Front End Web Development Project Requirements

Project Deadline: Push your final project to GitHub no later than Friday, July 26th by noon!

There will be a simple survey/form provided approximately 2 weeks prior to the due date that you will complete to “turn-in” your project.

Late projects will not be accepted.

The purpose of the capstone project is to reinforce what you’ve learned and show off your skills. Your projects will be your go-to tool to show off to potential employers and demonstrate you know what you’re talking about. Pick an idea that is fun, challenging, and hopefully useful, too! Create a website that demonstrates your knowledge of the Front-end development skills you’ve been learning. This application can be anything of your choosing **as long as it demonstrates the below requirements.**

Your project does not need to be “complete” in that it doesn’t need to be a fully-functioning, finalized project ready to be launched. It can be a small, simple site that only has a few features. It can even have incomplete features, so long as somewhere on the page it still meets all the below requirements. The important point is that you demonstrate good coding practices and the major platforms you learned in the course. You can always add on to your project after the end of the class.

Project Template:

A blank project that includes a folder structure, a blank readme, and some best practices has been created and made available to work off of. You are encouraged (but not required) to follow this example. It can be found here: https://github.com/CodeLouisville/front-end-template
Feel free to fork (copy) this project to your own GitHub portfolio and use it to start all of the front-end projects you work on.

Requirements:

The below items are the requirements for your personal project for Code Louisville. Projects are graded on a pass/fail system, thus every required bullet must be met in order for your project to pass. You should discuss your project/plan with mentors in advance to verify that it will meet the requirements, but also to make sure you don't try and tackle too large of a project for this class.

The requirements are:

- Your project is responsive to different devices and/or browser sizes and **improves the user experience in some way** based on what type of device the project is viewed from. The user experience must be improved in some way through your responsive design. See Clarification section below for important clarifications on this requirement.
- Your project includes at minimum 3 custom-written CSS selectors/rules in a .css file which are applied to your HTML elements
- Your project includes custom-written JavaScript including at least one JavaScript function (jQuery is fine as well) located in a .js file.
    - **Exception:** using *only* alert() or prompt() will not meet this requirement
- Your code has some comments noting major portions of your code
- Your project code is uploaded to your GitHub account, in its own repository, and the link to it is submitted via the provided form at the end of the session
- It must include a README file located at the top level directory of your project that includes a description of your project and - if necessary - any special instructions to run/view your project
- No asset swaps - you can't take a Treehouse project and change colors, rename it, swap photos, etc. Must be a unique project.

Recommended but not required:

- You are highly encouraged to include a front-end framework such as AJAX, jQuery, or Angular in your project as a demonstration of your ability to utilize these. However, this is not a requirement of a passing project
- You are also highly encouraged to add some form of user interactivity to your project where something responds to an action the user performs. However, this is also not a requirement of passing

Clarifications and Commonly Asked Questions

- How projects are reviewed
    - The project reviewer will use git to clone your project to their local machine and open index.html (or whatever your readme indicates)
    - By default, all projects are looked at in the latest version of Chrome on a Windows Desktop computer
    - Responsive design will be tested using Chrome Dev Tools to simulate one or more mobile and/or tablet devices
    - Passing is considered pass/fail meaning if you meet all requirements listed above in the Requirements section, your project will pass
- Naming your project
    - Choose a name for your GitHub repo that is relevant to the subject of your project, meaning do not name your repo "CodeLouisvilleProject" or similar.

Choose a name based on what your project is about. For example “Brian’s House of Pancakes”, “Personal Portfolio Site”, etc

- Responsive Design
    - Your site/app must improve user experience with its responsive design, such as making the page easier to view or read, rearranging content, swapping in different assets, etc.
    - **Swapping the color of your font or changing a background image/color is not demonstrating an improved experience and will not count**.
    - Setting a width, such as 100% width on an image, that causes the content area to scale with the screen will NOT meet this requirement
    - The two most common (but not the only) methods of accomplishing responsive design are:
        - CSS media/device queries that will change elements on your page above or below certain screen sizes
        - Using a framework (such as Bootstrap) to implement responsive design
    - You do not have to account for all possible devices and browser sizes, just demonstrate some responsive layout principles
- Custom CSS
    - These selectors/rules MUST be located in a separate .css file you created. It cannot be 'inline' CSS found only within your HTML elements
    - Using ONLY Bootstrap for your customization does not fulfill this requirement, you still have to write some CSS yourself even if Bootstrap is handling your site styles
    - You are highly encouraged to use a variety of CSS styles to enrich your site, 3 is an extremely low *bare minimum*. Most sites will have dozens, hundreds, or even *thousands* of CSS elements
- Custom JavaScript
    - You must include some form of JavaScript written by you, and must be included in a separate .js file in your project (no inline JavaScript)
    - It must include at minimum 1 working JavaScript function
    - Using a JavaScript framework such as AJAX, Angular, or jQuery can certainly meet this requirement
    - Just importing/linking Bootstrap (or other frameworks) does not meet this requirement
- Comments
    - Every line doesn’t need a comment, but major sections of your CSS, HTML, and/or JavaScript files should have some helpful comments so a reviewer can know what the major parts of your code do and more easily read it
- GitHub
    - If you choose to host your application on a live URL, great! You can share that for demonstration purposes or ease of running - and this is encouraged! But your code must still be available on GitHub for review.

    - Check out GitHub pages (https://pages.github.com/) for a quick way to host your site
    - Yes, GitHub is a requirement. It's not just how we find and view your project, it's a critical skill you need to understand. Not having your project checked in on GitHub will result in not completing the class.
- README File
    - Your readme should help the reviewer understand what your project is going to be about so they know what to expect. It can be two sentences if that's all it takes to explain what your project is about
    - If you require any special setup, installation, configuration, or other steps to view your project, you must include those steps in your README
- You CANNOT re-use a project provided on Treehouse, from another student, or a completed project you found online
    - While taking inspiration, ideas, and code snippets from other projects is a normal part of the software development process, the complete re-use of an existing project is unacceptable
    - Any project which simply takes code from one of the projects that Treehouse provided and modifies a few elements (colors, images, names, etc) will not be accepted. You are expected to create a new project for your portfolio

Testing Your Project

You should test your project on another computer by having someone else obtain and run your project. Several projects in the past have failed to meet requirements because it was written in a way that only worked on that person's computer and not the reviewer's. Your project reviewer will not be responsible for tracking down why your project does not work and this may result in a failed project.

Mentors

You should talk about your project early and often with your mentors. Explain your idea and the features you are thinking of implementing. They will help you understand if it will meet the requirements or if you've possibly decided to tackle too large of a project for the 12-week time period. Towards the end of the session, you should again show your project to your mentors and get confirmation that it meets the requirements of the project. You are perfectly fine to ask them to confirm so there should be no surprises about whether your project will meet the requirements when it comes time to submit.