

HTML

1: Introduction

- HTML stands for Hyper Text Markup Language
- HTML describes the structure of Web pages using markup
- HTML elements are the building blocks of HTML pages
- HTML elements are represented by tags

2: HTML Editors

- Edit using notepad or notepad++ or any text editor

3: HTML Elements

- An HTML element usually consists of a **start** tag and **end** tag, with the content inserted in between

Start tag	Element content	End tag
<h1>	My First Heading	</h1>
<p>	My first paragraph.	</p>

4: HTML Attributes

- Attributes provide additional information about HTML elements
- The **title** attribute provides additional "tool-tip" information
- The **href** attribute provides address information for links
- The **width** and **height** attributes provide size information for images
- At W3Schools we always use **lowercase** attribute names
- At W3Schools we always **quote** attribute values with double quotes
- The filename of the image source is specified in the **src** attribute:

- The **alt** attribute specifies an alternative text to be used, when an image cannot be displayed.
- The style attribute is used to specify the styling of an element, like color, font, size etc.
- The language is declared with the **lang** attribute.
- “id” specifies the unique id for an element.
- “style” specifies the inline CSS style for an element.
- “disable” specifies the input element should be disabled.

5: HTML Headings

- <h1> to <h6> define the html heading.
- The <hr> element is used to separate content in an HTML page:

6: HTML Paragraphs

- HTML <p> element defines a **paragraph**:
- HTML
 element defines a **line break**.
- HTML <pre> element preserves both spaces and line breaks.

7:HTML Styles

- <tagname style="*property:value*;">
- 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

8: HTML Text Formatting

- Formatting elements were designed to display special types of text:
- - Bold text
- - Important text
- <i> - Italic text
- - Emphasized text
- <mark> - Marked text
- <small> - Small text
- - Deleted text

- `<ins>` - Inserted text
- `<sub>` - Subscript text
- `<sup>` - Superscript text

9: HTML Quotation

- HTML `<q>` element defines a short quotation
- HTML `<blockquote>` element defines a section that is quoted from another source.
- HTML `<abbr>` element defines an abbreviation or an acronym.
- HTML `<address>` element defines contact information (author/owner) of a document or an article
- HTML `<cite>` element defines the title of a work.
- HTML `<bdo>` element defines bi-directional override.

10: HTML Comments

- Comment tags are used to insert comments in the HTML source code.
- `<!-- Write your comments here -->`

11: HTML Colors

- HTML colors are specified using predefined color names, or RGB, HEX, HSL, RGBA, HSLA values.
- In HTML, a color can be specified by using a color name:
- You can set the background color for HTML elements:
- You can set the color of text:
- `<h1 style="border:2px solid Tomato;">Hello World</h1>`
- `<h1 style="background-color:rgb(255, 99, 71);">...</h1>`
- In HTML, a color can be specified using a hexadecimal value in the form:
- In HTML, a color can be specified using hue, saturation, and lightness (HSL) in the form: **hsl(hue, saturation, lightness)**
- RGBA color values are an extension of RGB color values with an alpha channel - which specifies the opacity for a color. **rgba(red, green, blue, alpha)**
- HSLA color values are an extension of HSL color values with an alpha channel - which specifies the opacity for a color.
- **hsla(hue, saturation, lightness, alpha).**

12: HTML Styles

- **CSS** stands for **Cascading Style Sheets**.
- CSS describes **how HTML elements are to be displayed on screen, paper, or in other media**.

CSS can be added to HTML elements in 3 ways:

- **Inline** - by using the style attribute in HTML elements
- **Internal** - by using a <style> element in the <head> section
- **External** - by using an external CSS file

13: Link

- **HTML links are hyperlinks**
- **a:link**
- **a:visited**
- **a:hover**
- **a:active**
- **target** attribute specifies where to open the linked document.
- **_blank** - Opens the linked document in a new window or tab
- **_self** - Opens the linked document in the same window/tab as it was clicked (this is default)
- **_parent** - Opens the linked document in the parent frame
- **_top** - Opens the linked document in the full body of the window
- **frameName** - Opens the linked document in a named frame
- **HTML bookmarks are used to allow readers to jump to specific parts of a Web page.**
- `<h2 id="C4">Chapter 4</h2>`
- `Jump to Chapter 4`
- links to a page located in the html folder on the current web site:
- `HTML tutorial`

14: HTML Images

- Use the HTML **** element to define an image
- Use the HTML **src** attribute to define the URL of the image
- Use the HTML **alt** attribute to define an alternate text for an image, if it cannot be displayed
- Use the HTML **width** and **height** attributes to define the size of the image
- Use the CSS **width** and **height** properties to define the size of the image (alternatively)

- Use the CSS **float** property to let the image float
- Use the HTML **<map>** element to define an image-map
- Use the HTML **<area>** element to define the clickable areas in the image-map
- Use the HTML ****'s element **usemap** attribute to point to an image-map
- Use the HTML **<picture>** element to show different images for different devices

15: HTML Tables

- An HTML table is defined with the **<table>** tag.
- Each table row is defined with the **<tr>** tag.
- A table header is defined with the **<th>** tag. By default, table headings are bold and centered.
- A table data/cell is defined with the **<td>** tag.
- For border

```
table, th, td {  
    border: 1px solid black;  
  
    border-collapse: collapse;  
}
```

- Use the HTML **<caption>** element to define a table caption
- Use the CSS **border** property to define a border
- Use the CSS **border-collapse** property to collapse cell borders
- Use the CSS **padding** property to add padding to cells
- Use the CSS **text-align** property to align cell text
- Use the CSS **border-spacing** property to set the spacing between cells
- Use the **colspan** attribute to make a cell span many columns
- Use the **rowspan** attribute to make a cell span many rows
- Use the **id** attribute to uniquely define one table

16: List

- Use the HTML **** element to define an unordered list
- Use the CSS **list-style-type** property to define the list item marker
- Use the HTML **** element to define an ordered list
- Use the HTML **type** attribute to define the numbering type
- Use the HTML **** element to define a list item
- Use the HTML **<dl>** element to define a description list

Notes for all

- Use the HTML **<dt>** element to define the description term
- Use the HTML **<dd>** element to describe the term in a description list
- Lists can be nested inside lists
- List items can contain other HTML elements
- Use the CSS property **float:left** or **display:inline** to display a list horizontally