CSS Cheat Sheet - You Don't Need JavaScript

Modern CSS features for building interactive, accessible websites.

Checkout my blog for more articles: theosoti.com.

SELECTORS & PSEUDO-ELEMENTS

`:has()`
```
fieldset:has(input:checked) { border-color: green; }
li:has(ul) > a::after { content: ">"; }
.list:has(.card:hover) .card:not(:hover) { filter: blur(4px); }
```
Browser support:93%+

`:root / ::before / ::after`
```
:root { --accent: #4EA1FF; } /* Global variables */
.card::before { content: ""; position: absolute; }
::details-content { /* Target details content */ }
```

THEMES & COLOR

`prefers-color-scheme`
```
@media (prefers-color-scheme: dark) {
  :root { --text: white; --bg: black; }
}
```
Browser support: 95%+

`color-scheme`
```
:root { color-scheme: light dark; }
```

`light-dark()`
```
:root {
  color-scheme: light dark;
  --text: light-dark(black, white);
}
```
Browser support: 86%

CSS Variables & var()
```
:root { --accent: #4EA1FF; }
button { color: var(--accent); }
```

SCROLLING

`scroll-behavior`
```
html { scroll-behavior: smooth; }
.sidebar { scroll-behavior: smooth; }
```
Browser support: 94%+

`scroll-padding-top`
```
html { scroll-padding-top: 80px; }
```
Global offset

`scroll-margin-top`
```
section { scroll-margin-top: 80px; }
```
Per-element

COUNTERS

`counter-reset / counter-increment`
```
main { counter-reset: h2; }
h2 { counter-increment: h2; }
h2::before { content: counter(h2) ". "; }
/* Nested: */ section { counter-reset: h3; }
h3::before { content: counter(h2) "." counter(h3) " - "; }
```

Animated Counter
```
@property --c { syntax: ""; initial-value: 0; }
@keyframes up { to { --c: 100; } }
.ticker { animation: up 3s linear forwards; }
.ticker::after { counter-reset: n var(--c); content: counter(n); }
```
Browser support: 92.5%+

ANIMATION & MOTION

`@property`
```
@property --angle {
  syntax: ""; initial-value: 0deg; inherits: false;
}
@keyframes spin { to { --angle: 360deg; } }
```
Browser support: 92.5%+

`@keyframes + animation`
```
@keyframes spin { to { transform: rotate(360deg); } }
.el { animation: spin 3s linear infinite; }
```

`prefers-reduced-motion`
```
@media (prefers-reduced-motion: reduce) {
  * { animation: none !important; }
}
```

Animated Borders
```
.card::after {
  background: conic-gradient(from var(--angle), #f45, #0f9, #06f);
  animation: spin 3s linear infinite;
}
```

SCROLL-DRIVEN ANIMATIONS

`animation-timeline: scroll()`
```
@keyframes grow { to { transform: scaleX(1); } }
.progress::before {
  animation: grow linear both;
  animation-timeline: scroll();
}
```
Browser support: 73%

`animation-timeline: view()`
```
img {
  animation: fadeIn linear forwards;
  animation-timeline: view();
  animation-range-start: 100px;
}
```

MASKING & VISUAL EFFECTS

`mask-image`
```
.slider { mask-image: linear-gradient(to right,
  transparent, #000 10% 90%, transparent); }
/* Before/after slider */
.before { mask: linear-gradient(to right, #000 0, transparent 0); }
.after { mask: linear-gradient(to right, transparent 0, #000 0); }
```
Browser support: 96%+ (with -webkit- prefix)

`backdrop-filter`
```
dialog::backdrop {
  backdrop-filter: blur(4px);
}
```

VIEW TRANSITIONS

`@view-transition`
```
@view-transition { navigation: auto; }
#content { view-transition-name: content; }
```
Browser support:81-87%

Styling Transitions
```
::view-transition-old(content) { animation: out 400ms; }
::view-transition-new(content) { animation: in 400ms; }
@keyframes out { to { translate: 100vw 0; } }
```

MOTION PATH

`offset-path / offset-distance`
```
.box {
  offset-path: path('M16,120 C80,20 220,20 284,120');
  animation: move 3s ease-in-out infinite;
}
@keyframes move { to { offset-distance: 100%; } }
```
Browser support: 93.5%+

`offset-rotate`
```
.arrow {
  offset-rotate: auto; /* Face travel direction */
}
```

NATIVE INTERACTIVE ELEMENTS

`<dialog>`
```
<dialog id="modal">
  <h2>Title</h2>
  <form method="dialog"><button>Close</button></form>
</dialog>
modal.showModal(); /* JS */
dialog[open] { opacity: 1; translate: 0; }
@starting-style { opacity: 0; translate: 0 -25vh; }
```
Browser support: 95%+ • @starting-style: 87%

`<details> / <summary>`
```
summary::-webkit-details-marker { display: none; }
summary::after { content: "›"; transform: rotate(90deg); }
details[open] summary::after { transform: rotate(270deg); }
.content { display: grid; grid-template-rows: 0fr; }
details[open] + .content { grid-template-rows: 1fr; }
```
Browser support: 95%+

FORM VALIDATION

`:valid / :invalid`
```
input:valid { border-color: green; }
input:invalid { border-color: red; }
```
Browser support: 95%+

`:user-valid / :user-invalid`
```
input:user-valid { --state: green; }
input:user-invalid { --state: red; }
input:user-valid + .msg [data-matches="user-valid"] { display: block; }
```
Browser support: 87%

EMERGING FEATURES

`popover`
```
<button popovertarget="menu">Open</button>
<div id="menu" popover>Content</div>
[popover]:popover-open { opacity: 1; transform: translateY(0); }
@starting-style { opacity: 0; transform: translateY(-20px); }
```
Browser support: 85.5%

`position-anchor`
```
.btn { anchor-name: --btn; }
.tip { position: absolute; position-anchor: --btn;
  top: calc(anchor(bottom) + 8px);
  position-try: flip-block flip-inline; }
```
Browser support: 73%

`appearance: base-select`
```
<select><button><selectedcontent></selectedcontent></button>
  <option>Item</option></select>
select, ::picker(select) { appearance: base-select; }
option::checkmark { content: "☑"; }
::picker-icon { color: #666; }
```
Browser support: 64%

CSS Carousels
```
.carousel {
  scroll-snap-type: x mandatory;
  scroll-marker-group: after;
}
li::scroll-marker { content: ""; width: 14px; }
::scroll-button(left) { content: "<"; }
```
Browser support: 67%

FUTURE / EXPERIMENTAL

`random()`
```
.confetti > i {
  animation-delay: random(0ms, 600ms);
}
```

`sibling-index()`
```
.card { animation-delay:
  calc((sibling-index() - 1) * 80ms);
}
```

`attr(type)`
```
.chip { rotate:
  attr(data-rot deg, 0deg);
}
```

`field-sizing`
```
input, textarea {
  field-sizing: content;
}
```

`if()`
```
.card { padding:
  if(media(width < 700px): .75rem;
  else: 1.25rem); }
```

`@function`
```
@function --space(--n : 1) {
  result: calc(1rem * var(--n));
}
```

Best Practices: Use @supports for feature detection • Provide fallbacks • Respect prefers-reduced-motion • Always validate server-side • Rule of Least Power: HTML → CSS → JS

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