

Using Images

Web browsers can read only a few types of image formats, and any image you include on your web pages must be saved in one of those formats.

JPEG – Joint Photographic Experts Group used for photographs.

- JPEG supports millions of colors – 16,777 millions
- JPEG format supports compression. Compression is a process of applying special algorithm to reduce the image's file size. However, the more an image is compressed, the more its quality is reduced. For this reason, standard JPEG image compression is called "lossy" compression.

GIF - Graphic Interchange format

- Highly compressible format
- Support **transparency**, which means that you can create transparent background on your image and place your image directly against the background of your page.
- Supports **animation**
- Drawback – GIF supports only **256 colors**, which is not enough for photographs and complex colors. For this reason GIFs are used mostly for line art: clip arts, drawing, sketches, text, and so on
- Provides **lossless** compression, which means the quality of the image stays the same

PNG – Portable Network Graphics format

- PNG format is not so widely used, because older web browsers do not fully support this format. (IE version 6 and earlier) doesn't support transparent PNG files.
- Supports **lossless** compression
- Supports **alpha** transparency (partial transparency)

Where to obtain images?

Stock Photography:

www.fotolia.com – inexpensive (from \$1.00)

www.istockphoto.com – most of the photos are from \$2.00

<http://www.sxc.hu/> - Stock.XCHNG – Free Stock images

Placing Images on a web page

To add an image to your web pages, use **** tag.

**** tag is not a container tag; for this reason, in XHTML, image tag must be closed either with closing tag, or by closing with forward slash before closing its right angle bracket.

Example: **** or ****

In **HTML5**, you can omit closing forward slash: ****

The key attribute of the **** tag is **src** attribute (stands for *source*) , which works as the pointer to the image file.

Another mandatory attribute of the **** tag is **alt** attribute. The **alt** attribute specifies alternative text to appear while the graphic is loading, or in place of the graphic in non-graphical browser.

For visually disabled visitors, who will not be able to see your images, the **alt** attribute provides an alternative brief text description, which will be read by the screen readers.

Code example:

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If a user disables images, the alternative text provides textual equivalent. Providing alternative text is essential if an image is used as a link.

If an image is used as a purely decorative element (bars, bullets, illustrative photos) do not provide text description. Just add alt attribute without value:

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Important:

- Make sure that the **alt** attribute is added.
- Do not "borrow" images or other illustrative materials from another site without permission
- If you allowed to use images, be sure to give credit to the sources
- Be sure to check any policies and copyright statements

Optional **** attributes

Width and Height

It is a good idea to add height and width attributes to your image tags, providing the image's dimensions in pixels. If the browser is given the dimensions of the image, it can reserve a space for it, and the page will render quickly.

If the *width* and *height* attributes are set to different values than the original image size, the browser will resize the image to the specified size (this will not change the file size in KB; this will change just the way it's displayed in the page).



This is a bad idea - the browser will not do a very good job of resizing and there are other complications. In general, you should always match the size attributes to the actual size of the image file. If your image is too large resample your graphic in Photoshop or other graphics editor.

Example:

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