

Tailwind CSS Topics — Descriptions & Examples

Styling with utility classes

Description: Use small, single-purpose CSS classes directly in your HTML to style elements quickly without writing custom CSS.

Example:

html

CopyEdit

```
<div class="bg-blue-500 text-white p-4 rounded">Hello Tailwind!</div>
```

Hover, focus, and other states

Description: Apply styles conditionally for interaction states like hover and focus by prefixing classes (e.g., `hover:bg-blue-700`).

Example:

html

CopyEdit

```
<button class="bg-green-500 hover:bg-green-700 text-white py-2 px-4 rounded">Hover me</button>
```

Responsive design

Description: Use prefixes like `sm:`, `md:`, `lg:` to apply different styles on different screen sizes.

Example:

html

CopyEdit

```
<div class="text-sm md:text-lg lg:text-xl">Responsive text size</div>
```

Dark mode

Description: Tailwind supports dark mode styling using the `dark:` prefix. Styles apply when dark mode is enabled.

Example:

html

CopyEdit

```
<div class="bg-white dark:bg-gray-800 text-black dark:text-white p-4">Dark mode content</div>
```

Theme variables

Description: Customize your Tailwind config to set theme colors, fonts, spacing, and more, allowing design consistency.

Example:

js

CopyEdit

```
// tailwind.config.js

module.exports = {
  theme: {
    extend: {
      colors: { primary: '#1DA1F2' },
    },
  },
}
```

Colors

Description: Use utility classes for colors like background, text, border with Tailwind's color palette.

Example:

html

CopyEdit

```
<p class="text-red-600 bg-yellow-200">Colored text and background</p>
```

Adding custom styles

Description: Add your own CSS or extend Tailwind utilities in the config for unique styles.

Example:

js

CopyEdit

```
// tailwind.config.js
```

```
module.exports = {  
  extend: {  
    spacing: { '72': '18rem' },  
  },  
}
```

Detecting classes in source files

Description: Tailwind scans your source files for class names to generate only necessary CSS (purge).

Example:

js

CopyEdit

```
// tailwind.config.js
```

```
module.exports = {  
  content: ['./src/**/*.html', './src/**/*.js', './src/**/*.vue'],  
}
```

Functions and directives

Description: Use Tailwind directives like @apply in your CSS to compose utility classes.

Example:

css

CopyEdit

```
.btn {  
  @apply bg-blue-500 text-white font-bold py-2 px-4 rounded;
```

```
}
```

Base styles

Description: Tailwind includes a base set of CSS resets and sensible defaults for consistency across browsers.

Example: No direct example — applies automatically.

Preflight

Description: Tailwind’s “preflight” resets browser styles to a consistent baseline.

Example: No direct example — included by default.

Layout

aspect-ratio

Description: Control the aspect ratio of an element (e.g., 16:9).

Example:

html

CopyEdit

```
<div class="aspect-w-16 aspect-h-9 bg-gray-300"></div>
```

columns

Description: Create multi-column layouts easily with utilities for number of columns.

Example:

html

CopyEdit

```
<div class="columns-3 gap-4">  
  <p>Column 1</p><p>Column 2</p><p>Column 3</p>  
</div>
```

break-after

Description: Control page, column, or region breaks after an element.

Example:

html

CopyEdit

```
<div class="break-after-page">Break after this element</div>
```

break-before

Description: Control breaks before an element.

Example:

html

CopyEdit

```
<div class="break-before-column">Break before this element</div>
```

break-inside

Description: Prevent or allow breaks inside an element (like a column).

Example:

html

CopyEdit

```
<div class="break-inside-avoid">Avoid break inside</div>
```

box-decoration-break

Description: Control how box decorations behave when broken over lines.

Example:

html

CopyEdit

```
<p class="box-decoration-break-clone bg-yellow-300">Decorated text</p>
```

box-sizing

Description: Control box model sizing: content-box or border-box.

Example:

html

CopyEdit

```
<div class="box-border p-4 border-2">Box border sizing</div>
```

display

Description: Control element display type: block, inline, flex, grid, etc.

Example:

html

CopyEdit

```
<div class="flex justify-center items-center">Flex container</div>
```

float

Description: Float elements left, right, or none.

Example:

html

CopyEdit

```

```

clear

Description: Control clear behavior after floated elements.

Example:

html

CopyEdit

```
<div class="clear-both">Clears floated elements</div>
```

isolation

Description: Create a new stacking context with isolation.

Example:

html

CopyEdit

```
<div class="isolation-isolate">New stacking context</div>
```

object-fit

Description: Control how replaced content (images/videos) fit their box.

Example:

html

CopyEdit

```

```

object-position

Description: Control the position of replaced content inside its box.

Example:

html

CopyEdit

```

```

overflow

Description: Control what happens when content overflows: visible, hidden, scroll, auto.

Example:

html

CopyEdit

```
<div class="overflow-auto h-40">Scrollable content</div>
```

overscroll-behavior

Description: Control behavior when reaching scroll boundaries.

Example:

html

CopyEdit

```
<div class="overscroll-contain">Contain overscroll</div>
```

position

Description: Control element positioning: static, relative, absolute, fixed, sticky.

Example:

html

CopyEdit

```
<div class="relative top-4 left-2">Relative positioned</div>
```

top / right / bottom / left

Description: Set offsets for positioned elements.

Example:

html

CopyEdit

```
<div class="absolute top-0 right-0">Top right corner</div>
```

visibility

Description: Control visibility: visible or hidden (still takes space).

Example:

html

CopyEdit

```
<div class="invisible">Hidden but occupies space</div>
```

z-index

Description: Control stacking order of elements.

Example:

html

CopyEdit

```
<div class="relative z-10">On top</div>
```

Flexbox & Grid

flex-basis

Description: Set the initial size of a flex item before growing/shrinking.

Example:

html

CopyEdit

```
<div class="flex">
  <div class="flex-basis-1/4 bg-red-300">Basis 25%</div>
  <div class="flex-1 bg-blue-300">Flex grow</div>
</div>
```

flex-direction

Description: Set the direction of flex items: row, row-reverse, column, column-reverse.

Example:

html

CopyEdit

```
<div class="flex flex-col">Vertical stack</div>
```

flex-wrap

Description: Control if flex items wrap onto multiple lines.

Example:

html

CopyEdit

```
<div class="flex flex-wrap">Wrapping flex items</div>
```

flex

Description: Set flex grow, shrink, and basis in shorthand.

Example:

html

CopyEdit

```
<div class="flex-1">Flexible item</div>
```

flex-grow

Description: Control how much a flex item grows relative to siblings.

Example:

html

CopyEdit

```
<div class="flex-grow">Grow to fill</div>
```

flex-shrink

Description: Control how much a flex item shrinks when needed.

Example:

html

CopyEdit

```
<div class="flex-shrink-0">Prevent shrinking</div>
```

order

Description: Control the order of flex/grid items.

Example:

html

CopyEdit

```
<div class="order-last">Last item</div>
```

grid-template-columns

Description: Define number and size of grid columns.

Example:

html

CopyEdit

```
<div class="grid grid-cols-3 gap-4">3 columns grid</div>
```

grid-column

Description: Control grid item's column start/end.

Example:

html

CopyEdit

```
<div class="col-span-2">Span 2 columns</div>
```

grid-template-rows

Description: Define number and size of grid rows.

Example:

html

CopyEdit

```
<div class="grid grid-rows-2 gap-2">2 rows grid</div>
```

grid-row

Description: Control grid item's row start/end.

Example:

html

CopyEdit

```
<div class="row-span-3">Span 3 rows</div>
```

grid-auto-flow

Description: Control auto-placement of grid items (row, column, dense).

Example:

html

CopyEdit

```
<div class="grid auto-flow-col gap-2">Auto flow columns</div>
```

grid-auto-columns

Description: Define size of implicitly created grid columns.

Example:

html

CopyEdit

```
<div class="auto-cols-max">Auto columns max size</div>
```

grid-auto-rows

Description: Define size of implicitly created grid rows.

Example:

html

CopyEdit

```
<div class="auto-rows-min">Auto rows min size</div>
```

gap

Description: Set gaps (gutters) between grid or flex items.

Example:

html

CopyEdit

```
<div class="grid grid-cols-3 gap-4">Grid with gap</div>
```

justify-content

Description: Align flex/grid items horizontally.

Example:

html

CopyEdit

```
<div class="flex justify-center">Centered items</div>
```

justify-items

Description: Align grid items horizontally inside their cells.

Example:

html

CopyEdit

```
<div class="grid justify-items-end">Items right aligned</div>
```

justify-self

Description: Align single grid item horizontally.

Example:

html

CopyEdit

```
<div class="justify-self-center">Center self</div>
```

align-content

Description: Align flex/grid lines vertically within container.

Example:

html

CopyEdit

```
<div class="grid content-center h-64">Content centered</div>
```

align-items

Description: Align flex/grid items vertically.

Example:

html

CopyEdit

```
<div class="flex items-center h-32">Items centered vertically</div>
```

align-self

Description: Align single flex/grid item vertically.

Example:

html

CopyEdit

```
<div class="self-end">Self aligned to bottom</div>
```

place-content

Description: Shortcut for setting both align-content and justify-content.

Example:

html

CopyEdit

```
<div class="place-content-center h-40">Content centered</div>
```

place-items

Description: Shortcut for align-items and justify-items.

Example:

html

CopyEdit

```
<div class="place-items-center">Items centered</div>
```

place-self

Description: Shortcut for align-self and justify-self.

Example:

html

CopyEdit

```
<div class="place-self-end">Self aligned bottom right</div>
```

Spacing

padding

Description: Add space inside element (padding).

Example:

html

CopyEdit

```
<div class="p-4">Padding all sides</div>
```

margin

Description: Add space outside element (margin).

Example:

html

CopyEdit

```
<div class="m-6">Margin all sides</div>
```

Sizing

width

Description: Set element width.

Example:

html

CopyEdit

```
<div class="w-1/2 bg-gray-300">50% width</div>
```

min-width

Description: Set minimum width.

Example:

html

CopyEdit

```
<div class="min-w-full">Min width 100%</div>
```

max-width

Description: Set maximum width.

Example:

html

CopyEdit

```
<div class="max-w-xs">Max width extra small</div>
```

height

Description: Set element height.

Example:

html

CopyEdit

```
<div class="h-24 bg-blue-300">Fixed height</div>
```

min-height

Description: Set minimum height.

Example:

html

CopyEdit

```
<div class="min-h-screen bg-gray-100">Min height full viewport</div>
```

max-height

Description: Set maximum height.

Example:

html

CopyEdit

```
<div class="max-h-40 overflow-auto">Max height 10rem</div>
```

Typography

font-family

Description: Set font family.

Example:

html

CopyEdit

```
<p class="font-sans">Sans serif font</p>
```

font-size

Description: Set font size.

Example:

html

CopyEdit

```
<p class="text-lg">Large text</p>
```

font-smoothing

Description: Control antialiasing for fonts.

Example:

html

CopyEdit

`<p class="antialiased">Smooth fonts</p>`

font-style

Description: Italicize or normal font style.

Example:

html

CopyEdit

`<p class="italic">Italic text</p>`

font-weight

Description: Set font weight (boldness).

Example:

html

CopyEdit

`<p class="font-bold">Bold text</p>`

font-stretch

Description: Control font width/stretch.

Example:

html

CopyEdit

`<p class="font-condensed">Condensed font</p>`

font-variant-numeric

Description: Control numeric font variants like oldstyle or tabular.

Example:

html

CopyEdit

`<p class="oldstyle-nums">Old style numbers</p>`

letter-spacing

Description: Adjust spacing between letters.

Example:

html

CopyEdit

```
<p class="tracking-wide">Wide letter spacing</p>
```

line-clamp

Description: Limit text lines with ellipsis overflow.

Example:

html

CopyEdit

```
<p class="line-clamp-3">This text is limited to 3 lines.</p>
```

line-height

Description: Set line height (leading).

Example:

html

CopyEdit

```
<p class="leading-loose">Loose line height</p>
```

list-style-image

Description: Set image for list bullets.

Example:

html

CopyEdit

```
<ul class="list-disc list-inside">Normal bullets</ul>
```

list-style-position

Description: Control position of list bullets (inside or outside).

Example:

html

CopyEdit

```
<ul class="list-inside">Bullets inside</ul>
```

list-style-type

Description: Set bullet style type.

Example:

html

CopyEdit

```
<ul class="list-decimal">Numbered list</ul>
```

text-align

Description: Set horizontal text alignment.

Example:

html

CopyEdit

```
<p class="text-center">Centered text</p>
```

color

Description: Set text color.

Example:

html

CopyEdit

```
<p class="text-red-500">Red text</p>
```

text-decoration-line

Description: Set text decoration lines (underline, line-through).

Example:

html

CopyEdit

```
<p class="underline">Underlined text</p>
```

text-decoration-color

Description: Set color of text decoration.

Example:

html

CopyEdit

```
<p class="underline decoration-red-500">Red underline</p>
```

text-decoration-style

Description: Set style of text decoration (solid, dashed).

Example:

html

CopyEdit

```
<p class="underline decoration-dashed">Dashed underline</p>
```

text-decoration-thickness

Description: Set thickness of text decoration.

Example:

html

CopyEdit

```
<p class="underline decoration-4">Thick underline</p>
```

text-underline-offset

Description: Offset underline position.

Example:

html

CopyEdit

```
<p class="underline underline-offset-4">Offset underline</p>
```

text-transform

Description: Control text case: uppercase, lowercase, capitalize.

Example:

html

CopyEdit

```
<p class="uppercase">Uppercase text</p>
```

text-overflow

Description: Control overflowed text with ellipsis.

Example:

html

CopyEdit

```
<div class="truncate w-48">Very long text truncated</div>
```

text-wrap

Description: Control text wrapping and breaking.

Example:

html

CopyEdit

```
<p class="break-words">Break long words</p>
```

text-indent

Description: Indent first line of text.

Example:

html

CopyEdit

```
<p class="indent-8">Indented paragraph</p>
```

vertical-align

Description: Control vertical alignment of inline or table-cell elements.

Example:

html

CopyEdit

```
<span class="align-middle">Middle aligned text</span>
```

white-space

Description: Control how white space inside text is handled.

Example:

html

CopyEdit

```
<p class="whitespace-nowrap">No wrapping text</p>
```

word-break

Description: Control line breaking inside words.

Example:

html

CopyEdit

```
<p class="break-all">Break long words anywhere</p>
```

overflow-wrap

Description: Control wrapping of long words to prevent overflow.

Example:

html

CopyEdit

```
<p class="break-words">Wrap long words</p>
```

hyphens

Description: Control hyphenation of words.

Example:

html

CopyEdit

```
<p class="hyphens-auto">Auto hyphenation</p>
```