

Notite CSS

(W3Schools Source)

- CSS Selectors

To select an element with a specific id, write a hash (#) character, followed by the id of the element:

```
#para1 {  
  text-align: center;  
  color: red;  
}
```

To select elements with a specific class, write a period (.) character, followed by the class name:

```
.center {  
  text-align: center;  
  color: red;  
}
```

You can also specify that only specific HTML elements should be affected by a class:

```
p.center {  
  text-align: center;  
  color: red;  
}
```

The universal selector (*) selects all HTML elements on the page.

To group selectors, separate each selector with a comma:

```
h1, h2, p {  
  text-align: center;  
  color: red;  
}
```

Selector	Example	Example description
<u>#id</u>	#firstname	Selects the element with id="firstname"
<u>.class</u>	.intro	Selects all elements with class="intro"
<u>element.class</u>	p.intro	Selects only <p> elements with class="intro"
<u>*</u>	*	Selects all elements
<u>element</u>	p	Selects all <p> elements
<u>element,element,...</u>	div, p	Selects all <div> elements and all <p> elements

External style: another file .css

Internal style: using <style></style> tag

Inline style: write style as attribute:

```
<h1 style="color:blue;text-align:center;">Sall</h1>
```

• CSS Colors

Ways to set background colors (Tomato color):

```
<h1 style="background-color:rgb(255, 99, 71);">...</h1>
```

```
<h1 style="background-color:#ff6347;">...</h1>
```

```
<h1 style="background-color:hsl(9, 100%, 64%;">...</h1>
```

```
<h1 style="background-color:rgba(255, 99, 71, 0.5);">...</h1>
```

```
<h1 style="background-color:hsla(9, 100%, 64%, 0.5);">...</h1>
```

hsl(hue, saturation, lightness): hue - a degree from 0 to 360

saturation - a percentage value: 0% - gray

100% - full color

lightness - 0% - black, 100% - white

alpha (for hsla) - from 0.0 to 1.0: 0.0 - transparent

• CSS Backgrounds

To set the background image repeat only horizontally:

```
background-image: url("gradient_bg.png");
```

```
background-repeat: repeat-x; // or repeat-y; no repeat;
```

```
background-position: right top;
```

```
background-attachment: fixed; //or scroll;
```

repeat - there also exist repeat-y and no-repeat

position - also we can set the position where the image will be displayed

attachment - the image remains fixed in the window even if we scroll

If we want to shorten the code, the following line is equivalent to the 4 lines from above:

```
background: url("gradient_bg.png") repeat-x right top fixed;
```

background-clip and background-origin have border-box, padding-box, content-box attributes.

// these are used to position the image somewhere in the window.

Value	Description	Demo
border-box	Default value. The background extends behind the border	Demo >
padding-box	The background extends to the inside edge of the border	Demo >
content-box	The background extends to the edge of the content box	Demo >
initial	Sets this property to its default value. Read about <i>initial</i>	
inherit	Inherits this property from its parent element. Read about <i>inherit</i>	

• CSS Borders

```
p.dotted {border-style: dotted;}
p.dashed {border-style: dashed;}
p.solid {border-style: solid;}
p.double {border-style: double;}
p.groove {border-style: groove;}
p.ridge {border-style: ridge;}
p.inset {border-style: inset;}
p.outset {border-style: outset;}
p.none {border-style: none;}
p.hidden {border-style: hidden;}
p.mix {border-style: dotted dashed solid double;}
```

A dotted border.

A dashed border.

A solid border.

A double border.

A groove border. The effect depends on the border-color value.

A ridge border. The effect depends on the border-color value.

An inset border. The effect depends on the border-color value.

An outset border. The effect depends on the border-color value.

No border.

A hidden border.

A mixed border.

There exist also `border-left-style`, `border-top-style`...

```
border-width: 25px 10px 4px 35px; /* 25px top, 10px right, 4px
bottom and 35px left */
border-width: 20px 5px; /* 20px top and bottom, 5px on the sides
*/
```

```
border-color: red green blue yellow; /* red top, green right,
blue bottom and yellow left */
```

```
border-radius: 5px; //to add rounded borders
```

- CSS Margins

Property	Description
margin	A shorthand property for setting all the margin properties in one declaration
margin-bottom	Sets the bottom margin of an element
margin-left	Sets the left margin of an element
margin-right	Sets the right margin of an element
margin-top	Sets the top margin of an element

The margin-bottom and margin-top collapse, meaning if margin-bottom for the first element is 50px and margin-top for the second element is 20px, the margin will be 50px, not 70px (Works just for bottom and top).

margin:... values:

Value	Description	Demo
<i>length</i>	Specifies a margin in px, pt, cm, etc. Default value is 0. Negative values are allowed. Read about length units	Demo >
%	Specifies a margin in percent of the width of the containing element	Demo >
auto	The browser calculates a margin	Demo >
initial	Sets this property to its default value. Read about initial	
inherit	Inherits this property from its parent element. Read about inherit	

- CSS Padding

When we use width and padding at the same time, the px values add up, which is often undesirable. To avoid this, you can use `box-sizing` property:

```
div {
  width: 300px;
  padding: 25px;
  box-sizing: border-box;
}
```

undesirable result:

Padding and element width

This div is 300px wide.

The width of this div is 350px, even though it

desirable result:

Padding and element width - with box-sizing

This div is 300px wide.

The width of this div remains at 300px, in spite of the 50px of total left padding. If the box-sizing property is not set, the width of the element is the width of the content plus the padding.

- CSS Height/Width

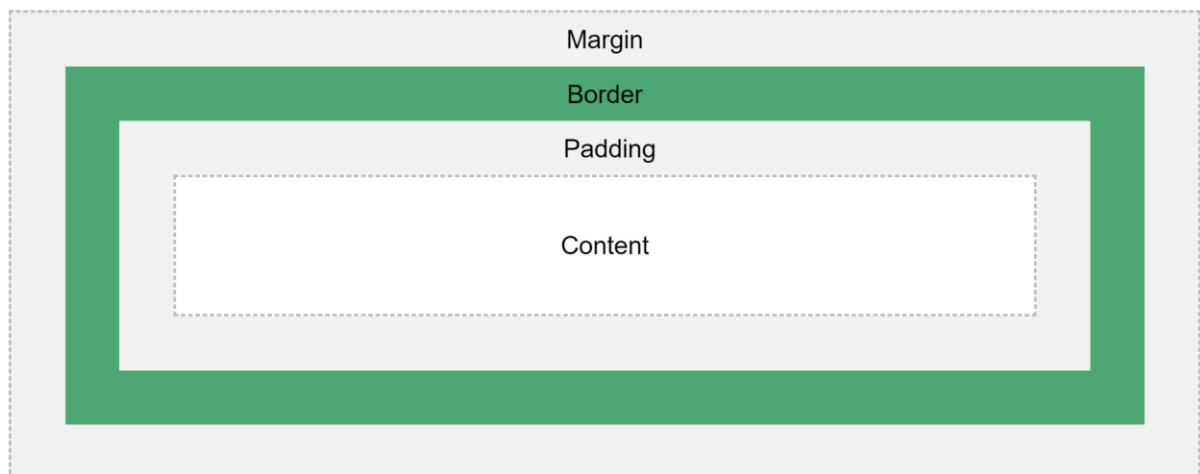
The CSS `height` and `width` properties are used to set the height and width of an element.

The CSS `max-width` property is used to set the maximum width of an element.

The `height` and `width` properties may have the following values:

- `auto` - This is default. The browser calculates the height and width
- `length` - Defines the height/width in px, cm, etc.
- `%` - Defines the height/width in percent of the containing block
- `initial` - Sets the height/width to its default value
- `inherit` - The height/width will be inherited from its parent value

- CSS Box Model



- CSS Outline

An outline is a line drawn outside the element's border.

It may overlap other content, because it is not part of the element's dimensions.

The `outline-style` property can have all the values from "CSS Borders" section. Also, it has all the other properties that borders have (and their values). Only `outline-offset` is new!

Property	Description
<code>outline</code>	A shorthand property for setting <code>outline-width</code> , <code>outline-style</code> , and <code>outline-color</code> in one declaration
<code>outline-color</code>	Sets the color of an outline
<code>outline-offset</code>	Specifies the space between an outline and the edge or border of an element
<code>outline-style</code>	Sets the style of an outline
<code>outline-width</code>	Sets the width of an outline

- CSS Text

`direction` property - sets the text direction (values are: `rtl`, `ltr`)

`unicode-bidi` property - sets the text direction (values are: `bidi-override`)

For some reason, they must be used together in order to work.

Property	Description
<code>direction</code>	Specifies the text direction/writing direction
<code>text-align</code>	Specifies the horizontal alignment of text
<code>text-align-last</code>	Specifies how to align the last line of a text
<code>unicode-bidi</code>	Used together with the <code>direction</code> property to set or return whether the text should be overridden to support multiple languages in the same document
<code>vertical-align</code>	Sets the vertical alignment of an element

`vertical-align` values are: `baseline`, `text-top`, `text-bottom`, `sub`, `super`.

`text-decoration-line` values are: `overline`, `line-through`, `underline`:

Overline text decoration

~~Line-through text decoration~~

Underline text decoration

Overline and underline text decoration.

Also you can specify a color to the decoration line using `text-decoration-color` property and specify a style for it using `text-decoration-style` property and set the thickness using `text-decoration-thickness` property (values in px).

Property	Description
<code>text-decoration</code>	Sets all the text-decoration properties in one declaration
<code>text-decoration-color</code>	Specifies the color of the text-decoration
<code>text-decoration-line</code>	Specifies the kind of text decoration to be used (underline, overline, etc.)
<code>text-decoration-style</code>	Specifies the style of the text decoration (solid, dotted, etc.)
<code>text-decoration-thickness</code>	Specifies the thickness of the text decoration line

`text-decoration-color` - specify a color to the decoration line

`text-decoration-style` - specify a style for the decoration line

`text-decoration-thickness` - set the thickness (its values are in px)

`text-transform` - transform the text into "uppercase", "lowercase", "capitalize" (these are the values ^_^)

`text-indent` - specify the indentation of the first line of a text (in px)

`letter-spacing` - specify the space between the characters in a text (in px; works with negative numbers!)

`line-height` - specify the space between lines (ex. values: 0.8, 1.8, etc.)

`word-spacing` - specify the space between the words in a text (in px; works with negative numbers!)

`white-space` - specify how the white-space inside an element is handled. The values are:

Value	Description	Demo
normal	Sequences of whitespace will collapse into a single whitespace. Text will wrap when necessary. This is default	Demo >
nowrap	Sequences of whitespace will collapse into a single whitespace. Text will never wrap to the next line. The text continues on the same line until a tag is encountered	Demo >
pre	Whitespace is preserved by the browser. Text will only wrap on line breaks. Acts like the <pre> tag in HTML	Demo >
pre-line	Sequences of whitespace will collapse into a single whitespace. Text will wrap when necessary, and on line breaks	Demo >
pre-wrap	Whitespace is preserved by the browser. Text will wrap when necessary, and on line breaks	Demo >
initial	Sets this property to its default value. Read about <i>initial</i>	
inherit	Inherits this property from its parent element. Read about <i>inherit</i>	

Property	Description
letter-spacing	Specifies the space between characters in a text
line-height	Specifies the line height
text-indent	Specifies the indentation of the first line in a text-block
white-space	Specifies how to handle white-space inside an element
word-spacing	Specifies the space between words in a text

`text-shadow` - adds shadows to text (values in px, you specify the horizontal shadow and the vertical shadow): `text-shadow: 2px 2px 5px red;`
The third value is the blur.

- **CSS Fonts**

`font-family` - specify the font of a text

It is a good practice to write more fonts in case the first fonts are not available: `font-family: Tahoma, Verdana, sans-serif;`

`font-style` - used to specify italic text (values are: normal, italic, oblique (less supported))

`font-weight` - used to apply bold to a text (values are: normal, bold)

`font-variant` - used to apply small-caps or not (values are: normal, small-caps)

`font-size` - apply size to text (values are: px, %, em - for allowing users to resize the text (1 em = 16px), vw - for resizing the text according to the size of the window)

Good To Know:

Georgia font - good for headings

Verdana font - good for paragraphs

You can use all the properties in one like this:

`font: italic small-caps bold 12px/30px Georgia, serif;`

Property	Description
<code>font</code>	Sets all the font properties in one declaration
<code>font-family</code>	Specifies the font family for text
<code>font-size</code>	Specifies the font size of text
<code>font-style</code>	Specifies the font style for text
<code>font-variant</code>	Specifies whether or not a text should be displayed in a small-caps font
<code>font-weight</code>	Specifies the weight of a font

• CSS Links

```
/* unvisited link */
a:link {
  color: red;
}
```

```
/* visited link */
a:visited {
  color: green;
}
```

```
/* mouse over link */
a:hover {
  color: hotpink;
}
```

```
/* selected link */
a:active {
```



```
color: blue;  
}
```

a:hover MUST come after a:link and a:visited
a:active MUST come after a:hover

Funny Feature:

This example demonstrates different types of cursors:

```
<span style="cursor: auto">auto</span><br>  
<span style="cursor: crosshair">crosshair</span><br>  
<span style="cursor: default">default</span><br>  
<span style="cursor: e-resize">e-resize</span><br>  
<span style="cursor: help">help</span><br>  
<span style="cursor: move">move</span><br>  
<span style="cursor: n-resize">n-resize</span><br>  
<span style="cursor: ne-resize">ne-resize</span><br>  
<span style="cursor: nw-resize">nw-resize</span><br>  
<span style="cursor: pointer">pointer</span><br>  
<span style="cursor: progress">progress</span><br>  
<span style="cursor: s-resize">s-resize</span><br>  
<span style="cursor: se-resize">se-resize</span><br>  
<span style="cursor: sw-resize">sw-resize</span><br>  
<span style="cursor: text">text</span><br>  
<span style="cursor: w-resize">w-resize</span><br>  
<span style="cursor: wait">wait</span>
```