# 10 useful HTML5 Tags and Attributes You Must Know!

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# HTML



## HTML5 elements and features

# INTRODUCTION

As we know, HTML5 is now becoming a hot topic among web designers and developers as well as bloggers. So, how about you? Interest in HTML5 also? Then you're come to the right place.

We all know that HTML5 has introduced many brand new tags and elements as well as attributes and features. Some of these are really useful and helpful for our sites. Hence, in this presentation, I have summarized **10 useful and important HTML5 tags and attributes** that you must know and can't miss out!

Perhaps, you can use these as HTML5 essential before start your own HTML5 website.

# 1. A NEW DOCTYPE DECLARATION

Having problem remembering long and complicated HTML4 / XHTML 1.0 `doctype` like below?

```
1    <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional
2    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd'
```

If so, then you will surely love the new `doctype` by HTML5, which looks simple, clean and easy to memorize. Here it is:

```
1    <!DOCTYPE html>
```

# 2. Getting Simple – No more Type attribute for script and link

This is how you define your `<script>` and `<link>` tags in HTML4.

```
1    <link rel="stylesheet" type="text/css" href="style.css" /
2    <script type="text/javascript" src="script.js"></script>
```

In HTML5, you don't have to specify the MIME type value for your `<script>` and `<link>` tag. All scripts and styles are assumed to be `type="text/javascript"` and `type="text/css"`. You can simply write your code as:

```
1    <link rel="stylesheet" href="style.css" />
2    <script src="script.js"></script>
```

# 3. SEMANTIC STRUCTURE - header, footer & nav

Previously, we added an `id` or `classes` to HTML structure and perhaps, it can be serve as pseudo-semantic structure. But by nature, `div` have no semantic structure even after added an `id`.

```
1  <div id="header">
2      ...
3  </div>
4  <div id="nav">
5      <ul>...</ul>
6  </div>
7  <div id="footer">
8      ...
9  </div>
```

Hereby, HTML5 were created to help us better explain the semantic structure. New HTML5 tags like `<header>`, `<nav>` and `<footer>` can be used to replace the mark-up above, with provide semantic structure to content.

```
1  <header>
2      ...
3  </header>
4  <nav>
5      <ul>...</ul>
6  </nav>
7  <footer>
8      ...
9  </footer>
```

# 4. SEMANTIC STRUCTURE - article VS section

HTML5 also offers new `<article>` and `<section>` tags to help us create semantic content.

```
1   <section>
2      ...
3   </section>
```

`<section>` tag defines sections in a HTML such as headers, footers, or any other sections of content.

```
1   <article>
2      ...
3   </article>
```

The `<article>` tag is used to specify independent and self-contained content.

# 5. New HTML5 Form Input Types and Attributes

HTML5 has introduced 13 new input types and several new attributes for `<form>` and `<input>` tags. However, not all browsers are fully support HTML5 new input types and attribute. By the way, you might have to try out these amazing HTML5 form, some new features has been added for instance the browser-based validation, build-in placeholder and new input types.

```html
<form id="myform">
    Name: <input name="name" required placeholder="Your name" pattern="[A-z]{7}"
    <br/>
    Email: <input type="email" name="email" required placeholder="email@inwebson
    <br/>
    URL: <input type="url" name="url" placeholder="Homepage URL"/>
    <br/>
    Age: <input type="number" name="age" min="18" max="99" />
    <br/>
    Description: <textarea name="desc" placeholder="Describe yourself here..."><
    <br/>
    <input type="submit" value="Submit" />
</form>
```

The form above using new HTML5 input types like *email*, *url* and *number*, and new HTML5 input attributes like *required*, *pattern(regexp)*, *min*, *max* and *placeholder*.

# 6. HTML5 Canvas

The most exciting feature, HTML5 `<canvas>` tag allows us to render 2D shapes or graphics on web page with help of JavaScript. Moreover, we're able to create an animation using HTML5 Canvas.

The HTML below shows a simple HTML5 Canvas declaration and use JavaScript to draw a blue rectangle on it.

```html
<canvas id="myCanvas" width="200" height="200"></canvas>

<script>
    var c=document.getElementById("myCanvas");
    var ctx=c.getContext("2d");
    ctx.fillStyle="#0000FF";
    ctx.fillRect(0,0,150,150);
</script>
```

# 7. HTML5 Audio and Video Support

Previously, to embed an audio or video file on web page we have to rely on third party plugin like Flash through `<object>` and `<embed>` tags. To view the media, user requires administrator privileges to install this plugin as well as the browser has to be able to support this plugin.

```
1  <object width="400" height="300">
2      <param name="movie" value="video.mp4" />
3      ...
4      <embed src="video.mp4" type="application/x-shockwave-flash" ... ></embed>
5  </object>
```

HTML5 now introduces a new way to embed media via the `<audio>` and `<video>` tags. With HTML5, at least we don't have to worry about plugins problem. But for the time being, not all browsers but most recent version of browsers offer support for HTML5 `<audio>` and `<video>` tags.

```
1  <audio controls="controls">
2      <source src="audio.mp3" type="audio/mp3" />
3      <source src="audio.ogg" type="audio/ogg" />
4      Your browser does not support the <audio> tag.
5  </audio>
```

```
1  <video controls="controls" width="400" height="300">
2      <source src="movie.mp4" type="audio/mp4" />
3      <source src="media.ogg" type="audio/ogg" />
4      Your browser does not support the <video> tag.
5  </audio>
```

# 8. Editable HTML5 Content

HTML5 has offers another cool new attribute – `contenteditable`. You can make your content editable with adding the `contenteditable` attribute to it. This feature will be more useful if paired with HTML5 Local Storage (will be explain in below).

```html
<div contenteditable="true">
    Any content here will be editable...
</div>
```

# 9. HTML5 Local Storage

Now, no more web browser's cookies storage needed (perhaps, depend on your usage)! This is because HTML5 has introduces a new way to store the data in user's browser, known as client-side storage. HTML5 offers two new methods for storing data on user's browser, which are `localStorage` and `sessionStorage`.

```html
<script>
    localStorage.variableName = "value";
    alert(localStorage.variableName);
    localStorage.removeItem("variableName");
    alert(localStorage.variableName);
</script>
```

The `localStorage` stores the data with no time limit, which means the data can be accessible at anytime and any windows/tabs (with some conditions like same domain and same browser) even if the browser is restarted.

```html
<script>
    sessionStorage.variableName = "value";
    alert(sessionStorage.variableName);
    sessionStorage.removeItem("variableName");
    alert(sessionStorage.variableName);
</script>
```

The `sessionStorage` stores the data for one session, which means the data is deleted when the browser's window is closed.

# 10. HTML5 Custom Data- Attribute

Have you ever use custom attributes inside a tag to store arbitrary data for the purpose of JavaScript? Or store these arbitrary data using `class` or `rel` attribute rather than creating custom attributes for the purpose of valid HTML markup.

```
1  <div id="div1" class="style" time="3" order="1"></div>
2  <div id="div1" class="style" time="5" order="3"></div>
3  <div id="div1" class="style" time="2" order="2"></div>
```

Thanks to HTML5, we now able to create custom attributes on all HTML elements with the prefix `data-` and simultaneously, give us valid HTML markup.

```
1  <div id="div1" class="style" data-time="3" data-order="1"></div>
2  <div id="div1" class="style" data-time="5" data-order="3"></div>
3  <div id="div1" class="style" data-time="2" data-order="2"></div>
```

# Extra: HTML5 Fix for Internet Explorer

Internet Explorer up to version 8.0 can't read HTML5 tags properly, you can't style them. Thankfully, **Remy Sharp** and **John Resig** have found a fix for this.

```
1   <!--[if lt IE 9]>
2      <script src="http://html5shiv.googlecode.com/svn/trunk/html5.js"></script>
3   <![endif]-->
```

Simply include this script in the `<header>` tag and you will be able to style the HTML5 elements in IE.

# CONCLUSION

That's all for today's tips and tricks.

However, this doesn't mean all for HTML5, there are still a lot of new tags and attributes by HTML5, I will cover some other useful HTML5 tips in future.

Hope you join!

# THANK YOU FOR ATTENTION!