

Tailwind CSS Bible — Structured Reference

Summary tables, practical examples, and variants at a glance

How to read this PDF

- Each section starts with a quick summary, followed by common utilities and one or more example snippets.
- Responsive variants like `sm:`, `md:`, etc., and state variants like `hover:`, `focus:` can prefix any class.
- Use arbitrary values with square brackets, e.g., `w-[72px]`, `bg-[#1E40AF]`.

Variants (Once, Up Front)

Type	Prefix	Example	Notes
Responsive	<code>sm:</code> , <code>md:</code> , <code>lg:</code> , <code>xl:</code> , <code>2xl:</code>	<code>sm:text-base md:text-lg</code>	Mobile-first; applies at min-width breakpoints
State	<code>hover:</code> , <code>focus:</code> , <code>active:</code> , <code>visited:</code>	<code>hover:bg-blue-700</code>	Pseudo-classes
Color Mode	<code>dark:</code>	<code>dark:bg-neutral-900</code>	Enable dark mode in config or 'media'
Motion/Media	<code>motion-safe:</code> , <code>motion-reduce:</code> , <code>print:</code> , <code>animate:none</code>	<code>motion-safe</code>	Respects user preferences / print
Direction	<code>rtl:</code> , <code>ltr:</code>	<code>rtl:text-right</code>	When using RTL plugins/config

Layout

Summary

- Use display, position, z-index, overflow for page structure.
- Container centers content and sets responsive paddings.
- Use inset and top/left/right/bottom utilities for abs/fixed positioning.

Common Utilities

- Display: block, inline, inline-block, flex, grid, table, hidden
- Position: static, relative, absolute, fixed, sticky
- Z-Index: z-0, z-10, z-20, z-50, z-auto
- Overflow: overflow-hidden, overflow-auto, overflow-x-scroll, overflow-y-hidden
- Inset: inset-0, top-4, right-4, -bottom-2 (negatives supported)
- Container: container mx-auto px-4

Examples

```
<div class="container mx-auto px-4">
  <header class="sticky top-0 bg-white/80 backdrop-blur supports-backdrop:backdrop-blur-md">
    <nav class="flex items-center justify-between py-3">
      <h1 class="text-lg font-semibold">Brand</h1>
      <ul class="hidden md:flex gap-6">
```

```

        <li><a class="hover:underline" href="#">Home</a></li>
        <li><a class="hover:underline" href="#">About</a></li>
    </ul>
</nav>
</header>
</div>

```

Spacing

Summary

- Margin (m, mx, my, mt, etc.) and padding (p, px, py, pt, etc.) follow a scale.
- Use space-x-* and space-y-* to add consistent gaps between children.

Common Utilities

- Margin: m-0 .. m-96, mx-auto, -mt-2
- Padding: p-0 .. p-96, px-4, py-6
- Gaps between siblings: space-x-4, space-y-2 (use on parent)

Examples

```

<ul class="divide-y divide-gray-200">
    <li class="py-3">Item A</li>
    <li class="py-3">Item B</li>
    <li class="py-3">Item C</li>
</ul>

<div class="flex space-x-4 p-4">
    <button class="px-4 py-2 bg-indigo-600 text-white rounded-lg">Save</button>
    <button class="px-4 py-2 bg-gray-100 rounded-lg">Cancel</button>
</div>

```

Sizing

Summary

- Width/height support fixed, fractions, viewport & min/max constraints.
- Use aspect-ratio plugin/utilities for consistent media sizing.

Common Utilities

- Width: w-4, w-1/2, w-full, w-screen, max-w-md, min-w-0
- Height: h-10, h-full, h-screen, max-h-96
- Aspect: aspect-square, aspect-video
- Arbitrary: w-[72px], max-w-[48rem]

Examples

```
<figure class="max-w-md mx-auto">
  
</figure>
```

Typography

Summary

- Control font family, size, weight, leading, tracking, alignment, decoration and list styles.
- Use prose (Typography plugin) to style long-form content easily.

Common Utilities

- Fonts: font-sans, font-serif, font-mono
- Size: text-xs .. text-9xl, responsive sizes with sm:, md:
- Weight: font-light .. font-black
- Leading & tracking: leading-tight, tracking-wide
- Decoration: underline, line-through, no-underline; decoration-dashed
- Prose: prose, prose-invert (with @tailwindcss/typography)

Examples

```
<article class="prose lg:prose-lg dark:prose-invert">
  <h1>Getting Started</h1>
  <p>Tailwind makes it fast to build custom interfaces using utility classes.</p>
  <ul>
    <li>Utility-first</li>
    <li>Responsive</li>
    <li>Composable</li>
  </ul>
</article>
```

Flexbox & Grid

Summary

- Use flexbox for 1D alignment, grid for 2D layouts.
- Gap utilities work in both flex and grid.

Common Utilities

- Flex: flex, inline-flex, flex-col, flex-wrap, items-center, justify-between, gap-4
- Grid: grid, grid-cols-2 .. grid-cols-12, auto-rows-min, grid-flow-col
- Order/Grow/Shrink: order-1, flex-grow, flex-shrink-0

Examples

```

<div class="grid grid-cols-1 sm:grid-cols-2 lg:grid-cols-3 gap-6">
  <div class="p-4 rounded-xl shadow bg-white">Card 1</div>
  <div class="p-4 rounded-xl shadow bg-white">Card 2</div>
  <div class="p-4 rounded-xl shadow bg-white">Card 3</div>
</div>

<div class="flex items-center justify-between gap-4">
  <div class="order-2 md:order-1">Left</div>
  <div class="order-1 md:order-2">Right</div>
</div>

```

Backgrounds & Gradients

Summary

- Set solid colors, images, positions, and gradients.
- Opacity can be controlled via `bg-opacity-*` or using colors with alpha (e.g., `bg-black/50`).

Common Utilities

- Solid: `bg-indigo-600`, `bg-neutral-900`
- Images: `bg-[url('/hero.png')]` `bg-cover` `bg-center`
- Gradients: `bg-gradient-to-r from-indigo-500 via-purple-500 to-pink-500`
- Opacity: `bg-black/50`

Examples

```

<section class="bg-gradient-to-r from-indigo-600 to-purple-600 text-white rounded-2xl p-8">
  <h2 class="text-2xl font-semibold">Welcome</h2>
  <p class="mt-2 opacity-90">Build beautiful UIs fast with utilities.</p>
</section>

```

Borders, Divide & Ring

Summary

- Border width/color/radius utilities plus `divide-*`/`ring-*` for advanced UIs.
- Use `rounded-full` for pills/avatars.

Common Utilities

- Border: `border`, `border-2`, `border-x`, `border-y`, `border-transparent`
- Color: `border-gray-200`, `border-indigo-600`
- Radius: `rounded`, `rounded-lg`, `rounded-2xl`, `rounded-full`
- Divide: `divide-y`, `divide-x-2` `divide-gray-200` (on parent)
- Ring: `ring`, `ring-1`, `ring-2`, `ring-indigo-500` `ring-offset-2`

Examples

```
<button class="px-4 py-2 bg-white border border-gray-300 rounded-lg hover:ring-2 hover:ring-indigo-500">  
  Focusable Button  
</button>  
  
<ul class="divide-y divide-gray-200 rounded-xl overflow-hidden border">  
  <li class="p-3">Row A</li>  
  <li class="p-3">Row B</li>  
</ul>
```

Effects (Shadow, Opacity, Blend)

Summary

- Shadows create depth; opacity controls visibility; mix-blend and bg-blend for compositing effects.

Common Utilities

- Shadows: shadow-sm, shadow, shadow-md, shadow-lg, shadow-xl, shadow-2xl
- Opacity: opacity-0 .. opacity-100
- Blend: mix-blend-multiply, bg-blend-overlay

Examples

```
<article class="p-6 rounded-2xl shadow-lg bg-white">  
  <h3 class="text-lg font-semibold">Card</h3>  
  <p class="text-gray-600">A simple elevated surface.</p>  
</article>
```

Transforms & Transitions

Summary

- Use translate/scale/rotate/skew to transform elements.
- Transition utilities define which properties, duration, and easing to animate.

Common Utilities

- Transform: -translate-y-1/2, translate-x-4, scale-95, rotate-6, skew-x-6
- Transition: transition, transition-colors, duration-200, ease-in-out, delay-150

Examples

```
<button class="px-4 py-2 bg-indigo-600 text-white rounded-lg transition-transform duration-200 hover:scale-95">  
  Hover Me  
</button>  
  
<div class="h-2 bg-gray-200 rounded overflow-hidden">  
  <div class="h-full w-1/2 bg-green-500 transition-all duration-500 ease-out"></div>  
</div>
```

Animation

Summary

- Built-in animations include spin, ping, pulse, and bounce.
- Create custom keyframes in tailwind.config.js and reference with animate-[name].

Common Utilities

- animate-spin, animate-ping, animate-pulse, animate-bounce
- Custom: animate-[wiggle] with @keyframes wiggle in config

Examples

```
<!-- Spinner -->
<svg class="animate-spin h-5 w-5 text-indigo-600" viewBox="0 0 24 24">
  <circle cx="12" cy="12" r="10" stroke="currentColor" stroke-width="4" fill="none" />
</svg>
```

Filters & Backdrop Filters

Summary

- Apply CSS filters to elements and backdrop-blur/backdrop-brightness to backgrounds.

Common Utilities

- Filter: blur-sm, brightness-110, contrast-125, grayscale, sepia
- Backdrop: backdrop-blur, backdrop-brightness-125, backdrop-contrast-125

Examples

```
<div class="relative h-48 bg-[url('/photo.jpg')] bg-cover bg-center rounded-2xl overflow-hidden">
  <div class="absolute inset-0 backdrop-blur-sm bg-black/30 flex items-center justify-center">
    <span class="text-white text-lg">Overlay Text</span>
  </div>
</div>
```

Interactivity & Accessibility

Summary

- Control cursors, pointer-events, user-select, scroll behavior, and focus-visible outlines.
- Use focus-visible and ring utilities for accessible focus states.

Common Utilities

- Cursor: cursor-pointer, cursor-not-allowed
- Pointer: pointer-events-none
- Select: select-none, select-text
- Scroll: scroll-smooth, snap-x, snap-mandatory
- Focus: focus:outline-none focus-visible:ring-2 focus-visible:ring-indigo-500

Examples

```
<a href="#" class="underline focus:outline-none focus-visible:ring-2 focus-visible:ring-offset-2 f Accessible Link
</a>
```

Dark Mode

Summary

- Prefix with dark: to apply styles in dark color scheme (class or media strategy).
- Combine with ring, divide, and prose-invert for complete theming.

Common Utilities

- dark:bg-neutral-900 dark:text-neutral-100
- dark:prose-invert
- dark:ring-neutral-700 dark:divide-neutral-800

Examples

```
<div class="p-4 bg-white dark:bg-neutral-900 text-neutral-900 dark:text-neutral-100 rounded-xl">
  <h4 class="font-semibold">Theme Aware</h4>
  <p class="opacity-80">Switch your system theme to see changes.</p>
</div>
```

Arbitrary Values

Summary

- Use square brackets to provide custom values not on the scale.
- Great for design tokens or one-off adjustments.

Common Utilities

- w-[72px], h-[38px], top-[10%]
- bg-[#1E40AF], shadow-[0_2px_10px_rgba(0,0,0,0.15)]
- grid-cols-[repeat(3,minmax(0,1fr))]

Examples

```
<button class="px-[14px] py-[9px] bg-[#1E40AF] text-white rounded-[10px] shadow-[0_4px_14px_rgba(0, 22, 68, 0.1)] font-semibold transition-colors duration-150 ease-in-out">Custom Token Button</button>
```

Forms (Plugin)

Summary

- Use `@tailwindcss/forms` for better default styles; then apply utilities on top.

Common Utilities

- `form-input`, `form-select` (via plugin's base), plus utilities like `focus:ring-2`

Examples

```
<label class="block">  
  <span class="text-sm">Email</span>  
  <input type="email" class="mt-1 block w-full rounded-md border-gray-300 shadow-sm focus:border-indigo-300 focus:outline-none" />  
</label>
```

Putting It Together — Sample Card Component

Summary

- A small example using spacing, typography, shadows, dark mode, focus states, and responsive variants.

Examples

```
<article class="max-w-sm mx-auto p-5 bg-white dark:bg-neutral-900 rounded-2xl shadow transition-colors duration-150 ease-in-out">  
  <header class="flex items-center gap-3">  
      
    <div>  
      <h3 class="text-base font-semibold">Jane Doe</h3>  
      <p class="text-sm text-gray-500 dark:text-gray-400">Product Designer</p>  
    </div>  
  </header>  
  <p class="mt-3 text-gray-700 dark:text-gray-300">  
    Tailwind lets you build quickly with consistent spacing, colors, and utilities.  
  </p>  
  <footer class="mt-4 flex gap-3">  
    <button class="px-4 py-2 bg-indigo-600 text-white rounded-lg hover:bg-indigo-700 focus-visible:outline-indigo-700">  
      Follow  
    </button>  
    <button class="px-4 py-2 bg-gray-100 dark:bg-neutral-800 rounded-lg">  
      Message  
    </button>  
  </footer>  
</article>
```

Notes & Tips

- Start mobile-first; add sm:/md:/lg: progressively.
- Extract components when class lists get long (via @apply or UI components).
- Keep design tokens in tailwind.config.js (colors, spacing, fonts) for consistency.
- Prefer semantic HTML + accessible focus states (focus-visible + ring).