CHAPTER SEVEN

7.0 CSS FONT

CSS font properties define the font family, boldness, size, and the style of a text.

Difference Between Serif and Sans-serif Fonts

7.1 CSS Font Families

In CSS, there are two types of font family names:

- **generic family** - a group of font families with a similar look (like "Serif" or "Monospace")
- **font family** - a specific font family (like "Times New Roman" or "Arial")

Generic family	Font family	Description
Serif	Times New Roman Georgia	Serif fonts have small lines at the ends on some characters
Sans-serif	Arial Verdana	"Sans" means without - these fonts do not have the lines at the ends of characters
Monospace	Courier New Lucida Console	All monospace characters have the same width

Note: *On computer screens, sans-serif fonts are considered easier to read than serif fonts.*

7.2 Font Family

The font family of a text is set with the font-family property. The font-family property should hold several font names as a "fallback" system. If the browser does not support the first font, it tries the next font.

Start with the font you want, and end with a generic family, to let the browser pick a similar font in the generic family, if no other fonts are available.

Note: *If the name of a font family is more than one word, it must be in quotation marks*, like: *"Times New Roman"*.

More than one font family is specified in a comma-separated list:

Example

```
<!DOCTYPE html>
<html>
	<head>
		<style>
			p.serif {
			  font-family: "Times New Roman", Times, serif;
			}

			p.sansserif {
			  font-family: Arial, Helvetica, sans-serif;
			}
		</style>
	</head>
	<body>
		<h1>CSS font-family</h1>
		<p class="serif">This is a paragraph, shown in the Times New Roman font.</p>
		<p class="sansserif">This is a paragraph, shown in the Arial font.</p>
	</body>
</html>
```

7.3 CSS Web Safe Font Combinations

Commonly Used Font Combinations

The font-family property should hold several font names as a "fallback" system, to ensure maximum compatibility between browsers/operating systems. If the browser does not support the first font, it tries the next font.

Start with the font you want, and end with a generic family, to let the browser pick a similar font in the generic family, if no other fonts are available:

Example

Below are some commonly used font combinations, organized by generic family.

7.3.1 Serif Fonts:

font-family	Example text
Georgia, serif	**This is a heading** This is a paragraph
"Palatino Linotype", "Book Antiqua", Palatino, serif	**This is a heading** This is a paragraph
"Times New Roman", Times, serif	**This is a heading** This is a paragraph

7.3.2 Sans-Serif Fonts:

font-family	Example text
Arial, Helvetica, sans-serif	**This is a heading** This is a paragraph
"Arial Black", Gadget, sans-serif	**This is a heading** **This is a paragraph**
"Comic Sans MS", cursive, sans-serif	**This is a heading** This is a paragraph
Impact, Charcoal, sans-serif	**This is a heading** **This is a paragraph**
"Lucida Sans Unicode", "Lucida Grande", sans-serif	**This is a heading** This is a paragraph
Tahoma, Geneva, sans-serif	**This is a heading** This is a paragraph
"Trebuchet MS", Helvetica, sans-serif	**This is a heading** This is a paragraph
Verdana, Geneva, sans-serif	**This is a heading** This is a paragraph

7.3.3 Monospace Fonts:

font-family	Example text
"Courier New", Courier, monospace	**This is a heading** This is a paragraph
"Lucida Console", Monaco, monospace	**This is a heading** This is a paragraph

For more commonly used font combinations, we shout look at our Web Safe Font Combinations.

7.4 Font Style

The font-style property is mostly used to specify italic text.

This property has three values:

- normal - The text is shown normally
- italic - The text is shown in italics
- oblique - The text is "leaning" (oblique is very similar to italic, but less supported)

Example

```
<!DOCTYPE html>
<html>
        <head>
                <style>
                        p.normal {
                          font-style: normal;
                        }
                        p.italic {
                          font-style: italic;
                        }
                        p.oblique {
                          font-style: oblique;
                        }
                </style>
        </head>
        <body>
                <p class="normal">This is a paragraph in normal style.</p>
                <p class="italic">This is a paragraph in italic style.</p>
                <p class="oblique">This is a paragraph in oblique style.</p>
        </body>
</html>
```

7.5 Font Size

The font-size property sets the size of the text.

Being able to manage the text size is important in web design. However, you should not use font size adjustments to make paragraphs look like headings, or headings look like paragraphs.

Always use the proper HTML tags, like <h1> - <h6> for headings and <p> for paragraphs. The font-size value can be an absolute, or relative size.

Absolute size:

- Sets the text to a specified size
- Does not allow a user to change the text size in all browsers (bad for accessibility reasons)
- Absolute size is useful when the physical size of the output is known

Relative size:

- Sets the size relative to surrounding elements
- Allows a user to change the text size in browsers

Note: *If you do not specify a font size, the default size for normal text, like paragraphs, is 16px (16px=1em).*

7.6 Set Font Size With Pixels

Setting the text size with pixels gives you full control over the text size:

Example

```
<!DOCTYPE html>
<html>
    <head>
        <style>
            h1 {
              font-size: 40px;
            }
```

```
            h2 {
                font-size: 30px;
            }
            p {
                font-size: 14px;
            }
        </style>
    </head>
    <body>
        <h1>This is heading 1</h1>
        <h2>This is heading 2</h2>
        <p>This is a paragraph.</p>
        <p>This is another paragraph.</p>
    </body>
</html>
```

Tip: If you use pixels, you can still use the zoom tool to resize the entire page.

7.7 Set Font Size With Em

To allow users to resize the text (in the browser menu), many developers use em instead of pixels. The em size unit is recommended by the W3C.

1em is equal to the current font size. The default text size in browsers is 16px. So, the default size of 1em is 16px. The size can be calculated from pixels to em using this formula: *pixels*/16=*em*

Example

```
<!DOCTYPE html>
<html>
	<head>
		<style>
			h1 {
			   font-size: 2.5em; /* 40px/16=2.5em */
			}
			h2 {
			   font-size: 1.875em; /* 30px/16=1.875em */
			 }
			p {
			   font-size: 0.875em; /* 14px/16=0.875em */
			}
		</style>
	</head>
	<body>
		<h1>This is heading 1</h1>
		<h2>This is heading 2</h2>
		<p>This is a paragraph.</p>
		<p>
			Specifying the font-size in em allows all major browsers to resize
			the text.
			Unfortunately, there is still a problem with older versions of IE.
			When resizing the text, it becomes larger/smaller than it should.
		</p>
	</body>
</html>
```

In the example above, the text size in em is the same as the previous example in pixels. However, with the em size, it is possible to adjust the text size in all browsers.

Unfortunately, there is still a problem with older versions of IE. The text becomes larger than it should when made larger, and smaller than it should when made smaller.

7.8 Use a Combination of Percent and Em

The solution that works in all browsers, is to set a default font-size in percent for the <body> element:

Example

```
<!DOCTYPE html>
<html>
	<head>
		<style>
			body {
			  font-size: 100%;
			}

			h1 {
			  font-size: 2.5em;
			}
			h2 {
			  font-size: 1.875em;
			}
			p {
			  font-size: 0.875em;
			}
		</style>
	</head>
	<body>
		<h1>This is heading 1</h1>
		<h2>This is heading 2</h2>
		<p>This is a paragraph.</p>
		<p>
			Specifying the font-size in percent and em displays the same size
			in all major browsers, and allows all browsers to resize the text!
		</p>
	</body>
</html>
```

All CSS Font Properties

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