

A. COLOR PROPERTIES

- **color:** Sets the color of text (*note: TEXT ONLY, not background*)

```
body {
    color: red;
}

h1 {
    color: #00ff00;
}

p {
    color: rgb(0,0,255);
}
```

- **opacity:** Sets the opacity level for an element

Style:

```
div {
    background-color: red;
    opacity: 0.5;
    filter: Alpha(opacity=50); /* IE8 and earlier */
}
```

HTML:

```
<div>This element's opacity is 0.5! Note that both the text and the
background-color are affected by the opacity level!</div>
```

Note: When using the opacity property to add transparency to the background of an element, all of its child elements become transparent as well. This can make the text inside a fully transparent element hard to read. If you do not want to apply opacity to child elements, use RGBA color values instead (See example below).

Style:

```
div {
    background: rgb(76, 175, 80);
    padding: 10px;
}

div.first {
    background: rgba(76, 175, 80, 0.1);
}

div.second {
    background: rgba(76, 175, 80, 0.3);
}

div.third {
    background: rgba(76, 175, 80, 0.6);
}
```

HTML:

```
<h1>Transparent Box</h1>
<p>With opacity:</p>
<div style="opacity:0.1;"><p>10% opacity</p></div>
<div style="opacity:0.3;"><p>30% opacity</p></div>
<div style="opacity:0.6;"><p>60% opacity</p></div>
<div><p>opacity 1</p></div>

<p>With RGBA color values:</p>
<div class="first"><p>10% opacity</p></div>
<div class="second"><p>30% opacity</p></div>
<div class="third"><p>60% opacity</p></div>
<div><p>default</p></div>
```

<p>Notice how the text gets transparent as well as the background color when using the opacity property.</p>

B. TEXT PROPERTIES

- **letter-spacing:** Increases or decreases the space between characters in a text

```
h1 {
  letter-spacing: 2px;
}

h2 {
  letter-spacing: -3px;
}
```

- **line-height:** Sets the line height

*Style:*

```
p.small {
  line-height: 70%;
}

p.big {
  line-height: 200%;
}
```

*HTML:*

```
<p>
This is a paragraph with a standard line-height.<br>
This is a paragraph with a standard line-height.<br>
The default line height in most browsers is about 110% to 120%.<br>
</p>

<p class="small">
This is a paragraph with a smaller line-height.<br>
This is a paragraph with a smaller line-height.<br>
This is a paragraph with a smaller line-height.<br>
This is a paragraph with a smaller line-height.<br>
</p>

<p class="big">
This is a paragraph with a bigger line-height.<br>
This is a paragraph with a bigger line-height.<br>
This is a paragraph with a bigger line-height.<br>
This is a paragraph with a bigger line-height.<br>
</p>
```

- **text-align:** Specifies the horizontal alignment of text

```
h1 {
  text-align: center;
}

h2 {
  text-align: left;
}

h3 {
  text-align: right;
}

p {
  text-align: justify;
}
```

- **text-indent:** Specifies the indentation of the first line in a text-block

```
p {
  text-indent: 50px;
}
```

- **text-transform:** Controls the capitalization of text

```
p.uppercase {
  text-transform: uppercase;
}

p.lowercase {
  text-transform: lowercase;
}

p.capitalize {
  text-transform: capitalize;
}
```

- **white-space:** Specifies how white-space inside an element is handled

```
p {
  white-space: normal | nowrap | pre | pre-line | pre-wrap
}
```

Note:

- *Normal - Sequences of whitespace will collapse into a single whitespace. Text will wrap when necessary. This is default*
- *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 <br> tag is encountered*
- *Pre - Whitespace is preserved by the browser. Text will only wrap on line breaks. Acts like the <pre> tag in HTML*
- *Pre-line - Sequences of whitespace will collapse into a single whitespace. Text will wrap when necessary, and on line breaks*
- *Pre-wrap - Whitespace is preserved by the browser. Text will wrap when necessary, and on line breaks*

- **word-spacing:** Increases or decreases the space between words in a text

```
p {
  word-spacing: 30px;
}
```

- **text-decoration:** Specifies the decoration added to text

```
h1 {
  text-decoration: overline;
}

h2 {
  text-decoration: line-through;
}

h3 {
  text-decoration: underline;
}
```

- **text-shadow:** Adds shadow to text

```
h1 {
  text-shadow: 2px 2px 10px #ff0000; /* /h-shadow, v-shadow, blur-radius, color */
}
```

C. FONT PROPERTIES

- **font-family:** Specifies the font family for text

```
p {
  font-family: "Times New Roman", Georgia, Serif;
}
```

Note:  
*The font-family property specifies the font for an element.*

*The font-family property can hold several font names as a "fallback" system. If the browser does not support the first font, it tries the next font.*

*There are two types of font family names:*

*> family-name - The name of a font-family, like "times", "courier", "arial", etc.  
> generic-family - The name of a generic-family, like "serif", "sans-serif", "cursive", "fantasy", "monospace".  
Start with the font you want, and always end with a generic family, to let the browser pick a similar font in the generic family, if no other fonts are available.*

*Separate each value with a comma.*

*If a font name contains white-space, it must be quoted. Single quotes must be used when using the "style" attribute in HTML.*

- **font-size:** Specifies the font size of text

```
h1 {
  font-size: 12px;
}

h2 {
  font-size: 200%;
}

p {
  font-size: medium;
}
```

*// Other possible values:  
medium | xx-small | x-small | small | large | x-large | xx-large | smaller | larger | **length***

- **font-style:** Specifies the font style for text

```
p.normal {
  font-style: normal;
}

p.italic {
  font-style: italic;
}

p.oblique {
  font-style: oblique;
}
```

- **font-weight:** Specifies the weight of a font

```
p.normal {
  font-weight: bold; //other possible values: normal | bold | bolder | lighter | number
}
```

- **font-face:** A rule that allows websites to download and use fonts other than the "web-safe" fonts

*Style:*

```
@font-face {
  font-family: myFirstFont;
  src: url(sansation_light.woff);
}
```

```
div {
  font-family: myFirstFont;
}
```

*HTML:*

```
<div>With CSS3, websites can finally use fonts other than the pre selected
"web-safe" fonts.</div>
```

```
<p><b>Note:</b> Internet Explorer 8 and earlier, do not support the @font-face
rule with the WOFF format (only support for EOT format).</p>
```

- **font:** Sets all the font properties in one declaration

```
p.ex1 {
  font: 15px arial, sans-serif;
}
```

```
p.ex2 {
  font: italic bold 12px/30px Georgia, serif;
}
```

*Note:*

*The font shorthand property sets all the font properties in one declaration.*

*The properties that can be set, are (in order): "font-style font-variant font-weight font-size/line-height font-family"*

*The font-size and font-family values are required. If one of the other values are missing, the default values will be inserted, if any.*

## D. LIST PROPERTIES

- **list-style-type:** Specifies the type of list-item marker

```
ul.a {list-style-type: circle;}
ul.b {list-style-type: disc;}
ul.c {list-style-type: square;}
```

```
ol.n {list-style-type: lower-alpha;}
ol.o {list-style-type: lower-greek;}
ol.p {list-style-type: lower-latin;}
ol.q {list-style-type: lower-roman;}
ol.r {list-style-type: upper-alpha;}
ol.s {list-style-type: upper-latin;}
ol.t {list-style-type: upper-roman;}
```

## E. BACKGROUND PROPERTIES

- **background-color:** Specifies the background color of an element

```
body {
  background-color: yellow;
}
```

```
h1 {
  background-color: #00ff00;
}
```

```
p { background-color: rgb(255,0,255);
```

- **background-image:** Specifies one or more background images for an element

```
background-image: url("paper.gif");
background-color: #cccccc;
```

Note:

*The background of an element is the total size of the element, including padding and border (but not the margin).*

*By default, a background-image is placed at the top-left corner of an element, and repeated both vertically and horizontally.*

*Tip: Always set a background-color to be used if the image is unavailable.*

- **background-attachment:** Sets whether a background image is fixed or scrolls with the rest of the page

```
background-image: url('image.jpg');
background-attachment: scroll | fixed;
```

- **background-position:** Specifies the position of a background image

```
background-image: url('image.jpg');
background-position: left top | left center | left bottom | right top | right center |
                    right bottom | center top | center center | center bottom
```

Note:

*If you only specify one keyword, the other value will be "center"*

- **background-repeat** - Sets how a background image will be repeated

```
background-image: url('image.jpg');
background-repeat: repeat | repeat-x | repeat-y | no-repeat
```

- **background-size:** Specifies the size of the background image(s)

```
background: url(img_flwr.gif);
background-size: 80px 60px;
```

// Other possible values:

- Auto - Default value. The background-image contains its width and height
- Length - Sets the width and height of the background image. The first value sets the width, the second value sets the height. If only one value is given, the second is set to "auto"
- Percentage - Sets the width and height of the background image in percent of the parent element. The first value sets the width, the second value sets the height. If only one value is given, the second is set to "auto"
- Cover - Scale the background image to be as large as possible so that the background area is completely covered by the background image. Some parts of the background image may not be in view within the background positioning area
- Contain - Scale the image to the largest size such that both its width and its height can fit inside the content area

- **background:** A shorthand property for setting all the background properties in one declaration

```
background: #00ff00 url("smiley.gif") no-repeat fixed center;
```

Note:

*The properties that can be set, are: background-color, background-image, background-position, background-size, background-repeat, background-origin, background-clip, and background-attachment.*

*It does not matter if one of the values above are missing, e.g. background:#ff0000 url(smiley.gif); is allowed.*

## F. BORDER PROPERTIES

- **border-style:** Sets the style of the four borders

border-style: none | hidden | dotted | dashed | solid | double | groove | ridge | inset | outset | solid;

- **border-width:** Sets the width of the four borders

border-style: solid;  
border-width: medium | thin | thick | *length*

- **border-color:** Sets the color of the four borders

border-style: solid;  
border-color: #ff0000 #0000ff;

Possible combinations of values:

- border-color:red green blue pink;
  - top border is red
  - right border is green
  - bottom border is blue
  - left border is pink
- border-color:red green blue;
  - top border is red
  - right and left borders are green
  - bottom border is blue
- border-color:red green;
  - top and bottom borders are red
  - right and left borders are green
- border-color:red;
  - all four borders are red

- **border** - Sets all the border properties in one declaration

border: 5px solid red;

*Note:*

*The properties that can be set, are (in order): border-width, border-style, and border-color.*

*It does not matter if one of the values above are missing, e.g. border:solid #ff0000; is allowed.*

- **border-radius:** A shorthand property for setting all the four border-\*-radius properties

border: 2px solid;  
border-radius: 25px;

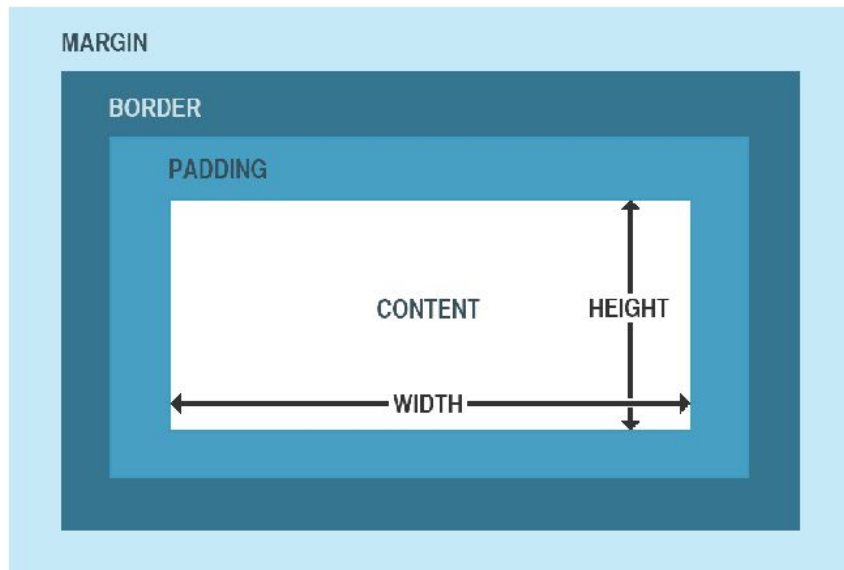
*Note:*

*If you specify only one value for the border-radius property, this radius will be applied to all 4 corners.*

*However, you can specify each corner separately if you wish. Here are the rules:*

- *Four values: first value applies to top-left, second value applies to top-right, third value applies to bottom-right, and fourth value applies to bottom-left corner*
- *Three values: first value applies to top-left, second value applies to top-right and bottom-left, and third value applies to bottom-right*
- *Two values: first value applies to top-left and bottom-right corner, and the second value applies to top-right and bottom-left corner*
- *One value: all four corners are rounded equally*

## G. BASIC BOX PROPERTIES



- **height:** Sets the height of an element

height: auto | length

- **width:** Sets the width of an element

height: auto | length

- **padding:** Sets all the padding properties in one declaration

```
p {
  padding: 2cm 4cm 3cm 4cm;
}
```

Note:

- *padding:10px 5px 15px 20px;*
    - *top padding is 10px*
    - *right padding is 5px*
    - *bottom padding is 15px*
    - *left padding is 20px*
  - *padding:10px 5px 15px;*
    - *top padding is 10px*
    - *right and left padding are 5px*
    - *bottom padding is 15px*
  - *padding:10px 5px;*
    - *top and bottom padding are 10px*
    - *right and left padding are 5px*
  - *padding:10px;*
    - *all four paddings are 10px*
- **margin** - Sets all the margin properties in one declaration

```
p {
  padding: 2cm 4cm 3cm 4cm;
}
```

Note:

*\*the same rules as above (padding)\**

- **box-shadow:** Attaches one or more drop-shadows to the box



box-shadow: none | h-shadow v-shadow blur spread color | inset

box-shadow: 10px 10px 5px #888888;

Note:

- *None - Default value. No shadow is displayed*
  - *H-shadow - Required. The position of the horizontal shadow. Negative values are allowed*
  - *v-shadow - Required. The position of the vertical shadow. Negative values are allowed*
  - *Blur - Optional. The blur distance*
  - *Spread - Optional. The size of shadow. Negative values are allowed*
  - *Color - Optional. The color of the shadow. The default value is black. Look at CSS Color Values for a complete list of possible color values.*
    - *Note: In Safari (on PC) the color parameter is required. If you do not specify the color, the shadow is not displayed at all.*
  - *Inset - Optional. Changes the shadow from an outer shadow (outset) to an inner shadow*
- **box-sizing:** Used to tell the browser what the sizing properties (width and height) should include. Should they include the border-box? Or just the content-box (which is the default value of the width and height properties)?

Values:

content-box: Default. The width and height properties (and min/max properties) includes only the content. Border, padding, or margin are not included

border-box: The width and height properties (and min/max properties) includes content, padding and border, but not the margin

Example: Specify that <div> elements should have padding and border included in the element's total width and height:

```
div {
  width: 300px;
  height: 100px;
  border: 1px solid blue;
  box-sizing: border-box;
}
```

- **z-index:** Sets the stack order of a positioned element

```
img {
  position: absolute;
  left: 0px;
  top: 0px;
  z-index: -1;
}
```

Note:

*An element with greater stack order is always in front of an element with a lower stack order.*

*Negative numbers are allowed.*

*z-index only works on positioned elements (position:absolute, position:relative, or position:fixed).*