HTML 5

HTML 5

- Headings
- Paragraphs
- Styles
- Formatting

- Quotations
- Comments
- Colors
- CSS

HTML Headings

Example

```
<h1>Heading 1</h1>
<h2>Heading 2</h2>
<h3>Heading 3</h3>
<h4>Heading 4</h4>
<h5>Heading 5</h5>
<h6>Heading 6</h6>
```

Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

Headings Are Important
Search engines use the headings to index the structure and content of your web pages.

Users skim your pages by its headings. It is important to use headings to show the document structure.

<h1> headings should be used for main headings, followed by <h2> headings, then the less important <h3>, and so on.

Example

```
<h1 style="font-size:60px;">Heading 1</h1>
```

Each HTML heading has a default size. However, you can specify the size for any heading with the style attribute, using the CSS font-size property:

HTML Horizontal Rules

The <hr> tag defines a thematic break in an HTML page, and is most often displayed as a horizontal rule.

The <hr> element is used to separate content (or define a change) in an HTML page:

Example

```
<h1>This is heading 1</h1>
<p>This is some text.</p>
<hr>
<h2>This is heading 2</h2>
<p>This is some other text.</p>
<hr>
```

```html
<!DOCTYPE html>
<html>
<body>

<h1 style="font-size:60px;">Heading 1</h1>

<p>You can change the size of a heading with the style attribute, using the font-size property.</p>

</body>
</html>
```

Heading 1

You can change the size of a heading with the style attribute, using the font-size property.

```html
<!DOCTYPE html>
<html>
<body>

<h1>This is heading 1</h1>
<p>This is some text.</p>
<hr>

<h2>This is heading 2</h2>
<p>This is some other text.</p>
<hr>

<h2>This is heading 2</h2>
<p>This is some other text.</p>

</body>
</html>
```

This is heading 1

This is some text.

This is heading 2

This is some other text.

This is heading 2

This is some other text.

The HTML <head> Element

The HTML <head> element has nothing to do with HTML headings.

The <head> element is a container for metadata. HTML metadata is data about the HTML document. Metadata is not displayed.

The <head> element is placed between the <html> tag and the <body> tag:

Example

```
<!DOCTYPE html>
<html>

<head>
  <title>My First HTML</title>
  <meta charset="UTF-8">
</head>

<body>
.
.
.
```

View HTML Source Code:
Right-click in an HTML page and select "View Page Source" (in Chrome) or "View Source" (in IE), or similar in other browsers. This will open a window containing the HTML source code of the page.

Inspect an HTML Element:
Right-click on an element (or a blank area), and choose "Inspect" or "Inspect Element" to see what elements are made up of (you will see both the HTML and the CSS). You can also edit the HTML or CSS on-the-fly in the Elements or Styles panel that opens.

HTML Tag Reference

Tag	Description
<html>	Defines the root of an HTML document
<body>	Defines the document's body
<head>	A container for all the head elements (title, scripts, styles, meta information, and more)
<h1> to <h6>	Defines HTML headings
<hr>	Defines a thematic change in the content

https://www.w3schools.com/tags/default.asp

HTML Paragraphs

The HTML <p> element defines a paragraph:

HTML Display

You cannot be sure how HTML will be displayed.

Large or small screens, and resized windows will create different results.

With HTML, you cannot change the output by adding extra spaces or extra lines in your HTML code.

The browser will remove any extra spaces and extra lines when the page is displayed:

```html
<!DOCTYPE html>
<html>
<body>

<p>
This paragraph
contains a lot of lines
in the source code,
but the browser
ignores it.
</p>

<p>
This paragraph
contains        a lot of spaces
in the source        code,
but the      browser
ignores it.
</p>

<p>
The number of lines in a paragraph depends on the size of the browser window.
If you resize the browser window, the number of lines in this paragraph will
change.
</p>

</body>
</html>
```

This paragraph contains a lot of lines in the source code, but the browser ignores it.

This paragraph contains a lot of spaces in the source code, but the browser ignores it.

The number of lines in a paragraph depends on the size of the browser window. If you resize the browser window, the number of lines in this paragraph will change.

HTML Line Breaks

The HTML <br> element defines a line break.

Use <br> if you want a line break (a new line) without starting a new paragraph:

The <br> tag is an empty tag, which means that it has no end tag.

My Bonnie lies over the ocean. My Bonnie lies over the sea. My Bonnie lies over the ocean. Oh, bring back my Bonnie to me.

The Poem Problem

This poem will display on a single line:

Example

```
<p>
    My Bonnie lies over the ocean.

    My Bonnie lies over the sea.

    My Bonnie lies over the ocean.

    Oh, bring back my Bonnie to me.
</p>
```

The HTML <pre> Element

The HTML <pre> element defines preformatted text.

The text inside a <pre> element is displayed in a fixed-width font (usually Courier), and it preserves both spaces and line breaks:

Example

```
<pre>
    My Bonnie lies over the ocean.

    My Bonnie lies over the sea.

    My Bonnie lies over the ocean.

    Oh, bring back my Bonnie to me.
</pre>
```

HTML Styles

```html
<!DOCTYPE html>
<html>
<body>

<p>I am normal</p>
<p style="color:red;">I am red</p>
<p style="color:blue;">I am blue</p>
<p style="font-size:50px;">I am big</p>

</body>
</html>
```

I am normal

I am red

I am blue

I am big

The HTML Style Attribute

Setting the style of an HTML element, can be done with the style attribute.

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

The property is a CSS property. The value is a CSS value.

HTML Background Color

The background-color property defines the background color for an HTML element.

Example

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

<h1>This is a heading</h1>
<p>This is a paragraph.</p>


</body>
```

This is a heading

This is a paragraph.

HTML Text Color

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

```
<!DOCTYPE html>
<html>
<body>


<h1 style="color:blue;">This is a heading</h1>
<p style="color:red;">This is a paragraph.</p>


</body>
</html>
```

This is a heading

This is a paragraph.

HTML Fonts

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

Example

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

HTML Text Alignment

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

HTML Text Size

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

Example

```
<h1 style="font-size:300%;">This is a heading</h1>
<p style="font-size:160%;">This is a paragraph.</p>
```

Example

```
<h1 style="text-align:center;">Centered Heading</h1>
<p style="text-align:center;">Centered paragraph.</p>
```

HTML Text Formatting

```
<!DOCTYPE html>
<html>
<body>

<p><b>This text is bold</b></p>
<p><i>This text is italic</i></p>
<p>This is<sub> subscript</sub> and <sup>superscript</sup></p>

</body>
</html>
```

This text is bold

This text is italic

This is subscript and superscript

HTML Formatting Elements

▶ HTML also defines special **elements** for defining text with a special **meaning**.

▶ HTML uses elements like <b> and <i> for formatting output, like **bold** or *italic* text.

▶ Formatting elements were designed to display special types of text:

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

HTML Quotation and Citation Elements
HTML \<q> & \<blockquote> for Quotations

```html
<!DOCTYPE html>
<html>
<body>

<h1>The blockquote element</h1>

<p>Here is a quote from WWF's website:</p>

<blockquote cite="http://www.worldwildlife.org/who/index.html">
For 50 years, WWF has been protecting the future of nature. The world's leading conservation organization, WWF
works in 100 countries and is supported by 1.2 million members in the United States and close to 5 million
globally.
</blockquote>

</body>
</html>
```

The blockquote element

Here is a quote from WWF's website:

> For 50 years, WWF has been protecting the future of nature. The world's leading conservation organization, WWF works in 100 countries and is supported by 1.2 million members in the United States and close to 5 million globally.

HTML <abbr> for Abbreviations

The HTML `<abbr>` element defines an abbreviation or an acronym.

HTML <address> for Contact Information

The HTML `<address>` element defines contact information (author/owner) of a document or an article.

HTML <cite> for Work Title

The HTML `<cite>` element defines the title of a work.

HTML <bdo> for Bi-Directional Override

The HTML `<bdo>` element defines bi-directional override.

```html
<!DOCTYPE html>
<html>
<body>

<p>The HTML cite element defines the title of a work.</p>
<p>Browsers usually display cite elements in italic.</p>

<img src="img_the_scream.jpg" width="220" height="277" alt="The Scream">
<p><cite>The Scream</cite> by Edvard Munch. Painted in 1893.</p>

</body>
</html>
```

```html
<!DOCTYPE html>
<html>
<body>

<p>If your browser supports bi-directional override (bdo), the next line will be written from right to left (rtl):</p>

<bdo dir="rtl">This line will be written from right to left</bdo>

</body>
</html>
```

The HTML cite element defines the title of a work.

Browsers usually display cite elements in italic.

The Scream by Edvard Munch. Painted in 1893.

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

tfel ot thgir morf nettirw eb lliw enil sihT

HTML Quotation and Citation Elements

Tag	Description
<abbr>	Defines an abbreviation or acronym
<address>	Defines contact information for the author/owner of a document
<bdo>	Defines the text direction
<blockquote>	Defines a section that is quoted from another source
<cite>	Defines the title of a work
<q>	Defines a short inline quotation

HTML Comment Tags

```
<!-- Write your comments here -->
```

Example

```
<!-- Do not display this at the moment
<img border="0" src="pic_trulli.jpg" alt="Trulli">
-->
```

HTML Colors

**HTML colors are specified using predefined color names,
or RGB, HEX, HSL, RGBA, HSLA values.**

Color Names
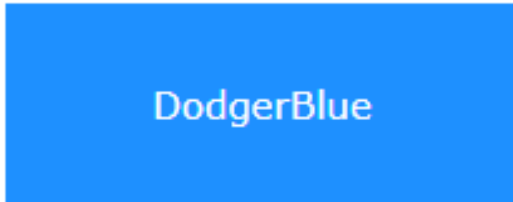
In HTML, a color can be specified by using a color name:
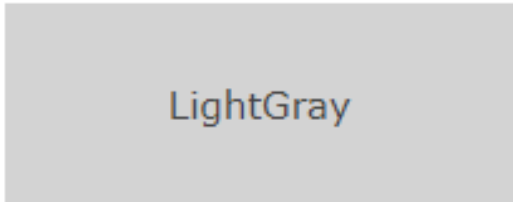
| Tomato | Orange | DodgerBlue | MediumSeaGreen |
| Gray | SlateBlue | Violet | LightGray |

https://www.w3schools.com/colors/colors_names.asp

Background Color

Hello World

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat.

Example

```
<h1 style="background-color:DodgerBlue;">Hello World</h1>
<p style="background-color:Tomato;">Lorem ipsum...</p>
```

Text Color

Hello World

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat.

Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat.

Example

```
<h1 style="color:Tomato;">Hello World</h1>
<p style="color:DodgerBlue;">Lorem ipsum...</p>
<p style="color:MediumSeaGreen;">Ut wisi enim...</p>
```

Border Color

Hello World

Hello World

Hello World

Example

```
<h1 style="border:2px solid Tomato;">Hello World</h1>
<h1 style="border:2px solid DodgerBlue;">Hello World</h1>
<h1 style="border:2px solid Violet;">Hello World</h1>
```

rgb(255, 99, 71)

#ff6347

hsl(9, 100%, 64%)

Same as color name "Tomato", but 50% transparent:

Color Values

rgba(255, 99, 71, 0.5)

In HTML, colors can also be specified using RGB values, HEX values, HSL values, RGBA values, and HSLA values:

hsla(9, 100%, 64%, 0.5)

Example

```html
<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>
```

Color Names Supported by All Browsers

https://www.w3schools.com/colors/colors_hex.asp

Color Name	HEX	Color	Shades	Mix
Black	#000000		Shades	Mix
Navy	#000080		Shades	Mix
DarkBlue	#00008B		Shades	Mix
MediumBlue	#0000CD		Shades	Mix
Blue	#0000FF		Shades	Mix
DarkGreen	#006400		Shades	Mix
Green	#008000		Shades	Mix
Teal	#008080		Shades	Mix

Chapter Summary

- Use the **style** attribute for styling HTML elements
- Use **background-color** for background color
- Use **color** for text colors
- Use **font-family** for text fonts
- Use **font-size** for text sizes
- Use **text-align** for text alignment