



LENGUAJECSS.COM

CSS SYNTAX, COLORS AND UNITS

Created by @Manz (<https://manz.dev/>)

<https://lenguajecss.com/>

CSS

C CSS Syntax

tag #id .class [attr] :pseudoclass ::pseudoelement { selector : value ; }

S CSS Selectors

SELECTORS & COMBINATORS

| PRIMARY | # element with unique id |
|---------|------------------------------|
| . | elements with class |
| * | all elements (universal) |
| | inside elements (descendant) |

| SECONDARY | > direct childs |
|-----------|-----------------------|
| + | adjacents siblings |
| - | siblings (same level) |

LOGICAL COMBINATORS

| | | | |
|--------------|-----------------|-----------------|------------------------------|
| :is(A , B) | group selectors | :where(A , B) | less specific than :is() |
| :not(S) | not match by S | :has(S) | element w/ childs match by S |

ATTRIBUTES

IGNORE CASE SENSITIVE [attr="..." i]

| BASIC | [attr] attr present | ADVANCED | :not([attr]) attr absent |
|-------|-------------------------------|----------|------------------------------|
| | [attr = "val"] value is val | | [attr ~= "val"] contains val |
| | [attr ^= "val"] begins w/ val | | [attr = "es"] contains es-* |
| | [attr \$= "val"] ends w/ val | | [attr *= "val"] includes val |

PSEUDOCLASSES

| LINKS | :link | :visited | not/visited link | LANG | :lang(es) | language match |
|---------------------|--------------------|--|--------------------------------|-----------------|-----------|-----------------|
| | :any-link | links (visited or not) | | | :dir(val) | direction match |
| ACTION | :target | URL anchor target | | | | |
| | :hover | user move mouse/pointer over element | | | | |
| USER FORM INTERFACE | :active | element is being activated by user | | | | |
| | :focus | :focus-within | :focus-visible | w/ focus or not | | |
| | :enabled | :disabled | on/off input state | | | |
| | :checked | elements toggled "on" by user | | | | |
| | :indeterminate | input on indeterminate state | | | | |
| | :read-only | :read-write | input modifiable or not | | | |
| | :placeholder-shown | inputs w/ active placeholder | | | | |
| | :default | default elements for form (input, option...) | | | | |
| | :valid | :invalid | userdata pass check validation | | | |
| | :user-valid | :user-invalid | idem, with user interaction | | | |
| | :in-range | :out-of-range | userdata ok/out of range | | | |
| | :required | :optional | required/optional for submit | | | |

| STRUCTURAL CHILDREN | :first-child | CHILDREN(SAME) | :first-of-type |
|---------------------|--------------------|----------------|----------------------|
| | :last-child | | :last-of-type |
| | :nth-child(n) | | :nth-of-type(n) |
| | :nth-last-child(n) | | :nth-last-of-type(n) |
| | :only-child | | :only-of-type |
| | :root | | |
| OTHERS | :host | | |
| | :empty | | |

PSEUDOELEMENTS

| CONTENT HIGHLIGHT | ::before / ::after | HIGHLIGHT | ::selection | selected text of user |
|-------------------|------------------------|-----------|------------------------------------|-----------------------|
| | ::first-line | | ::target-text | fragment url style |
| | ::first-letter | text | ::spelling-error ::grammar-error | |
| | ::file-selector-button | | ::backdrop | background elements |
| | ::marker | list sign | ::placeholder | form text hints |

C CSS Colors

COLOR PROPERTIES

color: CanvasText color opacity: 1 alpha

COLOR MODELS alpha 0...1 0%...100%

keyword transparent currentColor

COLOR FORMATS

rgb(25% 41% 88% / 50%) rgba() RGB / A

rgb(65 106 225 / 50%) RGB / A

41 6A E1 88 #RRGGBBAA / #RGBA

hsl(120deg 25% 75% / 50%) hsla() HSL / A

hwb(120deg 55% 25% / 50%) HWB / A

lab(41% 60 42 / 50%) BW RG BY / alpha

oklab(51% 0.2 0.1 / 50%) BW RG BY / alpha

lch(41% 99 35deg / 50%) BW ST / alpha

oklch(50% 0.2 26deg / 50%) BW ST / alpha

COLOR FUNCTIONS / OPERATIONS

SPACE SRGB SRGB-LINEAR DISPLAY-P3 A98-RGB

PROPHOTO-RGB REC2020 XYZ XYZ-D65 XYZ-D50

color(space p1 p2 p3) color in a spacecolor

light-dark(color lightmode , color darkmode)

RELATIVE COLORS

color-mix(in space , c1 % , c2 %) mix colors

rgb(from color , colors / A) color-based

U CSS Values & Units

RESETTING ALL PROPERTIES

all: initial value inherit parent unset previous

UNITS

px pixel cm mm Q ¼mm in inches pc pt

% parent size em rem root em ex rex cap rcap

ch 1 character rch ic ric lh 1 line rlh

vw vh vmin vmax vi vb % viewport

svw svh svmin svmax svi svb small

lvw lvh lvmin lvmax lvi lvb large

dvw dvh dvmin dvmax dvi dvb dynamic

cqw cqh cqmin cqmax cqi cqbs container

V CSS Variables

CUSTOM PROPERTIES

-- varname : value ; declaring vars

var(-- varname , fallback ...) using vars

env(environment-variable) user-agent vars



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BOX MODEL AND BORDERS

Created by @Manz (<https://manz.dev/>)

<https://lenguajecss.com/>

CSS

M CSS Box Model

INTRINSIC SIZES

max-content | min-content | fit-content

width: auto | size | % height: auto | size | %
 min-width: 0 | size | % min-height: 0 | size | %
 max-width: none | size | % max-height: none | size | %

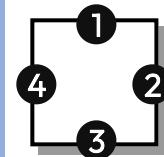
MARGIN/PADDINGS

SPECIFIC MARGINS

margin-top: 0 | size | % padding-top: 0 | size | %
 margin-right: 0 | size | % padding-right: 0 | size | %
 margin-bottom: 0 | size | % padding-bottom: 0 | size | %
 margin-left: 0 | size | % padding-left: 0 | size | %

MARGIN/PADDING SHORTHAND

margin/padding: [1] [2] [3] [4]
 margin/padding: [1] [2 4] [3]
 margin/padding: [1 3] [2 4]
 margin/padding: [1 2 3 4]



OVERFLOW/VISIBILITY

overflow-x: visible | hidden | scroll | auto
 overflow-y: visible | hidden | scroll | auto
 overflow: overflow-x | overflow-y

VISIBILITY

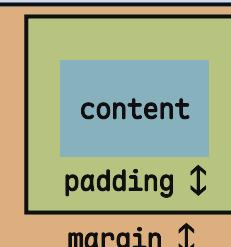
visibility: visible | hidden | collapse

MODEL BOX TYPES

display: inline | none | inline-block | block | inline-list-item | list-item | inline-table | table | table-cell | table-row | inline-grid | grid | subgrid | inline-grid-lanes | grid-lanes | inline-flex | flex

CHANGE BOX MODEL

box-sizing: content-box | border-box



B1 CSS Border Image

BORDER IMAGE

border-image-source: none | url(img.ext)
 border-image-slice: 100% | top | right | bottom | left | fill
 border-image-width: 1 | top | right | bottom | left
 border-image-outset: 0 | top | right | bottom | left
 border-image-repeat: stretch | repeat | round | space
 border-image: source | slice | /width | outset | repeat

BORDER IMAGE VALUES

-slice → number | % -width → auto | size | number | %
 -outset → number | size
 -repeat → repeat | space | round | no-repeat

T CSS Tables

border-collapse: separate | collapse
 border-spacing: 0 | size caption-side: top | bottom
 empty-cells: show | hide table-layout: auto | fixed

B CSS Borders

BORDERS

border-width: size | thin | medium | thick

border-style: none | border-style | hidden

border-color:currentColor | color

SHORTHANDS

border-top-*
 border-right-*
 border-bottom-*
 border-left-*

BORDER STYLES

| | |
|--------|--------|
| solid | dotted |
| dashed | double |
| groove | ridge |
| inset | outset |

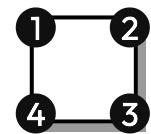
C Rounded Corners

SPECIFIC CORNERS

border-top-left-radius: 0 | size | %
 border-top-right-radius: 0 | size | %
 border-bottom-left-radius: 0 | size | %
 border-bottom-right-radius: 0 | size | %

MAIN SHORTHAND

border-radius: [1][2][3][4]
 border-radius: [1][2 4][3]
 border-radius: [1 3][2 4]
 border-radius: [1 2 3 4]



MAIN SHORTHAND WITH HORIZONTAL/VERTICAL RADIUS

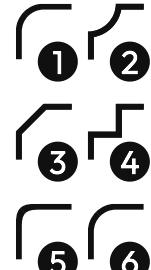
border-radius: border-radius / border-radius

CS Corner Shape

CORNER SHAPE VALUES

corner-shape:

- | | |
|-------------------|--------------------------|
| 1 round | ~ superellipse(2) |
| 2 scoop | ~ superellipse(0.5) |
| 3 bevel | ~ superellipse(1) |
| 4 notch | ~ superellipse(0) |
| 5 squircle | ~ superellipse(4) |
| 6 straight | ~ superellipse(Infinity) |
| superellipse(n) | ~ custom shape corner |



L CSS Lists

LISTS

list-style-image: none | url(img.png)

list-style-position: inside | outside

list-style-type: disc | circle | square | upper-alpha

lower-alpha | upper-roman | lower-roman | decimal

decimal-leading-zero | lower-greek | armenian

georgian | none | countername | symbols(...)

list-style: type | position | image



F Base Fonts

FONTS (TYPOGRAPHY)

```
font-family: font1, font2, ..., safe-font;
font-size: size | % | smaller | larger
  xx-small | x-small | small | medium
  large | x-large | xx-large
font-size-adjust: none | number
font-style: normal | italic | oblique
font-synthesis: none | weight | style
font-variant: none | small-caps
font-weight: normal | bold | lighter | bolder
  number 1-1000
font-width: normal | % | condensed | expanded
  ultra-condensed | extra-condensed | semi-condensed
  semi-expanded | extra-expanded | ultra-expanded
font: style | variant | weight | width | size/
line-height | family | caption | icon | menu
message-box | small-caption | status-bar
```

FF Font Face

FONT LOADING

```
@font-face {
  font-family: font-name;
  font-display: swap;
  src: url(file.woff2) format("woff2"),
    url(file.woff) format("woff"),
    url(file.ttf) format("truetype");
  unicode-range: U+000-27FF;
}
```

MC CSS Multi Column

SPANNING & FILLING

```
columns
column-width: auto | size
column-count: auto | number
columns: width | counter

COLUMN RULES
column-rule-width: size | thin | medium | thick
column-rule-style: style | none
column-rule-color: color
column-rule: width | style | color

COLUMN BREAKS
break-before/break-after: auto | left | right
  always | recto | verso | avoid | page | column
  avoid-page | avoid-column
break-inside: auto | avoid | avoid-page
  avoid-column
orphans: 2 | number
widows: 2 | number
```

CT CSS Text

TRANSFORMING TEXT

```
text-transform: none | capitalize | uppercase | lowercase
  full-width
```

WHITE SPACES & BREAKING WORDS

```
white-space-collapse: break-spaces | collapse | preserve
  preserve-breaks
```

```
text-wrap-mode: nowrap | wrap | tab-size: 8 | number | size
```

```
white-space-trim: none | discard-before | discard-after
  discard-inner
```

```
white-space: normal | collapse | wrap-mode | trim
```

LINE BREAKING & WORD BOUNDARIES

```
hyphens: none | manual | auto
```

```
overflow-wrap: normal | break-word | anywhere
```

```
line-break: auto | loose | normal | strict | anywhere
```

```
word-break: normal | keep-all | break-all | break-word
```

ALIGNMENT & JUSTIFICATION

```
text-align: left | right | center | justify | start | end | match-parent
```

```
text-align-last: auto | left | right | center | justify | start | end
  match-parent
```

```
text-justify: auto | none | inter-word | inter-character
```

SPACING

```
word-spacing: normal | size
```

```
letter-spacing: normal | size
```

EDGE EFFECTS

```
text-indent: 0 | size | hanging | each-line
```

```
hanging-punctuation: none | first | last | force-end | allow-end
```

SHADOW EFFECTS

```
text-shadow: none | pos-x | pos-y | blur | color
```

```
box-shadow: none | pos-x | pos-y | blur | spread | color | inset
```

TD CSS Text Decoration

LINE OPTIONS

```
text-decoration: none | options
```

```
underline | overline | line-through
```

LEVEL 3

```
text-decoration-line: none | line-option | blink
```

```
text-decoration-style: solid | double | dotted | dashed | wavy
```

```
text-decoration-color: currentColor | color
```

```
text-decoration-skip: none | objects | spaces | ink | edges
  box-decoration
```

```
text-decoration: none | line | style | color
```

```
text-underline-position: auto | under | left | right
```

EMPHASIS MARKS

```
text-emphasis-style: none | string | status [ dot | circle
  double-circle | triangle | sesame ]
```

```
text-emphasis-color: currentColor | color
```

```
text-emphasis-position: over | under | left | right
```

```
text-emphasis: style | color
```

STATUS

```
filled | open
```

```
EX: open circle;
```



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BACKGROUNDS, IMAGES AND RULES

Created by @Manz (<https://manz.dev/>)

<https://lenguajecss.com/>

CSS

CB CSS Backgrounds

BACKGROUND BASE PROPERTIES

```
background-color: transparent | currentColor | color
background-image: none | url('im1.png') | url('im2.png') ...
background-repeat: repeat | repeat-x | repeat-y | space | round | no-repeat
background-attachment: scroll | fixed | local
```

BACKGROUND POSITION

```
background-position-x: 0% | size | %
    left | center | right | x-start | x-end
background-position-y: 0% | size | %
    top | center | bottom | y-start | y-end
background-position: 0% 0% | pos-x | pos-y
```

BACKGROUND MODERN PROPERTIES

```
background-clip: border-box | padding-box | content-box | text
background-origin: border-box | padding-box | content-box
background-size: auto | width | height | contain | cover
background: color | position | size | repeat | origin | clip
    attachment | image
```



CR CSS Rules

IMPORTING SYNTAX AND ALTERNATIVE SYNTAX

```
@import "file.css"           @import url("file.css")
```

IMPORTING FEATURES

```
@import "file.css" print      apply styles if printing
@import "file.css" MQ conditions   if media query is true
@import "file.css" supports(condition)  if feature supported
@import "file.css" layer(layername)    apply styles on layer
```

CASCADE LAYERS

```
@layer { ... }    create anonymous cascade layer
@layer [layername1, layername2, ...];    order layers
@layer [layername1, layername2, ... { ... }]  create/order
@layer [layername.sub-layername { ... }]  create sublayer
```

CAN NEST LAYERS

SCOPING STYLES

```
@scope { ... } limit scope from parent to child (using on inline <style>)
@scope (selector) { ... }    limit scope from selector to child
@scope (selector) to (selector) { ... }  limit between select
```

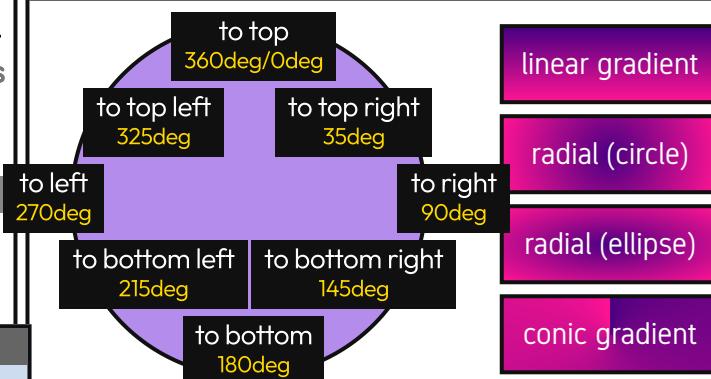
NESTING STYLES

```
A-selector { parent selector
  B-selector { ... } equivalent to "A B"
  & B-selector { ... } equivalent to "A B"
  B-selector & { ... } equivalent to "B A"
  @media (condition) { ... } nesting media query
  @scope (selector) { ... } nesting scoping
}
```

CG CSS Gradients

GRADIENTS

DIRECTIONS



LINEAR GRADIENTS

```
background-image: linear-gradient(direction, color-stop1, ...)
repeating-linear-gradient(...same params...)
```

RADIAL GRADIENT (CIRCLE)

```
background-image: radial-gradient(circle | rsize | at pos, col, ...)
repeating-radial-gradient(...same params...)
```

RADIAL GRADIENT (ELLIPSE)

```
background-image: radial-gradient(ellipse | rx | ry | at pos, col, ...)
repeating-radial-gradient(...same params...)
```

CONIC GRADIENTS

```
background-image: conic-gradient(from angle | at pos, col, ...)
repeating-conic-gradient(...same params...)
```

CI CSS Images

FUNCTIONS

```
image-set(
  url(im1.avif) | type("image/avif"),
  url(im2.webp) | 2x, ...
);
cross-fade([image | color] size | %, ...)
```

IMAGES AND OBJECTS

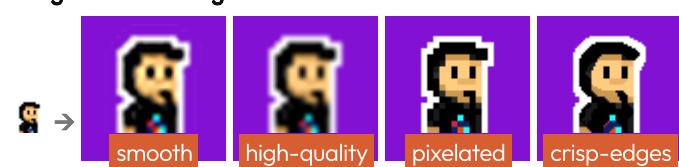
SIZING

```
object-fit: fill | contain | cover | none | scale-down
object-position: 50% 50% | background-position
object-view-box: rect() | inset() | xywh()
```

IMAGE PROCESSING

```
image-orientation: from-image | none
```

image-rendering:





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EFFECTS, FILTERS AND SHAPES

Created by @Manz (<https://manz.dev/>)

<https://lenguajecss.com/>

CSS

CF CSS Filters

FILTER PROPERTY

filter/backdrop-filter: none | filter1 | filter2 | filter3 ... ;

FILTERS

blur(blur)
brightness(number | %)
contrast(number | %)
saturate(number | %)
grayscale(number | %)
invert(number | %)
sepia(number | %)
opacity(number | %)
hue-rotate(angle)
drop-shadow(pos-x | pos-y | blur | color)

| | |
|------------|--|
| blur | |
| brightness | |
| contrast | |
| saturate | |
| grayscale | |
| invert | |
| sepia | |
| opacity | |
| hue-rotate | |

(= text-shadow)

CM CSS Masks

CLIPPING SHAPE

clip-path: none | url(img.png) | basic-shape | shape-box

POSITIONED MASKS

mask-image: none | url(img.svg#mask) | gradient
mask-mode: auto | alpha | luminance
mask-repeat: no-repeat | background-repeat
mask-position: center | background-position
mask-clip: border-box | no-clip | shape-box
mask-origin: border-box | shape-box
mask-size: auto | background-size
mask-composite: add | subtract | intersect | exclude
mask: image | mode | position | /size | repeat | clip | composite

C Compositing

COMPOSING AND BLENDING

background-blend-mode: normal | blend

mix-blend-mode: normal | blend | isolation: auto | isolate

BLEND MODES

SEPARABLE



NON SEPARABLE



CSO CSS Shape Outside

FLOATING AREA SHAPE

shape-outside: none | url(img.png) | gradient
basic-shape | shape-box
shape-image-threshold: 0.0 | number
shape-margin: 0 | size | %

CS CSS Shapes

BASIC SHAPES

RECTANGLE

rect: x | w | y | h | round | radius |
inset: top | right | bottom | left | round | radius |
xywh: x | y | w | h | round | radius |

CIRCLE/ELLIPSE

circle: shaperadius | at | position |
ellipse: radius-x | radius-y | at | position |

ADVANCED

polygon: x0 | y0 , ... , xi | yi |
path: svg coords |
shape: from position |, shape commands |

SHAPE COMMANDS

MOVE COMMANDS

from x | y | **move to** x | y | **move by** x | y |
close close shape and connect with first point

LINE COMMANDS

line to x | y | **hline to** x | **vline to** y |

CURVE COMMANDS

curve to x | y | reuse previous point
curve to x | y | with | Ax | Ay | use control point A
curve to x | y | with | Ax | Ay | / | Bx | By | ctrl point A,B

SYMMETRIC CURVE COMMANDS

smooth to x | y | reuse previous point
smooth to x | y | with | Ax | Ay | use control point A

SEGMENT COMMANDS

arc to x | y | implicit arc (radius and shape autocalc)
arc to x | y | of | r | between current point and x,y
arc to x | y | of | Rx | Ry | elliptic arc with radius R

OPTIONS

cw | **ccw** clockwise or counterclockwise
large | **small** segment size | **rotate** | angle | (def: 0deg)

CP CSS Performance

PERFORMANCE PROPERTIES

will-change: property | optimize painting/animation
contain: none | strict | content
size | inline-size | layout | style | paint
content-visibility: visible | auto | hidden



CT CSS Transitions

TRANSITIONS

```
transition-property: all|none|property1, property2, ...
transition-duration: 0s|time
transition-timing-function: ease|timing-function
transition-delay: 0s|time
transition: property|duration|t-function|delay
```

TIMING FUNCTIONS

TIMING BASE FUNCTIONS

| | |
|----------------|-------------------------------|
| ease | (0.25, 0.1, 0.25, 1) |
| linear | (0.00, 0.0, 1.00, 1) |
| ease-in | (0.42, 0.0, 1.00, 1) |
| ease-out | (0.00, 0.0, 0.58, 1) |
| ease-in-out | (0.42, 0.0, 0.58, 1) |
| cubic-bezier() | custom timing func |
| linear() | custom: linear(0, 1) = linear |

TIMING STEP FUNCTIONS

| | |
|------------|----------------|
| step-start | steps(1,start) |
| step-end | steps(1,end) |
| steps(n) | steps(n,end) |
| steps(a,b) | steps(a,b) |

CHAINED ANIMATIONS

| | | |
|-------|----|-------------|
| name1 | 5s | linear, |
| name2 | 5s | linear 5s, |
| name3 | 6s | linear 10s; |

CA CSS Animations

ANIMATIONS

```
animation-name: none|name1, name2, ...
animation-duration: 0s|time
animation-timing-function: ease|timing-function
animation-delay: 0s|time
animation-iteration-count: 1|number|infinite
animation-direction: normal|reverse|alternate|alternate-reverse
animation-fill-mode: none|forwards|backwards|both
animation-play-state: running|paused
animation-range-start: normal|name|size|%|size%
animation-range-end: normal|name|size|%|size%
animation-range: range-start|range-end
animation-composition: replace|add|accumulate
animation-timeline: auto|none|--name|scroll()|view()
animation: name|duration|timing-function|delay
    iteration-count|direction|fill-mode|play-state
```

SCROLL DRIVEN ANIMATION

TIMELINE FUNCTIONS

```
scroll() → scroll([nearest|root|self] [x|y])
view() → view([x|y]|auto|size-start|size-end|)
```

TIMELINE PROPERTIES

```
scroll-timeline-name: none|--name
scroll-timeline-axis: x|y
scroll-timeline: name|axis
view-timeline-name: none|--name
view-timeline-axis: x|y
view-timeline-inset: auto|size|%|size%
view-timeline: name|axis|inset
```

KEYFRAMES

```
@keyframes name {
  0% /* css */
  100% /* css */}
```

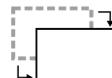
CT CSS Transforms

TRANSFORM PROPERTY

```
transform: none|func1|func2 ...
```

2D TRANSFORM FUNCTIONS

| | |
|--------------------|-------------|
| translateX(size %) | move x-axis |
| translateY(size %) | move y-axis |



| | |
|---------------------------|--|
| translate(size %, size %) | |
|---------------------------|--|



| | |
|----------------|---------------|
| scaleX(number) | resize x-axis |
|----------------|---------------|

| | |
|----------------|---------------|
| scaleY(number) | resize y-axis |
|----------------|---------------|



| | |
|-----------------------|--|
| scale(number, number) | |
|-----------------------|--|



| | |
|--------------|----------------------------|
| skewX(angle) | horizontal shear transform |
|--------------|----------------------------|

| | |
|--------------|--------------------------|
| skewY(angle) | vertical shear transform |
|--------------|--------------------------|



| | |
|--------------------|--|
| skew(angle, angle) | |
|--------------------|--|



| | |
|---------------|--------------------|
| rotate(angle) | spin element angle |
|---------------|--------------------|

| | |
|--------------------------------|--|
| matrix(n1, n2, n3, n4, n5, n6) | |
|--------------------------------|--|



3D TRANSFORM FUNCTIONS

| | |
|------------------|------------------|
| translateZ(size) | move along depth |
|------------------|------------------|

| | |
|--|--|
| translate3d(size %, size %, size %) | |
|--|--|

| | |
|----------------|---------------------|
| scaleZ(number) | stretch along depth |
|----------------|---------------------|

| | |
|---------------------------------|--|
| scale3d(number, number, number) | |
|---------------------------------|--|

| | |
|----------------|----------------|
| rotateX(angle) | spin on x-axis |
|----------------|----------------|

| | |
|----------------|----------------|
| rotateY(angle) | spin on y-axis |
|----------------|----------------|

| | |
|----------------|----------------|
| rotateZ(angle) | spin on z-axis |
|----------------|----------------|

| | |
|---|--|
| rotate3d(number, number, number, angle) | |
|---|--|

TRANSFORM OPTIONS

| | |
|---|--|
| transform-origin: 50% 50% pos-x pos-y pos-z | |
|---|--|

| | |
|-----------------------------------|-------------------|
| transform-style: flat preserve-3d | preserve 3d child |
|-----------------------------------|-------------------|

| | |
|-------------------------------------|----------------|
| backface-visibility: visible hidden | hide rear face |
|-------------------------------------|----------------|

PERSPECTIVE OPTIONS

| | |
|------------------------|------------------------|
| perspective: none size | depth illusion control |
|------------------------|------------------------|

| | |
|---|--|
| perspective-origin: 50% 50% pos-x pos-y pos-z | |
|---|--|

INDIVIDUAL PROPERTIES

TRANSLATE PROPERTY

| | |
|--------------------|------------------|
| translate: size % | move only x axis |
|--------------------|------------------|

| | |
|----------------------------|---------------|
| translate: size % size % | only x/y axis |
|----------------------------|---------------|

| | |
|-----------------------------------|------------|
| translate: size % size % size % | x/y/z axis |
|-----------------------------------|------------|

SCALE PROPERTY

| | |
|---------------|-------------------------------|
| scale: num % | apply same factor to x/y axis |
|---------------|-------------------------------|

| | |
|----------------------|-------------------|
| scale: num % num % | apply to x/y axis |
|----------------------|-------------------|

| | |
|-----------------------------|------------|
| scale: num % num % num % | x/y/z axis |
|-----------------------------|------------|

ROTATE PROPERTY

| | |
|---------------|-----------------|
| rotate: angle | apply to z axis |
|---------------|-----------------|

| | |
|--------------------|---------------------|
| rotate: axis angle | ex: rotate: y 10deg |
|--------------------|---------------------|

| | |
|---------------------|--------------------------|
| rotate: x y z angle | ex: rotate: 11 0.5 45deg |
|---------------------|--------------------------|



F CSS Flex

PARENT PROPERTIES DISPLAY: FLEX

ORDERING AND ORIENTATION

flex-direction: row | column | row-reverse | column-reverse

flex-wrap: nowrap | wrap | wrap-reverse

flex-flow: direction | wrap

PRIMARY / SECONDARY / WRAP AXIS

p **justify-content:** start | center | end | space

s **align-items:** start | center | end | baseline | stretch

g **align-content:** start | center | end | stretch | space

CHILD PROPERTIES

FLEXIBILITY

flex-grow: 0 | number **flex-shrink:** 0 | number

flex-basis: auto | content | size | %

flex: grow | shrink | basis

ALIGNMENT AND ORDERING

align-self: auto | space | baseline

order: 0 | number reorder items w/ weight

AREA PREFIXES

span-all | span-*
x-* | y-*

span-x-* | span-y-*

x-self-* | y-self-*

span-x-self-*

span-y-self-*

P CSS Position

POSITIONING

position: static | relative | absolute | fixed | sticky

FLOATING

float: none | left | right

clear: none | left | right | both

POSITIONING

top: auto | size | %

left: auto | size | %

right: auto | size | %

bottom: auto | size | %

z-index: auto | number

inset:

top | right | bottom | left

AP CSS Anchor Position

ANCHOR SETTING

anchor-name: none | --name

anchor-scope: none | all | --name

position-anchor: auto | --name

ANCHOR POSITIONING / SIZING

position-area: top | left | right | bottom | prefixes

anchor(--name | top | left | right | bottom **)**

anchor-size(width | height | block | inline **)**

GL Grid Lanes

MODERN MASONRY DISPLAY: GRID-LANES

item-direction: row | column | row-reverse | column-reverse

item-wrap: wrap | wrap-reverse | nowrap | normal | reverse

item-pack: normal | dense | balance

item-tolerance: normal | size | % | infinite

item-flow: direction | wrap | pack | tolerance

G CSS Gaps

GUTTERS (GRID AND FLEX GAPS)

row-gap: 0 | size | % **column-gap:** 0 | size | %

gap: row-gap | column-gap

G CSS Grid

PARENT PROPERTIES DISPLAY: GRID

EXPLICIT GRID

grid-template-columns: none | column1 | column2 | ...

grid-template-rows: none | row1 | row2 | ...

grid-template: rows / columns

GRID VALUES (ROWS AND COLUMNS)

auto | size | % | fr automatic size or size/fraction unit

repeat(number , size) repeat fragments n times

repeat(auto-fill , size) repeat + fill space & empty

repeat(auto-fit , size) repeat + fit + remove empty

minmax(min , max) min <= size range <= max

GRID AREA

grid-template-areas: " area1 | area2 " | ...

area area name . empty area none no defined

GRID ALIGNMENT

align start | center | end | stretch

space space-between | space-around | space-evenly

justify-content: normal | align | space

align-content: normal | align | space

justify-items: normal | align

align-items: normal | align | baseline

place-content: align-content | justify-content

place-items: align-items | justify-items

IMPLICIT GRID

grid-auto-columns: auto | size | % auto-created columns size

grid-auto-rows: auto | size | % auto-created rows size

grid-auto-flow: row | column | row dense | column dense

CHILD PROPERTIES

CELLS PLACEMENT

grid-column-start: auto | ln **grid-column-end:** auto | ln

grid-column: column-start / column-end

grid-row-start: auto | ln **grid-row-end:** auto | ln

grid-row: row-start / row-end

LINE (LN)

number | [linename] refer to a numbered or named grid line

span | number | [linename] span across until grid line

CHILD ALIGNMENT

justify-self: auto | normal | align

align-self: auto | normal | align

place-self: align-self | justify-self

AREA PLACEMENT

grid-area: area-name named area

order: 0 | number

GLOBAL SHORTHAND

grid: row-start / column-start / row-end / column-end



LENGUAJECSS.COM

MATHEMATICS AND CSS LOGIC

Created by @Manz (<https://manz.dev/>)

<https://lenguajecss.com/>

CSS

<meta name="viewport" content="initial-scale=1, width=device-width">

M CSS Math

CÁLCULOS

`calc(operations)` calc operations
`calc(var(--value) + 50px), calc(25px + 50%)`

SIGN RELATED

`abs(number)` get absolute value
`sign(number)` sign of number (-1, 0 or 1)

COMPARE FUNCTIONS

`min(A, B, ...)` `max(A, B, ...)`
`clamp(A, B, C)` ~ max(A, min(B, C))

STEPPED FUNCTIONS

`round(method, value, interval)`
method → nearest | up | down | to-zero
`mod(A, B)` modulus operation
`rem(A, B)` remainder of trunc division

TRIGONOMETRIC FUNCTIONS

| | |
|---------------------------|--|
| <code>sin(angle)</code> | <code>asin(number)</code> |
| <code>cos(angle)</code> | <code>acos(number)</code> |
| <code>tan(angle)</code> | <code>atan(number)</code> <code>atan2(Y, X)</code> |

EXPONENTIAL FUNCTIONS

| | | |
|--------------------------|------------------------|------------------------------|
| <code>pow(A, B)</code> | <code>sqrt(A)</code> | <code>hypot(A, ...)</code> |
| <code>log(A, B)</code> | <code>exp(A)</code> | |

F CSS Functions

FUNCTION DEFINITION SYNTAX

```
@function --func-name( --p1, --p2, ... ) {
  result: value; you can use params: var(--p1)
}
```

USE CSS FUNCTION

`property: --func-name(p1, p2, ...);`

R CSS Random

RANDOM VALUE FUNCTIONS

| | |
|--|---------------------|
| <code>random(min, max)</code> | cached random value |
| <code>random(min, max, by step)</code> | step-random |
| <code>random(--v, min, max)</code> | non-cached |
| <code>random(per-element, mn, mx)</code> | random |

RANDOM ITEMS FUNCTIONS

| | |
|--|--------------------|
| <code>random-item(v1, v2, ...)</code> | cached random item |
| <code>random-item(--v, v1, v2, ...)</code> | non-cached |
| <code>random-item(per-element, v1, v2, ...)</code> | random |

WE CSS When/Else

CONDITIONAL RULES

`@when (condition) { ... }` conditional rule support
`@else (condition) { ... }` conditional else support

C CSS Conditionals

MEDIA QUERIES

| | |
|---|----------------------|
| <code>@media (condition) { ... }</code> | standard media query |
| <code>@media (cond1) and (cond2) { ... }</code> | multi-condition MQ |
| <code>@media not (condition) { ... }</code> | negative media query |
| <code>@media print { ... }</code> | print media query |

MEDIA FEATURES (CONDITIONS)

| | |
|--|--------------------------|
| <code>width/height: size</code> | device width/height size |
| <code>aspect-ratio: number / number</code> | size proportion |
| <code>orientation: landscape portrait</code> | device screen rotation |

| | |
|--|------------------------------|
| <code>overflow-block: none scroll paged</code> | primary axis scrollability |
| <code>overflow-inline: none scroll</code> | secondary axis scrollability |

| | |
|--|-------------------------|
| <code>display-mode: fullscreen picture-in-picture browser</code> | PWA presentation mode |
| <code>minimal-ui standalone</code> | scripting support level |

| | |
|---|-------------------------|
| <code>scripting: none initial-only enabled</code> | scripting support level |
|---|-------------------------|

PRECISION FEATURES

| | |
|--|-----------------------|
| <code>pointer: none coarse fine</code> | detect primary device |
| <code>any-pointer: none coarse fine</code> | detect any device |

| | |
|--------------------------------------|-----------------------|
| <code>hover: none hover</code> | detect primary device |
| <code>any-hover: none hover</code> | detect any device |

OTHERS FEATURES

| | |
|---|---------------------|
| <code>resolution: ddpix-res infinite</code> | pixel density |
| <code>update: none slow fast</code> | speed update screen |

| | |
|----------------------------|------------------------------------|
| <code>color: number</code> | color-depth (8 bits, 16 bits, ...) |
|----------------------------|------------------------------------|

CONTAINER QUERIES

| | |
|---|-------------------|
| <code>@container name (condition) { ... }</code> | MQ for containers |
| <code>@container name style(prop: value) { ... }</code> | style check |

CONTAINER QUERIES PROPERTIES

| | |
|--|------------------------|
| <code>container-name: none name</code> | container name |
| <code>container-type: normal size inline-size</code> | axis (block or inline) |
| <code>container: container-name / container-type</code> | |

CONDITIONAL IF

| | |
|--|-----------------|
| <code>if(true cond : true ; else: false)</code> | css conditional |
| <code>if(cond1 : true ; cond2 : true ; ... ; else: false)</code> | multi |
| <code>if(style(prop: value) : true ; else: false)</code> | style check |
| <code>if(supports(prop: value) : true ; else: false)</code> | support |
| <code>if(media(condition) : true ; else: false)</code> | media style |

SUPPORTS CONDITIONALS

| | |
|---|------------------------------|
| <code>@supports (condition) { ... }</code> | check «prop: values» support |
| <code>@supports not (condition) { ... }</code> | negative check support |
| <code>@supports (cond1) and/or (cond2) { ... }</code> | multi check |
| <code>@supports selector(selector) { ... }</code> | check complex selector |
| <code>@supports font-tech(feature) { ... }</code> | (variations, palettes, ...) |
| <code>@supports font-format(format) { ... }</code> | woff, woff2, ... |