

**Subject: HTML-5**

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* 1. HTML : HTML is a markup language, which means that it is written with codes that can be read by a person without it needing to be compiled first. In other words, the text on a web page is “marked up” with these codes to give the web browser instructions on how to display the text.

**1.1.1** A markup language is a language that annotates(add notes, give explanation) text so that the computer can manipulate that text.

* 1. **HTML Tags/Elements:**
* An HTML element is an individual component of an HTML document.
* HTML Tags/Elements are building block for HTML page.
* An HTML element usually consists of a **start** tag and **end** tag, with the content inserted in between.
* HTML tags are not case sensitive
* W3C **recommends** lowercase in HTML, and **demands** lowercase for stricter document types like XHTML.
* HTML elements with no content are called empty elements. Empty elements do not have an end tag, such as the <br> ,< col> , <hr> ,< img> ,< input> , <link> , <meta> etc.
  1. **HTML Attributes:**
* Attributes provide **additional information** about an element
* Attributes usually come in name/value pairs like: **name="value"**
* Double quotes around attribute values are the most common in HTML, but single quotes can also be used.
  1. **HTML Headings:**

Headings are defined with the <h1> to <h6> tags. <h1> defines the most important heading. <h6> defines the least important heading.

HTML Heading Tags are important for SEO Works.

* 1. **HTML Paragraph:**

The HTML **<p>** element defines a **paragraph**

* 1. **HTML Formatting**
     1. <b> - Bold text
     2. <strong> - Important text
     3. <i> - Italic text
     4. <em> - Emphasized text
     5. <mark> - Marked text
     6. <small> - Small text
     7. <del> - Deleted text
     8. <ins> - Inserted text
     9. <sub> - Subscript text
     10. <sup> - Superscript text

**Eg: html\_first.html**

* 1. **HTML span:**

**Span is an inline element**

**Eg: html\_first.html**

* 1. **HTML br:**

Inserts a single line break.

Eg:html\_first.html

In HTML, the <br> tag has no end tag.

In XHTML, the <br> tag must be properly closed, like this: <br />.

* 1. **HTML hr:**

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

* 1. **HTML pre:**

The HTML <pre> tag is used for indicating preformatted text.

Eg:html\_pre.html

* 1. **HTML a:**

The <a> tag defines a hyperlink, which is used to link from one page to another.

**1.12 HTML img:**

The <img> tag defines an image in an HTML page.

When the srcset attribute is set, the src files will be used as a “fallback” or “default” image. If the srcset image fails to load, or if the browser doesn’t support srcset, the src file will be selected instead. So it is very important to **always include** the src attribute in your images.

Eg: html\_img.html

* 1. **HTML table:**

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.

Eg: html\_table.html

**1.14 HTML list**

An unordered list starts with the **<ul>** tag. Each list item starts with the **<li>** tag. The list items will be marked with bullets (small black circles) by default.

An ordered list starts with the **<ol>** tag. Each list item starts with the **<li>** tag.The list items will be marked with numbers by default.

Eg:html\_first.html

* 1. **HTML inline, block**

**Block-level Elements :** A block-level element always starts on a new line and takes up the full width available (stretches out to the left and right as far as it can).

## Inline Elements: An inline element does not start on a new line and only takes up as much width as necessary.

## 1.16 HTML classes

## Using The class Attribute: The class attribute specifies one or more class names for an HTML element.

## 1.17 HTML iframe

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

## Eg: html\_iframe

**1.18 HTML metatag**

<meta charset="utf-8">

<meta name="viewport" content="width=device-width, initial-scale=1">

<meta name= "robots" content="index, follow">

<meta name="description" content="IQ Stream Technologies is one of the top quality Software Training Institute in Bangalore BTM Layout area" />

<meta name="google-site-verification" content="AOuf1YDYIZwNNz09Gc9e98069aXXJUIFvmLzPb4NK8E" />

<meta name="keywords" content="software training in, training institute in, IT training in, software course in, software training in Bangalore, placements in Bangalore, jobs in Bangalore, placements in software company, software training for freshers">

<meta name="author" content="manoj">

<meta name="copyright"content="IT JOB TRAINERS">

<meta name="Classification" content="Training">

<meta name="distribution" content="global" />

<meta name="city" content="Bangalore" />

<meta name="geo.region" content="IN" />

<meta name="state" content="Karnataka" />

<meta property="og:street-address" content="#3, 8/2 Anugraha Complex, 1st E Cross, 20th Main,Maruti Nagar Main Road, BTM Layout 1st Stage"/>

<meta name= "SKYPE\_TOOLBAR"content="SKYPE\_TOOLBAR\_PARSER\_COMPATIBLE"/>

<meta name="msvalidate.01" content="5236A9FC52D8BC2544835C82311501E3" />

**1.19 HTML favicon**

It is icon on tab

<link rel="icon" href="favicon.png" type="image/png">

<link rel="icon" href="favicon.jpg" type="image/jpg">

**1.20 HTML form**

The HTML **<form>** element defines a form that is used to collect user input

<form method=”get/post” action=action.php/.jsp>

</form>

**1.20.1 input type=”text”**

It is the default input type

<input type=”text” name=”myname” id=”idname”>

Eg:html\_login.html

**1.20.2 input type=”password”**

<input type=”password” name=”mypassword” id=”idpassword”>

Eg:html\_login.html

**1.20.3 textarea**

<textarea rows="4" cols="40">  
Enter the text here….  
</textarea>

**1.20.4 radiobutton**

<input type="radio" name="gender" value="male" checked> Male<br>

<input type="radio" name="gender" value="female"> Female<br>

<input type="radio" name="gender" value="other"> Other

**1.20.5 select**

<select name="carlist" form="carform">  
  <option value="volvo">Volvo</option>  
  <option value="saab">Saab</option>  
  <option value="opel">Opel</option>  
  <option value="audi">Audi</option>  
</select>

**1.20.6 checkbox**

Check box for multiple value selection

<input type="checkbox" name=”color”value="red">RED

<input type="checkbox" name=”color”value="blue">BLUE

<input type="checkbox" name=”color”value="green">GREEN

**1.20.7 hidden**

Hidden field for passing value from one page to another page

<input type=”hidden” value=”10”>

**1.20.8 submit**

Submit for form submission

<input type=”submit” value=”SUBMIT”>

**1.20.9 reset**

For reset the value in form

<input type=”reset” value=”RESET”>

* 1. **HTML youtube**

<iframe width="420" height="345" src="https://www.youtube.com/embed/tgbNymZ7vqY">

</iframe>

* 1. **HTML icons**

**1.22.1 Glyphicon**

<link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.7/css/bootstrap.min.css">

<h2>Glyphicon Examples</h2>

<p>Envelope icon: <span class="glyphicon glyphicon-envelope"></span></p>

<p>Envelope icon as a link:

<a href="#">

<span class="glyphicon glyphicon-envelope"></span>

</a>

</p>

<p>Search icon: <span class="glyphicon glyphicon-search"></span></p>

<p>Search icon on a button:

<button type="button" class="btn btn-default">

<span class="glyphicon glyphicon-search"></span> Search

</button>

</p>

**1.22.2 HTML Font-Awesome**

<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">

<i class="fa fa-car"></i>  
<i class="fa fa-car" style="font-size:48px;"></i>  
<i class="fa fa-car" style="font-size:60px;color:red;"></i>

**1.22.3 Google icon**

<link rel="stylesheet" href="https://fonts.googleapis.com/icon?family=Material+Icons">

<i class="material-icons">cloud</i>  
<i class="material-icons" style="font-size:48px;">cloud</i>  
<i class="material-icons" style="font-size:60px;color:red;">cloud</i>

**1.22.4 Ionic Icon**

<link rel="stylesheet" href="http://code.ionicframework.com/ionicons/2.0.1/css/ionicons.min.css">

<i class = "icon icon ion-happy-outline"></i>

<i class = "icon icon ion-star"></i>

<i class = "icon icon ion-compass"></i>

<i class = "icon icon ion-planet"></i>

<i class = "icon icon ion-ios-analytics"></i>

* 1. **HTML marquee**

The HTML <marquee> tag is used for scrolling piece of text or image displayed either horizontally across or vertically down your web site page depending on the settings.

Eg: html\_marquee.html

**1.24 HTML Responsive**

Responsive Web Design makes your web page look good on all devices (desktops, tablets, and phones).

**1.24.1 viewport**

When making responsive web pages, add the following <meta> element in all your web pages.

<meta name="viewport" content="width=device-width, initial-scale=1.0">

**2.0 HTML Version**

2.0.1 The <!DOCTYPE html> declaration defines this document to be HTML5. HTML-5 release on 2014.

2.02 HTML 4.01release on 1999.

### HTML 4.01 Strict: This DTD contains all HTML elements and attributes, but does NOT INCLUDE presentational or deprecated elements (like font). Framesets are not allowed.

<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01//EN" "http://www.w3.org/TR/html4/strict.dtd">

### HTML 4.01 Transitional: This DTD contains all HTML elements and attributes, INCLUDING presentational and deprecated elements (like font). Framesets are not allowed.

### <!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" "http://www.w3.org/TR/html4/loose.dtd">

* 1. **HTML5 Semantic Elements:** Semantic element is element with meaning

**2.1.1<article>:**

<article>

<h1>India</h1>

<p>India is my country.</p>

</article>

**2.1.2<aside>**

<p>My family and I visited Wonderla.</p>  
  
<aside>  
  <h4>Wonderla</h4>  
  <p>Wonderla is a water theme park in Mysore Bangalore Road.</p>  
</aside>

**2.1.3<details>**

<details>

<summary>Copyright 1999-2014.</summary>

<p> - by Refsnes Data. All Rights Reserved.</p>

<p>All content and graphics on this web site are the property of the company Refsnes Data.</p>

</details>

**2.1.4<figcaption>**

<figure>  
  <img src="image.jpg" alt="my iamge" width="304" height="228">  
  <figcaption>Fig1. - A view of the pulpit rock in Norway.</figcaption>  
</figure>

**2.1.5<figure>**

**2.1.6<footer>**

<footer>

<p>Posted by: Manoj</p>

<p>Contact information: <a href="me:someone@example.com">someone@example.com</a>.</p>

</footer>

**2.1.7<header>**

<article>  
  <header>  
    <h1>Most important heading here</h1>  
    <h3>Less important heading here</h3>  
    <p>Some additional information here</p>  
  </header>  
  <p>My paragraph content....</p>  
</article>

**2.1.8<main>:**The <main> tag specifies the main content of a document.

<main>

<p>Main content goes here…</p>

</main>

**2.1.9<mark>:** The <mark> tag defines marked text.

<mark>highlight parts of your text</mark>

**2.1.10<nav>:** The <nav> tag defines a set of navigation links.

<nav>

<a href="/html/">HTML</a> |

<a href="/css/">CSS</a> |

<a href="/js/">JavaScript</a> |

<a href="/jquery/">jQuery</a>

</nav>

**2.1.11<section>**

**2.1.12<summary>**

**2.1.13<time>:**The <time> tag defines a human-readable date/time.

<p>We open at <time>10:00</time> every morning.</p>

Eg: html\_semantic.html

* 1. **HTML5 new input Elements:**

Color: <input type=”color”name=””>

Date<input type=”date” name=””>

Datetime<input type=”datetime” name=””>

Datetime Local<input type=”datatime-local” name=””>

Email<input type=”email” name=””>

Month<input type=”month” name=””>

Number<input type=”number” name=””>

Ranger<input type=”range” name=””>

Search<input type=”search” name=””>

Tel<input type=”tel” name=””>

Time<input type=”time” name=””>

Url<input type=”url” name=””>

Week<input type=”week” name=””>

Eg: html\_newinput.html

## HTML5 Form Elements

## 2.3.1HTML5 datalist

<input tytpe="text"list="browsers" name="browser">

<datalist id="browsers">

<option value="Internet Explorer">

<option value="Firefox">

<option value="Chrome">

<option value="Opera">

<option value="Safari">

</datalist>

Eg:html\_datalist.html

**2.3.2 HTML5 output**

<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>

Eg:html\_output.html

* 1. **HTML5 video**

The HTML5 <video> element specifies a standard way to embed a video in a web page.

Attributes-controls muted loop autoplay

Eg:html\_video.html

**2.4.1The <track>** tag specifies text tracks for media elements (<audio> and <video>).

**2.5 HTML5 audio**

The HTML5 <audio> element specifies a standard way to embed audio in a web page.

Eg:html\_audio.html

* 1. **HTML5 Canvas**

When using canvas, it's important to understand the difference between the canvas element and the canvas context, as often times people get these confused.  The canvas element is the actual DOM node that's embedded in the HTML page.  The canvas context is an object with properties and methods that you can use to render graphics inside the canvas element.

Eg: html\_canvas\_line.html, html\_canvas\_circle.html,html\_canvas\_fillcolor.html

* 1. **HTML5 SVG**

SVG stands for **S**calable **V**ector **G**raphics and it is a language for describing 2D-graphics and graphical applications in XML and the XML is then rendered by an SVG viewer.

Eg:html\_svg\_circle.html

* 1. **HTML5 built in API**

HTML5 js libraries are build in browsers.

* 1. **HTML5 Geolocation**

The HTML Geolocation API is used to get the geographical position of a user.

<button onclick="getLocation()">Try It</button>

<p id="demo"></p>

<script>

var x = document.getElementById("demo");

function getLocation() {

if (navigator.geolocation) {

navigator.geolocation.getCurrentPosition(showPosition);

} else {

x.innerHTML = "Geolocation is not supported by this browser.";

}

}

function showPosition(position) {

x.innerHTML = "Latitude: " + position.coords.latitude +

"<br>Longitude: " + position.coords.longitude;

}

</script>

**3.1HTML5 Web Storage**

Eg:storageone.html, storagetwo.html, stoaregethree.html

* 1. **HTML5 Drag and Drop**

Eg: draganddrop.html

* 1. **HTML5 Web worker**
  2. **HTML5 SSE**

**4.0 Google font, earth**

**4.0.1 GoogleFont**

For making artistic fonts and native fonts

Eg:googlefont.html

**4.0.2 Google earth**

**Eg:googleearth\_one.html**

**All HTML tags with description and Type**

|  |  |  |
| --- | --- | --- |
| **TAG** | **DESCRIPTION** | **TYPE** |
| <!-- …--> | Defines a comment | Basic HTML |
| <!DOCTYPE> | Defines the document type | Basic HTML |
| <a> | Defines a hyperlink | Links |
| <abbr> | Defines an abbreviation or an acronym | Formating |
| <acronym> 2 | Not supported in HTML5. Use <abbr> instead.  Defines an acronym. | Formating |
| <address> | Defines contact information for the author/owner of a document |  |
| <applet> 3 | Not supported in HTML5. Use <embed> or <object> instead.  Defines an embedded applet | Programming |
| <area> | Defines an area inside an image-map | Images |
| <article>[5] | Defines an article | Style and Semantic |
| <aside>[5] | Defines content aside from the page content | Style and Semantic |
| <audio>[5] | Defines sound content | audio/video |
| <b> | Defines bold text | Formating |
| <base> | Specifies the base URL/target for all relative URLs in a document | Meta info |
| <basefont> 4 | Not supported in HTML5. Use CSS instead.  Specifies a default color, size, and font for all text in a document | Meta info |
| <bdi>[5] | Isolates a part of text that might be formatted in a different direction from other text outside it | Formating |
| <bdo> | Overrides the current text direction | Formating |
| <big> 4 | Not supported in HTML5. Use CSS instead.  Defines big text | Formating |
| <blockquote> | Defines a section that is quoted from another source | Formating |
| <body> | Defines the document's body | Basic HTML |
| <br> | Defines a single line break | Basic HTML |
| <button> | Defines a clickable button | Form Input |
| <canvas>[5] | Used to draw graphics, on the fly, via scripting (usually JavaScript) | Images |
| <caption> | Defines a table caption | Tables |
| <center> 4 | Not supported in HTML5. Use CSS instead.  Defines centered text | Formating |
| <cite> | Defines the title of a work | Formating |
| <code> | Defines a piece of computer code | Formating |
| <col> | Specifies column properties for each column within a <colgroup> element | Tables |
| <colgroup> | Specifies a group of one or more columns in a table for formatting | Tables |
| <command> |  |  |
| <data> | Links the given content with a machine-readable translation | Style and Semantics |
| <datalist>[5] | Specifies a list of pre-defined options for input controls | Form Input |
| <dd> | Defines a description/value of a term in a description list | Lists |
| <del> | Defines text that has been deleted from a document | Formating |
| <details>[5] | Defines additional details that the user can view or hide | Style and Semantic |
| <dfn> | Represents the defining instance of a term | Formating |
| <dialog> | Defines a dialog box or window | Style and Semantic |
| <dir> \* | Not supported in HTML5. Use <ul> instead.  Defines a directory list | Lists |
| <div> | Defines a section in a document | Style and Semantic |
| <dl> | Defines a description list | Lists |
| <dt> | Defines a term/name in a description list | Lists |
| <em> | Defines emphasized text | Formating |
| <embed>[5] | Defines a container for an external (non-HTML) application | Programming |
| <fieldset> | Groups related elements in a form | Form Input |
| <figcaption>[5] | Defines a caption for a <figure> element | Images |
| <figure>[5] | Specifies self-contained content | Images |
| <font>[\*] | Not supported in HTML5. Use CSS instead.  Defines font, color, and size for text | Formating |
| <footer> | Defines a footer for a document or section | Style and Semantic |
| <form> | Defines an HTML form for user input | Form Input |
| <frame>[\*] | Not supported in HTML5.  Defines a window (a frame) in a frameset | Frame |
| <frameset>[\*] | Not supported in HTML5.  Defines a set of frames | Frame |
| <h1> - <h6> | Defines HTML headings |  |
| <head> | Defines information about the document | Meta info |
| <header>[5] | Defines a header for a document or section | Style and Semantic |
| <hgroup> |  |  |
| <hr> | Defines a thematic change in the content | Basic HTML |
| <html> | Defines the root of an HTML document | Basic HTML |
| <i> | Defines a part of text in an alternate voice or mood | Formating |
| <iframe> | Defines an inline frame | Frame |
| <img> | Defines an image | Images |
| <input> | Defines an input control | Form Input |
| <ins> | Defines a text that has been inserted into a document | Formating |
| <kbd> | Defines keyboard input | Formating |
| <keygen>[5] | Defines a key-pair generator field (for forms) | Form Input |
| <label> | Defines a label for an <input> element | Form Input |
| <legend> | Defines a caption for a <fieldset> element | Form Input |
| <li> | Defines a list item | Lists |
| <link> | Defines the relationship between a document and an external resource (most used to link to style sheets) | Links |
| <main>[5] | Specifies the main content of a document | Style and Semantic |
| <map> | Defines a client-side image-map | Images |
| <mark> | Defines marked/highlighted text | Formating |
| <menu> | Defines a list/menu of commands | Lists |
| <menuitem>[5] | Defines a command/menu item that the user can invoke from a popup menu | Lists |
| <meta> | Defines metadata about an HTML document | Meta Info |
| <meter>[5] | Defines a scalar measurement within a known range (a gauge) | Formating |
| <nav>[5] | Defines navigation links | Links |
| <noframes>[\*] | Not supported in HTML5.  Defines an alternate content for users that do not support frames | Frames |
| <noscript> | Defines an alternate content for users that do not support client-side scripts | Programming |
| <object> | Defines an embedded object | Programming |
| <ol> | Defines an ordered list | Lists |
| <optgroup> | Defines a group of related options in a drop-down list | Form Input |
| <option> | Defines an option in a drop-down list | Form Input |
| <output>[5] | Defines the result of a calculation | Form Input |
| <p> | Defines a paragraph | Basic HTML |
| <param> | Defines a parameter for an object | Programming |
| <picture>[5] | Defines a container for multiple image resources | Images |
| <pre> | Defines preformatted text | Formating |
| <progress>[5] | Represents the progress of a task | Formating |
| <q> | Defines a short quotation | Formating |
| <rp>[5] | Defines what to show in browsers that do not support ruby annotations | Formating |
| <rt> | Defines an explanation/pronunciation of characters (for East Asian typography) | Formating |
| <ruby>[5] | Defines a ruby annotation (for East Asian typography) | Formating |
| <s> | Defines text that is no longer correct | Formating |
| <samp> | Defines sample output from a computer program | Formating |
| <script> | Defines a client-side script | Programming |
| <section>[5] | Defines a section in a document | Style and Semantic |
| <select> | Defines a drop-down list | Form Input |
| <small> | Defines smaller text | Formating |
| <source>[5] | Defines multiple media resources for media elements (<video> and <audio>) | Audio/video |
| <span> | Defines a section in a document | Style and Semantic |
| <strike>[\*] | Not supported in HTML5. Use <del> or <s> instead.  Defines strikethrough text | Formating |
| <strong> | Defines important text | Formating |
| <style> | Defines style information for a document | Style and Semantic |
| <sub> | Defines subscripted text | Formating |
| <summary>[5] | Defines a visible heading for a <details> element | Style and Semantic |
| <sup> | Defines superscripted text | Formating |
| <table> | Defines a table | Tables |
| <tbody> | Groups the body content in a table | Tables |
| <td> | Defines a cell in a table | Tables |
| <textarea> | Defines a multiline input control (text area) | Form Input |
| <tfoot> | Groups the footer content in a table | Tables |
| <th> | Defines a header cell in a table | Tables |
| <thead> | Groups the header content in a table | Tables |
| <time>[5] | Defines a date/time | Formating |
| <title> | Defines a title for the document |  |
| <tr> | Defines a row in a table | Tables |
| <track> | Defines text tracks for media elements (<video> and <audio>) | Audio/video |
| <tt>[\*] | Not supported in HTML5. Use CSS instead.  Defines teletype text | Formating |
| <u> | Defines text that should be stylistically different from normal text | Formatting |
| <ul> | Defines an unordered list | Lists |
| <var> | Defines a variable | Formatting |
| <video> | Defines a video or movie | Audio/video |
| <wbr> | Defines a possible line-break | Formatting |

**All HTML attribute**

|  |  |  |
| --- | --- | --- |
| **Attribute** | **Belongs to** | **Description** |
| accept | <input> | Specifies the types of files that the server accepts (only for type="file") |
| accept-charset | <form> | Specifies the character encodings that are to be used for the form submission |
| accesskey | Global Attributes | Specifies a shortcut key to activate/focus an element |
| action | <form> | Specifies where to send the form-data when a form is submitted |
| align[\*] | Not supported in HTML 5. | Specifies the alignment according to surrounding elements. Use CSS instead |
| alt | <area><input><input> | Specifies an alternate text when the original element fails to display |
| async | <script> | Specifies that the script is executed asynchronously (only for external scripts) |
| autocomplete | <from><input> | Specifies whether the <form> or the <input> element should have autocomplete enabled |
| autofocus | <button>, <input>, <keygen>, <select>, <textarea> | Specifies that the element should automatically get focus when the page loads |
| autoplay | <audio>, <video> | Specifies that the audio/video will start playing as soon as it is ready |
| bgcolor | Not supported in HTML 5. | Specifies the background color of an element. Use CSS instead |
| border | Not supported in HTML 5. | Specifies the width of the border of an element. Use CSS instead |
| challenge | <keygen> | Specifies that the value of the <keygen> element should be challenged when submitted |
| charset | <meta>, <script> | Specifies the character encoding |
| checked | <input> | Specifies that an <input> element should be pre-selected when the page loads (for type="checkbox" or type="radio") |
| cite | <blockquote>, <del>, <ins>, <q> | Specifies a URL which explains the quote/deleted/inserted text |
| class | Global attributes | Specifies one or more classnames for an element (refers to a class in a style sheet) |
| color | Not supported in HTML 5. | Specifies the text color of an element. Use CSS instead |
| cols | <textarea> | Specifies the visible width of a text area |
| colspan | <td>, <th> | Specifies the number of columns a table cell should span |
| content | <meta> | Gives the value associated with the http-equiv or name attribute |
| contenteditable | Global attribute | Specifies whether the content of an element is editable or not |
| contextmenu | Global Attribute | Specifies a context menu for an element. The context menu appears when a user right-clicks on the element |
| controls | <audio>, <video> | Specifies that audio/video controls should be displayed (such as a play/pause button etc) |
| coords | <area> | Specifies the coordinates of the area |
| data | <object> | Specifies the URL of the resource to be used by the object |
| data-\* | Global attributes | Used to store custom data private to the page or application |
| datetime | <del>, <ins>, <time> | Specifies the date and time |
| default | <track> | Specifies that the track is to be enabled if the user's preferences do not indicate that another track would be more appropriate |
| defer | <script> | Specifies that the script is executed when the page has finished parsing (only for external scripts) |
| dir | Global Attribute | Specifies the text direction for the content in an element |
| dirname | <input>, <textarea> | Specifies that the text direction will be submitted |
| disabled | <button>, <fieldset>, <input>, <keygen>, <optgroup>, <option>, <select>,<textarea> | Specifies that the specified element/group of elements should be disabled |
| download | <a>, <area> | Specifies that the target will be downloaded when a user clicks on the hyperlink |
| draggable | Global Attributes | Specifies whether an element is draggable or not |
| dropzone | Global Attribute | Specifies whether the dragged data is copied, moved, or linked, when dropped |
| enctype | <form> | Specifies how the form-data should be encoded when submitting it to the server (only for method="post") |
| for | <label>, <output> | Specifies which form element(s) a label/calculation is bound to |
| form | <button>, <fieldset>, <input>, <keygen>, <label>, <meter>, <object>, <output>, <select>, <textarea> | Specifies the name of the form the element belongs to |
| formaction | <button>, <input> | Specifies where to send the form-data when a form is submitted. Only for type="submit" |
| headers | <td>, <th> | Specifies one or more headers cells a cell is related to |
| height | <canvas>, <embed>, <iframe>, <img>, <input>, <object>, <video> | Specifies the height of the element |
| hidden | Global Attribute | Specifies that an element is not yet, or is no longer, relevant |
| high | <meter> | Specifies the range that is considered to be a high value |
| href | <a>, <area>, <base>, <link> | Specifies the URL of the page the link goes to |
| hreflang | <a>, <area>, <link> | Specifies the language of the linked document |
| http-equiv | <meta> | Provides an HTTP header for the information/value of the content attribute |
| id | Global Attribute | Specifies a unique id for an element |
| ismap | <img> | Specifies an image as a server-side image-map |
| keytype | <keygen> | Specifies the security algorithm of the key |
| kind | <track> | Specifies the kind of text track |
| label | <track>, <option>, <optgroup> | Specifies the title of the text track |
| lang | Global Attribute | Specifies the language of the element's content |
| list[5] | <input> | Refers to a <datalist> element that contains pre-defined options for an <input> element |
| loop | <audio>, <video> | Specifies that the audio/video will start over again, every time it is finished |
| low | <meter> | Specifies the range that is considered to be a low value |
| manifest | <html> | Specifies the address of the document's cache manifest (for offline browsing) |
| max[5] | <input>, <meter>, <progress> | Specifies the maximum value |
| maxlength | <input>, <textarea> | Specifies the maximum number of characters allowed in an element |
| media | <a>, <area>, <link>, <source>, <style> | Specifies what media/device the linked document is optimized for |
| method | <form> | Specifies the HTTP method to use when sending form-data |
| min | <input>, <meter> | Specifies a minimum value |
| multiple | <input>, <select> | Specifies that a user can enter more than one value |
| muted[5] | <video>, <audio> | Specifies that the audio output of the video should be muted |
| name | <button>, <fieldset>, <form>, <iframe>, <input>, <keygen>, <map>, <meta>, <object>, <output>, <param>, <select>, <textarea> | Specifies the name of the element |
| novalidate[5] | <form> | Specifies that the form should not be validated when submitted |
| onabort | <audio>, <embed>, <img>, <object>, <video> | Script to be run on abort |
| onafterprint | <body> | Script to be run after the document is printed |
| onbeforeprint | <body> | Script to be run before the document is printed |
| onbeforeunload | <body> | Script to be run when the document is about to be unloaded |
| onblur | All visible elements. | Script to be run when the element loses focus |
| oncanplay[5] | <audio>, <embed>, <object>, <video> | Script to be run when a file is ready to start playing (when it has buffered enough to begin) |
| oncanplaythrough | <audio>, <video> | Script to be run when a file can be played all the way to the end without pausing for buffering |
| onchange | All visible elements. | Script to be run when the value of the element is changed |
| onclick | All visible elements. | Script to be run when the element is being clicked |
| oncontextmenu | All visible elements. | Script to be run when a context menu is triggered |
| oncopy | All visible elements. | Script to be run when the content of the element is being copied |
| oncuechange | <track> | Script to be run when the cue changes in a <track> element |
| oncut | All visible elements. | Script to be run when the content of the element is being cut |
| ondblclick | All visible elements. | Script to be run when the element is being double-clicked |
| ondrag | All visible elements. | Script to be run at the end of a drag operation |
| ondragend | All visible elements. | Script to be run at the end of a drag operation |
| ondragenter | All visible elements. | Script to be run when an element has been dragged to a valid drop target |
| ondragleave | All visible elements. | Script to be run when an element leaves a valid drop target |
| ondragover | All visible elements. | Script to be run when an element is being dragged over a valid drop target |
| ondragstart | All visible elements. | Script to be run at the start of a drag operation |
| ondrop | All visible elements. | Script to be run when dragged element is being dropped |
| ondurationchange | <audio>, <video> | Script to be run when the length of the media changes |
| onemptied | <audio>, <video> | Script to be run when something bad happens and the file is suddenly unavailable (like unexpectedly disconnects) |
| onended | <audio>, <video> | Script to be run when the media has reach the end (a useful event for messages like "thanks for listening") |
| onerror | <audio>, <body>, <embed>, <img>, <object>, <script>, <style>, <video> | Script to be run when an error occurs |
| onfocus | All visible elements. | Script to be run when the element gets focus |
| onhashchange | <body> | Script to be run when there has been changes to the anchor part of the a URL |
| oninput | All visible elements. | Script to be run when the element gets user input |
| oninvalid | All visible elements. | Script to be run when the element is invalid |
| onkeydown | All visible elements. | Script to be run when a user is pressing a key |
| onkeypress | All visible elements. | Script to be run when a user presses a key |
| onkeyup | All visible elements. | Script to be run when a user releases a key |
| onload | <body>, <iframe>, <img>, <input>, <link>, <script>, <style> | Script to be run when the element is finished loading |
| onloadeddata | <audio>, <video> | Script to be run when media data is loaded |
| onloadedmetadata | <audio>, <video> | Script to be run when meta data (like dimensions and duration) are loaded |
| onloadstart | <audio>, <video> | Script to be run just as the file begins to load before anything is actually loaded |
| onmousedown | All visible elements | Script to be run when a mouse button is pressed down on an element |
| onmousemove | All visible elements. | Script to be run as long as the  mouse pointer is moving over an element |
| onmouseout | All visible elements. | Script to be run when a mouse pointer moves ot of an element |
| onmouseover | All visible elements. | Script to be run when a mouse pointer moves over an element |
| onmouseup | All visible elements. | Script to be run when a mouse button is released over an element |
| onmousewheel | All visible elements. | Script to be run when a mouse wheel is being scrolled over an element |
| onoffline | <body> | Script to be run when the browser starts to work offline |
| ononline | <body> | Script to be run when the browser starts to work online |
| onpagehide | <body> | Script to be run when a user navigates away from a page |
| onpageshow | <body> | Script to be run when a user navigates to a page |
| onpaste | All visible elements. | Script to be run when the user pastes some content in an element |
| onpause | <audio>, <video> | Script to be run when the media is paused either by the user or programmatically |
| onplay | <audio>, <video> | Script to be run when the media is ready to start playing |
| onplaying | <audio>, <video> | Script to be run when the media actually has started playing. |
| onpopstate | <body> | Script to be run when the window's history changes. |
| onprogress | <audio>, <video> | Script to be run when the browser is in the process of getting the media data |
| onratechange | <audio>, <video> | Script to be run each time the playback rate changes (like when a user switches to a slow motion or fast forward mode). |
| onreset | <form> | Script to be run when a reset button in a form is clicked. |
| onresize | <body> | Script to be run when the browser window is being resized. |
| onscroll | All visible elements. | Script to be run when an element's scrollbar is being scrolled |
| onsearch | <input> | Script to be run when the user writes something in a search field (for <input="search">) |
| onseeked | <audio>, <video> | Script to be run when the seeking attribute is set to false indicating that seeking has ended |
| onseeking | <audio>, <video> | Script to be run when the seeking attribute is set to true indicating that seeking is active |
| onselect | All visible elements. | Script to be run when the element gets selected |
| onshow | <menu> | Script to be run when a <menu> element is shown as a context menu |
| onstalled[5] | <audio>, <video> | Script to be run when the browser is unable to fetch the media data for whatever reason |
| onstorage | <body> | Script to be run when a Web Storage area is updated |
| onsubmit | <form> | Script to be run when a form is submitted |
| onsuspend | <audio>, <video> | Script to be run when fetching the media data is stopped before it is completely loaded for whatever reason |
| ontimeupdate | <audio>, <video> | Script to be run when the playing position has changed (like when the user fast forwards to a different point in the media) |
| ontoggle | Script to be run when the user opens or closes the <details> element | Script to be run when the user opens or closes the <details> element |
| onunload | <body> | Script to be run when a page has unloaded (or the browser window has been closed) |
| onvolumechange | <audio>, <video> | Script to be run each time the volume is changed which (includes setting the volume to "mute") |
| onwaiting | <audio>, <video | Script to be run when the media has paused but is expected to resume (like when the media pauses to buffer more data) |
| onwheel | All visible elements. | Script to be run when the mouse wheel rolls up or down over an element |
| open | <details> | Specifies that the details should be visible (open) to the user |
| optimum | <meter> | Specifies what value is the optimal value for the gauge |
| pattern | <input> | Specifies a regular expression that an <input> element's value is checked against |
| placeholder | <input>, <textarea> | Specifies a short hint that describes the expected value of the element |
| poster | <video> | Specifies an image to be shown while the video is downloading, or until the user hits the play button |
| preload | <audio>, <video> | Specifies if and how the author thinks the audio/video should be loaded when the page loads |
| readonly | <input>, <textarea> | Specifies that the element is read-only |
| rel | <a>, <area>, <link> | Specifies the relationship between the current document and the linked document |
| required | <input>, <select>, <textarea> | Specifies that the element must be filled out before submitting the form |
| reversed | <ol> | Specifies that the list order should be descending (9,8,7...) |
| rows | <textarea> | Specifies the visible number of lines in a text area |
| rowspan | <td>, <th> | Specifies the number of rows a table cell should span |
| sandbox | <iframe> | Enables an extra set of restrictions for the content in an <iframe> |
| scope | <th> | Specifies whether a header cell is a header for a column, row, or group of columns or rows |
| scoped | <style> | Specifies that the styles only apply to this element's parent element and that element's child elements |
| selected | <option> | Specifies that an option should be pre-selected when the page loads |
| shape | <area> | Specifies the shape of the area |
| size | <input>, <select> | Specifies the width, in characters (for <input>) or specifies the number of visible options (for <select>) |
| sizes | <img>, <link>, <source> | Specifies the size of the linked resource |
| span | <col>, <colgroup> | Specifies the number of columns to span |
| spellcheck | Global Attributes | Specifies whether the element is to have its spelling and grammar checked or not |
| src | <audio>, <embed>, <iframe>, <img>, <input>, <script>, <source>, <track>, <video> | Specifies the URL of the media file |
| srcdoc | <iframe> | Specifies the HTML content of the page to show in the <iframe> |
| srclang | <track> | Specifies the language of the track text data (required if kind="subtitles") |
| srcset | <img>, <source> | Specifies the URL of the image to use in different situations |
| start | <ol> | Specifies the start value of an ordered list |
| step | <input> | Specifies the legal number intervals for an input field |
| style | Global Attributes | Specifies an inline CSS style for an element |
| tabindex | Global Attributes | Specifies the tabbing order of an element |
| target | <a>, <area>, <base>, <form> | Specifies the target for where to open the linked document or where to submit the form |
| title | Global Attributes | Specifies extra information about an element |
| translate | Global Attributes | Specifies whether the content of an element should be translated or not |
| type | <button>, <embed>, <input>, <link>, <menu>, <object>, <script>, <source>, <style> | Specifies the type of element |
| usemap | <img>, <object> | Specifies an image as a client-side image-map |
| value | <button>, <input>, <li>, <option>, <meter>, <progress>, <param> | Specifies the value of the element |
| width | <canvas>, <embed>, <iframe>, <img>, <input>, <object>, <video> | Specifies the width of the element |
| wrap | <textarea> | Specifies how the text in a text area is to be wrapped when submitted in a form |

**HTML Symbols**

|  |  |  |  |
| --- | --- | --- | --- |
| **Char** | **Number** | **Entity** | **Description** |
| ∀ | &#8704; | &forall; | For all |
| ∂ | &#8706; | &part; | Partial differential |
| ∃ | &#8707; | &exist; | Three exists |
| ∅ | &#8709; | &empty; | Empty sets |
| ∇ | &#8711; | &nabla; | Nabla |
| ∈ | &#8712; | &isin; | Element of |
| ∉ | &#8713; | &notin; | Not an element of |
| ∋ | &#8715; | &ni; | Contains as member |
| ∏ | &#8719; | &prod; | N-Ary Product |
| ∑ | &#8721; | &sum; | N- Ary Summation |