

CSS3 WEB DESIGN

CHEAT SHEET

CSS SYNTAX, COLORS & UNITS



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C CSS Syntax

GENERAL SYNTAX

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

COMMENTS (ANNOTATIONS)

/* comment */

EXAMPLE /* IE sucks */

S CSS Selectors

SELECTORS & COMBINATORS

- # element with id="unique"
- . elements with class="c1"
- * all elements inside of div (universal)
- div inner div elements inside of div (descendant)
- > direct child of div (child)
- + adjacent elements (adjacent sibling)
- ~ siblings elements at same level (general sibling)

#unique

.c1

div *

div div

div > div

div + div

div ~ div

ATTRIBUTES

IGNORE CASE SENSITIVE

[attr]	elements with attr attribute present
[attr="val"]	elements with attr= attribute with value val
[attr~= "val"]	elements with attr~= that contains val "abc val xyz"
[attr = "es"]	elements with attr = that contains es-* "en-US es-ES"
[attr*= "val"]	elements with attr*= that includes val "equivalent-is-"
[attr^= "val"]	elements with attr^= that begins with val "value-is-..."
[attr\$= "val"]	elements with attr\$= that ends with val "in-interval"

PSEUDOCLASSES

:link	links that have not yet been visited
:visited	links that has been visited
:hover	user move mouse/pointer over element
:active	element is being activated by user
:focus	element has the focus (foreground)
:enabled	:disabled on/off input state
:checked	elements toggled "on" by user
:indeterminate	input on indeterminate state
:read-only	:read-write readonly input or modifiable
:placeholder-shown	inputs that shows placeholder at now
:default	default elements for form (input, option, ...)
:valid	:invalid userdata pass/not pass check validation
:in-range	:out-of-range userdata in range/out of range
:required	:optional elements required/optional for submit
:first-child	first child of group of elements ~ :nth-child(1)
:last-child	last child of group of elements ~ :nth-last-child(1)
:nth-child(n)	n th child of group of elements
:nth-last-child(n)	last n th child of group of elements
:only-child	unique child
~ :first-child:last-child	

:first-of-type	first child of same type
:last-of-type	last child of same type
:nth-of-type(n)	n th child of same type
:nth-last-of-type(n)	last n th child (same type)
:only-of-type	unique child (same type)

:root root element of the document

:empty element without contents

:not(x) not match by x selector

:target is the target of anchor URL

:lang(x) elements in x language

PSEUDOELEMENTS

::first-line first line of text element

::first-letter 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

COLOR EXAMPLE

RGB 237 + 63 + 0 = RGB(237, 63, 0)

HSL 11 + 255 + 119 = HSL(11, 255, 119)

COLOR MODELS

colorkey transparent currentColor

NUMERIC FORMAT

RGB(red , green , blue)

RGB(65, 106, 225)

red_hex green_hex blue_hex

#416AE1 short form: #46E

HSL(hue , saturation , lightness)

HSL(159, 185, 145)

WITH ALPHA CHANNEL

RGBA(red , green , blue , alpha)

RGBA(65, 106, 225, 0.5)

HSLA(hue , saturation , lightness , alpha)

HSLA(159, 185, 145, 1)

COLOR COMPONENTS

red green blue numeric value between [0 ... 255]



red_hex green_hex blue_hex hexadecimal value [00 ... FF]



hue numeric value (degrees) between [0 ... 360deg]



saturation lightness percentage values [0%...100%]

alpha number value between [0.0 ... 1.0]



V CSS Values & Units

IMPORTANT

property: value !important

EXAMPLE color:red!important;

RESETTING ALL PROPERTIES

all: initial inherit unset

COMMON VALUES

initial property's initial value

inherit computed value on parent

unset initial or inherit (depending)

MATHEMATICAL EXPRESSIONS

calc(value1 op value2 ...)

EXAMPLE calc(200px + 10%)

FONT-RELATIVE SIZES

em computed value on current

vw viewport width %

ex x-height of lowercase "x"

vh viewport height %

ch advance measure of "0" glyph

vmin smaller (vw or vh)

rem computed value on root elem

vmax larger (vw or vh)

ABSOLUTE SIZES

px pixels

deg degrees [0..360]

s seconds

cm centimeters

grad gradians [0..400]

ms millisecs

mm millimeters

rad radians [0..6.28]

turns [0.0..1.0]

Q quarter-mm

PERCENTAGES

value %

in inches

EXAMPLE 75%

pc picas

EXAMPLE calc(var(--size, 50px) * 2);

pt points

CUSTOM PROPERTIES (CSS VARIABLES)

DECLARING

USING

-- varname : value;

var(-- varname , fallback ...)

EXAMPLE --size: 100px;

EXAMPLE calc(var(--size, 50px) * 2);

M CSS Media Features

VIEWPORT SIZE

MIN MAX width

device-width

size

MIN MAX height

device-height

size

ASPECT RATIO

MIN MAX aspect-ratio

ratio

ratio

COLORS

MIN MAX color

color-index

number

OTHERS

MIN MAX monochrome

number

EXAMPLES

device-min-width: 640px

device-aspect-ratio: 16/9

max-color-index:256

min-resolution:300dpi

min-monochrome:2

grid:1

resolution

dpi/dpcm

orientation

portrait landscape

scan

progressive interface

grid

number

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F Fonts

FONTS (TYPOGRAPHY)

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

font-size: size %

ABS REL smaller larger

ABS REL 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 %

CUE

cue-before: none URL url(snd.mp3)

pause-after: 0 time %

cue-after: none URL url(snd.mp3)

pause: before after

cue: before after

MIXING/SPATIAL

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

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

RIGHT right-side far-right right center-right

behind leftwards rightwards

elevation: angle ABOVE 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

@ 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 } }

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B CSS Box Model

DIMENSIONS

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

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

MARGINS/PADDINGS

specific margins
margin-top: 0 | size | %
margin-right: 0 | size | %
margin-bottom: 0 | size | %
margin-left: 0 | size | %

specific paddings
padding-top: 0 | size | %
padding-right: 0 | size | %
padding-bottom: 0 | size | %
padding-left: 0 | size | %

MARGIN SHORTHAND

margin: top right bottom left
top left right bottom
top bottom left right
top right bottom left

PADDING SHORTHAND

padding: top right bottom left
top left right bottom
top bottom left right
top right bottom left

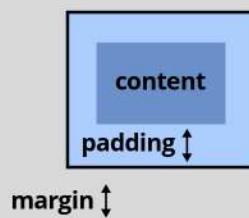
OVERFLOW/VISIBILITY

overflow-x: visible | hidden | scroll | auto | no-display | no-content
overflow-y: visible | hidden | scroll | auto | no-display | no-content
overflow: overflow-x | overflow-y
visibility: visible | hidden | collapse

BOX TYPES (DISPLAY)

display: inline | none | run-in
block
inline-block
list-item
list-item
table
table-cell
table-row
table-caption
grid
subgrid
flex
flex

CSS MODEL BOX



I CSS Images

GRADIENTS

LINEAR GRADIENTS

background-image: linear-gradient(direction color1 start , color2 start , ...)
repeating-linear-*

RADIAL GRADIENTS

background-image: radial-gradient(shape rsize at pos color1 start , color2 ...)
repeating-radial-*

GRADIENT OPTIONS

shape | rsize
circle | radius | at | pos ...
ellipse | rh | rv | at | pos ...

EXAMPLE (ellipse 55px 45px at top, red, blue)

RADIUS SIZE (RSIZE) ALSO ACCEPT...

closest-side | farthest-side
closest-corner | farthest-corner

IMAGES AND OBJECTS

sizing
object-fit: fill | contain | cover | none | scale-down
object-position: 50% 50% | background-position

IMAGE PROCESSING

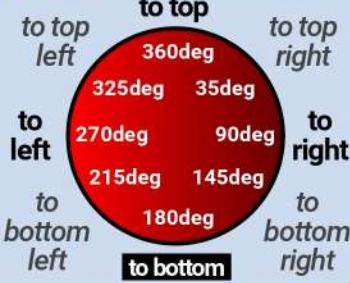
image-orientation: 0deg | size
image-resolution: 1dppx | from-image | resolution | snap
image-rendering: auto | crisp-edges | pixelated

START SIZE

size | %

repeating-linear-*

DIRECTION



B CSS Borders

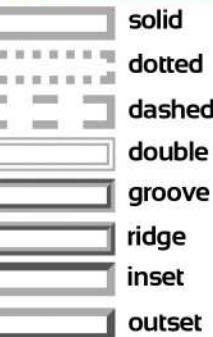
BORDERS

border-width: size | thin | medium | thick
border-style: none | border-style | hidden
border-color: currentColor | color

SPECIFIC SHORTHANDS

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

BORDER STYLES



B Rounded Corners

SPECIFIC CORNERS

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

2-PARAMETER FORMAT

size-h | size-v
1-PARAMETER
size-h = size-v
size-h | size-v

MAIN SHORTHAND

border-radius: top-left | top-right | bottom-right | bottom-left
top-left | top-right bottom-left | bottom-right
top-left bottom-right | top-right bottom-left
top-left top-right bottom-right bottom-left

MAIN SHORTHAND WITH HORIZONTAL/VERTICAL RADIUS

border-radius: border-radius / border-radius

BORDER IMAGE WIDTH

auto | size | number | %

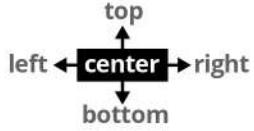


IMAGE SLICE
number | %

IMAGE OUTSET
number | size

B CSS Border Image

BORDER IMAGE

border-image-source: none | url(img.png)
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

REPEAT-STYLE PARAMETERS

repeat | space | round | no-repeat
EXAMPLE repeat no-repeat (or repeat-x)

LEVEL 2

background-color: transparent | color
background-image: none | url(image.png), url(image.jpg), ...
background-repeat: repeat | repeat-x | repeat-y | repeat-style
repeat repeat | repeat-style-h | repeat-style-v

background-attachment: scroll | fixed | local

background-position: pos-x | pos-y

background: color | image | repeat | attachment | position

LEVEL 3

background-clip: border-box | padding-box | content-box
background-origin: border-box | padding-box | content-box
background-size: auto | width | height | contain | cover
background: color | pos | size | repeat | origin | clip | attach | image
EFFECTS: SHADOWS
box-shadow: none | pos-x | pos-y | blur | size | color | inset

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F CSS Filters

FILTER PROPERTY

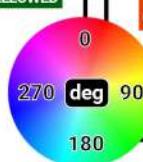
filter: none filter1 filter2 ...

FILTERS

blur(blur)	Opx = original >Opx=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

COMPOSING 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 '

PSEUDOCLASSES

::before before element

::after after element

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

MARKERS

::marker item's marker generated by list item (bullet, number...)

marker-side: list-item list-container

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

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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	cubic-bezier()	
s f s	ease	(0.25, 0.1, 0.25, 1)
n n n	linear	(0.00, 0.0, 1.00, 1)
s n n	ease-in	(0.42, 0.0, 1.00, 1)
n n s	ease-out	(0.00, 0.0, 0.58, 1)
s n s	ease-in-out	(0.42, 0.0, 0.58, 1)

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

A 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: name | duration | t-function | delay | it-c | dir | f-m | p-s

CHAINED (ANIMATION PROPERTY)

animname1	5s	linear	,
animname2	5s	linear	5s,
animname3	6s	linear	10s;

ANIMATION KEYFRAMES

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

@-vendor-keyframes

M CSS Motion Paths

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/SNAPPOT

scroll-padding*: →
scroll-snap-margin*: →

AXIS

none | start | center | end

EXAMPLE scroll-snap-align: start end

SCROLL SNAPPING/SNAPPOT

SNAP MARGIN/PADDING

*-top: 0 | size | %
 *-right: 0 | size | %
 *-bottom: 0 | size | %
 *-left: 0 | size | %

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)

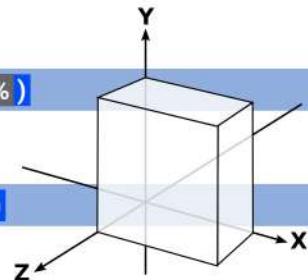
transform: scale(number , number)

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

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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

OVERFLOW POSITION

safe | unsafe

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

BASELINE-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

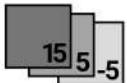
POSITIONING

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