

COMP 484/L Final Project

For the next 7 weeks or so of the semester, you will build a portfolio site that will showcase your newly acquired web engineering skills. This is an important project because you will have something to show to the public.

The purpose of the final project is to provide hands-on experience of using design pattern and the technology stack of developing latest web technology plus and troubleshooting/analyzing skills.

The final deliverable will be an implementation a novel, creative website with **no more** than 5 web pages. I will mention couple of project topics during class. If you prefer something else the content for your final project is completely up to you. You may put whatever materials you want into your website. You should draw upon your design, HTML and CSS knowledge to make your site look nice. But, the focus should be on demonstrating your proficiency of using JavaScript and PHP and putting all of them together. You are welcome to use additional frameworks, packages, and other platforms along with your development. Do **NOT** recreate the wheel, focus on solving a problem and bringing together all the things you've learned! For example, feel free to use Bootstrap to help on the front-end work, but you must still customize the look in some way. Your code should also include comments. Every line doesn't need a comment, but at the very least large blocks of code you've written should have comments explaining what that block of code does. Auto-generated comments are OK.

Because your site can consist of any content, you will be grade upon specific features you have incorporated into your site. Your site needs to contain the following items as the minimum:

- 1) At least 20 different types of HTML elements (tags).
- 2) At least 10 different valid CSS selectors.
- 3) At least 10 examples of proper variable or constant use including proper scope.
- 4) At least 5 examples of properly using conditional statements, comparison operators and loops.
- 5) At least 2 example of properly working with an array or multi-dimensional array.
- 6) At least 2 example of grouping HTML element to a JavaScript/PHP object to get and set some data.
- 7) At least 5 examples of defining your own JavaScript/PHP functions (with at least 3 functions having parameters).
- 8) At least 5 different events being captured and handled by your JavaScript code.
- 9) At least 1 HTML form containing at least 5 different data from the client are sent to the server and processed by the server.
- 10) Use at least 1 regular expressions **OR** produce 2 types of graphical representations.
- 11) Your project is responsive to at least 2 different devices and/or browser sizes/resolutions.
- 12) Show your efforts to eliminate duplicate code.

- 13) Write comments.
- 14) Use a consistent style across page elements and pages.

Your project must include a README file providing the following:

- 1) A brief description of your project's purpose and functionality (ex: "My CSUN COMP 484 Project. A web app designed to let users create their own To-Do lists, add items to the lists, and mark them as complete." Try to think of what would be useful to a potential employer that is looking at your GitHub account without any context
- 2) Detailed steps on how to start the application and any prerequisites needed by the user/reviewer. If anything else is needed, (packages, frameworks, etc), be sure to list them. Just ensure anyone viewing your project will be able to figure out how to see it in action.

In addition to these requirements, your project:

- Try to follow CSUN identity guideline.
- Must run without errors.
- Must be posted to a publicly accessible URL with no broken links or broken images.
- Should obviously demonstrate your HTML, CSS, JavaScript and PHP skills (this is a subjective measure).

* Using new features of HTML5.x will always be a plus!

Projects will be carried out by a team of 1-2 people. Each group will be responsible for meeting with the professor and presenting the project. During the first meeting you will describe the motivation of developing the website, current progress of building if it is an existing project, and final milestones. You also need to confirm whether this website is mobile first or not. Take advantage of this meeting as a chance to get feedback on the direction of the project from the professor. This meeting should be done by November 8, 2017 and it counts for 4 out of 10 points of "professionalism".

At the end of the class we will have final project presentation session. The final presentation will give you a chance to show off the hard work you put into your project, and to learn about the projects of your peers. Be prepared to give a 10-minutes oral presentation. You should include a demo of your project along with some narrative material (e.g. slides). The presentation will be considered as part of the final deliverable, so don't forget to apply good visual design principles to your webpages and presenting material. The final presentation should include the following information:

- Problem: A clear statement of the problem your project addresses.
- Motivation: An explanation of why the problem is interesting and what makes it difficult to solve by bare-bone JavaScript if this applies.
- Approach: A description of the techniques or frameworks you used to solve the problem.

- Results: a working demo or screenshots of the website you built.
- Future Work: An explanation of how the work could be extended.

The code comprising your site needs to be zipped up with your name included like this: COMP484_LastName1(_LastName2).zip and submitted here in Canvas with a publicly accessible URL. Submission failed to meet this requirement will not be graded. Grade may be forfeited.

Have fun! Your project should be something you're proud of, and that adequately demonstrates your base knowledge in the concepts you've learned. A good portfolio piece is becoming increasingly important to obtaining web design and development jobs. Try to build your site in a way that you can constantly improve upon as you gain additional skills.

Happy Web Engineering!