

Module 1: HTML 4 & 5 – Cheat Sheet

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1.0. Introduction to HTML 5

What is HTML?	<ul style="list-style-type: none"> • Tag-based language. • Creates elements in the web page. • Creates a basic appearance to the web page.
Features:	<ul style="list-style-type: none"> • Markup Language. • Executed by all browsers. • Not a case sensitive language.
History:	<ul style="list-style-type: none"> • Developed by Tim Berners Lee in 1991. • HTML 1.0: Late 1991 • HTML 2.0: 1995-11-24 • HTML 3.0: 1997-1-14 • HTML 4.0: 1997-12-18 • HTML 5.0: 2014-10-28 • HTML 5.1: 2016-11-1 • HTML 5.2: 2017-12-14

1.1. <html>

Example:	<pre><html> head, body only. </html></pre>
Interpretation:	Defines beginning and ending point of HTML program.
Attributes:	None

1.2. <body>

Example:	<pre><body> div, p, hr, span, ul, ol, table etc. </body></pre>
Interpretation:	Defines beginning and ending point of Content of the web page.
Attributes:	None

1.3. <head>

Example:	<pre><head> meta, script, style, link etc. </head></pre>
Interpretation:	Beginning and ending point of Metadata of the web page.
Attributes:	None

1.4. <title>

Example:	<pre><title> title here </title></pre>
Interpretation:	Represents the page title that is displayed in the browser's title bar.
Attributes:	None

1.5. <h1>

Example: `<h1>`
heading 1 here
`</h1>`

Interpretation:

- Represents heading level 1.
- It is block level element.

Attributes: None

1.6. <h2>

Example: `<h2>`
heading 2 here
`</h2>`

Interpretation:

- Represents heading level 2.
- It is block level element.

Attributes: None

1.7. <h3>

Example: `<h3>`
heading 3 here
`</h3>`

Interpretation:

- Represents heading level 3.
- It is block level element.

Attributes: None

1.8. <h4>

Example: `<h4>`
heading 4 here
`</h4>`

Interpretation:

- Represents heading level 4.
- It is block level element.

Attributes: None

1.9. <h5>

Example: `<h5>`
heading 5 here
`</h5>`

Interpretation:

- Represents heading level 5.
- It is block level element.

Attributes: None

1.10. <h6>

Example: `<h6>`
heading 6 here
`</h6>`

Interpretation:

- Represents heading level 6.
- It is block level element.

Attributes: None

1.11. <p>

Example: `<p>`
paragraph here
`</p>`

Interpretation:

- Creates paragraph in the web page.
- It is block level element.

Attributes: None

1.12. <hr>

Example: `<hr>`

Interpretation:

- Horizontal ruler (Horizontal line).
- Used as separator.
- It is block level element.

Attributes: None

1.13. <div>

Example: `<div>`
content here
`</div>`

Interpretation:

- Creates division or section of the document.
- Acts as a container of many other html tags.
- Can be used in `<body>`.
- Can be nested.
- It is block level element.

Attributes: None

1.14.

Example: ``
text here
``

Interpretation:

- Creates small part of the text.
- Acts as a container of other small tags such as ``, `<i>`, `<u>` etc.
- `` is an "Inline Container"; `<div>` is a "Block level Container".
- Can be nested.
- It is an inline level element.

Attributes: None

1.15.

Example: ``
` item 1 `
` item 2 `
``

Interpretation:

- Represents a list of items with bullets.
- It is a block level element.
- Each item in the list is represented as `` tag.
- `` represents "List Item", which is a paired tag.
- You can use `` tags only inside `` or `` tags.

Attributes of : None

Attributes of : None

1.16.

Example:	<pre> item 1 item 2 </pre>	
Interpretation:	<ul style="list-style-type: none"> Represents a list of items with numbers. It is a block level element. Each item in the list is represented as tag. represents "List Item", which is a paired tag. You can use tags only inside or tags. 	
Attributes of :	reversed="reversed"	Specifies to display the list numbers in reverse order (9, 8, 7, 6, 5, 4, 3, 2, 1 etc.)
	start="number"	Specifies the list numbers should be started with specified number.
Attributes of :	None	

1.17. <dl>

Example:	<pre><dl> <dt>Title</dt> <dd>Description</dd> </dl></pre>	
Interpretation:	<ul style="list-style-type: none"> DL tag defines description list. DL tag is used in conjunction with <dt> (description term / description title) and <dd> (description data - describes each description title). It is block level element. 	
Attributes of <dl>:	None	
Attributes of <dt>:	None	
Attributes of <dd>:	None	

1.18. <a>

Example:	<pre> Link text here </pre>	
Interpretation:	<ul style="list-style-type: none"> Creates a hyperlink; when the user clicks it, the provided url gets opened in the browser. By default, <ul style="list-style-type: none"> An unvisited link is underlined and blue. A visited link is underlined and blue. An active (click-and-hold) link is underlined and red. It is an inline level element. 	
Attributes:	href="url"	Specifies the url that should be opened when the user clicks on the hyperlink.
	target="filename"	Specifies the frame name, where the target url should be opened.
	download="filename"	Specifies that the user can be able to download the target url (file).

1.19. <iframe>

Example: `<iframe src="url">`
`</iframe>`

Interpretation:

- <iframe> tag embeds (displays) a web page (based on url) within the current web page.
- It is inline level element.

Attributes:	<code>width="pixels"</code>	Specifies width of iframe.
	<code>height="pixels"</code>	Specifies height of iframe
	<code>src="url"</code>	Specifies url of the web page that should be displayed in the iframe.
	<code>name="name"</code>	Specifies name of iframe.

1.20.

Example: ``

Interpretation:

- Displays an image.
- It is inline level element.
- It is unpaired tag.

Attributes:	<code>width="pixels"</code>	Specifies width of image.
	<code>height="pixels"</code>	Specifies height of image.
	<code>alt="alternate text"</code>	Specifies alternate text that will be appear in case of image is not found in the browser.
	<code>src="image url"</code>	Specifies path (url) of image.

1.21. <figure>

Example: `<figure>`
``
`<figcaption> caption here </figcaption>`
`</figure>`

Interpretation:

- Displays a self-contained image with caption.
- Caption is represented using <figcaption> tag.
- The <figure> tag position is independent of the main flow, and if removed it should not affect the flow of the document.
- It is block level element.

Attributes: None

1.22. <picture>

Example: `<picture>`
`<source srcset="filename1.jpg" media="(min-width: pixels)">`
`<source srcset="filename2.jpg" media="(min-width: pixels)">`
``
`</picture>`

Interpretation:

- Displays any one of the specified images, based on the screen width.
- If the screen width doesn't match with any one of the <source> tags [or] the browser doesn't support <picture> tag, then the image specified in tag will be displayed.
- It is block level element.

Attributes of <picture>: None

Attributes of <source>:	<code>media="(min-width: pixels)"</code>	Specifies screen width.
	<code>srcset="image url"</code>	Specifies path (url) of image.

1.23. <embed>

Example: `<embed width="pixels" height="pixels" src="filename.swf">`

Interpretation:

- Displays a Flash (swf) / animated file.
- It is inline level element.
- It is an unpaired tag.

Attributes:	<code>width="pixels"</code>	Specifies width of flash player.
	<code>height="pixels"</code>	Specifies height of flash player.
	<code>src="flash file url"</code>	Specifies path (url) of flash file.

1.24. <object>

Example: `<object width="pixels" height="pixels" data="filename.swf">
</object>`

Interpretation:

- Displays a Flash (swf) / animated file.
- It is inline level element.

Attributes:	<code>width="pixels"</code>	Specifies width of flash player.
	<code>height="pixels"</code>	Specifies height of flash player.
	<code>src="flash file url"</code>	Specifies path (url) of flash file.

1.25. <audio>

Example: `<audio>
<source src="filename.mp3">
<source src="filename.ogg">
</audio>`

Interpretation:

- Plays the specified audio file in the browser.
- If multiple <source> tags are specified, any one of the audio files will be played by the browser automatically, whichever is compatible with that browser.

Attributes:	<code>autoplay="autoplay"</code>	Specifies that the audio should start playing automatically when the web page is loaded.
	<code>controls="controls"</code>	Displays the audio player in the web page.

1.26. <video>

Example: `<video>
<source src="filename.mp4">
<source src="filename.ogg">
</video>`

Interpretation:

- Plays the specified video file in the browser.
- If multiple <source> tags are specified, any one of the video files will be played by the browser automatically, whichever is compatible with that browser.

Attributes:	<code>width="pixels"</code>	Specifies width of video player.
	<code>height="pixels"</code>	Specifies height of video player.
	<code>autoplay="autoplay"</code>	Specifies that the video should start playing automatically when the web page is loaded.
	<code>controls="controls"</code>	Displays the video player in the web page.

1.27. <table>

Example:

```
<table>
  <caption> Title </caption>

  <thead>
    <tr>
      <th> Heading cell 1 </th>
      <th> Heading cell 2 </th>
    </tr>
  </thead>

  <tbody>
    <tr>
      <td> Cell 1 </td>
      <td> Cell 2 </td>
    </tr>
  </tbody>

  <tfoot>
    <tr>
      <td> Footer Cell 1 </td>
      <td> Footer Cell 2 </td>
    </tr>
  </tfoot>
</table>
```

Interpretation:

- <table> tag displays a table in the web page.
- Table is a collection of rows (<tr> tag); Row is a collection of cells (<td> or <th> tag).
- <caption> tag specifies title of the table.
- Use <caption>, <tbody>, <thead> tags inside <table> tag.
- Use <tr> in either <tbody> and <thead> tags.
- Use <td> or <th> tags in <tr> tag.
- <thead> tag represents collection of header rows. <th> tag displays header cell. Header cell is similar to normal cell but has bold + center alignment, by default.
- <tbody> tag represents collection of data rows. <td> tag displays data cell (normal cell).
- <table> is a block level element.

Attributes of <table>: None

Attributes of <thead>: None

Attributes of <tbody>: None

Attributes of <tfoot>: None

Attributes of <tr>: None

Attributes of <caption>: None

Attributes of <td> and <th>:	colspan="number"	Specifies the number of columns to merge for the current cell.
	rowspan="number"	Specifies the number of rows to merge for the current cell.

1.28. <form>

Example:	<pre><form> input, textarea, select, button, label, fieldset, datalist tags here </form></pre>	
Interpretation:	<ul style="list-style-type: none"> Creates a form with a set of form elements. Form can be submitted to the server, based on the specified url. It is a block level element. 	
Attributes:	action="url"	Specifies the target server url, to which the form to be submitted.
	method="get post"	Specifies get request or post request, through which the form should be submitted. In case of "get", the form elements (a.k.a parameters) are submitted as query string (name=value&name=value). In case of "post", the form elements (a.k.a. parameters) are submitted as request body instead of query string.
	target="frame name"	Specifies the frame name in which, the target url should be opened after form submission.
	name="name"	Represents logical name of the form.
	novalidate="novalidate"	Disables browser built-in validations.

1.29. <input>

Example:	<pre><input type="text"> <input type="password"> <input type="checkbox"> <input type="radio"> <input type="email"> <input type="submit"> <input type="reset"> <input type="color"> <input type="date"> <input type="datetime-local"> <input type="time"> <input type="month"> <input type="week"> <input type="file"> <input type="url"> <input type="number"> <input type="range"> <input type="search"> <input type="image"></pre>	
Interpretation:	<ul style="list-style-type: none"> Creates a form element such as textbox, password textbox, checkbox, radio button, email textbox, submit button, color dropdown, date textbox etc., in the form. It is an inline level element. It is an unpaired tag. 	
Attributes:	type="text password ..."	Specifies type of form element such as textbox, checkbox, radio button etc.
	id="some id"	Specifies identification name of form element, used to refer the form element.

<code>class="some class"</code>	Specifies CSS class name of the form element to apply styles.
<code>value="some value"</code>	Specifies current / default value of the form element.
<code>name="some name"</code>	Specifies name of the form element, based on which the element's value should be submitted to the server.
<code>src="filename.jpg"</code>	Specifies source image path in case of <code><input type="image"></code> .
<code>readonly="readonly"</code>	Represents a readonly textbox; so, the user can't modify the value.
<code>disabled="disabled"</code>	Disables the form element; so, the value and events will be blocked.
<code>autocomplete="on off"</code>	Enables / disables the value history of the textbox.
<code>autofocus="autofocus"</code>	Enables the browser to place the cursor in the form element by default, while opening the web page.
<code>multiple="multiple"</code>	Allows the user to select multiple images, in case of <code><input type="file"></code> .
<code>placeholder="some text"</code>	Specifies the hint text that should be appear to the user, in case of value is empty.
<code>step="number"</code>	Specifies step value for increment / decrement in case of <code><input type="number"></code> .
<code>required="required"</code>	Specifies that the form element is mandatory.
<code>min="number"</code>	Specifies minimum value that is allowed in case of <code>type="number"</code> or <code>type="range"</code> or <code>type="date"</code> .
<code>max="number"</code>	Specifies maximum value that is allowed in case of <code>type="number"</code> or <code>type="range"</code> or <code>type="date"</code> .
<code>maxlength="number"</code>	Specifies maximum no. of character allowed in the textbox.
<code>pattern="reg exp"</code>	Specifies regular expression to validate the textbox value.
<code>formnovalidate="novalidate"</code>	Disables the browser built-in validations. Used as alternative to <code><form novalidate="novalidate"></code> .
<code>formaction="url"</code>	Specifies the server url, to which the form should be submitted. Used as alternative to "action" attribute of <code><form></code> tag.
<code>formmethod="get post"</code>	Specifies method (mode) of form submission either "get" or "post". Used as alternative to "method" attribute of <code><form></code> tag.
<code>formtarget="frame name"</code>	Specifies name of the frame, in which the target url should be opened after form submission. Used as alternative to "target" attribute of <code><form></code> tag.
<code>list="id of datalist"</code>	Specifies reference to the <code><datalist></code> tag, based on which the list of suggestions to be displayed in the textbox.

<code>form="id of form"</code>	Specifies list of id's of forms, to which the form element belongs to.
<code>tabindex="number"</code>	Specifies TAB key order of the element.

1.30. <datalist>

Example:	<pre><datalist id="id"> <option value="some value"> Text here </option> <option value="some value"> Text here </option> </datalist></pre>
Interpretation:	<ul style="list-style-type: none"> Creates list of options that can be displayed in the textbox for selection. It is an invisible element.
Attributes of <datalist>:	None

1.31. <textarea>

Example:	<pre><textarea> </textarea></pre>				
Interpretation:	<ul style="list-style-type: none"> Creates a multi-line textbox. It is an inline level element. 				
Attributes:	<table> <tr> <td><code>rows="number"</code></td><td>Specifies no. of rows in the textarea.</td></tr> <tr> <td><code>cols="number"</code></td><td>Specifies no. of characters (based on average character width) in the textarea.</td></tr> </table>	<code>rows="number"</code>	Specifies no. of rows in the textarea.	<code>cols="number"</code>	Specifies no. of characters (based on average character width) in the textarea.
<code>rows="number"</code>	Specifies no. of rows in the textarea.				
<code>cols="number"</code>	Specifies no. of characters (based on average character width) in the textarea.				

1.32. <select>

Example:	<pre><select> <option value="some value"> text here </option> <option value="some value"> text here </option> </select></pre>				
Interpretation:	<ul style="list-style-type: none"> Creates dropdownlist, where the user can select an item in the list. It is an inline level element. 				
Attributes:	<table> <tr> <td><code>multiple="multiple"</code></td><td>Allows the user to select multiple options in the select box.</td></tr> <tr> <td><code>size="number"</code></td><td>Defines number of visible options in the select box.</td></tr> </table>	<code>multiple="multiple"</code>	Allows the user to select multiple options in the select box.	<code>size="number"</code>	Defines number of visible options in the select box.
<code>multiple="multiple"</code>	Allows the user to select multiple options in the select box.				
<code>size="number"</code>	Defines number of visible options in the select box.				

1.33. <optgroup>

Example:	<pre><select> <optgroup label="Some title"> <option value="some value"> Text here </option> <option value="some value"> Text here </option> </optgroup> <optgroup label="Some title"> <option value="some value"> Text here </option> <option value="some value"> Text here </option> </optgroup> </select></pre>		
Interpretation:	<ul style="list-style-type: none"> Creates groups in the dropdownlist options. It is a block level element. Create <optgroup> tag inside <select> tag. Create <option> tags inside <optgroup> tag. 		
Attributes:	<table> <tr> <td><code>label="label text"</code></td><td>Specifies label text to show for the option group.</td></tr> </table>	<code>label="label text"</code>	Specifies label text to show for the option group.
<code>label="label text"</code>	Specifies label text to show for the option group.		

1.34. <fieldset>

Example: <fieldset>
 <legend> *title here* </legend>
 form elements here
 </fieldset>

Interpretation:

- Creates a box surrounding the form elements.
- It is a block level element.
- <legend> tag specifies title of the fieldset.
- Use <legend> tag inside <fieldset> tag.

Attributes of <fieldset>: None

Attributes of <legend>: None

1.35.

Example:
 bold text here

Interpretation:

- Displays the text in bold.
- It is an inline level element.

Attributes: None

1.36.

Example:
 strong text here

Interpretation:

- Displays the text that should be pronounced strongly, in bold.
- It is an inline level element.

Attributes: None

1.37. <i>

Example: <i>
 italic text here
 </i>

Interpretation:

- Displays the text in *oblique*.
- It is an inline level element.

Attributes: • None

1.38.

Example:
 emphatic text here

Interpretation:

- Displays the text in *emphasis*, which should be pronounced emphatically (without doubt).
- It is an inline level element.

Attributes: • None

1.39. <u>	
Example:	<code><u></code> <i>underline text here</i> <code></u></code>
Interpretation:	<ul style="list-style-type: none"> Displays the text in <u>underline</u>. It is an inline level element.
Attributes:	<ul style="list-style-type: none"> None

1.40. <ins>	
Example:	<code><ins></code> <i>inserted text here</i> <code></ins></code>
Interpretation:	<ul style="list-style-type: none"> Displays the text i.e. newly inserted in the website. It is an inline level element.
Attributes:	<ul style="list-style-type: none"> None

1.41. 	
Example:	<code></code> <i>deleted text here</i> <code></code>
Interpretation:	<ul style="list-style-type: none"> Displays the text i.e. recently deleted in the website. It is an inline level element.
Attributes:	<ul style="list-style-type: none"> None

1.42. <mark>	
Example:	<code><mark></code> <i>marked text here</i> <code></mark></code>
Interpretation:	<ul style="list-style-type: none"> Displays the marked text (text highlighted in yellow color). It is an inline level element.
Attributes:	<ul style="list-style-type: none"> None

1.43. <q>	
Example:	<code><q></code> <i>quoted text here</i> <code></q></code>
Interpretation:	<ul style="list-style-type: none"> Displays the text with double quotes. It is an inline level element.
Attributes:	<ul style="list-style-type: none"> None

1.44. <blockquote>	
Example:	<code><blockquote></code> <i>externally quoted text here</i> <code></blockquote></code>
Interpretation:	<ul style="list-style-type: none"> Displays the text / section i.e. quoted (taken) from another source / website. It is a block level element.
Attributes:	<ul style="list-style-type: none"> None

1.45. <sup>

Example: <sup>
 Text here
 </sup>

Interpretation: • Superscript (appears at up to the normal text).
 • It is inline level element.

Attributes: None

1.46. <sub>

Example: <sub>
 Text here
 </sub>

Interpretation: • Subscript (appears at down to the normal text).
 • It is inline level element.

Attributes: None

1.47.

Example:

Interpretation: • It inserts a line break at the current position.
 • It pushes the subsequent content to the next line.
 • It is inline level element.
 • It is unpaired tag.

Attributes: None

1.48. <abbr>

Example: <abbr title="full form text here">
 short form text here
 </abbr>

Interpretation: • Displays the short form on the browser; when the user places mouse pointer on the abbreviation, the full form will be shown as tooltip.
 • It is an inline level element.

Attributes: • None

1.49. <address>

Example: <address>
 address text here
 </address>

Interpretation: • Represents company address.
 • It is a block level element.

Attributes: • None

1.50. <code>

Example: `<code>
computer code (program) here
</code>`

Interpretation:

- Represents computer code (program source code).
- It is a block level element.
- The <kbd> tag represents keyboard shortcuts.
- The <samp> tag represents sample output of the program.
- The <var> tag represents variable in the computer program.

Attributes:

- None

1.51. <bdo>

Example: `<bdo dir="ltr | rtl">
text here
</bdo>`

Interpretation:

- Displays the text in "left-to-right" or "right-to-left" direction.
- It is an inline level element.

Attributes: `dir="ltr | rtl"` | Text direction (left-to-right or right-to-left).

1.52. <small>

Example: `<small>
text here
</small>`

Interpretation:

- Displays the text in small size than normal.
- It is an inline level element.

Attributes:

- None

1.53. <!-- --> Comments

Example: `<!--
comments here
-->`

Interpretation:

- Represents html comments, that are used to explain the code, but not for display.

Attributes:

- None

1.54. <article>

Example: `<article>
headings, paragraphs here
</article>`

Interpretation:

- Represents an individual set of content in the web page, which may include headings and paragraphs.
- It is a block level element.

Attributes:

- None

1.55. <header>

Example:	<code><header></code> <i>header content here</i> <code></header></code>
Interpretation:	<ul style="list-style-type: none"> Represents header content such as website logo, current user information, logout button etc. It is a block level element.
Attributes:	<ul style="list-style-type: none"> None

1.56. <nav>

Example:	<code><nav></code> <i>nav content here</i> <code></nav></code>
Interpretation:	<ul style="list-style-type: none"> Represents navigation bar (horizontal menu bar), with a collection of hyperlinks. It is a block level element.
Attributes:	<ul style="list-style-type: none"> None

1.57. <section>

Example:	<code><section></code> <i>section content here</i> <code></section></code>
Interpretation:	<ul style="list-style-type: none"> Represents a section (part) of the web page. It is a block level element.
Attributes:	<ul style="list-style-type: none"> None

1.58. <aside>

Example:	<code><aside></code> <i>right box content here</i> <code></aside></code>
Interpretation:	<ul style="list-style-type: none"> Represents a section that should be rendered at right side of the web page. It is a block level element.
Attributes:	<ul style="list-style-type: none"> None

1.59. <details>

Example:	<code><details></code> <code><summary></code> <i>title here</i> <code></summary></code> <i>actual content here</i> <code></details></code>	
Interpretation:	<ul style="list-style-type: none"> Displays the actual content, when the user clicks on the title. It is collapsible element. It is a block level element. 	
Attributes of <details>:	<code>open="open"</code>	Specifies the content shown be visible by default, when the web page is launched.
Attributes:	<ul style="list-style-type: none"> None 	

1.60. <progress>

Example: `<progress min="minimum value" max="maximum value" value="current value">
</progress>`

Interpretation:

- Displays a progress bar in the web page.
- It is a block level element.

Attributes:	<code>min="minimum"</code>	Specifies minimum value of the progress bar.
	<code>max="maximum"</code>	Specifies maximum value of the progress bar.
	<code>value="number"</code>	Specifies current value of the progress bar.

1.61. <meta>

Example: `<meta charset="utf-8">
<meta name="keywords" content="HTML,CSS,XML,JavaScript">
<meta name="description" content="Free Web tutorials">
<meta name="author" content="Harsha">
<meta name="viewport" content="width=device-width">`

Interpretation:

- Represents metadata of the web page, such as keywords, description, character-set etc.
- It is an invisible element, which must be used only within <head> tag.

1.62. Global Attributes

Global Attributes for all tags:	<code>class="class names"</code>	Specifies css class names of the element. A CSS class represents similar elements.
	<code>id="id"</code>	Specifies identification name of the element. ID should be unique within the web page. (html file).
	<code>style="css styles"</code>	Specifies css properties to apply styles quickly to the specific element.
	<code>title="tooltip"</code>	Specifies tooltip text of the element, which appears when the user places mouse pointer on the element.