

Web Development Summer Homework

After you have completed the Web Development class please complete the assignment below for the summer assignment. This assignment is due on August 28, 2020. If you turned in the signature assignment during the fourth quarter then you are excluded from this assignment and enjoy your summer.

Purpose

To design, develop, and publish a responsive web site using recommended design practices. Your Project will demonstrate mastery of the web development skills and concepts learned in this course. Your site must be a static website (no scripting).

Project Requirements

You are required to publish your website on the Internet. You can use UC File Space to host your site, or use the free or paid host of your choice. Your web site might be about a favorite hobby or subject, your family, a church or club you belong to, a company that a friend owns, the company you work for, etc.

The project must be your own design and be completed by you. You may look at other sites or any other resources you find for inspiration, but you are not permitted to start with a template. Your site must be coded 100% by you, meaning you started with a blank document and personally typed in every single line of code. If you find a tutorial that shows you how to do something and follow along that's fine, but don't just search out bits of HTML or CSS from on line and paste it into your files. You may not use any frameworks, such as Bootstrap, Foundation, HTML5 Boilerplate, etc.

Your project must:

- Have at least five (5), but no more than eight (8), content pages, with appropriate page content. You will lose points for going over or being under on page count.
- Contain appropriate text and images, and other content that provides information and value to the target audience on each page. Web page documents that have little or no content of value to your intended audience or consist only of an image or a PDF will NOT be counted as a "page". Portfolio sites that are 100% images or sites that are all list or links are not appropriate. There should be an informational component to your site.
- Contain at least one (1) table utilizing data effectively. Table may not be used for layout of text and images. It should display data that is appropriate for a table.
- Contain at least one (1) embedded video or audio file (you are not required to create the video, there are many shareable videos and audio files on the Web –

choose one that is relevant to your project). You may use the embed code provided by Youtube or Kaltura. Any validation errors related to embed code from YouTube or Kaltura will not be counted against your grade.

- Contain at least one (1) e-mail link.
- Contain at least one (1) external link.
- Contain at least one (1) form with four (4) fields minimum, plus the submit button. Note the form does not need to be processed as we're not covering server side scripting in this course. Your form must be part of your site, a link to an external form is not allowed.
- Contain at least one (1) external style sheet (CSS) which contains a minimum of ten (10) styles.
- Use responsive design, with at least 2 separate styles for desktop/laptop full size browser and either tablet or mobile view.
- Be visually appealing and exemplify appropriate use of Contrast, Repetition, Alignment, and Proximity.
- Pass HTML and CSS validation. You must provide screenshots showing that each of your pages pass both validation tests. Screenshots of validation should be taken AFTER you host your lab, so that your instructor can see the URL that was validated. Be sure the link to each page (on FileSpace) shows in your validation screenshots. Do not use the copy/paste or file upload methods to validate. Paste all of your screen shots into a single word document. Upload this word document with your assignment, but do not zip it in with your website files.
- Adhere to Section 508 Standards.
 - Section 508 Standards can be complicated, so if you have any items that you did not know how to resolve, please address those in your presentation video. Even if you don't know what to do to fix an accessibility issue at this stage of your learning, you do need to be aware of your own lack of knowledge and what you need to work on in the future.
 - At a minimum, all images must have descriptive alt tags (something beyond just the word "image"). All text background color choices must be chosen to be accessible to those with Red/Green color blindness, and be considerate of users who may have issues viewing/reading content with low contrast. Tables should only be used to display data (not for page layout) and must have appropriate markup to assist users who use assistive technology (screen readers).
- Contain appropriate page titles, meta tags, character encoding tags, and a favicon image on each page.

Project must NOT contain:

- Scripting. No scripting of any kind is permitted without prior approval (at the instructor's discretion).
- Links to libraries or styles that you did not create yourself.

- Frame based pages.
- Table based pages.
- Spry Widgets (From older versions of Dreamweaver).
- Inline or embedded CSS, or deprecated elements (exceptions for when individual words or phrases within a paragraph are styled for emphasis).
- Image based pages (where the page contains little or no text or content other than images).
- Copyrighted images or content without citations.

Deliverables/ Submission Requirements

Your final project submission must include:

- Clickable link to your live site. Your site must display live to be graded.
- Zipped file containing all your website files and resources (images, audio files, video files, etc).
- Screenshots showing that each page passed HTML and CSS validation (pasted into a word document).
- Screencast Presentation of your website. This is a tour of your site, where you show us each page and explain how you have fulfilled each of the project rubric requirements. You will lose points if your presentation does not specifically address each area of the final project rubric. Be sure you have viewed the rubric! **Please address the rubric requirements in the order they appear on the rubric.** You must also include a discussion of the challenges encountered while developing the site, including how you overcome those challenges. Your presentation should also reference the suggestions offered during peer reviews and why you decided to incorporate or reject the suggestion.

If the link to your site does not work, I will not grade it. Check your links and videos, to ensure they work and are viewable, before you submit.

- Instructions: Use responsive design, with at least 2 separate styles for desktop/laptop full size browser and either tablet or mobile view.
- Resources:
 - Chapter 18 — CSS Techniques
 - https://www.w3schools.com/html/html_responsive.asp
 - <https://www.smashingmagazine.com/2011/01/guidelines-for-responsive-web-design/>
 - https://www.youtube.com/watch?v=Up_NC-qGzuI
 - <https://www.youtube.com/watch?v=fA1NW-T1QXc>
 - https://www.w3schools.com/css/css_rwd_intro.asp

Step 2: HTML and CSS Validation

- Instructions: Pass HTML and CSS validation. You must provide screenshots showing that each of your pages pass both validation tests. Paste all of your screen shots into a single word document. Upload this word document for your assignment.
- Resources:
 - Chapter 4
 - <https://validator.w3.org/>
 - https://www.w3schools.com/w3css/w3css_validation.asp
 - <https://www.thesitewizard.com/webdesign/htmlvalidation.shtml>
 - <https://www.youtube.com/watch?v=79qAXqE3Qz8>

Step 3: Section 508 Standards

- Instructions: At a minimum, all images must have descriptive alt tags (something beyond just the word "image"). All text background color choices must be chosen to be accessible to those with Red/Green color blindness, and be considerate of users who may have issues viewing/reading content with low contrast. Tables should only be used to display data (not for page layout) and must have appropriate markup to assist users who use assistive technology (screen readers)
- Resources
 - Chapter 3
 - https://www.w3schools.com/html/html_accessibility.asp
 - <https://www.bgsu.edu/cms-training/accessibility.html>
 - <https://webaim.org/standards/508/checklist>