Web Images

OVERVIEW

Not optimizing images properly results in extremely slow loading time. When you intend to publish your images online, you have to compromise the quality. Optimizing your images for the web means saving or compiling your images in a web friendly format depending on what the image contains so they load fast and look great.

In this project students will convert the image files provided to Web appropriate formats, color spaces and sizes, and then compress them in a folder. The trick is to keep the combined file size of all of the pictures to 300kb or less.

OBJECTIVE

Employ digital technologies to optimize images appropriate for the web.

INSTRUCTIONS

1. Download the <u>folder of images</u>.

2. Open each in Photoshop.

3. Check the **mode** on each image (**Image > Mode**). Any image with **indexed** color should be converted to **RGB**, otherwise the image will scale badly and may not properly save.

4. **Re-size** each image (**Image > Image size**). Although there is no specific "correct" size for Web images, you don't want them to be too big. The average Web page is 960 pixels wide so your images should be at least that small. Typical Web images range from 200–500 pixels in size, but that can vary depending on their use. **For this exercise, re-size each image to 400 pixels along the longer edge.**
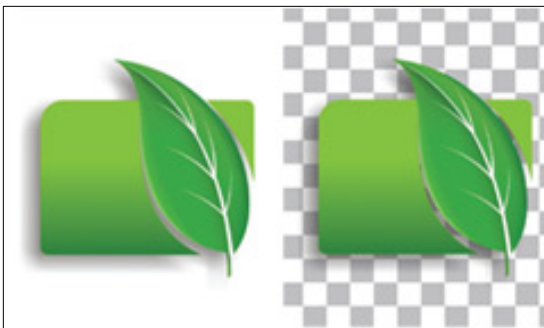
SKILLS

- Describe image file formats
- Prepare web ready images

5. **Important**—when you resize an image, make sure you do so proportionately. If you resize one dimension only, the image will distort.

6. Choose **File > Save for Web & Devices**. A dialog box will appear with all sorts of options. First, choose a file format (jpeg, gif or png). Which one you use depends on the image:

JPEGs	Joint Photographic Experts Group	designed for photographic/continuous tone images (photos, paintings, fine art). Jpegs can be compressed a lot, making for very small files (smaller than pngs; see below)
GIFs	Graphics Interchange Format	used for flat, graphic images (logos, cartoons, comic art with minimal or no shading). Gifs can also contain (simple) transparency and animation.
PNG-8s	Portable Network Graphic	are like gifs, used for flat graphics with or without transparency. They tend to be of higher quality and smaller size than gifs. But they can not contain animation. Also, older versions of IE (6 and below) sometimes have a hard time displaying pings.
PNG-24s	Portable Network Graphic	have a bit depth of 24 (8 bits per channel) like TIFFS so they are well suited for photos; they can also contain transparent and semi-transparent pixels. Png images are a higher quality than jpegs, but also *much larger*. In addition, older versions of IE (6 and below) don't display png transparency and can have other issues with the format. You may use them for this exercise—just be wary of their size.

7. Choose a quality setting (for jpegs) or number of colors (for gifs and png-8s). The goal is to use as few colors as possible, or reduce the quality as much as possible, and still have the image look decent. Obviously there will be a certain amount of trade off. Keep your eye on the file size (lower-left corner of the screen); for purposes of this exercise, **the sum of the 9 images must not exceed 300kb.**

8. If the image contains **transparency**, make sure that you chose a format that supports it, and that you check that option.

9. Make sure the "**Convert to sRGB**" box is checked.

10. Choose "Save." Give this file a different name (or location) so that it does not overwrite the original. Make sure you include the file extension in the name (.jpg, .gif, or .png).

11. Repeat for the remainder of the provided images.

12. Create a folder for this exercise called "**WebImages(your Initials)**," and place the photos you saved for the Web inside.

13. Upon completion **compress the file** (right-click or control-click on the folder and choose "Compress."). Then upload the compressed .zip file to the drop box I have set-up for this exercise.

RESOURCES

Web Design Introductory 4th Ed: Chapter 5

The designer's guide to image compression: http://www.creativebloq.com/design/designers-guide-image-compression-10121068

Optimizing Images for the Web: http://inobscuro.com/tutorials/optimizing-images-for-web-35/

ASSESSMENT

See Rubric Below.

Criteria	Excellent	Good	Fair	Poor	Redo
For each image	10 points • Format is appropriate • Size is correct • There is no width/height distortion • Image quality is reasonably good • Transparency is used if appropriate	8 points One error	6 points Two errors	4 points Three errors	0 points Four or more errors or missing
Total memory used	10 points Sum of all image sizes is less than 300kb.	8 points Sum of all images between 301–350kb	6 points Sum of all images between 351–400kb	4 points Sum of all images between than 400-500kb	0 points Sum of all images greater than 500kb
Submission requirements	No penalty Image files placed in a single folder with student's name, compressed, and uploaded	–4 points No name on folder	-10 points No folder (files turned-in separately)	-2 points For every day late	
				Total	_____ / 20