

Web Programming

Chapter 2

HTML Styles and Formatting

Reference: <https://www.w3schools.com>



HTML Style

- Setting the style of an HTML element, can be done with the style attribute.
- HTML Style is an attribute that can be used within any tag.
- Syntax for adding Style attribute:

```
<tagname style="property:value;">
```



HTML Background Color

```
<!DOCTYPE html>
<html>
<head>
  <title> HTML Background Color </title>
</head>

  <body style ="background-color:powderblue;">

    <h1 style="background-color:#ff0033;">HTML
    Background color</h1>

    <p style="background-color:rgb(224,46,205);">

  </body>
</html>
```

HTML Background color

Paragraph with background color. Body background color set using color name. Heading back color is set using Hexadecimal Code. Paragraph background color is set as using RGB values..

```
<tagname style="background-
color:value;">
```



HTML Text Color

- The ***color*** property defines the text color for an HTML element:

```
<tagnameRelatedToText style="color:value;">
```

HTML Text Color

This is a paragraph.

This is another paragraph.



HTML Fonts

- The font-family property defines the font to be used for an HTML element:

```
<tagnameRelatedToText style="font-family :value;">
```

```
<h1 style="font-family:verdana;">HTML Fonts</h1>  
<p style="font-family:courier;">This is a paragraph.</p>
```

HTML Fonts

This is a paragraph.



HTML Text Size

- The font-size property defines the text size for an HTML element:

```
<tagnameRelatedToText style="font-size :value;">
```

```
<h1 style="font-size:250%;">HTML Text Size</h1>  
<p style="font-size:16px;">This is a paragraph.</p>  
<p style="font-size:2em;">This is another paragraph.</p>
```

HTML Text Size

This is a paragraph.

This is another paragraph.



HTML Text Alignment

- The text-align property defines the horizontal text alignment for an HTML element:

```
<tagnameRelatedToText style="text-align :value;">
```

```
<h1 style="text-align:center">HTML Text Align</h1>  
<p style="text-align:right">This is a right align  
paragraph.</p>  
<p style="text-align:justify">This is another paragraph. Text  
alignment is justify.</p>
```

HTML Text Align

This is a right align paragraph.

This is another paragraph. Text alignment is justify.



Text Formatting

- HTML also defines special elements for defining text with a special meaning.
- HTML uses elements like `` and `<i>` for formatting output, like bold or italic text.
- Formatting elements were designed to display special types of text:

`` - Bold text
`` - Important text
`` - Emphasized text
`<i>` - Italic text
`<small>` - Small text
`<sub>` - Subscript text
`<sup>` - Superscript text
`` - Deleted text
`<ins>` - Inserted text
`<mark>` - Marked text

This text is bold.

This text is Strong.

This text is emphasized.

This text is italic.

This text is small.

This text contains subscript

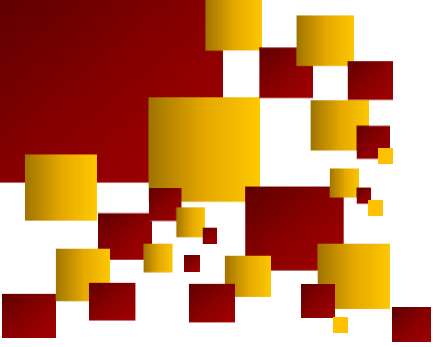
This text contains superscript

This text is ~~deleted~~

This text is inserted

This text is **marked.**





Web Programming

Chapter 2

HTML Styles and Formatting Advanced

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Pre-Formatted Text

<p>

This is
normal text.

It does not preserves both spaces and
line breaks.

</p>

<pre>

This is
preformatted text.

It preserves both spaces and
line breaks.

</pre>

This is normal text. It does not preserves both spaces and line breaks.

This is
preformatted text.
It preserves both spaces and
line breaks.



Output Tags

`<code>`Computer code`</code>`

`
`

`<kbd>`Keyboard input`</kbd>`

`
`

`<samp>`Sample Text`</samp>`

`
`

`<var>`Computer variable`</var>`

`
`

`<p>`

``Note:``These tags are often used to
display computer programming codes!

`</p>`

Computer outputs tags

Computer code

Keyboard input

Sample Text

Computer variable

Note:These tags are often used to display computer programming codes!



Write an address in HTML document

```
<h3>Write an address</h3>
  <hr>
  <address>
    Donald Duck <br>
    BOX 555<br>
    Disneyland<br>
    USA
  </address>
```

Write an address

Donald Duck
BOX 555
Disneyland
USA



Abbreviation/acronyms

```
<h3>Abbreviations/acronyms</h3>
```

```
<hr>
```

```
<abbr title="Sri Lanka">SL</abbr>
```

```
<p>
```

The title attributes is used to show the spelled-out version when holding the mouse pointer over the abbreviation.

```
</p>
```

```
<br>
```

Abbreviations/acronyms

SL

Sri Lanka

The title attributes is used to show the spelled-out version when holding the mouse pointer over the abbreviation.



Text Direction

```
<h3>Text direction</h3>
```

```
<hr>
```

```
<p>
```

If this browser supports bi-directional override (bdo), the next line will be written in from the right to the left (rtl).

```
</p>
```

```
<bdo dir="rtl">
```

Here is some Hebrew text!

```
</bdo>
```

Text direction

If this browser supports bi-directional override (bdo), the next line will be written in from the right to the left (rtl).

!txet werbeH emos si ereH



HTML Quotations

`<blockquote>`

This is a long quotation. This is a long quotation. This is a long quotation. This is a long quotation.....

`</blockquote>`

`<p>`Here comes a short quotation:

`<q>`This is a short quotation`</q>`

`</p>`

Quotations

This is a long quotation. This is a long quotation. This is a long quotation. This is a long quotation. This is a long quotation. This is a long quotation. This is a long quotation.

Here comes a short quotation: "This is a short quotation"

With the block quote element, the browser inserts line breaks and margins, but the q element does not render as anything special.



HTML Character Entities

- Reserved characters in HTML must be replaced with character entities.
- Characters that are not present on your keyboard can also be replaced by entities.
- Some characters are reserved in HTML.
- If you use the less than (<) or greater than (>) signs in your text, the browser might mix them with tags.
- Character entities are used to display reserved characters in HTML.
- A character entity looks like this:

&entity_name;

OR

&#entity_number;



HTML Entities (Cont.)

- Example:

```
<h3>Character Entities</h3>
<hr>
<p>
  non-breaking space 1 &nbsp; &#160; &nbsp; 2
  less than: &lt; copy: &copy; , pound: &#163;
  greater than: &gt;

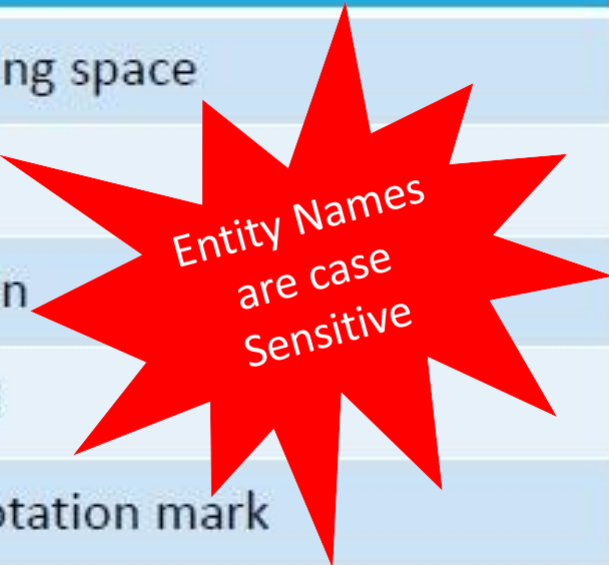
</p>
```

Character Entities

non-breaking space 1 2 less than: < copy: © , pound: £ greater than: >



Result	Description	Entity Name	Entity Number
	Non-breaking space	 	
<	less than	<	<
>	greater than	>	>
&	ampersand	&	&
"	double quotation mark	"	"
'	single quotation mark (apostrophe)	'	'
¢	cent	¢	¢
£	pound	£	£
¥	yen	¥	¥
€	euro	€	€
©	copyright	©	©
®	registered trademark	®	®



HTML Symbol Entities

- Many mathematical, technical, and currency symbols, are not present on a normal keyboard.
- To add such symbols to an HTML page, you can use an HTML entity name.
- If no entity name exists, you can use an entity number, a decimal, or hexadecimal reference.

```
<p>I will display &euro;</p>  
<p>I will display &#8364;</p>  
<p>I will display &#x20AC;</p>
```



I will display €
I will display €
I will display €



Example - Mathematical

Char	Number	Entity	Description
\forall	∀	∀	FOR ALL
∂	∂	∂	PARTIAL DIFFERENTIAL
\exists	∃	∃	THERE EXISTS
\emptyset	∅	∅	EMPTY SETS
∇	∇	∇	NABLA
\in	∈	∈	ELEMENT OF
\notin	∉	∉	NOT AN ELEMENT OF
\ni	∋	∋	CONTAINS AS MEMBER
\prod	∏	∏	N-ARY PRODUCT
\sum	∑	∑	N-ARY SUMMATION



Example – Greek Letters

Char	Number	Entity	Description
A	Α	Α	GREEK CAPITAL LETTER ALPHA
B	Β	Β	GREEK CAPITAL LETTER BETA
Γ	Γ	Γ	GREEK CAPITAL LETTER GAMMA
Δ	Δ	Δ	GREEK CAPITAL LETTER DELTA
E	Ε	Ε	GREEK CAPITAL LETTER EPSILON
Z	Ζ	Ζ	GREEK CAPITAL LETTER ZETA



Combining Diacritical Marks

- A diacritical mark is a "glyph" added to a letter.
- Some diacritical marks, like grave (`) and acute (´) are called accents.
- Diacritical marks can appear both above and below a letter, inside a letter, and between two letters.
- Diacritical marks can be used in combination with alphanumeric characters to produce a character that is not present in the character set (encoding).



HTML Encoding (Character Sets)

- To display an HTML page correctly, a web browser must know which character set (character encoding) to use.
- ASCII was the first **character encoding standard /character set**. ASCII defined 128 different alphanumeric characters that could be used on the internet: numbers (0-9), English letters (A-Z), and some special characters like ! \$ + - () @ < > .
- The default character encoding for HTML5 is UTF-8 (Unicode Transformation Format).

This is specified in the <meta> tag:

```
<meta charset="UTF-8">
```

Other Char sets were available HTML4:

ASCII, Windows-1252, ISO-8859-1



In Class

Write the HTML code to display the
given web page.

URL for the background Image: <https://www.pixelstalk.net/wp-content/uploads/2016/10/Download-Blue-Textured-Pictures.jpg>

HTML symbol Unicode number for Smiley face: 128515

Exercise 3

Maths is fun 😊

Squares of the numbers 1 - 5

$$1^2 = 1$$

$$2^2 = 4$$

$$3^2 = 9$$

$$4^2 = 16$$

$$5^2 = 25$$

For-Loop to display 1 to 10

x is the variable. Computer code:

```
void main()
{
    int i;
    for(i=0; i<10; i++){
        printf("->%d",i);
    }
}
```

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