Font & Text Decoration

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1. Text Properties

As previously discussed, UI/UX refers to everything related to the user's interface and their experience using the interface. One such aspect is written text and how it is presented, formatted, and organized on the screen. As such, it is important to understand the different aspects of text that can be affected using CSS.

All of the following properties can be used to modify how text is rendered on the page, regardless of the typeface or font style. Remember that the design of the site, including the typography, needs to support the end user's needs. Cool effects applied to text on a site may feel awesome to a programmer who just learned about the different CSS text properties; however, they are not so awesome when a user cannot make out what the text says.

1a. Text Color

Text color includes the color of the text itself as well as the background color. The following table contains details of properties that can be modified on text.

Property	Values	Description	Example

color	red
	#ff0000
	#ff0000ff
	rgb(255, 0, 0)
	rgba(255, 0, 0, 255)
		This changes the color of the text itself. It will accept color names, RGB and RGBA hex, and the rgb() and rgba() functions.	Example

background-color	red
	#ff0000
	#ff0000ff
	rgb(255, 0, 0)
	rgba(255, 0, 0, 255)
		This changes the background color behind the text.	Example

🖊 KEY CONCEPT

While colors can be represented using "color names," color names should only be used when exact color matching is not needed or important. Some named colors do not behave exactly as expected, and some systems may interpret a color name differently. Most organizations have logos or some type of imagery that is used to represent their brand. To ensure the consistency of colors in all applications and usage, hex code or RGB values are often used to ensure the right shade of color is used. Android, for example, is known for its green robot icon. To ensure the proper green is used, developers can refer to the organization's brand guidelines. Android provides its brand guidelines at developer.android.com/distribute/marketing-tools/brand-guidelines and provides the hex code of #3ddc84 for the green Android robot.

Check out this article about the odd nuances of named colors.

1b. Text Alignment

Text alignment controls the horizontal and vertical alignment of text. The following table contains details of alignment properties that can be modified on text.

Property	Values	Description	Example

text-align	left
	right
	center
	justify
		This controls the horizontal alignment of text.	Example left
			
			                      Example right
			
			           Example center
			
			Example of justify. In my younger and more vulnerable years my father gave me some advice that I've been turning over in my mind ever since. 'Whenever you feel like criticizing anyone,' he told me, 'just remember that all the people in this world haven't had the advantages that you've had.'

text-align-last	left right center justify	This controls the horizontal alignment of the last line of text.	Example line of text demonstrating the last line left alignment. Example line of text demonstrating the last line right alignment. Example line of text demonstrating the last line center alignment. Example line of text demonstrating the last line justify alignment.
direction unicode-bidi	rtl bidi-override	In situations where the text needs to run from right to left (such as in Arabic or Hebrew), these two properties need to be used together in order to swap the text's orientation.	gnitartsnomed si taht txet fo enil elpmaxE .enil tsal eht fo tnemngila ehT

vertical-align	baseline text-top text-bottom sub super	This controls the vertical alignment or positioning of the text around an image. NOTE: This property is applied to the image surrounded by text, not the text itself.	Example image ▮ text vertical alignment baseline Example image ▮ text vertical alignment text-top Example image ▮ text vertical alignment text-bottom Example image ▮ text vertical alignment super Example image ▮ text vertical alignment sub

1c. Text Decoration

Text decoration controls the appearance of the decoration line on the text. The following table contains details of the decoration properties that can be modified on text.

Property	Values	Description	Example
text-decoration-line	none overline line-through underline "overline underline"	This controls the location of the decoration line. NOTE: Use the shorthand "text-decoration" to include any combination of lines.	Example none Example overline Example line-through Example underline Example over under and through
text-decoration-color	red #ff0000 #ff0000ff rgb(255, 0, 0) rgba(255, 0, 0, 255)	This controls the color of the decoration line (not the text).	Example over under and through

text-decoration-style	solid double dotted dashed wavy	This controls the style/appearance of the decoration line.	Example solid Example double Example dotted Example dashed Example wavy
text-decoration-thickness	auto 5px 25%	This controls how thick the decoration line appears.	Example solid Example double Example dotted Example dashed Example wavy
text-decoration		This is shorthand for controlling the line position, color, style, and thickness. Only the text-decoration-line value is required; the other properties are optional.	Example shorthand

1d. Text Transformation

Transform determines the capitalization of text. The following table contains details of the transform properties that can be modified on text.

Property	Values	Description	Example
text-transform	uppercase lowercase capitalize	This converts the text to either all uppercase or all lowercase or capitalizes the first letter of every word.	Original text: The quick brown fox. Uppercase: THE QUICK BROWN FOX.

			Lowercase: the quick brown fox. Capitalized: The Quick Brown Fox.

1e. Text Spacing

Text spacing controls the indentation, space between characters and words, and height of text. The following table contains details of the spacing properties that can be modified on text.

Property	Values	Description	Example
text-indent	50px	This controls how far to indent the first line of text.	This is an example paragraph demonstrating indentation of the first line.
letter-spacing	5px	This controls how much space to use between each character.	Example Normal Example Line-Spacing 5px
line-height	0.8 1.8	This controls the height of each line of text and accepts a relative decimal. 1.0 is 1x line height.	Example Line-Height 1.0 Example Line-Height 1.8 Example Line-Height 0.5
word-spacing	10px	This controls how much space to use between each word.	Example of Word-Spacing at normal Example of Word-Spacing at 8px

white-space	nowrap normal pre	This enables or disables text wrap. The "pre" value stands for "presentation" and will display the text's lines of text as they are formatted in the code (only regarding the organization of the lines of text).	Example of text that uses normal white-space
			Example of text that uses nowrap white-space
			Example of text that uses pre white-space
| | | | ```html
<body>
    <div class="a">Example of text that
    uses
    normal white-space</div><br />
    <div class="b">Example of text that
    uses
    nowrap white-space</div><br />
    <div class="c">Example of text that
    uses
    pre white-space</div><br />
</body>
``` |

1f. Text Shadow

Text shadow controls the appearance of shadow on text. The following table contains details of the shadow properties that can be modified on text.

Property	Values	Description	Example
text-shadow	2px 2px 3px 3px 4px 3px 3px red 3px 3px 4px red	This adds a drop shadow to the text itself. The first two values indicate how far the shadow appears from the text. The optional third value determines how much the shadow should be blurred. The last value is the color of the shadow, which will accept color names, hex, or rgb/rgba color values. Shadows are also stackable on a single set of text; to do so, provide text-shadow a comma-separated list of shadow value sets using different colors and sizes for a unique effect.	Example of drop-shadow
			Example of drop-shadow with blur
			Example of drop-shadow with color
			Example of drop-shadow with blur and color

Let us take a closer look at the drop shadow examples. The two without blur are rather difficult to read, while the other two look great and actually stand out from the normal text on the screen. Text properties should be modified in order to enhance readability for the user.

Imagine that your client's color scheme includes a dark gray (`#424242`) and black text. The client insists that the dark dray be used as the background. While this is not advisable for accessibility and usability reasons, the client insists.

⇨ EXAMPLE This is the result:

In an effort to make the text more visible and easier to read while also maintaining the accurate colors, you decide to add a white drop shadow to the text.

⇨ EXAMPLE This is the result:

Now the text stands out against the dark background a bit more without impacting the overall color of the background. Ideally, in scenarios such as this, we would want to provide our client with reasoned arguments as to why this is not advised, supported with research. However, the client has the final say, and this may be a good compromise to present as an option.

2. Font Properties

Although we have already discussed typefaces, font-families, and variants of typefaces, CSS can be used to modify the typeface itself. The font-family property specifies the font for text added to a webpage. Recall that some fonts are considered web safe and others are not. Web-safe fonts are generally supported by all modern browsers and will render as expected. Whether you are using web-safe fonts or not, it is a good practice to include fallback fonts that can be used as well. The font-family property can contain several font names that are

separated by a comma. The preferred font-family should be listed first. If it is not supported by the browser, the second font-family will be used and so on. Best practice is to end with a generic font-family so that the browser can select a similar font from the generic family (i.e., serif) if no other fonts are available.

Not all font-families will possess the features that may be enabled or disabled by the following properties. As a result, not all of the following properties will have an effect on all fonts. The following are font-related properties:

Property	Value	Description
font-family	courier, "times new roman," arial Serif, sans-serif	This changes the font-family. It accepts a comma-separated list of font-families as fallback options. It also accepts generic family names such as serif, sans-serif, cursive, fantasy, and monospace.
font-feature-settings	"smcp" converts to small caps. "c2sc" converts regular caps to small caps. "zero" uses a slash through zeros. "hist" enables historical forms. "liga" 0 disables common ligatures (small connections between certain characters). "tnum" uses monospacing for tabular data (helps columns line up). "frac" enables automatic fraction format (½). "swsh" 2 enables swash characters, which are extra lines or curved embellishments on characters. "ss07" enables stylistic character sets if available. (This example enables stylistic set 7.)	
font-kerning	auto normal none	This enables or disables character kerning, if available.
font-size	16px 20pt 115% xx-small x-small smaller small medium large larger x-large xx-large	This specifies the overall size of the font using pixels, points, or any of the names' sizes.
font-size-adjust	0.58	This is used in cases of fallback fonts and helps avoid dramatic changes in font sizes when a fallback font is used. It accepts the

		aspect value of the intended typeface, which is the ratio of the lowercase letter and the uppercase letter.
font-stretch	ulta-condensed extra-condensed condensed semi-condensed normal semi-expanded expanded extra-expended ultra-expanded	This overrides the width of the font itself, not the spacing.
font-style	normal italic oblique	This adds the forward slant to characters. Oblique simply slants the characters, whereas italic slants the characters in a more cursive manner.
font-variant-caps	normal small-caps all-small-caps petite-caps all-petite-caps unicase title-caps	This enables the use of alternative character glyphs to force small caps or petite caps.
font-weight	normal bold bolder lighter 100–900	This controls the thickness and emphasis of the character lines. When using a value of 100 through 900, 400 is the equivalent of normal and 700 is the same as bold.

Remember that font properties should be used to modify the presentation of a typeface only as needed to enhance the readability or to meet the design needs of the client. For example, a typeface can have an impact on the perceived size of the font and has the potential to make an h2 appear the same size as an h3 with a different typeface. In order to maintain a visual text hierarchy, you might use the font-size property to adjust the h2 up or the h3 down.

📋 **SUMMARY**

In this lesson, you learned about the different **text-related properties** that can change different aspects of text on the page. Text-related properties will affect different aspects that are beyond the actual typeface. You also learned about **font-related properties** that can impact and modify the style, accents,

or embellishments of an actual typeface. Together, these CSS properties will enable you to fine-tune your site's typography design to maximize the written text's impact, effectiveness, and aesthetics.

Source: This Tutorial has been adapted from "The Missing Link: An Introduction to Web Development and Programming " by Michael Mendez. Access for free at https://open.umn.edu/opentextbooks/textbooks/the-missing-link-an-introduction-to-web-development-and-programming. License: Creative Commons attribution: CC BY-NC-SA.