|  |  |
| --- | --- |
| **Basic HTML** | |
| **<!DOCTYPE>** | Define the document type |
| **<html>** | Define an HTML document |
| **<head>** | Contains metadate/information for the document |
| **<title>** | Defines a title for the document |
| **<body>** | Defines the document’s body |
| **<h1> to <h6>** | Defines HTML headings |
| **<p>** | Defines a paragraph // not line break |
| **<br>** | Inserts a single line break |
| **<hr>** | Define a thematic break change in the content |
| **<!-- 🡪** | Defines a comment // phím tắt Shift + alt + A |
| **Formatting** | |
| **<abbr>** | Define an abbrevation or an acronym |
| <p1> The <**abbr** title=”world wide web”> WWW is ….</p1> 🡺 The WWW is …  //trỏ chuột vô chữ WWW sẽ hiện ra chú thích: world wide web | |
| **<address>** | Define a contact information. //Chỉ rõ khu vực ghi địa chỉ liên hệ |
| **<b>** | Defines bold text |
| **<bdi>** | Tag isolates a part of text that might be formatted in a defferent direction |
| <p> Đây là 1 chữ tiếng tàu : <bdi>こんにちは </bdi> </p> | |
| **<bdo>** | Override the current text direction |
| <p> <**bdo** **dir = “rtl”**> abcdef </bdo> </p> 🡺 fedcba  // dir = “rtl”: right-to-left or “ltr” :left-to-right | |
| **<blockquote>** | that is quoted /trích dẫn/ from another source |
| <p><blockquote cite=”url nguồn nội dung”> nội dung trích dẫn</blockquote></p> | |
| **<cite>** | Defines the title of a creative // *The Examples* |
| **<code>** | Define a piece of computer code //examples |
| **<del>** | Defines text that has been deleted // ~~examples~~ |
| **<dfn>** | Defines for the “definiton element” // *HTML* |
| **<em>** | Defines emphasized /nhấn mạnh/ text // *HTML* |
| **<i>** | Defines *Italics* text // *HTML* |
| **<ins>** | Defines a text has been inserted // HTML |
| **<kbd>** | Defines keyboard input // Ctrl |
| **<marked>** | Defines marked/highlighted text |
| **<meter>** | Defines a scalar measurement within a known range |
| <label for = "disk\_c"> Disk usage C: </label>  <meter id = "disk\_c" value="2" min="0" max="10"></meter> <br>  <label for ="disk\_d"> Disk usage D: </label>  <meter id="disk\_d" value="0.6">60%</meter> | |
| **<pre>** | Defines preformatted /định dạng trước/ text //space & line break |
| **<progress>** | Defines represents the completion progress of a task |
| <label for="file">Downloading progress:</label>  <progress id="file" value="32" max="100"> 32% </progress> | |
| **<q>** | Defines a short quotation // **“** example **“** |
| **<s>** | Specifies text that is no longer correct // ~~Only 50$~~ |
| **<samp>** | Defines sample output from a computer program |
| **<small>** | Defines smaller text |
| **<strong>** | Defines **strong** text |
| **<sub>** | Defines subscripted text // X2 |
| **<sup>** | Defines superscripted text // X2 |
| **<template>** | to hold some content that will be ***hidden*** when the page loads. Use JavaScript to display it. |
| **<time>** | Define a time and a date |
| <p> Have a date on <time datetime=”2021-02-14”>Valentine day</time>. </p>  /timedate: use for machine-readable so that browsers can offer to add date reminders/ | |
| **<u>** | Defines unarticulated text // examples |
| **<var>** | Defines some text as *variable* // *obj* |
| **<wbr>** | Define Word Break Opportunity when a word too long |
| **Forms and Input** | |
| **<form>** | Defines an HTML form for user input |
| **<form accept-charset**=”utf-8” **action**=”url” **autocomplete**=”on/off” **method**=”post/get” **enctype**=”mutipart/form-data”/”application/x-www-form-urlencoded”/”text/plain” **name=” “**  **novalidate rel=” “ target**=”\_blank”/”\_self”/”\_parent”/”\_top”/”framename”**> </form>**  **action=** ”url” : where to send the form-data when a forn is SUBMITTED  **method** =”get” **:** Appends the form-data to the URL in name/value paris  =”post”: Sends the form-data as an HTTP post transaction  **enctype**  = ”mutipart/form-data”: this value is necessary if the user will upload a file  = ”application/x-www-form-urlencoded” : all character encoded before sent  = ”text/plain” : sends data without any encoding at all (NOT recommended)  **novalidate:** boolean attribute, form-data should not to be validated when submitted  **rel =** “ “ : Relationship between a linked resource and the current document like: extenal, help,.  **target** = : where to display the response that is received after submitting the form  = ”\_blank” : in a new window or tab  = ”\_seft” : in a same frame (default)  = ”\_parent” : in the parent frame  = ”\_top” : in the full body of the window  = ”framename” : in a named ***iframe*** | |
| **<input>** | Defines an input control |
| **<input** **type=”**button” /”checkbox” /”color” /”date” /”datetime-local” /”email”/ ”file” /”hidden” /”image” /”month” /”number” /”password” /”radio” /”range” /”reset” /”search” /”submit” /”tel”/ ”text” /”time” /”url” /”week” **accept =** “file\_extension” / ”audio/\*” / ”video/\*” / ”image\*/” / “media\_type” **alt**=” “ **autocomplete**=”on”/”off” **dirname=” “ form=”***form-id***” formaction=”**url” **formenctype=” “ formnethod=” “ formnovalidate formtarget=” “ heigth=” “ width=” “ list=”**datalist-id” **max=**”number”/”date” **min=**”number”/”date” **maxlength=”**number” **minlength=”**number” **pattern=**”regex” **placeholder=” “ size=”**number” **src=”**url**“ step=”**number” **value=”**text” **autofocus cheked** **readonly required disable** > </input>  **type = “color” :** Select your favorite color:  **= “time”,“date”,”week”,”month”,** Select time:  **= “datetime-local” :** select your date and time  **= “email” + *multiple*:** chọn multiple để thêm được nhiều mail, cách nhau bằng dấu  **;**  **=” file “ + *multiple*:** chọn multiple để thêm được nhiều file một lúc  **= “image” + src=”**img\_url” + **alt=”**name” : thay thế cho ***submit button***  **=”number”** **+ min=”1”+max=”5**” + **step=”2”** : Select a number:  **=”range” +min=” “ + max=” “ :** control for entering a number (slide control)  **=”tel” + patten=”**regex**” :** input your phonenumber;  **=”url” , “text” , “submit” , “search” , “reset” ,”radio” , “password” , “checkbox” , “button”**  **list=”datalist\_id”** : Refers to a <datalist> | |
| **<textarea>** | Defines a multi-line text input control |
| **<textarea name**=”name” **rows**=”4” **cols**=”50” **maxlength**=”200” **placeholder**=” ” **wrap**=”hard/sort”  **autofocus disabled readonly required > </textarea>**  **wrap =** “hard” **:** the text in textarae is wrapped when submitted in a form  **=** “sort” **:** not wraped, default  **boolean attribute:**  ***autofocus***: automatically get focus when page load  ***disabled*** : text area is unusable and text cannot be copied .Use Javascript to make text area can usable( after select a chectbox,..)  ***readonly***: text area should be read-only, but user can copy,highligth..  ***required:*** text area must be filled out (if not can not submit) | |
| **<button>** | Defines a clickable button |
| Inside a <button> you can put **text and tag**(<i>,<b>,<img>…) that is not possible with a button with <input type=”button”> | |
| **<select>** | Defines a drop-drown list |
| <label for=”cars”> Choose a car: </label>  <**select name=”**cars**” id=”**cars**” size=”**number**” form=”**form-id**” autofocus disable multiple required**>  <**option** value=”audi”> Audi </option>  <**option** value=”merc”> Mercedes </option>  <**option** value=”lexus”> Lexus </option>  <**option** value=”bmw”> BMW</option>  **</select>**  Ex: **size=”**2” | |
| **<option>** | Defines a option of drop-down list |
| **<otpgroup>** | Define a group of related options in drop-down list |
| <select> <**otpgroup label=”luxury car”>**  <option value=”…”>… | |
| **<fieldset>** | Used to group related elements in a form |
| **<fieldset>**  **<legend>** Personalia: **</legend>**  <label for=”fname”> First name: </label>  <input type=”text” id=”fname” name=”fname”>  **</fieldset>** | |
| **<legend>** | Defines a caption for a <fieldset> |
| **<label>** | Defines a label for several element (<label for=”id\_name”> |
| **<datalist>** | Specifies a list of Pre-defined option for an < input > |
| <label for=”*carname***”**> Nhap loai xe tu danh sach sau: </label>  <input **list=**”***cars***” name=”carname” id=”*carname*”>  <**datalist** **id=”*cars***”>  <option value=”toyota”>  <option value=”audi”>  **</datalist>**  <input type=”submit”> | |
| **<output>** | Represent the result of a calculation |
| <form ***oninput=”x.value*** = parseInt(a.value) + parseInt(b.value)>  <input type=”range” **id=”a”** >  + <input type=”number” **id=”b”>**  = <output ***id=”x”*** **for=”a b”>** </out>  </form> | |
| **Frames** | |
| **<iframe>** | Defines an inline frame, use to embed another document within the current HTML document |
| **< iframe** **src=”**web\_url” **title=”**name\_web” **name=**” “ **height=”** “ **width=**” “ **referrerpolicy=”…”>**  **</ifame>** | |
| **Images** | |
| **<img>** | Defines an image |
| **< img** **src=”**url\_img” **alt=”**name\_img” **height=”**px” **width=”**px” **loading=”**eager | lazy” **ismap usemap=”**map\_name” **referrerpolicy=”** no-referrer | no-referrer-when-downgrade | origin  | origin-when-cross-origin | unsafe-url ” **>**  **ismap** : ảnh trở thành một map khi click vào sẽ gửi vị trí click cho server dưới dạng URL query sting.  (ismap chỉ có ở **<a href=”url”> <imb> <a>)**  **usemap =”***map\_name*” : tạo những vùng click được trên ảnh dựa trên thẻ <map name=”map\_name”>  **loading = “eager” :** Default. Loads an image immediately  **= “lazy”** : Defer loading of images until some conditions are met  **referrerpolicy = :** chính sách giới thiệu  **= “no-referrer” : no referrer information is sent;**  **= “no-referrer-when-downgrade”** : Default. The referrer header will not sent to origin without HTTPS;  **= “origin”** : Send the origin (scheme, host, and port) of the document;  **= “origin-when-cross-origin”** : ???  **= “unsafe-url”** : Send the origin, path and query string (but not fragment, password, or username) | |
| **<map>** | Define a client-side image map |
| **<map name=”***map\_name***”>**  **<area shape=”**rect” **coords=”**a1,a2,b1,b2” **atl=**” “ **href**=”url1”> //rect: rectangele có toạ độ a1,a2, b1,b2  **<area shape=”**circle” **coords=”**x,y,r” **atl=**” “ **href**=”url2”> //circle có tâm toạ độ x,y và bán kính r  **<area shape=”**poly” **coords=”**x1,y1,x2,y2,..,xn,yn” **atl=**” “ **href**=”url2”> //polygonal có các điểm toạ độ (x1,y1)  (x2,y2)… (xn,yn)  **<area shape=”**default” **atl=**” “ **href**=”url2”> //toàn bộ khu vực  **</map>** | |
| **<area>** | Defines an area inside an image <map> |
| **<area** **alt=**”area\_name” **shape=**” default | rect | circle | poly| “ **coord=**”coordinates” **href=**”url” **hreflang=**”language\_code” **download=**”filename\_for\_downloaded file” **media=**”Devices+Operator+Value”  **referrerpolicy=”**no-referrer |…” **rel=”**alternate|… “ **target=**”\_blank|…” **type=**”MIME\_type\_of\_url” **>** | |
| **<canvas>** | Used to draw graphics via scripting(Javascript) |
| <canvas id=”name”> Your brower does not support the canvas tag</canvas>  <script> var canvas = document.getElementById(“name”);  var ctx = canvas.getContext(“2d”) ; ctx.fillStyle="FF0000” ; ctx.fillRect(0,0,80,80);  </script> | |
| **<figure>** | Specifies self-contained content /nội dung độc lập |
| <figure>  <img src=”url” alt=”name\_img”>  <figcaption>Tên chú thích bức ảnh</figcaption>  </figure> | |
| **<figcaption>** | Defines a caption for a <figure> element |
| **<picture>** | Defines a container for Multiple image resources |
| **<picture>**  **<source** **media=”**min-width:650px” **srcset=**”url1” **>**  **<soure** **media=”**min-width:465px” **srcset=**”url2” **>**  **<img** **src=”**ulr” **alt=**” “ **style=**”width:auto;” **>**  **</picture>**  // the brower will look for the first <source> element where the media query matches the current viewport | |
| **<svg>** | Defines a container for SVG graphics |
| <svg width=”100” height=”100”>  <circle cx=”50” cy=”50” r=”40” stroke=”green” stroke-width=”4” fill=”yellow” />  </svg> | |
| **Audio/Video** | |
| **<audio>** | Defines sound content |
| **<video>** | Defines a video or movie |
| **<audio** **controls autoplay loop muted** **src=**”url” **preload=**”none | metadata | auto “>  <source src=”url/.mp3” type=”audio/mp3” >  <source src=”url/.mpeg” type=”audio/mpeg”>  **</audio>**  **src :** should use <source> for more resource for browers. | |
| **<source>** | Defines multiple media resources for media elements |
| **<track>** | Defines text track for media element <video> <audio> |
| **<track** **src=”**url.vtt” **label=”**text” **kind=”** caption | chapters | description | metadata | subtiles” **default srclang=”**language\_code”**>**  **default : boolean :** chọn thẻ <track> này luôn là mặc định , chỉ nên có 1 thẻ  **srclang=”**language\_code” phải có nếu **kind=”subtiles”**  **“**language\_code” : vd: Vietnam – vi , English – en , Chinese – zh …. More on *ISO Language Codes* | |
| **Links** | |
| **<a>** | Defines a hyperlink |
| **<a href=”**url” **hreflang=”**languege\_code” **download media=”***media\_query*” **ping=”**url” **rel=”***relationship*” **referrerpolicy=**”….” **target=**”*where\_to\_open\_linked*” **type=”***media\_type*”**> </a>**  **download :** the target will be downloaded when user clicks  **ping=”**url” : send a short HTTP POST request , useful for tracking/monitoring | |
| **<link>** | Defines the relationship between a document and an external resource. |
| **<link href=”**url” **hreflang=”**languege\_code” **media=”***media\_query*” **referrerpolicy=**”….” **rel=”***relationship*”  **type=”***media\_type*”**>**  **//link most often used to link to external style sheets(css**) **<link** href=”index.css” rel=”stylesheet”**>** | |
| **<nav>** | Defines navigation links |
| <nav>  <a href=”url1”> Home <a> |  <a href=”url1”> Product <a> | 🡺 Home | Product | Contact  <a href=”url1”> Contact <a>  </nav> | |
| **Lists** | |
| **<ul>** | Defines an unodered list |
| **<ol>** | Defines an oderes list |
| **<li>** | Defines a list item |
| <**ul> <ol** **type=”**1 | A | a | I | I” **start=”**number\_begin” **reversed**>  **<li> </li>** **<li> </li>**  **<li> </li> <li> </li>**  **<ul>** **</ol>**  // reversed: the list order should be descending ( 10 , 9 , 8 , 7 ,…) | |
| **<dl>** | Defines a description list |
| **<dt>** | Defines a name in description list |
| **<dd>** | Defines a description of a name in description list |
| **<dl>**  **<dt>** Nhom 1: **</dt**> Nhom 1:  **<dd>** aaa **</dd>** aaa  **<dd>** bbb **</dd>** bbb  **<dt>** Nhom 2 : **</dt>** Nhom 2:  **<dd>** ccc **</dd>** ccc  **</dl>** | |
| **Table** | |
| **<table>** | Defines a table |
| **<caption>** | Defines a tablecaption |
| **<th>** | Table header |
| **<th** **abbr=”***abbreviated*” **headers=”**head\_id” **scope=”**col | colgroup | row | rowgroup “ **colspan=”**number” **rowspan=”**number”> </th>  **headers=”head\_id” :** thẻ head này có liên quan tới thẻ <th id=”**head\_id**”>  **scope :** mục đích : ý nói thẻ head này là đại diện cho cột| nhóm cột | hàng | nhóm hàng | |
| **<tr>** | Table row |
| **<td>** | Table datacell |
| **<td** **headers=”**header\_id” **colspan=”**number” **rowspan=”**number” **> </td>** | |
| **<table>**  **<caption>** Table-Name **</caption>**  **<colgroup> <col style=”**background-color:red”> **<col style=”**background-color:blue**”> </colgroup>**  **Table-Name**  **<thead>**  **<tr>** <**th**> aaa **</th>** **<th>** aaa **</th>** **</tr>** **</thead> aaa aaa**  **<tbody>** **<tr>** **<td>** bbb **</td>** **<td>** bbb **</td>** **</tr>** **</tbody>** bbb bbb  **<tfoot>** **<tr>** **<td>** ccc **</td> <td>** ccc **</td>** **</tr> </tfoot>** ccc ccc  **</table>** | |
| **<thead>** | Group the header content in a table |
| **<tbody>** | Group the body content in a table |
| **<tfoot>** | Group the footer content in a table |
| **<colgroup>** | Specifies group of columns in a table for formatting |
| **<col>** | Specifies colum properties for each colum in a <colgroup> |
| **<col** **span=”**number” **style=** ”……. “ > | |
| **Style and Semantics** | |
| **<style>** | Defines style information for a document |
| **<style** **type=**”text/css” **media=**”media\_query“> | |
| **<div>** | Defines a section in a document //block element |
| **<span>** | Defines a section in a document //inline element |
| **<header>** | Defines a header for a document or section |
| **<header>** <h1>--<h6> | logo or icon | authorship information **</header>** | |
| **<footer>** | Defines a footer for a document or section |
| **<footer>** authorship information | copyright info | contact info | sitemap | back to top links | related document **</footer>** | |
| **<main>** | Specifies the main content of a document |
| **<section>** | section in a document |
| **<article>** | Defines an article //bài báo |
| **<aside>** | Defines an aside //về một bên |
| **<detail>** | Defines additional detail that user can view or hide |
| **<sumary>** | Defines a visible heading for a <details> element |
| **<detail>**  **<sumary>**HTML**</sumary>** HTML click🡪 HTML  <p>Hyper text mark up language is … h<p> Hyper text mark up language is…  **</detail>** | |
| **<data>** | Adds a machine-readable translation |
| **<data** value=”1020212” > Product1 **</data>**  **//** cung cấp một lúc 2 dữ liệu : human-readable : product1 và machine-readable: 1020212 | |
| **META INFO** | |
| **<head>** | Defines information about the document |
| **<head>** <title> <style> <base> <link> <meta> <script> <noscript>  **</head>** | |
| **<meta>** | Defines metadada about an HTML document |
| **<meta** **charset=”UTF-8”> //**chỉ định mã hoá ký tự cho tài liệu HTML, ưu tiên dùng bộ ký tự UTF-8  **<meta name=”**application-name**” content=”**trang web mục đích gì**” >**  **<meta name=”**author**” content=”**tên tác giả**” >**  **<meta name=”**application-name**” content=”**trang web mục đích gì**” >**  **<meta name=”**generato**r” content=”**tên phần mềm để tạo ra document**” >**  **<meta name=”**keywords**” content=”**các keyword quan trọng, hỗ trợ search engines**” >**  **<meta name=”**viewport” **content=”**with=device-width, initial-scale=1.0**”>** //kiểm soát kích thước và tỷ lệ của trang | |
| **<base>** | Specifies the base URL for all relative URLs |
| **<base** href=”<https://www.w3schools.com/>” **target=”\_**blank”>  thì trong body có 1 tag <img> như sau:  **<img** **src=”**image.gif” **width=”** “ **height=”** “ >  thì thẻ <img> sẽ tự hiểu như sau:  **<img** **src=”**<https://www.w3schools.com/>image.gif **target=”\_**blank” **width=”** “ **height=”** “> | |
| **PROGRAMMING** | |
| **<script>** | Defines a client-side script |
| **<script async**|**defer** **type=”**text/javascript” **src=”**url” **integrity=”** “ **crossorigin=”** “ **referrerpolicy=”** “ **>**  **async:** tập lệnh tải xuống song song với phân tích cú pháp việc thực thi tập lệnh xảy ra ngay khi có sẵn  ( trước quá tình phân tích cú pháp)  **defer** : tập lệnh tải xuống song song với phân tích cú pháp và thực hiện sau khi phân tích cú pháp xong  **Không có async và defer** : tải xuống và thực hiện luôn ( không phân tích cú pháp) | |
| **<noscrip.t>** | Defines an notice if user browser don’t support script |
| **<object>** | Defines an embedded object //use <img>,<video>,<audio.. better |
| **<param>** | Defines a parameter for an object |