

# CSS3 WEB DESIGN

CHEAT SHEET

CSS SYNTAX, COLORS & UNITS



Created by @Manz ( <http://twitter.com/Manz> )

<https://lenguajecss.com/>

## C CSS Syntax

### GENERAL SYNTAX

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

### COMMENTS (ANNOTATIONS)

**/\* comment \*/**

EXAMPLE **/\* IE sucks \*/**

## S CSS Selectors

### SELECTORS & COMBINATORS

<b>#</b> element with id="unique"	<b>#unique</b>
<b>.</b> elements with class="c1"	<b>.c1</b>
<b>*</b> all elements inside of div (universal)	<b>div *</b>
<b>&gt;</b> inner div elements inside of div (descendant)	<b>div div</b>
<b>&gt;</b> direct childs of div (child)	<b>div &gt; div</b>
<b>+</b> adjacents elements (adjacent sibling)	<b>div + div</b>
<b>~</b> siblings elements at same level (general sibling)	<b>div ~ div</b>

### ATTRIBUTES

### IGNORE CASE SENSITIVE

**[attr="..." i]**

<b>[attr]</b> elements with <b>attr</b> attribute present	
<b>[attr="val"]</b> elements with <b>attr=</b> attribute with value <b>val</b>	<b>"val"</b>
<b>[attr~="val"]</b> elements with <b>attr~=</b> that contains <b>val</b>	<b>"abc val xyz"</b>
<b>[attr = "es"]</b> elements with <b>attr =</b> that contains <b>es</b> *	<b>"en-US es-ES"</b>
<b>[attr*="val"]</b> elements with <b>attr*=</b> that includes <b>val</b>	<b>"equivale<sup>n</sup>t-is-"</b>
<b>[attr^="val"]</b> elements with <b>attr^=</b> that begins with <b>val</b>	<b>"value-is-..."</b>
<b>[attr\$="val"]</b> elements with <b>attr\$=</b> that ends with <b>val</b>	<b>"in-interval"</b>

### PSEUDOCLASSES

<b>LINKS</b>	<b>:link</b> links that have not yet been visited
<b>LINKS</b>	<b>:visited</b> links that has been visited
<b>USER ACTION</b>	<b>:hover</b> user move mouse/pointer over element
<b>USER ACTION</b>	<b>:active</b> element is being activated by user
<b>USER ACTION</b>	<b>:focus</b> element has the focus (foreground)
<b>USER INTERFACE</b>	<b>:enabled</b> <b>:disabled</b> on/off input state
<b>USER INTERFACE</b>	<b>:checked</b> elements toggled "on" by user
<b>USER INTERFACE</b>	<b>:indeterminate</b> input on indeterminate state
<b>USER INTERFACE</b>	<b>:read-only</b> <b>:read-write</b> readonly input or modifiable
<b>USER INTERFACE</b>	<b>:placeholder-shown</b> inputs that shows placeholder at now
<b>USER INTERFACE</b>	<b>:default</b> default elements for form (input, option, ...)
<b>USER INTERFACE</b>	<b>:valid</b> <b>:invalid</b> userdata pass/not pass check validation
<b>USER INTERFACE</b>	<b>:in-range</b> <b>:out-of-range</b> userdata in range/out of range
<b>USER INTERFACE</b>	<b>:required</b> <b>:optional</b> elements required/optional for submit
<b>STRUCTURAL</b>	<b>:first-child</b> first child of group of elements ~ <b>:nth-child(1)</b>
<b>STRUCTURAL</b>	<b>:last-child</b> last child of group of elements ~ <b>:nth-last-child(1)</b>
<b>STRUCTURAL</b>	<b>:nth-child(n)</b> n <sup>th</sup> child of group of elements <b>n</b> <small>odd even expr</small>
<b>STRUCTURAL</b>	<b>:nth-last-child(n)</b> last n <sup>th</sup> child of group of elements
<b>STRUCTURAL</b>	<b>:only-child</b> unique child ~ <b>:first-child:last-child</b>
<b>CHILD OF SAME TYPE</b>	<b>:first-of-type</b> first child of same type
<b>CHILD OF SAME TYPE</b>	<b>:last-of-type</b> last child of same type
<b>CHILD OF SAME TYPE</b>	<b>:nth-of-type(n)</b> n <sup>th</sup> child of same type
<b>CHILD OF SAME TYPE</b>	<b>:nth-last-of-type(n)</b> last n <sup>th</sup> child (same type)
<b>CHILD OF SAME TYPE</b>	<b>:only-of-type</b> unique child (same type)
<b>OTHERS</b>	<b>:root</b> root element of the document
<b>OTHERS</b>	<b>:empty</b> element without contents
<b>OTHERS</b>	<b>:not(x)</b> not match by x selector
<b>OTHERS</b>	<b>:target</b> is the target of anchor URL
<b>OTHERS</b>	<b>:lang(x)</b> elements in x language

### PSEUDOELEMENTS

<b>::first-line</b>	first line of text element
<b>::first-letter</b>	first letter of text element

### legend

optional keyword
keyword
wide unsupported
shorthand value
userdata value
detailed value
default value
pseudoclass
pseudoelement

## C CSS Colors

### COLOR PROPERTIES

**color:** **color**  
**opacity:** **1** **alpha**

### COLOR EXAMPLE

<b>RGB</b>	<b>237</b> + <b>63</b> + <b>0</b> = <b>RGB(237, 63, 0)</b>
<b>HSL</b>	<b>11</b> + <b>255</b> + <b>119</b> = <b>HSL(11, 255, 119)</b>

### COLOR MODELS

### KEYWORDS

**colorkey** **transparent** **currentColor**

### NUMERIC FORMAT

### EXAMPLES

<b>RGB( red , green , blue )</b>	<b>RGB(65, 106, 225)</b>
<b># red_hex green_hex blue_hex</b>	<b>#416AE1 short form: #46E</b>
<b>HSL( hue , saturation , lightness )</b>	<b>HSL(159, 185, 145)</b>

### WITH ALPHA CHANNEL

### EXAMPLES

<b>RGBA( red , green , blue , alpha )</b>	<b>RGBA(65, 106, 225, 0.5)</b>
<b>HSLA( hue , saturation , lightness , alpha )</b>	<b>HSLA(159, 185, 145, 1)</b>

### COLOR COMPONENTS

<b>red</b> <b>green</b> <b>blue</b> numeric value between [0 ... 255]	
<b>red_hex</b> <b>green_hex</b> <b>blue_hex</b> hexadecimal value [00 ... FF]	
<b>hue</b> numeric value (degrees) between [0 ... 360deg]	
<b>saturation</b> <b>lightness</b> percentage values [0%...100%]	
<b>alpha</b> number value between [0.0 ... 1.0]	

## V CSS Values & Units

### RESETTING ALL PROPERTIES

**all:** **initial** **inherit** **unset**

### COMMON VALUES

<b>initial</b>	property's initial value
<b>inherit</b>	computed value on parent
<b>unset</b>	initial or inherit (depending)

### IMPORTANT

**property:** **value** **!important**  
EXAMPLE **color:red!important;**

### MATHEMATICAL EXPRESSIONS

**calc( value1 op value2 ... )**  
EXAMPLE **calc(200px + 10%)**

### FONT-RELATIVE SIZES

### VIEWPORT SIZES

<b>em</b> computed value on current	<b>vw</b> viewport width %
<b>ex</b> x-height of lowercase "x"	<b>vh</b> viewport height %
<b>ch</b> advance measure of "0" glyph	<b>vmin</b> smaller (vw or vh)
<b>rem</b> computed value on root elem	<b>vmax</b> larger (vw or vh)

### ABSOLUTE SIZES

### ANGLES

### DURATIONS

<b>px</b> pixels	<b>deg</b> degrees [0..360]	<b>s</b> seconds
<b>cm</b> centimeters	<b>grad</b> gradians [0..400]	<b>ms</b> millisecs
<b>mm</b> millimeters	<b>rad</b> radians [0..6.28]	
<b>Q</b> quarter-mm	<b>rad</b> turns [0.0..1.0]	
<b>in</b> inches		
<b>pc</b> picas		
<b>pt</b> points		

### CUSTOM PROPERTIES (CSS VARIABLES)

DECLARING	USING
<b>-- varname : value ;</b> EXAMPLE <b>--size: 100px;</b>	<b>var( -- varname , fallback ... )</b> EXAMPLE <b>calc(var(--size, 50px) * 2);</b>

## M CSS Media Features

### VIEWPORT SIZE

### DEVICE SIZE

<b>MIN</b> <b>MAX</b> <b>width</b>	<b>size</b>	<b>MIN</b> <b>MAX</b> <b>device-width</b>	<b>size</b>
<b>MIN</b> <b>MAX</b> <b>height</b>	<b>size</b>	<b>MIN</b> <b>MAX</b> <b>device-height</b>	<b>size</b>

### ASPECT RATIO

<b>MIN</b> <b>MAX</b> <b>aspect-ratio</b>	<b>ratio</b>	<b>MIN</b> <b>MAX</b> <b>device-aspect-ratio</b>	<b>ratio</b>
---	--------------	--	--------------

### COLORS

<b>MIN</b> <b>MAX</b> <b>color</b>	<b>number</b>	<b>MIN</b> <b>MAX</b> <b>color-index</b>	<b>number</b>
------------------------------------	---------------	--	---------------

### OTHERS

<b>MIN</b> <b>MAX</b> <b>monochrome</b>	<b>number</b>	EXAMPLES
<b>MIN</b> <b>MAX</b> <b>resolution</b>	<b>dpi/dpcm</b>	<b>device-min-width: 640px</b>
<b>orientation</b>	<b>portrait</b> <b>landscape</b>	<b>device-aspect-ratio: 16/9</b>
<b>scan</b>	<b>progressive</b> <b>interlace</b>	<b>max-color-index: 256</b>
<b>grid</b>	<b>number</b>	<b>min-resolution: 300dpi</b>
		<b>min-monochrome: 2</b>
		<b>grid: 1</b>

# CSS3

CHEAT SHEET

# WEB DESIGN

FONTS, TEXT, SPEECH & RULES



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<https://lenguajecss.com/>

## F Fonts

### FONTS (TYPOGRAPHY)

font-family: font1, font2, font3 ..., genericfont

font-size: size %

REL smaller larger

ABS 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

REL lighter bolder

ABS 100 200 300 400 500 600 700 800 900

font: style variant weight stretch size/ line-height family

caption icon menu message-box small-caption status-bar

<https://fonts.googleapis.com/css?family=Open+Sans:300,400|Roboto:400>

## S Speech Media

### VOLUME/SPEAK

volume: number % silent x-soft soft medium loud x-loud

speak: normal none spell-out

### PAUSE

pause-before: 0 time %

pause-after: 0 time %

pause: before after

### CUE

cue-before: none url( snd.mp3 )

cue-after: none url( snd.mp3 )

cue: before after

### MIXING/SPATIAL

play-during: auto none url( snd.mp3 ) mix repeat

azimuth: angle center left right left-side far-left left center-left

right-side far-right right center-right

behind leftwards rightwards

elevation: angle ABS below level above REL lower higher

### VOICE CHARACTERISTICS

speech-rate: number ABS x-slow slow medium fast x-fast

REL slower faster

voice-family: voice1, voice2, voice3 ..., genericvoice

pitch: frequency x-low low medium high x-high

pitch-range: 50 number

richness: 50 number

stress: 50 number

### GENERIC VOICE

male female child

EXAMPLE voice-family: Romeo, male;

### SPEECH

speak-punctuation: none code

speak-numeral: continuous digits

speak-header: once always

## T CSS Text L3

### TRANSFORMING TEXT

text-transform: none capitalize uppercase lowercase full-width

### WHITE SPACES

white-space: normal pre nowrap pre-wrap pre-line

tab-size: 8 number size

### LINE BREAKING & WORD BOUNDARIES

line-break: auto loose normal strict

word-break: normal keep-all break-all

### BREAKING WORDS

hyphens: none manual auto

word-wrap: normal break-word

overflow-wrap: normal break-word

### ALIGNMENT & JUSTIFICATION

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

text-align-last: auto start end left right center justify

text-justify: auto none inter-word distribute

### SPACING

word-spacing: normal size

letter-spacing: normal size

### EDGE EFFECTS

text-indent: size hanging each-line

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

## T CSS Text Decoration

### LEVEL 2 (LEGACY)

text-decoration: none underline overline line-through

### LEVEL 3

text-decoration-line: none underline overline line-through blink

text-decoration-color: currentColor color

text-decoration-style: solid double dotted dashed wavy

text-decoration-skip: none objects spaces ink edges

box-decoration

text-decoration: none line style color

text-underline-position: auto under left right

### STATUS

filled open

EXAMPLE open circle;

### 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

### TEXT SHADOW

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

## @ CSS Rules

### FONT LOADING

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

### FONT FORMATS

embedded-opentype truetype opentype svg woff woff2

EXAMPLE url(file.ttf) format("truetype");

### MEDIA QUERIES (RESPONSIVE DESIGN)

```
@media all screen print and (...) {
  property: value;
}
```

Media features

EXAMPLE @media screen and (max-width: 640px) { ... }

### CSS IMPORT RULES

```
@import "index.css";
@import url("index.css");
@import url("print.css") print;
```

serif font

monospaced font

sans serif font

fantasy font

### LINE HEIGHT CALCULATIONS (LEGACY)

line-height: number % size normal

vertical-align: size % baseline middle sub super

text-top text-bottom top bottom

### CSS CONDITIONAL

```
@supports not ( feature ) or and ... {
  property: value;
}
```

EXAMPLE @supports not ( display: flexbox ) { .nav { display: block } }

# CSS3

CHEAT SHEET

# WEB DESIGN

BOX MODEL: BORDERS, BACKGROUNDS & IMAGES



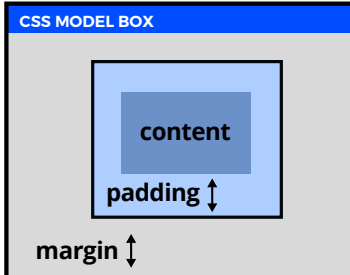
Created by @Manz (<http://twitter.com/Manz>)

<https://lenguajecss.com/>

## B CSS Box Model

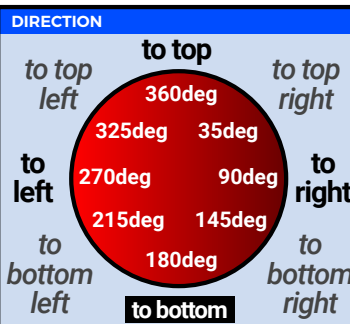
DIMENSIONS	
width: <b>auto</b> size %	height: <b>auto</b> size %
min-width: <b>0</b> size %	min-height: <b>0</b> size %
max-width: <b>none</b> size %	max-height: <b>none</b> size %
MARGINS/PADDINGS	
SPECIFIC MARGINS	SPECIFIC PADDINGS
margin-top: <b>0</b> size %	padding-top: <b>0</b> size %
margin-right: <b>0</b> size %	padding-right: <b>0</b> size %
margin-bottom: <b>0</b> size %	padding-bottom: <b>0</b> size %
margin-left: <b>0</b> size %	padding-left: <b>0</b> size %
MARGIN SHORTHAND	PADDING SHORTHAND
margin: <b>top</b> <b>right</b> <b>bottom</b> <b>left</b>	padding: <b>top</b> <b>right</b> <b>bottom</b> <b>left</b>
<b>top</b> <b>left</b> <b>right</b> <b>bottom</b>	<b>top</b> <b>left</b> <b>right</b> <b>bottom</b>
<b>top</b> <b>bottom</b> <b>left</b> <b>right</b>	<b>top</b> <b>bottom</b> <b>left</b> <b>right</b>
<b>top</b> <b>right</b> <b>bottom</b> <b>left</b>	<b>top</b> <b>right</b> <b>bottom</b> <b>left</b>
OVERFLOW/VISIBILITY	
overflow-x: <b>visible</b> <b>hidden</b> <b>scroll</b> <b>auto</b> <b>no-display</b> <b>no-content</b>	
overflow-y: <b>visible</b> <b>hidden</b> <b>scroll</b> <b>auto</b> <b>no-display</b> <b>no-content</b>	
overflow: <b>overflow-x</b> <b>overflow-y</b>	
visibility: <b>visible</b> <b>hidden</b> <b>collapse</b>	

BOX TYPES (DISPLAY)	
display: <b>inline</b> <b>none</b> <b>run-in</b>	
<b>inline-block</b> <b>block</b>	
<b>inline-list-item</b> <b>list-item</b>	
<b>inline-table</b> <b>table</b> <b>table-cell</b>	
<b>table-row</b> <b>table-caption</b>	
<b>inline-grid</b> <b>grid</b> <b>subgrid</b>	
<b>inline-flex</b> <b>flex</b>	



## I CSS Images

GRADIENTS	
LINEAR GRADIENTS	
background-image: <b>linear-gradient</b> ( <b>direction</b> <b>color1</b> <b>start</b> , <b>color2</b> <b>start</b> , ... )	repeating-linear-*
RADIAL GRADIENTS	
background-image: <b>radial-gradient</b> ( <b>shape</b> <b>rsize</b> <b>at pos</b> <b>color1</b> <b>start</b> , <b>color2</b> ... )	repeating-radial-*
GRADIENT OPTIONS	
<b>shape</b> <b>rsize</b>	
<b>circle</b> <b>radius</b> <b>at pos</b> ...	
<b>ellipse</b> <b>rh</b> <b>rv</b> <b>at pos</b> ...	
EXAMPLE (ellipse 55px 45px at top, red, blue)	
RADIUS SIZE (RSIZE) ALSO ACCEPT...	
<b>closest-side</b> <b>farthest-side</b>	
<b>closest-corner</b> <b>farthest-corner</b>	
IMAGES AND OBJECTS	
SIZING	
object-fit: <b>fill</b> <b>contain</b> <b>cover</b> <b>none</b> <b>scale-down</b>	
object-position: <b>50% 50%</b> <b>background-position</b>	
IMAGE PROCESSING	
image-orientation: <b>0deg</b> <b>size</b>	
image-resolution: <b>1dppx</b> <b>from-image</b> <b>resolution</b> <b>snap</b>	
image-rendering: <b>auto</b> <b>crisp-edges</b> <b>pixelated</b>	



## B CSS Borders

BORDERS	
border-width: <b>size</b> <b>thin</b> <b>medium</b> <b>thick</b>	
border-style: <b>none</b> <b>border-style</b> <b>hidden</b>	
border-color: <b>currentColor</b> <b>color</b>	
SIDE BORDER SHORTHAND	
border-top: <b>width</b> <b>style</b> <b>color</b>	
border-right: <b>width</b> <b>style</b> <b>color</b>	
border-bottom: <b>width</b> <b>style</b> <b>color</b>	
border-left: <b>width</b> <b>style</b> <b>color</b>	
MAIN SHORTHAND	
border: <b>width</b> <b>style</b> <b>color</b>	
SPECIFIC SHORTHANDS	
border-top-*	
border-right-*	
border-bottom-*	
border-left-*	
BORDER STYLES	
	solid
	dotted
	dashed
	double
	groove
	ridge
	inset
	outset
2-PARAMETER FORMAT	
size-h size-v	size-h = size-v
size-h	size-h
MAIN SHORTHAND	
border-radius: <b>top-left</b> <b>top-right</b> <b>bottom-right</b> <b>bottom-left</b>	
<b>top-left</b> <b>top-right</b> <b>bottom-left</b> <b>bottom-right</b>	
<b>top-left</b> <b>bottom-right</b> <b>top-right</b> <b>bottom-left</b>	
<b>top-left</b> <b>top-right</b> <b>bottom-right</b> <b>bottom-left</b>	
MAIN SHORTHAND WITH HORIZONTAL/VERTICAL RADIUS	
border-radius: <b>border-radius</b> / <b>border-radius</b>	
BORDER IMAGE WIDTH	
<b>auto</b> <b>size</b> <b>number</b> %	
left center right	
top	
bottom	
IMAGE SLICE	
<b>number</b> %	
IMAGE OUTSET	
<b>number</b> <b>size</b>	
B CSS Border Image	
BORDER IMAGE	
border-image-source: <b>none</b> <b>url</b> ( <b>img.png</b> )	
border-image-slice: <b>100%</b> <b>top</b> <b>right</b> <b>bottom</b> <b>left</b> <b>fill</b>	
border-image-width: <b>1</b> <b>top</b> <b>right</b> <b>bottom</b> <b>left</b>	
border-image-outset: <b>0</b> <b>top</b> <b>right</b> <b>bottom</b> <b>left</b>	
border-image-repeat: <b>stretch</b> <b>repeat</b> <b>round</b> <b>space</b>	
border-image: <b>source</b> <b>slice</b> / <b>width</b> <b>outset</b> <b>repeat</b>	
REPEAT-STYLE PARAMETERS	
<b>repeat</b> <b>space</b> <b>round</b> <b>no-repeat</b>	
EXAMPLE <b>repeat</b> <b>no-repeat</b> (or <b>repeat-x</b> )	

## B Backgrounds

LEVEL 2	
background-color: <b>transparent</b> <b>color</b>	
background-image: <b>none</b> <b>url</b> ( <b>image.png</b> ), <b>url</b> ( <b>image.jpg</b> ), ...	
background-repeat: <b>repeat</b> <b>repeat-x</b> <b>repeat-y</b> <b>repeat-style</b>	
<b>repeat</b> <b>repeat</b> <b>repeat-style-h</b> <b>repeat-style-v</b>	
background-attachment: <b>scroll</b> <b>fixed</b> <b>local</b>	
background-position: <b>pos-x</b> <b>pos-y</b>	
background: <b>color</b> <b>image</b> <b>repeat</b> <b>attachment</b> <b>position</b>	
LEVEL 3	
background-clip: <b>border-box</b> <b>padding-box</b> <b>content-box</b>	
background-origin: <b>border-box</b> <b>padding-box</b> <b>content-box</b>	
background-size: <b>auto</b> <b>width</b> <b>height</b> <b>contain</b> <b>cover</b>	
background: <b>color</b> <b>pos</b> <b>size</b> <b>repeat</b> <b>origin</b> <b>clip</b> <b>attach</b> <b>image</b>	
EFFECTS: SHADOWS	
box-shadow: <b>none</b> <b>pos-x</b> <b>pos-y</b> <b>blur</b> <b>size</b> <b>color</b> <b>inset</b>	



# CSS3

CHEAT SHEET

# WEB DESIGN

EFFECTS, MASKS, SHAPES, LISTS & UI



Created by @Manz ( <http://twitter.com/Manz> )

<https://lenguajecss.com/>

## F CSS Filters

FILTER PROPERTY

filter: none filter1 filter2 ...

FILTER VALUES

number 0.0 ... 1.0  
% 0% ... 100%

FILTERS

**blur( blur )** 0px = original >0px=blur  
**brightness( number % )** 0%=black 100%=original >100% ALLOWED  
**contrast( number % )** 0%=grey 100%=original >100% ALLOWED  
**saturate( number % )** 0%=B&W 100%=original >100% ALLOWED  
**grayscale( number % )** 0%=original 100%=B&W  
**invert( number % )** 0%=original 100%=invert  
**sepia( number % )** 0%=original 100%=sepia  
**opacity( number % )** 0%=transparent 100%=original  
**hue-rotate( angle )** 0deg=original 360deg=max  
**drop-shadow( pos-x pos-y blur color )** (same as text-shadow)



REFERENCE BOX

**geometry-box** = **shape-box** **fill-box** **stroke-box** **view-box**  
**shape-box** = **box** **margin-box**  
**box** = **content-box** **padding-box** **border-box**

## S CSS Shapes

FLOAT AREA SHAPE

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

BASIC SHAPES

RECTANGLE

**inset( top right bottom left round border-radius )**

CIRCLE/ELLIPSE

**circle( shape-radius at position )**  
**ellipse( radius\_x radius\_y at position )**

POLYGON

**polygon( x0 y0 ,... , xi yi )** **SHAPE RADIUS**  
size % farthest-side closest-side

## M CSS Masks

CLIPPING SHAPE

**clip-path:** none url( img.png ) basic-shape geometry-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 geometry-box  
**mask-origin:** border-box geometry-box  
**mask-size:** auto background-size  
**mask-composite:** add subtract intersect exclude  
**mask:** image mode position / size repeat clip composite

BORDER-BOX MASK

**mask-border-source:** none url( img.svg#mask )  
**mask-border-mode:** alpha luminance  
**mask-border-slice:** 0 border-image-slice  
**mask-border-width:** auto border-image-width  
**mask-border-outset:** 0 border-image-outset  
**mask-border-repeat:** stretch border-image-repeat  
**mask-border:** source slice / width / outset repeat mode

## C Compositing

COMPOSITING AND BLENDING

**background-blend-mode:** normal blend  
**isolation:** auto isolate  
**mix-blend-mode:** normal blend

BLEND MODES

SEPARABLE

normal multiply screen overlay  
darken lighten color-dodge color-burn  
hard-light soft-light difference exclusion

NON-SEPARABLE

hue saturation color luminosity

## L Lists

LISTS

**list-style-image:** none url( img.jpg )  
**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

**list-style:** type position image

GENERATED CONTENT

**content:** normal none url( img.jpg ) attr( attr ) ' string '  
open-quote close-quote no-open-quote no-close-quote  
counter( name , list-style-type )

**content-increment:** none name

**content-reset:** none name

**quotes:** ' open-str ' ' close-str ' none

MARKERS

**::marker** item's marker generated by list item (bullet, number...)  
**marker-side:** list-item list-container

PSEUDOCASSES

**::before** before element  
**::after** after element

E. AMPL E p::before { content: "-"; }

## U User Interface

BOX MODEL

**box-sizing:** content-box border-box

OUTLINE

**outline-width:** size thin medium thick  
**outline-style:** none auto hidden dotted dashed solid  
double groove ridge inset outset  
**outline-color:** invert color  
**outline-offset:** 0 size  
**outline:** color style width

RESIZE/OVERFLOW

**resize:** none both horizontal vertical  
**text-overflow:** clip ellipsis string

POINTING DEVICES AND KEYBOARDS

**cursor:** auto default none url( img.png ) x y  
context-menu help pointer progress wait  
cell crosshair text vertical-text zoom-in zoom-out  
alias copy move no-drop not-allowed grab grabbing  
n-resize ne-resize e-resize se-resize s-resize sw-resize  
w-resize nw-resize ew-resize ns-resize nesw-resize  
nwse-resize col-resize row-resize all-scroll  
**caret-color:** auto color  
**nav-up:** auto id current root target  
**nav-down:** auto id current root target  
**nav-left:** auto id current root target  
**nav-right:** auto id current root target



## T 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-function

<b>s f s</b>	<b>ease</b>	(0.25, 0.1, 0.25, 1)
<b>n n n</b>	<b>linear</b>	(0.00, 0.0, 1.00, 1)
<b>s n n</b>	<b>ease-in</b>	(0.42, 0.0, 1.00, 1)
<b>n n s</b>	<b>ease-out</b>	(0.00, 0.0, 0.58, 1)
<b>s n s</b>	<b>ease-in-out</b>	(0.42, 0.0, 0.58, 1)

### timing-function steps()

<b>step-start</b>	(1, start)
<b>step-end</b>	(1, end)
<b>steps(n)</b>	(n, end)
<b>steps(a,b)</b>	(a, b)

## A CSS Animations

**SLOW** **NORMAL** **FAST**

### 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: **name** **duration** **t-function** **delay** **it-c** **dir** **f-m** **p-s**

### CHAINED (ANIMATION PROPERTY)

<b>animname1</b>	<b>5s</b>	<b>linear</b>	
<b>animname2</b>	<b>5s</b>	<b>linear</b>	<b>5s</b>
<b>animname3</b>	<b>6s</b>	<b>linear</b>	<b>10s</b>

### ANIMATION KEYFRAMES

```
@keyframes animname {
  0% { property: value; ... }
  ...
  100% { property: value; ... }
}
```

@-vendor-keyframes

## M CSS Motion Paths

0% = from  
100% = to

### MOTION PATH

motion-path: **none** **url**(img.svg)

**basic-shape** **path** **geometry-box**

motion-offset: **0** size %

motion-rotation: **auto** **reverse** angle

motion: **path** **offset** **rotation**

## S CSS Scroll Snap

### CAPTURING SCROLL SNAP AREAS

scroll-snap-type: **none** **x** **y**

**block** **inline** **both** **mandatory** **proximity**

### ALIGNMENT AND LIMITS

scroll-snap-align: **inline-axis** **block-axis**

scroll-snap-stop: **normal** **always**

### SCROLL SNAPPING/SNAPPORT

scroll-padding\*:

scroll-snap-margin\*:

### AXIS

**none** **start** **center** **end**

EXAMPLE scroll-snap-align: start end

### SCROLL SNAPPING/SNAPPORT

#### SNAP MARGIN/PADDING

\*-top: **0** size %

\*-right: **0** size %

\*-bottom: **0** size %

\*-left: **0** size %

\*: **top** **right** **bottom** **left**

#### INLINE/BLOCK

\*-inline-start: **0** size %

\*-inline-end: **0** size %

\*-inline: **start** **end**

\*-block-start: **0** size %

\*-block-end: **0** size %

\*-block: **start** **end**

## T CSS Transforms

### TRANSFORM PROPERTY

transform: **none** transform1 transform2 ...

### 2D TRANSFORMS

transform: **translateX**( size % )

transform: **translateY**( size % )

transform: **translate**( size % , size % )

transform: **scaleX**( number )

transform: **scaleY**( number )

transform: **scale**( number , number )

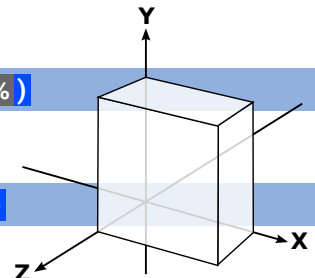
transform: **skewX**( angle )

transform: **skewY**( angle )

transform: **skew**( angle , angle )

transform: **rotate**( angle )

transform: **matrix**( n1 , n2 , n3 , n4 , n5 , n6 )



### 3D TRANSFORMS

transform: **translateZ**( size )

transform: **translate3d**( size % , size % , size % )

transform: **scaleZ**( number )

transform: **scale3d**( number , number , number )

transform: **rotateX**( angle )

transform: **rotateY**( angle )

transform: **rotateZ**( angle )

transform: **rotate3d**( number , number , number , angle )

transform: **perspective**( size )

transform: **matrix3d**( n1 , n2 , n3 , n4 , n5 , n6 , ..., n16 )

### TRANSFORMS OPTIONS

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

transform-style: **flat** **preserve-3d**

backface-visibility: **visible** **hidden**

### PERSPECTIVE OPTIONS

perspective: **none** size

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

## C CSS Multi Columns

### 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** **always** **avoid** **left** **right**

**page** **column** **avoid-page** **avoid-column**

break-inside: **auto** **avoid** **avoid-page** **avoid-column**

### SPANNING, FILLING AND GAPS

column-span: **none** **all**

column-fill: **auto** **balance**

column-gap: size **normal**



## F CSS Flexbox

### CONTAINER PROPERTIES

#### ORDERING AND ORIENTATION

flex-direction: **row** **row-reverse** **column** **column-reverse**

flex-wrap: **nowrap** **wrap** **wrap-reverse**

flex-flow: **direction** **wrap**

#### PRIMARY AXIS

justify-content: **flex-start** **center** **flex-end**  
**space-between** **space-around**

#### SECONDARY AXIS

align-items: **flex-start** **center** **flex-end** **baseline** **stretch**

#### MULTI-LINE CONTAINER PROPERTIES

align-content: **flex-start** **center** **flex-end** **stretch**  
**space-between** **space-around**

### ITEM 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** **flex-start** **center** **flex-end** **baseline** **stretch**  
order: **0** **number**

## A CSS Align

### CONTAINER PROPERTIES

#### CONTENT DISTRIBUTION

justify-content/align-content:

▶ **normal** **baseline-position**  
▶ **space-between** **space-around** **space-evenly** **stretch**  
▶ **overflow-pos** **self-position**

#### SELF-POSITION

▶ **start** **center** **end** (self, content)  
▶ **flex-start** **flex-end** idem (only flex)  
▶ **self-start** **self-end** (self)  
▶ **left** **right** (self, content) fallback: start

#### OVERFLOW POSITION

**safe** **unsafe**

#### BASLINE-POSITION

▶ **baseline** **last-baseline**

#### PRIMARY AXIS

justify-items: **auto** **normal** **stretch** **baseline-position**  
▶ **overflow-pos** **self-position**  
▶ **legacy** **left** **center** **right**

#### SECONDARY AXIS

align-items: **normal** **stretch** **baseline-position**  
▶ **overflow-pos** **self-position**

### ITEM PROPERTIES

#### PRIMARY AXIS

justify-self: **auto** **normal** **stretch** **baseline-position**  
▶ **overflow-pos** **self-position**

#### SECONDARY AXIS

align-self: **auto** **normal** **stretch** **baseline-position**  
▶ **overflow-pos** **self-position**

### TABLES

border-collapse: **separate** **collapse** caption-side: **top** **bottom**  
border-spacing: **size-h** **size-v** empty-cells: **show** **hide**  
table-layout: **auto** **fixed**

## P Positioning

### POSITIONING

position: **static** **relative** **absolute** **fixed** **sticky**

### FLOATING

float: **none** **left** **right**

clear: **none** **left** **right** **both**

### POSITIONING (NOT STATIC POSITION)

top: **auto** **size** %  
left: **auto** **size** %  
right: **auto** **size** %  
bottom: **auto** **size** %  
z-index: **auto** **number**



## G CSS Grids

### CONTAINER GRIDS

#### EXPLICIT GRID

grid-template-columns: **none** **track1** **track2** ...

grid-template-rows: **none** **track1** **track2** ...

#### TRACKS

▶ **auto** **size** % **fr** automatic size or specific size/fraction unit  
▶ **[ linename ]** **auto** **size** % **fr** named grid lines + specific size  
▶ **minmax( min , max )** min <= size range <= max  
▶ **repeat( number , tracks )** repeat fragments *n* times  
▶ **repeat(auto-fill, tracks)** repeated fragments and fill space  
▶ **repeat(auto-fit, tracks)** repeated fragments and fit space  
▶ **max-content** **min-content** largest max/min content track  
▶ **fit-content( size % )** ~ min(max-content, max(auto, arg))

### AREA GRID

grid-template-areas: **"area1 area2"** ... **"areaY areaZ"**

#### AREAS

▶ **area** grid area name (grid-area)  
▶ **.** empty grid area cell  
▶ **none** no grid areas are defined

#### EXAMPLE

#grid { display: grid;  
grid-template-areas: "head head"  
"nav main"  
"foot foot"; }

### SHORTHAND TEMPLATE GRID

grid-template: **none**  
▶ **template-rows** / **template-columns**  
▶ **template-areas** + **template-rows/columns**

### IMPLICIT GRID

grid-auto-columns: **auto** **size** %  
grid-auto-rows: **auto** **size** %  
grid-auto-flow: **row** **column** **dense**

### GUTTERS (GAPS)

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

### SHORTHAND GRID

grid: **template**  
▶ **template-rows** / **auto-flow** **dense** **grid-auto-columns**  
▶ **auto-flow** **dense** **grid-auto-rows** / **template-columns**

### ITEM GRIDS

#### LINE-BASED PLACEMENT

grid-column-start/grid-column-end: **auto** **line**  
grid-row-start/grid-row-end: **auto** **line**  
grid-column: **column-start** **column-end**  
grid-row: **row-start** **row-end**

### LINES

▶ **number** **name** refer to a numbered or named grid line  
▶ **span** **number** **name** span across until grid line

### PLACEMENT SHORTHANDS

grid-area: ▶ **template-area**  
▶ **row-start** / **column-start** / **row-end** / **column-end**