**Basic Programming Tags**

**Description**

The img element represents an image, which is an external resource that can embedded in the body of a document. The location of this external resource must be specified in the src attribute.

The img element shouldn't be used to insert images without a meaning to the document. Typical examples of this misuse include images used as spacehoders or as layout tools.

HTML5 introduced the srcset attribute for this element, which is thought to provide different versiones of an image for different display needs (screen sizes, resolutions and pixel densities). Being it fairly new, browser support is very poor.

**The alt attribute**

Images are visual elements. This is one of the reasons of the existence of the alt attribute, which is thought to provide an alternate version of the image's content or purpose for those situations where they can't be properly accessed (visually impaired users, non-supporting browsers, configurations where images are disabled, etc.)

The alt attribute must provide an alternate version of the image by fulfilling with text the same image's purpose. A description of the image contents isn't always the best approach.

To make it clearer, we're going to explore the different uses of one same image and the most proper implementation of the alt attribute in each scenario. The image corresponds to the flag of Dominica.

First we're going to use it as an icon that will accompany the name of the country in a sentence. In this case, the alt attribute is irrelevant, as the presence of the flag is complementary only. The meaning of the text in this sentece wouldn't be altered with the removal of the image.

Example

<p>Charles Angelo Savarin is a politician from <img src="../../images/dominica-flag-icon.gif" alt=""> Dominica who has been President of Dominica since 2013. He is a member of the Dominica Labour Party and served for a time as Minister for National Security, Immigration, Labour and the Public Service.</p>

Charles Angelo Savarin is a politician from Dominica who has been President of Dominica since 2013. He is a member of the Dominica Labour Party and served for a time as Minister for National Security, Immigration, Labour and the Public Service.

Now we're making a very similar use of the flag. But this time, it's representing the country it belongs to, so it would be proper to provide the name of the country in the alt attribute. A good way of analyzing this situation would be to imagine this piece of document with the image replaced by the alt text. That way it's clear what's the purpose of the image and what the proper alternate text should be.

Example

<ul>

 <li>Name: Charles Angelo Savarin</li>

 <li>Year of birth: 1943</li>

 <li>Nationaly: <img src="../../images/dominica-flag-icon.gif" alt="Dominica"></li>

</ul>

* Name: Charles Angelo Savarin
* Year of birth: 1943
* Nationaly: 

The following case is a little different form the other two. Here, the main subject of the document is the flag of Dominica, and after the flag has been displayed, the author makes some comments about it.

It's easy to see how a user without the means to view the image would be in a disadvantage here. That's why the author has properly filled the image's alt attribute with a description of the flags's composition.

Example

<p>The flag of Dominica was adopted on November 3, 1978.</p>

<p><img src="../../images/dominica-flag.gif" alt="Dominica's flag has a green background and three lines (one yellow, one black and the other white) crossing its center from left to right, and again from top to bottom. In the center, there's a red circle with ten green stars on its border and a sisserou parrot in the middle."></p>

<p>Its parrot, endemic to Dominica, is an endangered species with a population of only 250-350 individuals.</p>

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In a similar way, the next piece of document describes the flag of Dominica, this time directly in the text. So, the author has just left the alt attribute empty, considering that it would be redundant to provide a description in such scenario.

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With these examples, you should have a clue about the purpose and proper use of the alt attribute. In any case, try to imagine what the document would look like if the image was replaced by its alternative text and you'll have an idea of what to put inside alt.

**Examples**

This example shows the img element in action, in its most basic way. The element is defined with its required attribute src, holding a [URL](http://www.htmlquick.com/reference/uri-url.html) pointing to the location of the image resource.

<img src="../../images/charles-darwin.jpg">



In our second example we'll try out the alt attribute. Here, a picture of Charles Darwin will be inserted in a piece of document to lift its image and accompany the textual information. The content of the alt attribute will provide, in this case, the name of the person depicted in the image and other information relevant in understanding its relationship with the contents of the article. This way, the alt attribute will be fulfilling its purpose, by providing a textual alternative to the image in the context it's been inserted.

Additionally, to improve presentation, the image is being *floated* to the right margin with a couple of style declarations.

<h1>Natural selection</h1>

<img src="../../images/charles-darwin.jpg" style="float: right; margin: 0 0 1em 2em" alt="Charles Darwin, Father of the theory of evolution by natural selection">

<p>Natural selection is the differential survival and reproduction of individuals due to differences in phenotype; it is a key mechanism of evolution. The term "natural selection" was popularised by Charles Darwin, who intended it to be compared with artificial selection, now more commonly referred to as selective breeding.</p>

<p>Variation exists within all populations of organisms. This occurs partly because random mutations arise in the genome of an individual organism, and these mutations can be passed to offspring. Throughout the individuals’ lives, their genomes interact with their environments to cause variations in traits.</p>

For more Information, go to <http://www.htmlquick.com/reference/tags/img.html>