HTML

5

A DEVELOPER'S PARADISE

THE ULTIMATE HTML5 CHEAT SHEET

HTML5 BASIC TAGS

Standard Structure

<html> ... </html> These tags are used at the beginning and end of an HTML document. This is known as the “root element.” Using these tags tells the website that the web page is being written in HTML5, and that all the other tags within these are HTML formatted.

<head> ... </head> Use these to group information specific to the page. This includes title tags, meta descriptions, and links to both script and style sheets.

<title> ... </title> This is used for the title tag of the page. Here you’ll place a title that is useful to both search engines and users.

<body> ... </body> Between these tags is where you’ll place all the content for users. This includes text, images, and graphic elements.

Here’s what a typical layout looks like:

```
<html>
<head><title>HTML 5 Cheat Sheet</title>
</head><body> Your content </body>
</html>
```

<base/>

Signifies the Base URL and specifies all relative links in the document.

<meta/>

Includes additional information about the page. This includes descriptions, author, publish date,
keywords, and other “off-page” information.

<link/>

Creates association with external pages like style sheets.

<style> ... </style>

Used to include document style information which is usually CSS.

<script> ... </script>

All the information or links to external scripts.

Here’s an Example:

```
<html>
  <head>
     <meta charset=“utf-8”>
     <base href=“http://www.mywebsite.com” target=“_blank”/>
     <title>My Website</title>
     <link rel=“stylesheet” href=“/css/master.css”>

<script type=“text/javascript”>
   Var MyVar = 0;
</script>
</head>
<body>
Your content
</body>
</html>
```

HTML5 COMMON TAGS

Formatting your Text

<strong> .. </strong>

Places strong emphasis on something (displays in bold on browsers)

<em> ... </em>

The emphasis tag. Turns text into italics for on browsers.

<cite> ... </cite>

This highlights references information. Good for quotes and statements.

<del> ... </del>

Labels a previously deleted portion of text.

<blockquote> ..... </blockquote>

These are used for long paragraphs of quotation which are commonly cited as well.

<br/>

This creates a line break used for writing blocks of text on different lines.

_{...}

Subscript text that is smaller and placed a half-line lower than previous text.

<b> ... </b>

Also creates bold text, but not as effective as the tag above.

<i> ... </i>

An alternate way to create italics, but mainly used for thoughts or names.

<pre> ... </pre>

Monospace text laid out with the whitespace inside the element intact.

<ins> ... </ins>

Shows a section that has been inserted into the content.

<q> ... </q>

Used for shorter quotations.

<hr/>

Create a horizontal rule or sectional break. This is us to create a change in topic or section on the page.

^{...}

Superscript text which is half a line higher than previous text.

TEXT FORMATTING

This text is bold

This text is italic

This text is $^{\textit{superscript}}$

HTML5 DOCUMENT STRUCTURE

<h1 - h6>
...
</h1 - h6>

These are the six levels of headings on a page. One is the most important and six is the least.

<span> ... </span>

Inline labels used to grouping style elements.

<div> ... </div>

Containers used to label a page section orthe placement of an element.

<p> ... </p>

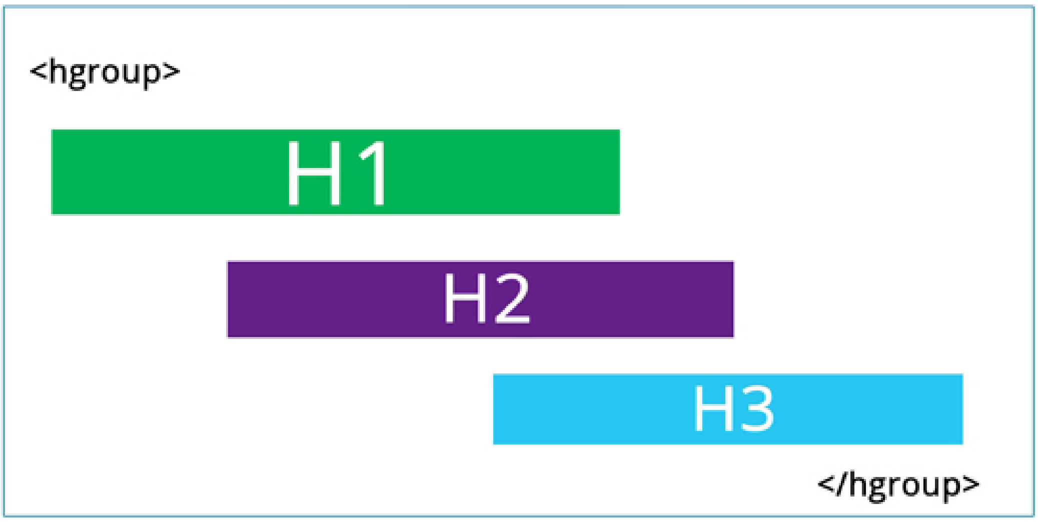
Used to organize paragraphs of text.

Example of Text and Document Formatting

```
<div>
<h1>How to start a blog</h1>
<p>So you have this idea, and you want to <strong>create
a blog</strong>. Well, today I’m going to show you how to
make that happen.</p>

<hr/>

<h2>Start With an Idea</h2>
<p>It all begins with a topic you want to cover in your new
blog. Remember, your topic is <em>the soul of your
blog</em. It has to be something you're <span>passionate
about</span>.</p>
</div>
```



<hgroup>

H1

H2

H3

</hgroup>

HTML5 IMPLEMENTING IMAGES

<img /> This tag is used to display image files.

alt=“text”

Alternative text used to explain image content to both search engines and users.

Width=“”

Specify width in pixels or percentages.

Border=“”

Specifies border thickness (if any).

hspace=“”

Spacing on the top or bottom of the image.

<map name=“”>... </map>

The name of the map between the image and the map itself.

src=“url” The URL or file name of the image being displayed.

height=“”

Used to specific image height in either pixels or percentages.

Align=“”

Where to align the image relative to other elements on the page.

vspace=“”

Denote spacing on the left or right side of the image.

<map> ... </map>

Informs users that an interactive image is present with clickable areas.

<area />

The image area of an image map.

Example of Images

```
<img src=“planets.gif” width=“140” height=“120” alt=“planets” usemap=“#planetmap”>

<map name=“planetmap”>
    <area shape=“rect” coords=“0,0,82,126” href=“sun.htm” alt=“Sun”>
    <area shape=“circle” coords=“90, 58, 3” href=“mercur.html” alt=“mercury”>
    <area shape=“circle” coords=“124, 58, 8” href=“venus.htm” alt=“venus”>
    </map>
```

HTML5 CREATING LISTS

<ol> ... </ol> Numbered lists in sequential order.

<li> ... </li> Specify each item to be bulleted or numbered.

<dt> ... </dt> Defines a single term inline with body content.

<ul> ... </ul> Bullet point list (no particular order).

<dl> ... </dl> List item definitions.

<dd> ... </dd> A description for a defined term.

Example of Listing

```
<ol>
<li>One</li>
<li>Two</li>
<li>Three</li>
<li>Four</li>
</ol>

<ul>
<li>Bacon</li>
<li>Eggs</li>
<li>Pancakes</li>
</ul>

<dl>
<dt>Cofee</dt>
<dd>Hot or iced drink, black</dd>
<dt>Milk</dt>
<dd>White, cold drink</dd>
</dl>
```

HTML5 DOCUMENT STRUCTURE

`<a href=“”> ... </a>` Creates a hyperlink with defined anchor text.

`<a href=“mailto:”> ... </a>` A link that pulls up an outgoing messages to a specific email address.

`<a href= “tel://###-”> ... </a>` A link that makes numbers clickable. Great for mobile users.

`<a name=“”> ... </a>` Anchor text used to bring users to a specific place in a document.

`<a href=“#name”> ... </a>` Anchor text used to bring users to a div element.

Example of Link

```
<a href=”www.onblastblog.com”>On Blast Blog</a>
```

HTML5 ADDING FORMS AND TABLES

Formatting your Text

<form> ... </form>

Tags used to create a form. Combined with attributes to show how the form will operate.

method=“”

Refers to the HTTP method and how to send the form data.

Autocomplete

Turns autocomplete on or off on the form.

Accept-charsets

Identifies character encoding on the form submission.

<fieldset> .... </fieldset>

Identifies the group of all fields on the form.

<legend> .... </legend>

A caption for the fieldset element.

action=“url”

Shows where data is sent when a visitor submits the form.

enctype=“”

Dictates how the form data is supposed to be encoded whensubmitting information to the web server. Only used with method=”post”.

Novalidate

Defines whether the form should be validated when submitted.

Target

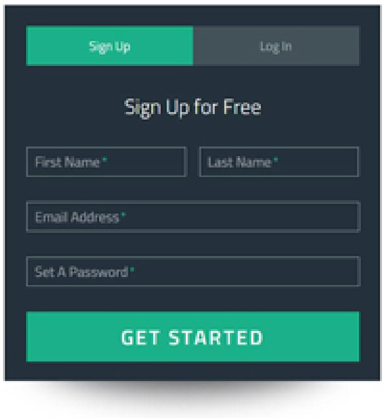
Used to show where the form response should be displayed after being submitted. Used with _blank, _self, _parent_top

<label> ... </label>

A label telling the user what to enter in each field.

<input />

The input attribute shows what type of field information to receive from users.



HTML5 INPUT TYPE ATTRIBUTES

type="" Specifies field input type, including text, password, date-time, checkbox, etc.

value="" The value of input field information.

maxlength="" Maximum input element characters allowed.

step="" The number intervals for an input field.

height="" Height in pixels of an <input> element.

pattern="" Checks the input against a defined value to ensure the information is correct.

max="" The maximum value of an <input> element.

Disabled Disables an <input> element on the form.

<select> ... </select> Drop-down box for users to select from options.

name="" The name of the form

size="" The input element width in characters

Required Tag used to ensure the <input> element is completed before submitting the form.

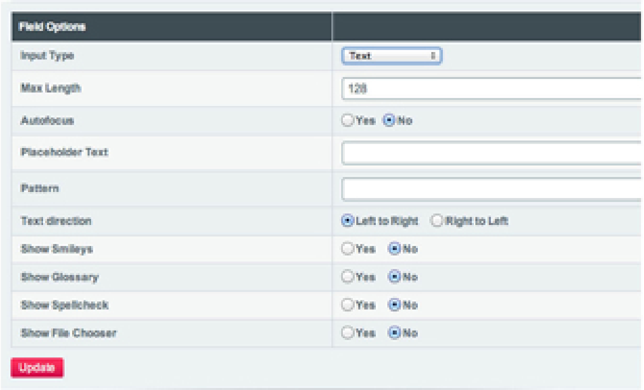
width="" Width in pixels of an <input> element.

placeholder="" A hint for users showing what the <input> element value should be.

min="" The minimum value of an <input> element.

Autofocus Ensures the <input> element comes into focus once a page loads.

<textarea> ... </textarea> Specifies a large text input for longer messages.



Field Options	
Input Type	Text
Max Length	128
Autofocus	○ Yes ● No
Placeholder Text	
Pattern	
Text direction	● Left to Right ○ Right to Left
Show Smileys	○ Yes ● No
Show Glossary	○ Yes ● No
Show Spellcheck	○ Yes ● No
Show File Chooser	○ Yes ● No

HTML5 SELECT ATTRIBUTES

(To be Used in </select> Tags)

name="" The title for a drop-down combination box.

size="" The number of options in a drop-down box.

Multiple Allows multiple sections to be made at one time.

Required Requires a value to be selected before a user can submit a form.

<optgroup> ... </optgroup> Specifies can entire grouping of available options.

<option> ... </option> Defines one of the available options in the drop-down list.

Option Attributes

value="" Explains an option's value available for selection.

Selected Shows the default selection option for users.

<button> ... </button> Shows the clickable button for users to submit options.

Example of Form

```
<form action="action_page.php" method="post">
   <fieldset>
   <legend>basic information:</legend>
   First name:<br>
   <input type="text" name="firstname" value="Matt"
placeholder="First Name"><br>
   Last name: <br>
   <input type="text" name="lastname" value="Banner"
placeholder="last name"><br><br>
   Blog topic:<br>
   <select>
        <option value="cooking">Cooking</option>
        <option value="SEO">SEO</option>
        <option value="Fashion">Fashion</option>
        </select>
<textarea name="description"></textarea>
<input type="submit" value="Submit">
</fieldset>
</form>
```

HTML5 TABLE FORMATTING

(To be Used in </select> Tags)

<table> ... </table> These tags define all the content related to a table.

<thead> ... </thead> The headers that label the content in each column.

<tfoot> ... <tfoot> Describes all footer content.

<th> ... </th> The data in a single header item.

<colgroup> ... </colgroup> Groups columns for formatting purposes.

<caption> ... </caption> A description of the table’s purpose and the information it contains.

<tbody> ... </tbody> The body of the table data or information.

<tr> ... </tr> Content within a single row.

<td> ... </td> Content within a single table cell.

<col /> A single column of information within a table.

An Example of Table Formatting

```
<table>
   <colgroup>
       <col span=”2” style=”background-color:
#182afb”>
     <col style=”background-color: #2f1475b”>
</colgroup>
<tr>
  <th>Blog title</th>
  <th>URL</th>
  <th>DA</th>
</tr>
<tr>
  <td>On Blast Blog</td>
  <td>www.onblastblog.com</td>
  <td>52</td>
</tr>
</table>
```

HTML5 OBJECTS AND IFRAMES

Objects

<object> ... </object> Describes a file type to be embedded (audio, video, PDFs, etc.).

width=”” Width of the object.

usemap=”” The name of the client-side image map within the <object> tag.

height=”” The height of the object.

type=”” The type of media the object contains.

iFrames formatting

<iframe> ... </iframe> An inline frame that allows external information to be embedded into a document.

src=”” The source URL for the object within the <iframe>.

Width=”” The width of the <iframe>.

<embed> ... </embed> A container for another external application or plug-in. Embed can also be used with the height, width, src, and type tags above.

name=”” The name of the <iframe>

srcdoc=”” The HTML content within the frame.

<param /> Adds extra parameters to help customize the iframe’s content.

Examples

```
<object width=”425” height=”225”></object>
<iframe src=”blogging_iframe.htm” width=”300”
height=”600”></iframe>
<embed src=”bringonblogging.swf” width=”400”
height=”800”></embed>
```

HTML5 NEW HTML5 TAGS

<header> … </header>	The header block for a document.	<footer> … </footer>	The footer block for a document or section.
<main> … </main>	The main content of a document.	<article> … </article>	Identifies an article within a document.
<aside> … </aside>	For content contained in a sidebar.	<section> … </section>	A section block in a document.
<details> … </details>	Additional facts or information that users can view/hide.	<dialog> … </dialog>	A box or window for dialog.
<figcaption> … </figcaption>	A <figure> element caption that describes the figure.	<figure> … </figure>	A content block featuring diagrams, photos,illustrations, and more.
<mark> … </mark>	Displays highlighted text within the content.	<nav> … </nav>	Navigation links for users.
<menuitem> … </menuitem>	The menu item a user can raise from a popup menu.	<meter> … </meter>	The scalar measurement within a known array.
<progress> … </progress>	The progress of a task, usually used for a progress bar.	<rp> … </rp>	Display text in browsers that don't support ruby annotations.
<rt> … </rt>	Display East Asian typography character details.	<ruby> … </ruby>	A Ruby annotation for East Asian typography.
<summary> … </summary>	Contains a heading for a <details> element.	<bdi> … </bdi>	Format part of text in a different direction from other text.
<time> … </time>	Identifies time and date.	<wbr>	A line break within content.

HTML5 CHARACTER OBJECTS

&#34; &quot;	Quotation Marks - “	&#38; &amp;	Ampersand - &
&#60; &lt;	Less Than - <	&#62; &gt;	Great Than - >
&#160;	Non-breaking space	&#169; &copy;	Copyright symbol - ©
&#64; &Uuml;	“at” symbol - @	&#149; &ouml;	Small bullet - •
&#153; &ucirc;	Trademark symbol - ™		

Unsupported Tags in HTML5

<acronym>
<applet>
<basefont>
<bgsound>
<big>
<center>
<fn>
<font>
<frame>
<frameset>
<isindex>
<dir>
<noembed>
<noframes>
<s>
<strike>
<tt>
<u>
<xmp>

HTML

EVENT HANDLER ATTRIBUTES

Onbeforeonload	Before onload event	Ondragenter	Element dragged on drop target
Oncanplay	Media can start play	Ondragleave	Element leaves valid drop target
Oncanplaythrough	Media can be played to the end	Ondragover	Element is dragged over drop target
Oncontextmenu	Context menu is triggered	Ondragstart	At the start of the drag operation
Ondrag	Element is dragged	Ondrop	Dragged element is being dropped
Ondragend	At the end of drag operation	Ondurationchange	Length of media is changed
Onbeforeonload	Before onload event	Ondragenter	Element dragged on drop target
Oncanplay	Media can start play	Ondragleave	Element leaves valid drop arget
Oncanplaythrough	Media can be played to the end	Ondragover	Element is dragged over drop target
Oncontextmenu	Context menu is triggered	Ondragstart	At the start of the drag operation
Ondrag	Element is dragged	Ondrop	Dragged element is being dropped
Onemptied	media resource element becomes empty	Onended	media has reached the end
Onerror	error occurs	Onforminput	form gets user input
Onhaschange	document has changed	Oninput	message is triggered
Oninvalid	element gets user input	Onloadeddata	media data is loaded
Onloadeddata	media data is loaded	Onloadedmetadata	duration of media element is loaded
Onloadstart	browser starts to load media data	Onmessage	element is invalid
Onmousewheel	mouse wheel is being rotated	Onpause	media data is paused

EVENT HANDLER ATTRIBUTES

Onplay	media data is going to start playing	Onplaying	media data has started playing
Onprogress	browser is fetching media data	Onratechange	media data's playing rate has changed
Onscroll	Element's scrollbar is being used	Onseeked	There is an error in fetching media data
Onseeking	Element's seeking attribute is true	Onstalled	There is an error in fetching media data
Onstorage	document loads	Onsuspend	Browser has stopped fetching media data
Ontimeupdate	media changes its playing position	Onvolumechange	media changes volume, also when mute
Onwaiting	Media has stopped playing		

HTML5 CANVAS ELEMENTS

HTML <canvas> element is used to draw graphics on the fly via scripting (most commonly JavaScript). The <canvas> element is a container for graphics, you must use a script to draw the graphics themselves.

CANVAS ELEMENT

Attributes

Width - unsigned long (Default: 300)

Height - unsigned long (Default: 150)

Methods

String - to DataURL([Optional] string type [variadic] any args)

Object - getContext(string contextId)

2D CONTEXT

Attributes

Canvas - HTMLCanvasObject [readonly]

Methods- Void - save() Void - restore()

TRANSFORMATION

Methods

Void - scale(float x, float y)
Void - rotate(float angle)
Void - translate(float x, float y)
Void - transform(
Float m11, float m12, float m21
Float m 22, float dx, float dy)

Set transform
(Float m11, float m12, float m21
Float m22, float dx, float dy)

HTML5 CANVAS ELEMENTS

IMAGE DRAWING

Methods

Void - drawImage(
    Object image, float dx, float dy
    [optional] float dw, float dh)

Argument "image" can be of type HTMLImage Element, HTMLCanvasElement, or HTMLVideo Element

Void - drawImage(
    Object image, float sx, float sy, float sw, float sh,
 float dx, float dy, float dw, float dh)

LINE STYLE

Attributes

Linewidth - float (Default: 1.0)
Linecap - string (Default: butt)

Supports the following values:
Butt
Round
Square

LineJoin - string (Default: miter)

Supports the following values:
Round
Bevel

MiterLimit - float (Default: 10)

COLORS, STYLES, AND SHADOWS

Attributes

strokeStyle - any type (Default: black)
fillStyle - any type (Default: black)
shadowOffsetX - float (Default: 0.0)
shadowOffsetY - float (Default: 0.0)
shadowBlur - float (Default 0.0)
shadowColor - string (Default: transparent black)

Methods

CanvasGradient - createLinearGradient(float x0, float y0, float x1, y1)
CanvasGradient - createRadialGradient(
    Float x0, float y0, float r0, float x1, float y1, float r1)
CanvasPattern - createPattern(Object image, string repetition)

Repetition supports any of the following values: repeat, repeat-x, repeat-y, no-repeat)

COMPOSITING

Attributes

GlobalAlpha - float (Default 1.0)
GlobalCompositeOperation - string (Default: source-over)

Supports the following values:

Source-over
Source-in
Source-out
Source-atop
Destination-over
Destination- in
Destination-out
Destination-atop
Lighter
Copy
Xor

TEXT

Attributes

Font (type: string) Default: 10px sans-serif

TextAlign (type: string) Default: start

(supports any of the following values: start, end, left, right, center)

TextBaseline (Type: string) Default: alphabetic (Supports the following values: top, hanging, middle, alphabetic, ideographic, bottom)

Methods

Void - fillText (string text, float x, float y, (optional) float maxwidth)

TextMetrics - measureText (string text)

HTML5 CANVAS ELEMENTS

TEXTMETRICS INTERFACE

Width - float (Default: reasonly)

RECTANGLES

Methods
Void - clearRect(float x, float y, float w, float h)
Void - fillRect(float x, float y, float w, float h)
Void - strokeRect(float x, float y, float w, float h)

PATHS

beginPath()
closePath()
fill()
stroke()
clip()
moveTo(float x, float y)
lineTo(float x, float y)
quadraticCurveTo(float cpx, float cpy, float x, float y) bezierCurveTo(float cp1x, float cp1y, float cp2x, float cp2y, float x, float y) arcTo (float x1, float y1, float x2, float y2, float radius) arc(float x, float y, float radius, float startAngle, float endAngle, boolean anticlockwise)
rect(float x, float y, float w, float h)
isPointInPath(float x, float y)

PIXEL MANIPULATION

Methods
ImageData - createImageData(float sw, float sh)
ImageData - createImageData(ImageData imagedata)
ImageData - getImageData(float sx, float sy, float sw, float sh)
Void - putImageData(ImageData imagedata, float dx, float dy, [Optional] float dirtyX, float dirtyY, float dirtyWidth, float dirtyHeight)

CanvasPixelArray Interface

Length - unsigned long (Default: readonly)

ImageData Interface

Width - unsigned long (Default: readonly)
Height - unsigned long (Default: readonly)
Data - CanvasPixelArray (Default: readonly

HTML5 SEO

Which HTML5 tags affect SEO?

- Cont extual Highlighting With <mark>
- Lower Importance with <small>
- Quotations With <q> and <blockquote>
- Insertion, Deletion, and Correction With <ins>, <del> and <s>
- Organizing Options with <optgroup>
- Predefined Options With <datalist>

#2 - HTML 5 is Bad For Video

- Some webmasters still prefer to use Flash for embedding video content.
- HTML5 allows you to add SEO-friendly labels, captions, and subtitles on your videos.
- These same parameters can be used for images (alt-text, captions, etc.)

HTML5 SEO Myths Debunked

#1 - HTML5 Does Not Help Rankings

- HTML5, like previous versions, does benefit SEO
- Special elements are used to make it easier for search engines and bots to understand the intent of elements themselves. These are known as Semantic elements.

#3 - You Can Only Use H1 Tag

- For each new content section, you can use a H1 tag.
- Any header tag you deem necessary is fine.
- Use a traditional tag hierarchy (H2, H3, and so on)