Image Optimisation



EverWeb Widgets

Website Images

Images account for more than 60% of the files that need to be downloaded to render a web page in the browser. Oversized images are the biggest factor in slow downloading pages. Web pages that take longer than 2 to 4 seconds to download will cause potential visitors to go elsewhere and the search engine ranking will suffer.

Image File Size

The larger the image dimensions in pixels the greater the file size and the longer it will take to download in the browser.

Images for a web page should first be assembled in a folder to be optimised and have a suitable file name added.

There's little point in importing an image into a web design app with a size of 1200px x 800px when it is going to be displayed at 800px width on the web page.

Image File Names

Image file names form part of a URL so they must have no spaces or special characters in them.

Use a descriptive file name with the words separated by hyphens so that the search engines can make sense of them.

Never use special characters like an apostrophe or an asterisk in the name of <u>any</u> file.

Optimising Images

Images can be quickly reduced in size using Preview.app which comes with every Mac. Images can be optimised more radically by removing EXIF meta data such as GPS position and camera info. This requires a specialist app but is a worth while extra step which becomes essential if more than a few images are inserted in a page or slideshow.

ImageOptim is available for free download and is simply drag and drop. It can also use lossy compression if a little image quality loss is OK.



Do NOT use the original image. Make a copy all the images required on the web page and put them in a suitably labelled folder.

Double click the image file to open it in Preview.app Select the Tools menu and click on "Adjust Size..."



Note how large the image size is when exported from the camera. Make sure pixels are selected for the image width and height.

Image Dimensions
Fit into: Custom 😂 pixels
Width: 3072
Height: 2304
Resolution: 72 pixels/inch
Scale proportionally Resample image
Resulting Size
100 percent
1.4 MB (was 1.4 MB)

Size Adjusted

The image width has been reduced to 800px. Note the huge reduction in the image file size from 1.4 MB to 135KB.

a IMG_5719.jpg	
Image Dimensions Fit into: Custom pixels Width: 800 pixels Height: 600 Resolution: 72 pixels/inch Scale proportionally	
Resulting Size 26 percent 135 KB (was 1.4 MB) Cancel OK	

Image files can be reduced even more by removing the invisible metadata from images, such as EXIF camera information and color profile.

A suitable application for removing unwanted data is ImageOptim. Click the icon to download it.



Unzip the package if necessary, drag it into the Applications folder and double click to launch it.

	• •	ImageOptim			
	File			Size	Savings
	image-optim.jpg		0	124,852	12.6%
+	Drag and drop image files	onto the area above		* C	Again

Drag an image from the web page folder, drop it onto the ImageOptim window and it's done!

The default preferences are shown below. Note that further optimisation can be achieved by reducing the image quality.

	General Quality Optimization speed	
Enable Zopfli PNGOUT OptiPNG AdvPNG PNGCrush	 Metadata and color profiles Strip PNG metadata (gamma, color profiles, optional chunks) Web browsers require gamma chunks to be removed Strip JPEG metadata (EXIF, color profiles, GPS, rotation, etc.) Not recommended if you rely on embedded copyright information 	
Gifsicle SVGO	Writing files to disk	
	Saving to network drives is faster when permissions are not preserved	

The image file that was reduced in size to 137 KB using Preview.app was reduced to 127 KB using ImageOptim. This is a worthwhile saving if two or more images are used on a web page and even more so if inserted in a slideshow.

When inserting images in a web page they must have a descriptive file name with no spaces or special characters and descriptive alt text. Without these, the image might as well not exist as far as the search engines are concerned.

Image Captions

A descriptive image caption is desirable for the benefit of the visitors. If the image is inserted using an HTML5 figure element, the caption can be inserted in the figcaption element. This improves SEO dramatically since it tells the search engines that the text in the figcaption is related to the image file.

See <u>THIS PAGE</u> for suitable widgets for inserting images with descriptive captions.

Slideshows

Using unsuitable image galleries and slideshows is one of the biggest contributors to slow downloading pages and visitors leaving a website.

Using slideshows with <u>lazy loading</u> and <u>image galleries</u> with separate thumbnails will go a long way to solving slow loading pages.

Mobile website slideshows must have ...

- [1] Optimised images
- [2] Lazy Loading
- [3] Swipe Navigation

See <u>THIS</u> page for a suitable slideshow for mobile websites and <u>THIS</u> page for an image gallery which can be launched from a single thumbnail image.