

CSS Selectors

Selector	Target	Example
Element Selector	Select a HTML element.	<code>p { CSS Code Here }</code>
Id Selector	Select HTML element by ID	<code># { CSS Code Here }</code>
Class Selector	Select HTML element by Class	<code>. { CSS Code Here }</code>
Element + Class Selector	Select elements marked with a specific Class	<code>p.par1 { CSS Code Here }</code>
Universal Selector	Select every element in a HTML file	<code>* { CSS Code Here }</code>
Grouping Selector	Select multiple elements at once	<code>h1,p,tr { CSS Code Here }</code>

Adding CSS Into HTML

Option	Example Code
External CSS	<code><link rel="stylesheet" href="mystyle.css"></code>
Internal CSS	<code><style>{ CSS Code Here}</style></code>
Inline CSS	<code><p style="color: red;">This is a paragraph.</p></code>

Note that the order of preference for selecting which CSS to run is: Inline Style has highest priority, then External and Internal Styles, and finally browser default styles.

CSS Borders

Property	Example Values	Effects
<code>border-style</code>	dotted, dashed, solid, double, groove, ridge, inset, outset, none, hidden	Kind of border to display. Values can be combined
<code>border-width</code>	medium, thick, 2px, 2in ...	Specify width of the four borders
<code>border-color</code>	RGB, names, HSL, HEX...	Color of the borders
<code>border-{side}-{property}</code>		Specify a border-property for a specific side
Use Case <code>border-radius</code>	2px, 10px ...	How much the border corners should be rounded
Link to an external CSS file <code>border-spacing</code>	20px, 30px (horizontal then vertical space) ...	Set space between cells of table
Add CSS to the <thead> section of your HTML file <code>border-collapse</code>	collapse, separate	Whether borders of table cells should be joint or not
Add CSS directly into a HTML element <code>border-color</code>		Note that none of the other border properties will work without specifying a <code>border-style</code> first. If <code>border-color</code> is not set, it inherits the color of the parent.
To set border-{property} for specific sides do: <code>border-{property}: {top} {right} {bottom} {left}</code> or <code>border-{property}: {top&bottom} {right&left}</code> or <code>border-{property}: {top} {right&left} {bottom}</code>		
Border shorthand is <code>border: {width} {style} {color}</code> .		
<code>border-collapse</code> can be used with <code>border-spacing</code> to style tables.		

CSS Margins

Property	Use Case
<code>margin-{individual-side}</code>	Which border sides do you want to add margin to

Margin is the space around the border of an element. Available sides are **top**, **bottom**, **left**, **right**.

Margin values should be in **px**. `margin: auto` means horizontally center the element within its container, and `margin: inherit` means inherit margin from parent element.

Shorthand `margin` applies margin values to all four sides of a border.

When two margins border each other, they **collapse** into one, the largest one. (Only for top and bottom margins)

CSS Padding

Property	Use Case
<code>padding-{individual-side}</code>	Which border side do you want to add padding to

Padding is the distance between an element and its border. Values can be in **length** e.g `2px`, **%** (percentage of the width of the containing element), or **inherit** (from parent element).

You can use the shorthand `padding` to set padding on all sides.

If an element has a specified width, adding padding will add to the initial width.

CSS Outlines

CSS Color Options

Option	?	Example
Color names	Use the exact color name	red, green, blue etc.
RGB (Red Green Blue)	Use RGB values to produce a color	<code>rgb(255, 255, 255)</code> produces white

CSS Color Options (cont)

RGBA (Red Green Blue Alpha)	Use RGB with an opacity (alpha)	<code>rgba(123, 45, 67, 0.4)</code> produces a color that 40% transparent
HEX	Use hexadecimal values to produce colors	<code>#ffffff</code> produces white
HSL (Hue Saturation Light)	Use HSL to produce colors	<code>hsl(120, 50%, 100%)</code> produces a 50% green color
HSLA (Hue Saturation Light Alpha)	Use HSL with opacity (alpha)	<code>hsla(120, 50%, 100%, 0.4)</code> produces a 50% green color that's 40% opaque

CSS Width, Max-Width, and Height

Property	Example Values	Use Case
<code>height</code>	auto, length, initial, inherit, 2%,	Set the height of an element
<code>width</code>	auto, length, initial, inherit, 2%,	Set the width of an element



CSS Width, Max-Width, and Height (cont)

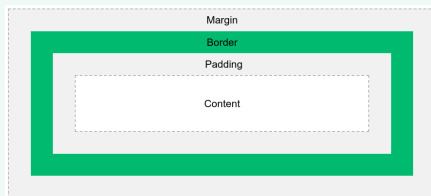
`max-width` "...", `no` Set the maximum width of an element

auto means the computer will calculate the heights and widths for you. **Initial** means default value. **Inherit** means get values from parent element.

For `width`, use the % so that it can be scaled as a percentage of the parent width. **max-width** allows the browser to better handle horizontal scrollbars when the available view port width becomes smaller than, say, the size of a `div`.

When using `max-width`, don't give an element a `width`. The latter overrides the former.

CSS Box Model



Every HTML element has layers around it, which we call a **box**.

Content is what's in the layers e.g text. **Padding** is transparent area around the content. **Border** is area enclosing content and padding.

Margin is transparent area around the border.

Setting the `width` and `height` of an element with CSS, just sets the width and height of the content area. To calculate the full size of an element, you must also add `padding`, `borders` and `margins`.

CSS Backgrounds

Property	Example Values	Effects
<code>background-color</code>	<code>red</code> , <code>rgba(0, 123, 45, 0.6)</code> , <code>hsl(65, 34%, 100%)</code>	Color for the background
<code>opacity</code>	0.0 (0% opaque), 1.0 (100% opaque)	Opacity for the background color

CSS Backgrounds (cont)

<code>background-image</code>	<code>url("{ link to image }")</code>	Background image for your page
<code>background-repeat</code>	<code>repeat-x</code> (horizontally), <code>repeat-y</code> (vertically), <code>no-repeat</code>	Image should be repeated/ no image repetition
<code>background-position</code>	<code>top</code> , <code>bottom</code> , <code>left</code> , <code>right</code> , <code>center</code> , <code>bottom left</code> , <code>0px</code> (offset from position)	Position of the background image
<code>background-attachment</code>	<code>fixed</code> , <code>scroll</code>	Image should scroll with the page or not
<code>background-size</code>	<code>100%</code> (100% of available screen width)	Size of the background image
<code>background-clip</code>	<code>border-box</code> , <code>padding-box</code> , <code>content-box</code>	How far the background (image or color) should extend within an element
<code>background-origin</code>	<code>border-box</code> , <code>padding-box</code> , <code>content-box</code>	Origin position of a background image

NOTE that the `background-{property}` properties can be combined into one shorthand like this:

`background: {-color} {-image} {-repeat} {-attachment} {-position};`

For `background-clip`, **border-box** makes background to extend beyond the border, **padding-box**, background extends to the inside edge of the border, **content-box**, background extends to the edge of the content box e.g around a paragraph. With `background-origin`, it's the same dimensions.

