<u>Notițe HTML</u>
(W3Schools Source)

- ## HTML Attributes

The `<!DOCTYPE>` declaration represents the document type, and helps browsers to display web pages correctly.

The `<a>` tag defines a hyperlink. The `href` attribute specifies the URL of the page the link goes to:

```
<a href="https://www.w3schools.com">Visit W3Schools</a>
```

The `<img>` tag is used to embed an image in an HTML page. The `src` attribute specifies the path to the image to be displayed:

```
<img src="img_girl.jpg" alt="Girl with a jacket" width="500"
height="600">
```

The `style` attribute is used to add styles to an element, such as color, font, size, and more:

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

You should always include the `lang` attribute inside the `<html>` tag, to declare the language of the Web page.

```
<html lang="en">
```

The `title` attribute defines some extra information about an element.
The value of the title attribute will be displayed as a tooltip when you mouse over the element:

```
<p title="I'm a tooltip">This is a paragraph.</p>
```

- ## HTML Paragraphs

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

```
<h1>This is heading 1</h1>
<hr>
<h2>This is heading 2</h2>
<hr>
```

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:

```
<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 Formatting

Tag	Description
<u>\<b\></u>	Defines bold text
<u>\<em\></u>	Defines emphasized text
<u>\<i\></u>	Defines a part of text in an alternate voice or mood
<u>\<small\></u>	Defines smaller text
<u>\<strong\></u>	Defines important text
<u>\<sub\></u>	Defines subscripted text
<u>\<sup\></u>	Defines superscripted text
<u>\<ins\></u>	Defines inserted text
<u>\<del\></u>	Defines deleted text
<u>\<mark\></u>	Defines marked/highlighted text

- ## HTML Quotation and Citation Elements

The HTML `<blockquote>` element defines a section that is quoted from another source.

Browsers usually indent `<blockquote>` elements.

```
<p>Here is a quote from WWF's website:</p>
<blockquote cite="http://www.worldwildlife.org/who/index.html">
For 60 years, WWF has worked to help people and nature thrive.
</blockquote>
```

The HTML `<q>` tag defines a short quotation.

Browsers normally insert quotation marks around the quotation.

```
<p>WWF's goal is to: <q>Build a future where people live in
harmony with nature.</q></p>
```

The HTML **<abbr>** tag defines an abbreviation or an acronym, like "HTML", "CSS", "Mr.", "Dr.", "ASAP", "ATM".

```
<p>The <abbr title="World Health Organization">WHO</abbr> was
founded in 1948.</p>
```

The HTML **<address>** tag defines the contact information for the author/owner of a document or an article.

The text in the **<address>** element usually renders in *italic,* and browsers will always add a line break before and after the **<address>** element.

```
<address>
Written by John Doe.<br>
Visit us at:<br>
Example.com<br>
Box 564, Disneyland<br>
USA
</address>
```

The HTML **<cite>** tag defines the title of a creative work. The text in the **<cite>** element usually renders in *italic.*

```
<p><cite>The Scream</cite> by Edvard Munch. Painted in 1893.</p>
```

BDO stands for Bi-Directional Override.

The HTML **<bdo>** tag is used to override the current text direction:

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

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 Comments

HTML comments are not displayed in the browser, but they can help document your HTML source code.

```
<p>This <!-- great text --> is a paragraph.</p>
```

- HTML Colors

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

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

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

Border color:
```
<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>
```

Color values:
```
<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>
```

- HTML Links

The target attribute specifies where to open the linked document.
The target attribute can have one of the following values:

- _self - Default. Opens the document in the same window/tab as it was clicked

- _blank - Opens the document in a new window or tab
- _parent - Opens the document in the parent frame
- _top - Opens the document in the full body of the window

```html
<a href="https://www.w3schools.com/" target="_blank">Visit W3Schools!</a>
```

To use an image as a link, just put the `<img>` tag inside the `<a>` tag:

```html
<a href="default.asp">
<img src="smiley.gif" alt="HTML tutorial"
style="width:42px;height:42px;">
</a>
```

Use mailto: inside the href attribute to create a link that opens the user's email program (to let them send a new email):

```html
<a href="mailto:someone@example.com">Send email</a>
```

- ## HTML Images

The HTML `<map>` tag defines an image map. An image map is an image with clickable areas. The areas are defined with one or more `<area>` tags.

```html
<img src="workplace.jpg" alt="Workplace" usemap="#workmap">

<map name="workmap">
  <area shape="rect" coords="34,44,270,350" alt="Computer" href="computer.htm">
  <area shape="rect" coords="290,172,333,250" alt="Phone" href="phone.htm">
  <area shape="circle" coords="337,300,44" alt="Coffee" href="coffee.htm">
</map>
```

The shape="poly" contains several coordinate points, which creates a shape formed with straight lines (a polygon).
This can be used to create any shape.
The coordinates come in pairs, one for the x-axis and one for the y-axis:

```html
<area shape="poly"
coords="140,121,181,116,204,160,204,222,191,270,140,329,85,355,58,352,37,322,40,259,103,161,128,147" href="croissant.htm">
```

- HTML Tables

Each table cell is defined by a `<td>` and a `</td>` tag.

Everything between `<td>` and `</td>` are the content of the table cell.

Each table row starts with a `<tr>` and ends with a `</tr>` tag.

For table headers, use the `<th>` tag instead of the `<td>` tag.

```
<table>
  <tr>
    <th>Person 1</th>
    <th>Person 2</th>
    <th>Person 3</th>
  </tr>
  <tr>
    <td>Emil</td>
    <td>Tobias</td>
    <td>Linus</td>
  </tr>
</table>
```

To make a cell span over multiple columns, use the colspan attribute:

```
<table>
  <tr>
    <th colspan="2">Name</th>
    <th>Age</th>
  </tr>
  <tr>
    <td>Jill</td>
    <td>Smith</td>
    <td>43</td>
  </tr>
</table>
```

To make a cell span over multiple rows, use the rowspan attribute:

```
<table>
  <tr>
    <th>Name</th>
    <td>Jill</td>
  </tr>
  <tr>
    <th rowspan="2">Phone</th>
    <td>555-1234</td>
  </tr>
  <tr>
```

```
      <td>555-8745</td>
  </tr>
</table>
```

To add a caption to a table, use the **<caption>** tag:
```
<table>
  <caption>Monthly savings</caption>
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
</table>
```

- ## HTML Lists

Tag	Description
	Defines an unordered list
	Defines an ordered list
	Defines a list item
<dl>	Defines a description list
<dt>	Defines a term in a description list
<dd>	Describes the term in a description list

The **type** attribute of the **<ol>** tag, defines the type of the list item marker:
```
<ol type="A">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>
```

By default, an ordered list will start counting from 1. If you want to start counting from a specified number, you can use the **start** attribute:
```
<ol start="50">
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>
```

A description list is a list of terms, with a description of each term.

The **<dl>** tag defines the description list, the **<dt>** tag defines the term (name), and the **<dd>** tag describes each term:

```
<dl>
  <dt>Coffee</dt>
  <dd>- black hot drink</dd>
  <dt>Milk</dt>
  <dd>- white cold drink</dd>
</dl>
```

Create a bookmark:

```
<h2 id="C4">Chapter 4</h2>
```

Add a link to the bookmark:

```
<a href="#C4">Jump to Chapter 4</a>
```

An HTML iframe is used to display a web page within a web page.

```
<iframe src="url" title="description"></iframe>

<iframe src="demo_iframe.htm" height="200" width="300"
title="Iframe Example"></iframe>
```

An iframe can be used as the target frame for a link.

The **target** attribute of the link must refer to the **name** attribute of the iframe:

```
<iframe src="demo_iframe.htm" name="iframe_a" title="Iframe
Example"></iframe>

<p><a href="https://www.w3schools.com"
target="iframe_a">W3Schools.com</a></p>
```

- HTML Forms

```
<form action="/action_page.php">
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" value="John"><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname" value="Doe"><br><br>
  <input type="submit" value="Submit">
</form>
```

Type	Description
<input type="text">	Displays a single-line text input field
<input type="radio">	Displays a radio button (for selecting one of many choices)
<input type="checkbox">	Displays a checkbox (for selecting zero or more of many choices)
<input type="submit">	Displays a submit button (for submitting the form)
<input type="button">	Displays a clickable button

The autocomplete attribute specifies whether a form should have autocomplete on or off.

```
<form action="/action_page.php" autocomplete="on">
```

The <select> element defines a drop-down list:

```
<label for="cars">Choose a car:</label>
<select id="cars" name="cars">
  <option value="volvo">Volvo</option>
  <option value="saab">Saab</option>
  <option value="fiat">Fiat</option>
  <option value="audi">Audi</option>
</select>
```

The <textarea> element defines a multi-line input field (a text area):

```
<textarea name="message" rows="10" cols="30">
The cat was playing in the garden.
</textarea>
```

The <button> element defines a clickable button:

```
<button type="button" onclick="alert('Hello World!')">Click Me!</button>
```

The <fieldset> element is used to group related data in a form.

The <legend> element defines a caption for the <fieldset> element.

```
<form action="/action_page.php">
  <fieldset>
    <legend>Personalia:</legend>
    <label for="fname">First name:</label><br>
    <input type="text" id="fname" name="fname" value="John"><br>
    <label for="lname">Last name:</label><br>
    <input type="text" id="lname" name="lname" value="Doe"><br><br>
    <input type="submit" value="Submit">
  </fieldset>
```

```
</form>
```

The **<datalist>** element specifies a list of pre-defined options for an **<input>** element.

Users will see a drop-down list of the pre-defined options as they input data.

The **list** attribute of the **<input>** element, must refer to the **id** attribute of the **<datalist>** element.

```
<form action="/action_page.php">
  <input list="browsers">
  <datalist id="browsers">
    <option value="Edge">
    <option value="Firefox">
  </datalist>
</form>
```

The **<output>** element represents the result of a calculation (like one performed by a script).

```
<form action="/action_page.php"
  oninput="x.value=parseInt(a.value)+parseInt(b.value)">
  0
  <input type="range"  id="a" name="a" value="50">
  100 +
  <input type="number" id="b" name="b" value="50">
  =
  <output name="x" for="a b"></output>
  <br><br>
  <input type="submit">
</form>
```

Tag	Description
<form>	Defines an HTML form for user input
<input>	Defines an input control
<textarea>	Defines a multiline input control (text area)
<label>	Defines a label for an <input> element
<fieldset>	Groups related elements in a form
<legend>	Defines a caption for a <fieldset> element
<select>	Defines a drop-down list
<optgroup>	Defines a group of related options in a drop-down list
<option>	Defines an option in a drop-down list
<button>	Defines a clickable button
<datalist>	Specifies a list of pre-defined options for input controls
<output>	Defines the result of a calculation

The `<input type="color">` is used for input fields that should contain a color. Depending on browser support, a color picker can show up in the input field.

```
<form>
  <label for="favcolor">Select your favorite color:</label>
  <input type="color" id="favcolor" name="favcolor">
</form>
```

The `<input type="date">` is used for input fields that should contain a date. Depending on browser support, a date picker can show up in the input field.

```
<form>
  <label for="birthday">Birthday:</label>
  <input type="date" id="birthday" name="birthday">
</form>
```

The `<input type="email">` is used for input fields that should contain an email address.
Depending on browser support, the e-mail address can be automatically validated when submitted.
Some smartphones recognize the email type, and add ".com" to the keyboard to match email input.

```
<form>
  <label for="email">Enter your email:</label>
  <input type="email" id="email" name="email">
</form>
```

The `<input type="file">` defines a file-select field and a "Browse" button for file uploads.

```
<form>
  <label for="myfile">Select a file:</label>
  <input type="file" id="myfile" name="myfile">
</form>
```

The `<input type="tel">` is used for input fields that should contain a telephone number.

```
<form>
  <label for="phone">Enter your phone number:</label>
  <input type="tel" id="phone" name="phone"
pattern="[0-9]{3}-[0-9]{2}-[0-9]{3}">
</form>
```

The `<input type="time">` allows the user to select a time (no time zone).

Depending on browser support, a time picker can show up in the input field.

```html
<form>
  <label for="appt">Select a time:</label>
  <input type="time" id="appt" name="appt">
</form>
```

The input readonly attribute specifies that an input field is read-only.

A read-only input field cannot be modified (however, a user can tab to it, highlight it, and copy the text from it).

The value of a read-only input field will be sent when submitting the form!

```html
<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" value="John"
readonly><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname" value="Doe">
</form>
```

The input disabled attribute specifies that an input field should be disabled.

A disabled input field is unusable and un-clickable.

The value of a disabled input field will not be sent when submitting the form!

```html
<form>
  <label for="fname">First name:</label><br>
  <input type="text" id="fname" name="fname" value="John"
disabled><br>
  <label for="lname">Last name:</label><br>
  <input type="text" id="lname" name="lname" value="Doe">
</form>
```

The input min and max attributes specify the minimum and maximum values for an input field.

```html
<label for="quantity">Quantity (between 1 and 5):</label>
  <input type="number" id="quantity" name="quantity" min="1"
max="5">
```

The input multiple attribute specifies that the user is allowed to enter more than one value in an input field.

The multiple attribute works with the following input types: email, and file.

```html
<form>
  <label for="files">Select files:</label>
  <input type="file" id="files" name="files" multiple>
</form>
```

The input **pattern** attribute specifies a regular expression that the input field's value is checked against, when the form is submitted.

The input **placeholder** attribute specifies a short hint that describes the expected value of an input field (a sample value or a short description of the expected format).

```html
<form>
  <label for="phone">Enter a phone number:</label>
  <input type="tel" id="phone" name="phone"
  placeholder="123-45-678"
  pattern="[0-9]{3}-[0-9]{2}-[0-9]{3}">
</form>
```

The input **required** attribute specifies that an input field must be filled out before submitting the form.

```html
<form>
  <label for="username">Username:</label>
  <input type="text" id="username" name="username" required>
</form>
```

The input **height** and **width** attributes specify the height and width of an **<input type="image">** element.

```html
<form>
  <label for="fname">First name:</label>
  <input type="text" id="fname" name="fname"><br><br>
  <label for="lname">Last name:</label>
  <input type="text" id="lname" name="lname"><br><br>
  <input type="image" src="img_submit.gif" alt="Submit" width="48"
height="48">
</form>
```