Brooklyn Emerging Leaders Academy

Daily Instructional Lesson Plan

**U1.L13 - My First Website - Portfolio Check-In**

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| Teacher(s) | Edwin Jaquez | Course | | Web Development | | Unit Title | [Unit 1- Career Exploration, Employability / Intro to Web Design](https://drive.google.com/open?id=1yGNRU0_k27j4bWIY5qFGA1uEiUT3ASwg8pCt3e6PChY) |
| Lesson # | 1 | Total Time | | 80 minutes | | Dates | **B Days** |
| Objectives: | | | | | | | |
| * **Images & styling with CSS** * **Web Lab** * **Feedback** * **Portfolio Submission** | | | | | | | |
| Assessment—Exit Ticket Questions | | | | | Student Exemplar Responses to the Exit Ticket Questions | | |
| **[Google Classroom]**  Students submit the link to their website via the Google classroom post for review. | | | | | **[Working LINK]** | | |

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| Lesson Methods | |
| Activating Strategy/Hook | Time: 10 minutes |
| **Project the following images on the board for students to observe.**    **In the Google Classroom, students answer the following prompts:**   1. *What are some differences and/or similarities between the images? (2-3 Sentences)* 2. *Which image do you prefer, and why? (2-3 Sentences)*   **Connect the do-now activity to the lesson, as an introduction to different types of images, and image quality.** | |
| Lesson Lecture | Time: 30 Minutes |
| **Students Take Notes on a Google Doc during the lecture.** *They do not have to share their notes sheet with me.*  **Introduction to image types:**   * There are multiple types of images, however we’ll be covering the most widely used formats   **Vector Image Files:**   * Vector images are far more flexible. They are constructed using proportional formulas rather than pixels. EPS, AI and PDF are perfect for creating graphics that require frequent resizing. Your logo and brand graphics should have been created as a vector, and you should always have a master file on hand. The real beauty of vectors lies in their ability to be sized as small as a postage stamp, or large enough to fit on an 18-wheeler!   **Raster Image Files**   * Raster images are constructed by a series of pixels, or individual blocks, to form an image. JPEG, GIF, and PNG are all raster image extensions. Every photo you find online or in print is a raster image. Pixels have a defined proportion based on their resolution (high or low), and when the pixels are stretched to fill space they were not originally intended to fit, they become distorted, resulting in blurry or unclear images. * In order to retain pixel quality, you cannot resize raster images without compromising their resolution.  |  |  | | --- | --- | |  | **JPEG (or JPG) - Joint Photographic Experts Group**   * JPEGs might be the most common file type you run across on the web, and more than likely the kind of image that is in your company's MS Word version of its letterhead. JPEGs are known for their "lossy" compression, meaning that the quality of the image decreases as the file size decreases. * You can use JPEGs for projects on the web, in Microsoft Office documents, or for projects that require printing at a high resolution. Paying attention to the resolution and file size with JPEGs is essential in order to produce a nice looking project. | |  | **PNG - Portable Network Graphics**   * PNGs are amazing for interactive documents such as web pages, but are not suitable for print. While PNGs are "lossless," meaning you can edit them and not lose quality, they are still low resolution. * The reason PNGs are used in most web projects is that you can save your image with more colors on a transparent background. This makes for a much sharper, web-quality image. | |  | **GIF - Graphics Interchange Format**   * GIFs are most common in their animated form, which are all the rage on Tumblr pages and in banner ads. It seems like every other day we have a new Grumpy Cat or Honey Boo Boo animated GIF. In their more basic form, GIFs are formed from up to 256 colors in the RGB colorspace. Due to the limited number of colors, the file size is drastically reduced. * This is a common file type for web projects where an image needs to load very quickly, as opposed to one that needs to retain a higher level of quality. | |  | **PDF - Portable Document Format**   * PDFs were invented by Adobe with the goal of capturing and reviewing rich information from any application, on any computer, with anyone, anywhere. I'd say they've been pretty successful so far. * If a designer saves your vector logo in PDF format, you can view it without any design editing software (as long as you have downloaded the free Acrobat Reader software), and they have the ability to use this file to make further manipulations. This is by far the best universal tool for sharing graphics. | |  | **PSD - Photoshop Document**   * PSDs are files that are created and saved in Adobe Photoshop, the most popular graphics editing software ever. This type of file contains "layers" that make modifying the image much easier to handle. This is also the program that generates the raster file types mentioned above. * The largest disadvantage to PSDs is that Photoshop works with raster images as opposed to vector images. |   **Styling Images with CSS - [Live Demo]**   * Use the HTML <img> element to define an image * Use the HTML src attribute to define the URL of the image * Use the HTML alt attribute to define an alternate text for an image, if it cannot be displayed * Use the HTML width and height attributes to define the size of the image * Use the CSS width and height properties to define the size of the image (alternatively) * Use the CSS float property to let the image float * Use the HTML <map> element to define an image-map * Use the HTML <area> element to define the clickable areas in the image-map * Use the HTML <img>'s element usemap attribute to point to an image-map * Use the HTML <picture> element to show different images for different devices   **Note:** Loading images takes time. Large images can slow down your page. Use images carefully. | |
| Work Period | Time: 35 minutes |
| **Students will use the remaining class time to continue working on their website, by adding images, and styling them using one of the elements discussed in the lesson via CSS instructions.**   * **Websites should contain 3 or more images, and can be styled any which way - should not be default size or styling information.** | |
| Closing/Exit Ticket | Time: 5 minutes |
| **[Google Classroom]**  Students submit the link to their website via the Google classroom post for review. | |