

# Cascading Style Sheets (CSS 3)

## BACKGROUND

<b>background</b>	<i>background-image background-position background-size background-repeat background-attachment background-origin background-clip background-color</i>
<b>background-attachment</b>	scroll   fixed
<b>background-break</b>	bounding-box   each-box   continuous
<b>background-clip</b>	length % border-box   padding-box   content-box   no-clip
<b>background-color</b>	color transparent
<b>background-image</b>	url none
<b>background-origin</b>	border-box   padding-box   content-box
<b>background-position</b>	top left   top center   top right   center left   center center   center right   bottom left   bottom center   bottom right x-% y-% x-pos y-pos
<b>background-repeat</b>	repeat   repeat-x   repeat-y   no-repeat
<b>background-size</b>	length % auto   cover   contain

## BORDER

<b>border</b>	<i>border-width border-style border-color</i>
<b>border-break</b>	<i>border-width border-style color close</i>
<b>border-bottom</b>	<i>border-bottom-width border-style border-color</i>
<b>border-bottom-color</b>	<i>border-color</i>
<b>border-bottom-style</b>	<i>border-style</i>
<b>border-bottom-width</b>	thin   medium   thick length
<b>border-collapse</b>	collapse   separate
<b>border-color</b>	color
<b>border-image</b>	image [ number / % border-width stretch   repeat   round ] none
<b>border-left</b>	<i>border-left-width border-style border-color</i>
<b>border-left-color</b>	<i>border-color</i>
<b>border-left-style</b>	<i>border-style</i>
<b>border-left-width</b>	thin   medium   thick length
<b>border-right</b>	<i>border-right-width border-style border-color</i>
<b>border-right-color</b>	<i>border-color</i>
<b>border-right-style</b>	<i>border-style</i>
<b>border-right-width</b>	thin   medium   thick length

## BORDER

<b>border-top</b>	<i>border-top-width border-style border-color</i>
<b>border-top-color</b>	<i>border-color</i>
<b>border-top-style</b>	<i>border-style</i>
<b>border-top-width</b>	thin   medium   thick length
<b>border-width</b>	thin   medium   thick length
<b>border-radius</b>	<i>border-top-right-radius border-bottom-right-radius border-bottom-left-radius border-top-left-radius</i>
<b>border-top-right-radius</b>	length
<b>border-bottom-right-radius</b>	length
<b>border-bottom-left-radius</b>	length
<b>border-top-left-radius</b>	length
<b>box-shadow</b>	inset    [ length, length, length, length    <color> ] none
<b>border-style</b>	none   hidden   dotted   dashed   solid   double   groove   ridge   inset   outset

## FONT

<b>font</b>	<i>font-style font-variant font-weight font-size/line-height font-family caption   icon   menu   message-box   small-caption   status-bar</i>
<b>font-family</b>	family-name generic-family inherit
<b>font-size</b>	xx-small   x-small   small   medium   large   x-large   xx-large   smaller   larger   inherit length %
<b>font-size-adjust</b>	none   inherit number
<b>font-stretch</b>	normal   wider   narrower   ultra-condensed   extra-condensed   condensed   semi-condensed   semi-expanded   expanded   extra-expanded   ultra-expanded   inherit
<b>font-style</b>	normal   italic   oblique   inherit
<b>font-variant</b>	normal   small-caps   inherit
<b>font-weight</b>	normal   bold   bolder   lighter   100   200   300   400   500   600   700   800   900   inherit

## BOX MODEL

<b>clear</b>	left   right   both   none
<b>display</b>	none   inline   block   inline-block   list-item   run-in   compact   table   inline-table   table-row-group   table-header-group   table-footer-group   table-row   table-column-group   table-column   table-cell   table-caption   ruby   ruby-base   ruby-text   ruby-base-group   ruby-text-group

## BOX MODEL

<b>float</b>	left   right   none
<b>height</b>	auto length %
<b>max-height</b>	none length %
<b>max-width</b>	none length %
<b>min-height</b>	none   inherit length %
<b>min-width</b>	none   inherit length %
<b>width</b>	auto % length
<b>margin</b>	<i>margin-top margin-right margin-bottom margin-left</i>
<b>margin-bottom</b>	auto length %
<b>margin-left</b>	auto length %
<b>margin-right</b>	auto length %
<b>margin-top</b>	auto length %
<b>padding</b>	<i>padding-top padding-right padding-bottom padding-left</i>
<b>padding-bottom</b>	length %
<b>padding-left</b>	length %
<b>padding-right</b>	length %
<b>padding-top</b>	length %
<b>marquee-direction</b>	forward   reverse
<b>marquee-loop</b>	infinite number
<b>marquee-play-count</b>	infinite integer
<b>marquee-speed</b>	slow   normal   fast
<b>marquee-style</b>	scroll   slide   alternate
<b>overflow</b>	visible   hidden   scroll   auto   no-display   no-content overflow-x overflow-y
<b>overflow-style</b>	auto   marquee-line   marquee-block
<b>overflow-x</b>	visible   hidden   scroll   auto   no-display   no-content
<b>overflow-y</b>	visible   hidden   scroll   auto   no-display   no-content
<b>rotation</b>	angle
<b>rotation-point</b>	position (paired value off-set)
<b>visibility</b>	visible   hidden   collapse

# Cascading Style Sheets (CSS 3)

TEXT	
direction	ltr   rtl   inherit
hanging-punctuation	none   [ start   end   end-edge ]
letter-spacing	normal length %
punctuation-trim	none   [start   end   adjacent]
text-align	start   end   left   right   center   justify
text-align-last	start   end   left   right   center   justify
text-decoration	none   underline   overline   line-through   blink
text-emphasis	none   [ [ accent   dot   circle   disc ] [ before   after ]? ]
text-indent	length %
text-justify	auto   inter-word   inter-ideograph   inter-cluster   distribute   kashida   tibetan
text-outline	none color length
text-shadow	none color length
text-transform	none   capitalize   uppercase   lowercase
text-wrap	normal   unrestricted   none   suppress
unicode-bidi	normal   embed   bidi-override
white-space	normal   pre   nowrap   pre-wrap   pre-line
white-space-collapse	preserve   collapse   preserve-breaks   discard
word-break	normal   keep-all   loose   break-strict   break-all
word-spacing	normal length %
word-wrap	normal   break-word

COLUMN	
column-count	auto number
column-fill	auto   balance
column-gap	normal length
column-rule	column-rule-width column-rule-style column-rule-color
column-rule-color	color
column-rule-style	border-style
column-rule-width	thin   medium   thick length
columns	column-width column-count
column-span	1   all
column-width	auto length

COLOR	
color	inherit color
opacity	inherit number

TEMPLATE LAYOUT	
box-align	start   end   center   base-
box-direction	normal   reverse
box-flex	number
box-flex-group	integer
box-lines	single   multiple
box-orient	horizontal   vertical   inline-axis   block-axis
box-pack	start   end   center   justify
box-sizing	content-box   padding-box   border-box   margin-box
tab-side	top   bottom   left   right

TABLE	
border-collapse	collapse   separate
border-spacing	length length
caption-side	top   bottom   left   right
empty-cells	show   hide
table-layout	auto   fixed

SPEECH	
cue	cue-before cue-after
cue-before	uri [ silent   x-soft   soft   medium   loud   x-loud ]   none   inherit   number %
cue-after	uri [ silent   x-soft   soft   medium   loud   x-loud ]   none   inherit   number %
mark	mark-before mark-after
mark-before	string
mark-after	string
pause	pause-before pause-after
pause-before	none   x-weak   weak   medium   strong   x-strong   inherit time
pause-after	none   x-weak   weak   medium   strong   x-strong   inherit time
phonemes	string
rest	rest-before rest-after
rest-before	none   x-weak   weak   medium   strong   x-strong   inherit time
rest-after	none   x-weak   weak   medium   strong   x-strong   inherit time
speak	none   normal   spell-out   digits   literal-punctuation   no-punctuation   inherit
voice-balance	left   center   right   leftwards   rightwards   inherit number
voice-duration	time

SPEECH	
voice-family	inherit   [ <specific-voice, age, generic-voice, number> ]
voice-rate	x-slow   slow   medium   fast   x-fast   inherit %
voice-pitch	x-low   low   medium   high   x-high   inherit number %
voice-pitch-range	x-low   low   medium   high   x-high   inherit number
voice-stress	strong   moderate   none   reduced   inherit
voice-volume	silent   x-soft   soft   medium   loud   x-loud   inherit number %

LIST & MARKERS	
list-style	list-style-type list-style-position list-style-image
list-style-image	none url
list-style-position	inside   outside
list-style-type	none   asterisks   box   check   circle   diamond   disc   hyphen   square   decimal   decimal-leading-zero   lower-roman   upper-roman   lower-alpha   upper-alpha   lower-greek   lower-latin   upper-latin   hebrew   armenian   georgian   cjk-ideographic   hiragana   katakana   hiragana-iroha   katakana-iroha   footnotes
marker-offset	auto length

ANIMATIONS	
animation	animation-name animation-duration animation-timing-function animation-delay animation-iteration-count animation-direction
animation-delay	time
animation-direction	normal   alternate
animation-duration	time
animation-iteration-count	inherit number
animation-name	none   IDENT
animation-play-state	running   paused
animation-timing-function	ease   linear   ease-in   ease-out   ease-in-out   cubic-Bezier (number, number, number, number)

TRANSITIONS	
transition	transition-property transition-duration transition-timing-function transition-delay
transition-delay	time
transition-duration	time
transition-property	none   all
transition-timing-function	ease   linear   ease-in   ease-out   ease-in-out   cubic-Bezier (number, number, number, number)

# Cascading Style Sheets (CSS 3)

GRID POSITIONING	
grid-columns	none   inherit [ length percentage relative length ]
grid-rows	none   inherit [ length percentage relative length ]
OUTLINE	
outline	outline-color outline-style outline-width
outline-color	color invert
outline-offset	inherit length
outline-style	None   dotted   dashed   solid   double   groove   ridge   inset   outset
outline-width	thin   medium   thick length
3D / 2D TRANSFORM	
backface-visibility	visible   hidden
perspective	none number
perspective-origin	[ [ [ percentage >   <length> ] left   center   right ] [ [ percentage >   <length> ] top   center   bottom ]? ] <length> ]   [ [ [ left   center   right ]   [ top   center   bottom ] ] [ [ left   center   right ]   [ top   center   bottom ] ] <length> ]
transform	none   matrix   matrix3d   translate3d   translateX   translateY   translateZ   scale   scale3d   scaleX   scaleY   scaleZ   rotate   rotate3d   rotateX   rotateY   rotateZ   skewX   skewY   skew   perspective
transform-origin	[ [ [ <percentage>   <length> ] left   center   right ] [ [ <percentage>   <length> ] top   center   bottom ]? ] <length> ]   [ [ [ left   center   right ]   [ top   center   bottom ] ] [ [ left   center   right ]   [ top   center   bottom ] ] <length> ]
transform-style	flat   preserve-3d
GENERATED CONTENT	
bookmark-label	content attr string
bookmark-level	none integer
bookmark-target	self uri attr
border-length	auto length
content	normal   none   inhibit uri
counter-increment	none identifier number
counter-reset	none identifier number
crop	auto shape
display	normal   none   list-item
float-offset	length length

GENERATED CONTENT	
hyphenate-after	auto integer
hyphenate-before	auto integer
hyphenate-character	auto string
hyphenate-lines	no-limit integer
hyphenate-resource	none uri
hyphens	none   manual   auto
image-resolution	normal   auto dpi
marks	[ crop   cross ]   none
move-to	normal   here identifier
page-policy	start   first   last
quotes	none string string string string
string-set	identifier content-list
text-replace	none [ <string> <string> ]+
LINE BOX	
alignment-adjust	auto   baseline   before-edge   text-before-edge   middle   central   after-edge   text-after-edge   ideographic   alphabetic   hanging   mathematical length %
alignment-baseline	baseline   use-script   before-edge   text-before-edge   after-edge   text-after-edge   central   middle   ideographic   alphabetic   hanging   mathematical
baseline-shift	baseline   sub   super length %
dominant-baseline	auto   use-script   no-change   reset-size   alphabetic   hanging   ideographic   mathematical   central   middle   text-after-edge   text-before-edge
drop-initial-after-align	alignment-baseline
drop-initial-after-adjust	central   middle   after-edge   text-after-edge   ideographic   alphabetic   mathematical length %
drop-initial-before-align	caps-height alignment-baseline
drop-initial-before-adjust	before-edge   text-before-edge   central   middle   hanging   mathematical length %
drop-initial-value	initial integer
drop-initial-size	auto integer % line
inline-box-align	initial   last integer

LINE BOX	
line-height	normal number length %
line-stacking	line-stacking-strategy line-stacking-ruby line-stacking-shift
line-stacking-strategy	inline-line-height   block-line-height   max-height   grid-height
line-stacking-ruby	exclude-ruby   include-ruby
line-stacking-shift	consider-shifts   disregard-shifts
text-height	auto   font-size   text-size   max-size
vertical-align	Baseline   sub   super   top   text-top   middle   bottom   text-bottom length %
HYPERLINK	
target	target-name target-new target-position
target-name	current   root   parent   new   modal string
target-new	window   tab   none
target-position	above   behind   front   back
POSITIONING	
bottom	auto % length
clip	shape auto
left	auto % length
position	static   relative   absolute   fixed
right	auto % length
top	auto % length
z-index	auto number
RUBY	
ruby-align	auto   start   left   center   end   right   distribute-letter   distribute-space   line-edge
ruby-overhang	auto   start   end   none
ruby-position	before   after   right   inline
ruby-span	attr(x)   none



# Cascading Style Sheets (CSS 3)

## PAGED MEDIA

<b>fit</b>	<i>fill</i>   <i>hidden</i>   <i>meet</i>   <i>slice</i>
<b>fit-position</b>	[ <i>top</i>   <i>center</i>   <i>bottom</i> ]    [ <i>left</i>   <i>center</i>   <i>right</i> ] <i>length</i> <i>%</i>
<b>image-orientation</b>	<i>auto</i> <i>angle</i>
<b>orphans</b>	<i>integer</i>
<b>page</b>	<i>auto</i> <i>identifier</i>
<b>page-break-after</b>	<i>auto</i>   <i>always</i>   <i>avoid</i>   <i>left</i>   <i>right</i>
<b>page-break-before</b>	<i>auto</i>   <i>always</i>   <i>avoid</i>   <i>left</i>   <i>right</i>
<b>page-break-inside</b>	<i>auto</i>   <i>avoid</i>
<b>size</b>	<i>auto</i>   <i>landscape</i>   <i>portrait</i> <i>length</i>
<b>windows</b>	<i>integer</i>

## UI

<b>appearance</b>	<i>normal</i>   <i>inherit</i>   [ <i>icon</i>   <i>window</i>   <i>desktop</i>   <i>workspace</i>   <i>document</i>   <i>tooltip</i>   <i>dialog</i>   <i>button</i>   <i>push-button</i>   <i>hyperlink</i>   <i>radio-button</i>   <i>checkbox</i>   <i>menu-item</i>   <i>tab</i>   <i>menu</i>   <i>menubar</i>   <i>pull-down-menu</i>   <i>pop-up-menu</i>   <i>list-menu</i>   <i>radio-group</i>   <i>checkbox-group</i>   <i>outline-tree</i>   <i>range</i>   <i>field</i>   <i>combo-box</i>   <i>signature</i>   <i>password</i> ]
<b>cursor</b>	<i>auto</i>   <i>crosshair</i>   <i>default</i>   <i>pointer</i>   <i>move</i>   <i>e-resize</i>   <i>ne-resize</i>   <i>nw-resize</i>   <i>n-resize</i>   <i>se-resize</i>   <i>sw-resize</i>   <i>s-resize</i>   <i>w-resize</i>   <i>text</i>   <i>wait</i>   <i>help</i> <i>url</i>
<b>icon</b>	<i>auto</i>   <i>inherit</i> <i>url</i>
<b>nav-index</b>	<i>auto</i>   <i>inherit</i> <i>number</i>
<b>nav-up</b>	<i>auto</i>   <i>inherit</i> < <i>id</i> > [ <i>current</i>   <i>root</i>   < <i>target-name</i> > ]
<b>nav-right</b>	<i>auto</i>   <i>inherit</i> < <i>id</i> > [ <i>current</i>   <i>root</i>   < <i>target-name</i> > ]
<b>nav-down</b>	<i>auto</i>   <i>inherit</i> < <i>id</i> > [ <i>current</i>   <i>root</i>   < <i>target-name</i> > ]
<b>nav-left</b>	<i>auto</i>   <i>inherit</i> < <i>id</i> > [ <i>current</i>   <i>root</i>   < <i>target-name</i> > ]
<b>resize</b>	<i>none</i>   <i>both</i>   <i>horizontal</i>   <i>vertical</i>   <i>inherit</i>

- Values in *italics* are place holders for an actual value (like 1px, 1em, 1%), values in normal text are values that can be used as the actual value
- CSS Properties in **Dark Red** are shorthand properties and each value must be defined. The exception is where the property can define from one to four of the sides of a box element property (Top-Right-Bottom-Left) - i.e. border-width

# Cascading Style Sheets (CSS 3)

## PSEUDO-CLASS

<b>:active</b>	an activated element
<b>:focus</b>	an element while the element has focus
<b>:visited</b>	a visited link
<b>:hover</b>	an element when you mouse over it
<b>:link</b>	an unvisited link
<b>:disabled</b>	an element while the element is disabled
<b>:enabled</b>	an element while the element is enabled
<b>:checked</b>	an element (form element control) that is checked
<b>:selection</b>	an element that is currently selected of highlighted by the user
<b>:lang</b>	Allows the author to specify a language to use in a specified element
<b>:nth-child(n)</b>	an element that is the n-th sibling
<b>:nth-last-child(n)</b>	an element that is the n-th sibling counting from the last sibling
<b>:first-child</b>	an element that is the first sibling
<b>:last-child</b>	an element that is the last sibling
<b>:only-child</b>	an element that is the only child
<b>:nth-of-type(n)</b>	an element that is the n-th sibling of its type.
<b>:nth-last-of-type(n)</b>	an element that is the n-th sibling of its type counting from the last sibling
<b>:last-of-type</b>	an element that is the first sibling of its type
<b>:first-of-type</b>	an element that is the last sibling of its type
<b>:only-of-type</b>	an element that is the only child of that type
<b>:empty</b>	an element that has no children
<b>:root</b>	root element within the document
<b>:not(x)</b>	an element not represented by the argument 'x'
<b>:target</b>	a target element as specified by a target in a URI

## PSEUDO-ELEMENT

<b>::first-letter</b>	Adds special style to the first letter of a text
<b>::first-line</b>	Adds special style to the first line of a text
<b>::before</b>	Inserts some content before an element
<b>::after</b>	Inserts some content after an element.

## UNITS

ABSOLUTE MEASUREMENT	
<b>%</b>	percentage
<b>cm</b>	centimeter
<b>in</b>	inch
<b>mm</b>	millimeter
<b>pc</b>	pica (1p = 12 points)
<b>pt</b>	point (1pt = 1/72 inch)
RELATIVE MEASUREMENT	
<b>ch</b>	width of the "0" glyph found in the font for the font size used to render
<b>em</b>	1em = current font size of current element
<b>ex</b>	x-height of the element's font
<b>gd</b>	the grid defined by 'layout-grid'
<b>px</b>	pixel of the viewing device
<b>rem</b>	the font size of the root element
<b>vh</b>	the viewport's height
<b>vw</b>	the viewport's width
<b>vm</b>	viewport's height or width, whichever is smaller of the two
ANGLES	
<b>deg</b>	degrees
<b>grad</b>	grads
<b>rad</b>	radians
<b>turn</b>	turns
TIME	
<b>ms</b>	milli-seconds
<b>s</b>	seconds
FREQUENCY	
<b>Hz</b>	hertz
<b>kHz</b>	kilo-hertz
COLORS	
<b>color name</b>	red, blue, green, dark green
<b>rgb(x,y,z)</b>	red = rgb(255,0,0)
<b>rgb(x%,y%,z%)</b>	red = rgb(100%,0,0)
<b>rgba(x,y,z, alpha)</b>	red = rgba(255,0,0)
<b>#rrggbb</b>	red = #ff0000 (or shorthand = #f00)
<b>hsl(hue, saturation, lightness)</b>	red = hsl(0, 100%, 50%)
<b>hsla(hue, saturation, lightness, alpha)</b>	red = hsl(0, 100%, 50%)
<b>flavor</b>	An accent color (typically chosen by the user) to customize the user interface of the user agent itself
<b>currentColor</b>	computed value of the 'currentColor' keyword is the computed value of the 'color' property

## SELECTOR TYPES

Name	Info	Example
<b>Universal</b>	Any element	* { font: 10px Arial; }
<b>Type</b>	Any element of that type	h1 { text-decoration: underline; }
<b>Grouping</b>	Multiple elements of different types	h1, h2, h3 { font-family: Verdana; }
<b>Class</b>	Multiple elements of different types when you don't want to affect all instances of that type	.sampleclass { text-decoration: underline; }
<b>Id</b>	A single element type when you don't want to affect all instances of that type	#sampleid { text-decoration: underline; }
<b>Descendant</b>	An element that is below (in the document tree) another element—no matter how many levels below	#gallery h1 { text-decoration: underline; }
<b>Child</b>	An element that is directly below (in the document tree) another element	#title > p { font-weight: bold; }
<b>Adjacent Sibling</b>	All elements that share the same parent and elements are in the same immediate sequence	h1 + p { font-style: italic; }
<b>General Sibling</b>	All elements that share the same parent and elements are in the same sequence (not necessarily immediate)	h1 ~ p { font-style: italic; }
<b>Attribute</b>	An element with that matches the attribute listed	E[selected] - att whatever the value E[att="val"] - att with a specific value E[rel~="next"] - att with a value is a whitespace separated list *[lang="en"] - att value either being exactly "val" or beginning with "val" immediately followed by "." E[att^="val"] - att value that begins with the prefix "val" E[att\$="val"] - att value that end with the suffix "val" E[att*="val"] - att value contains at least one instance of the substring "val"