='bg-blue-500'>Blue Background</div>

Text Color

Classes: text-{color}-{number}
Options: text-gray-800, text-yellow-600, text-purple-400
Example:
<p class='text-red-700'>Red Text</p>

2. Spacing

Padding

Classes: p-{size}, pt-{size}, pb-{size}, pl-{size}, pr-{size}, px-{size}, py-{size}
Options: p-4, pt-2, pb-6, pl-3, pr-5, px-8, py-4
Example:
<div class='p-4'>Padding on all sides</div>

Margin

Classes: m-{size}, mt-{size}, mb-{size}, ml-{size}, mr-{size}, mx-{size}, my-{size}
Options: m-4, mt-2, mb-6, ml-3, mr-5, mx-8, my-4
Example:
<div class='mt-2 mb-4'>Top and bottom margins</div>

3. Typography

Font Size

Classes: text-{size}
Options: text-xs, text-sm, text-base, text-lg, text-xl
Example:
<h1 class='text-3xl'>Large Text</h1>

Font Weight

Classes: font-{weight}
Options: font-light, font-normal, font-medium, font-semibold, font-bold
Example:
<p class='font-bold'>Bold Text</p>

4. Layout

Flexbox

Classes: flex, flex-row, flex-col, items-center, justify-between
Options: flex, flex-row, flex-col, items-start, justify-center
Example:
<div class='flex items-center justify-between'>
 <div>Item 1</div>
 <div>Item 2</div>
</div>

Grid

Classes: grid, grid-cols-{number}, col-span-{number}
Options: grid, grid-cols-2, grid-cols-4, col-span-1, col-span-2
Example:
<div class='grid grid-cols-3 gap-4'>
 <div>Column 1</div>
 <div>Column 2</div>
 <div>Column 3</div>
</div>

5. Borders/Shadows

Border Width

Classes: border-{size}
Options: border-0, border-2, border-4
Example:
<div class='border-2'>2px Border</div>

Border Radius

Classes: rounded-{size}
Options: rounded-sm, rounded-md, rounded-lg, rounded-full
Example:
<div class='rounded-lg'>Large Rounded Corners</div>

Box Shadow

Classes: shadow-{size}
Options: shadow-sm, shadow-md, shadow-lg, shadow-xl
Example:
<div class='shadow-md'>Medium Shadow</div>

6. Responsive Design

Breakpoints

Classes: sm:, md:, lg:, xl:
Options: sm:bg-red-500, md:bg-blue-500, lg:bg-green-500, xl:bg-yellow-500
Example:
<div class='p-4 md:p-8 lg:p-12'>Responsive Padding</div>

7. Pseudo-Classes

Hover

Classes: hover:{utility}
Options: hover:bg-blue-700, hover:text-white
Example:
<button class='bg-blue-500 hover:bg-blue-700'>Hover me</button>

8. Flex Utilities

Justify Content

Classes: justify-{alignment}
Options: justify-start, justify-end, justify-center, justify-between
Example:
<div class='flex justify-center'>Centered Flex Item</div>

Align Items

Classes: items-{alignment}
Options: items-start, items-end, items-center, items-stretch
Example:
<div class='flex items-center'>Aligned Center Flex Item</div>

9. Grid Utilities

Grid Columns
Classes: grid-cols-{number}
Options: grid-cols-1, grid-cols-2, grid-cols-3, grid-cols-4
Example:
```
<div class='grid grid-cols-3'>
 <div>Col 1</div>
 <div>Col 2</div>
 <div>Col 3</div>
</div>
```

Gap
Classes: gap-{size}
Options: gap-2, gap-4, gap-6, gap-8
Example:
```
<div class='grid grid-cols-3 gap-4'>
 <div>Col 1</div>
 <div>Col 2</div>
 <div>Col 3</div>
</div>
```

10. Transitions/Animations

Transition
Classes: transition-{property}
Options: transition-all, transition-colors, transition-opacity
Example:
```
<button class='transition-all duration-300'>Smooth Transition</button>
```

Animation
Classes: animate-{name}
Options: animate-spin, animate-ping, animate-bounce
Example:
```
<div class='animate-bounce'>Bouncing Animation</div>
```

11. Positioning

Position
Classes: absolute, relative, fixed, sticky
Options: absolute, relative, fixed, sticky

Example:
<div class='absolute top-0 left-0'>Positioned Element</div>

Z-Index
Classes: z-{index}
Options: z-0, z-10, z-20, z-30
Example:
<div class='z-10'>Z-Index 10</div>

12. Overflow

Overflow
Classes: overflow-{behavior}
Options: overflow-auto, overflow-hidden, overflow-visible, overflow-scroll
Example:
<div class='overflow-auto'>Overflow Container</div>

13. Box Model

Box Sizing
Classes: box-border, box-content
Options: box-border, box-content
Example:
<div class='box-border p-4 border-4'>Box Border</div>

14. Custom Breakpoints

Modify
Modify custom breakpoints in `tailwind.config.js`
Example:
module.exports = {
 theme: {
 screens: {
 '2xl': '1536px',
 },
 },
}