**Lesson 10: Images**

**The Set Up:**

***Preparation:***

Read through the information below to gain a better understanding of web graphics and image editing software – both online and local. Then, complete “The Doing” activity at the end of this lesson.

**The Learning:**

***Review: Inserting Images in HTML and CSS***

HTML – Insert images as elements

* <img src=“file.ext” alt=“Image Title” width=“px” height=“px”>

CSS – Insert images as div.class background-images

* div.image { background-image: url(“file.ext”);

***Image Editors***

There are hundreds of image editors out there, each of which varies when it comes to functionality vs. affordability. Some of the more basic programs include:

* Dreamweaver’s built-in image editor
* Windows Paint program installed on your computer by default

Some more advanced (and often costly) programs include:

* Adobe Photoshop, Lightroom, Illustrator, and Fireworks
* Google Picasa
* Open-source editors like GIMP.

There are also a variety of user-friendly Web 2.0 tools available for image editing. Some of the better free ones include:

* Pixlr Express
* PicMonkey
* BeFunky

The editors we will be focusing in on in class are Paint, Photoshop, and Pixlr Express. While it is convenient to use Dreamweaver’s built-in image editor, the results you are able to obtain are very limited and, more importantly, the changes you apply don’t actually impact the base image (which is key when it comes to file size).

***Image Resolution***

When selecting and editing images for your website, it is crucial to find a balance between resolution (quality) and file size (amount of space an image takes up in your computer/online). While it is possible to resize images with Dreamweaver, it’s generally **not a good idea**. Specifying the width and height of an image in the Property Inspector changes the display size of the image, but it does not resample the image the way a graphic processing application like Photoshop does.

* For example, a JPEG image that is 150 pixels by 150 pixels might have a file size of 30k. You could resize this image in Dreamweaver by 50% and the result would be a thumbnail image displayed at 75 pixels by 75 pixels. However, even though the image is visually smaller, the file size remains the same. A visitor to your website still must download the 30k file and this translates to slower loading time for the image (and possibly the page) and a potentially poor user experience, especially if they have low bandwidth.

***Copyright-Free Images***

Since websites are made public and accessible for all the world to see, it is very important to be mindful of copyright laws. It is illegal to use someone else’s copyrighted (which means that the image was taken/edited by someone else) image on your website, since it is basically stealing. This means that it is unacceptable to do a quick “Google” search for whatever type of image you are looking for, then save the image in your files without so much as checking whether or not it is copyright-free. To ensure that the images you choose are safe to use on your website, either use images that were taken/created by you, yourself OR find images at Creative Commons websites like CCSearch: <search.creativecommons.org>

**The Doing:**

***Image Editing Experimentation***

Use the photos in the “sample\_images” folder found in the Shared drive to experiment with the 3 types of photo editors (Paint, Photoshop, Pixlr Express) presented in class. Test out as many different techniques as possible – the more you learn, the more options you’ll have when it comes to building your own websites in the future!

***Image Editing Assignment***

Get Set Up:

1. Copy and paste the “Lesson10-11\_Images-Banners” folder into your Web Design folder.
2. Open the “css\_images-banners.html” document up in Dreamweaver, then define a new website called “CSS Images-Banners” inside your Files Panel.

Edit Images the “CSS Background-Image” Way:

1. Navigate to the site’s CSS in Code View. Find the “/\*forest elephants: 3 image divs\*/” comment tag, then examine the 3 class selectors (.forest-left, .forest-center, .forest-right) and their property:values combinations below. Make note of the width and height specified for each background-image – you will be using this to resize your images. Also make sure to check out the corresponding html code so that you can see how the CSS and HTML codes are connected.
2. Now take a look at the website in Design View. You’ll notice that the images are being cut off, since they are MUCH too large for the divs in which they are contained. This is one of the image aspects that you will need to change.
3. Minimize your “css\_images-banners.html” document for now (it is a good idea to leave it open so that you can check on the changes you are making to the photos while editing), and open the “images” subfolder inside the “css\_images-banners” folder. In addition to the “forest” and “Mongolia” images you are familiar with from other activities, there are 3 new images that correspond with the file names specified in your CSS.
4. Use a combination of the image editors and editing tools/skills you’ve learned about to make changes to these 3 images. You must resize them so that they properly fit the divs within the “css\_images.html” document. This means that, in order to maintain the appropriate aspect ratio you may need to do some cropping. **In addition to these two skills, apply a minimum of 3 other effects to each photo.** Make sure that, once you have finished, your images are well-suited to the overall design of the Exotic Animals page contained in the “css\_images-banners.html” document.

Add and Edit Images the “HTML Element” Way:

1. Find 3 copyright-free images that are well-suited to the “Mongolian Gerbils” segment of the website and save them inside the “images” folder with the images that were used in the “Forest Elephants” segment.
2. Inside your Source (HTML) Code, add 3 new divs below the final </div> tag in the “Mongolian Gerbils” segment. You will be placing your images below the segment, just like you did with the 3 for “Forest Elephants.” Assign the following classes to each div, respectively:
	1. class=“gerbil-left”
	2. class=“gerbil-center”
	3. class=“gerbil-right



1. Inside each div, add an HTML image code specifying the img src, alt, width, and height of each of your images. Use the CSS rules specified for the “Forest Elephant” images as a guideline to help you figure out what size you would like your images to be.
2. Inside your CSS Code, below the “/\*mongolian gerbils: 3 image divs\*/” comment, add your 3 new class selectors:
	1. .gerbil-left { }
	2. .gerbil-center { }
	3. .gerbil-right { }
3. Style your new CSS rules so that your “Mongolian Gerbil” images are formatted similarly to your “Forest Elephant” images.
4. Just as you did for the “Forest Elephant” images, use a combination of the image editors and editing tools/skills you’ve learned about to make changes to these 3 images.

THE HANDING IN

Save your work, and close Dreamweaver. Rename your “Lesson10-11\_Images-Banners” folder to that it includes your name, then hand in a copy of the entire folder to Ms. Hammond’s Shared > Hand In > Interactive Websites > css\_images folder.

THE ASSESSMENT

|  |  |
| --- | --- |
| **3 Forest Elephants** Images are:-resized to fit in div -without distortion -enhanced using a variety of editing skills | /3x3=9 |
| **3 Mongolian Gerbils** Images are:-selected according to theme –added into html –resized/enhanced by editing | /3x3=9 |

***Comprehension Question:***

* What are your favorite image editors? Why?
* What is resolution?
* Why is it a good idea to resize images prior to bringing them into Dreamweaver?
* What are some of the editing functions available within Dreamweaver’s photo editor?
* Why is it important to use copyright-free images?
* What is a good site where you can search for copyright-free images?