

ADV3550

Instructor: Genevieve Hitchings

Optimizing Graphics using Photoshop

We will use Photoshop to slice parts of our designs, then we will choose the correct format for each slice using 'Save for Web' and the 'Devices' panel. The goal is to create the most effective images while making the file size as small as possible. If your images are large, they will load slowly for users with slower internet connections.

Cross Platform -Mac/PC

Limited Monitors (4 bit or 16 bit color)

Color Calibration -monitors display different colors

Gamma -dictates the brightness and contrast of computer display (Macs typically brighter than PCs.)

Bit Depth: the number of colors in an image or number of colors on your screen

ex.: 1 bit = 2 colors

8 bit = 256 colors

Web File Formats: (compressed file formats) gifs, jpegs, PNG

K-size (measurement of how big files are)

Gifs: *Graphics Interchange Format* limit of 256 colors (8 bit, index color)

Good for graphics, cartoons, illustrations, small photographs, logos
(Compress solid color well)

Transparent gifs: regular gifs save images matted to a rectangular background, transparent gifs silhouette images. Allows images to be placed on top of background images or color.

Animated gifs: streaming animation. Allows each frame of animation to appear after the next. (Only animation on the web that requires no plug-in like flash.)

Jpegs: *Joint Photographic Experts Group* millions of color

(24 bit as opposed to 8 bit)

Good for large photographs

Compress files at different levels (maximum, high, medium and low).

Progressive JPEG: same concept as the *interlaced gif*. (Slowly comes into focus.)

PNG: The latest format to come into use. They are able to be fully transparent. It will eventually replace the gif entirely if they can create an animated PNG. In older browsers they are not always accepted.

Hexidecimal Colors

Your screen is made up of pixels, and each pixel is made up of 3 dots of color: red, green and blue. Each dot can have any value from 0 to 255, meaning they can have 256 values each. $256 \times 256 \times 256 = 16,777,216$ possible colors. Each color can be represented by a specific combination of these dots, and they are represented by numbers: 255 R, 255 G, 0 B = Yellow

The lower the number, the less the dot is lit. The best method for writing out these number codes is to use hexadecimal numbers. They are the 6 figure codes you see in Dreamweaver when you use the color picker. It is a more efficient way of expressing these colors than using straight binary code.

1. Getting Your Files ready for Coding

- > Print out your designs.
- > Using a pen or pencil, try to break your site up into the divs it will need to be— header, sidebar, navigation, footer, etc. (measure things out and write down widths and heights in pixels)
- > Decide what will be code and what will be image. Blocks of text should be coded in HTML, special fonts need to be saved out as images and brought in later.

2. Saving Images for the Web with Photoshop

- > Open your file in Photoshop.
- > Turn off all layers that do not need to be an image.
- > Decide what you want to be your background image, if any
- > Using the slice tool (Under the Crop tool, or Shift C), slice your image up into the necessary chunks. We will do a demo of this in class.

Go to File >> Save for Web and Devices. You will see the following dialogue box:
Save For Web & Devices dialog box

- > Using the optimizing menu, choose the format that best saves your image using the least amount of file size.
- > Save your optimized files in the images folder of your file structure

3. Bringing it all together in Dreamweaver

- > Create a proper file structure: 2 folders within it named docs and images.
- > Open a new html file and name it index.html.
- > Create a style sheet and name it styles.css. Save it in the docs folder.
- > Bring in all of the text for your index page and format it with semantic HTML, as we have been doing in class.
- > Refer back to the charts you drew on top of your design. Start chunking the formatted content up into the proper divs, being careful to give each div an id or name.
- > Using css, format the page so that it is structured properly — center it, get the width of the site down, add background colors as needed.
- > Now it's time to bring in the images you created in Photoshop: drop the background image in the wrapper div, add your header image to the header.
- > Go over the site again, tweaking your styles to get the site looking as much like your design as possible.

Additional: Types of Links

a:link Applies a style to unclicked or unvisited links

a:visited Applies a style to links that have already been clicked

a:hover Applies a style when the mouse pointer is over the link

a:active Applies a style when the mouse pointer is pressed

The Listamatic shows the power of CSS when applied to one simple list.

<http://css.maxdesign.com.au/listamatic/>