

CS2830 Final Project Criteria

For the final project you are to build a web application using HTML 5, CSS, JavaScript, and PHP and that has the characteristics described in this document.

The purpose, target audience, and capabilities of the web application are of your choosing. The characteristics described below are general technical requirements that any web application can incorporate and are chosen for you to demonstrate you have learned the material covered in this course. You can build any web application you want as long as it meets the criteria set here. You could build a web application for yourself or for someone else. In the past students have developed the following types of web applications. This is not a comprehensive list and does not limit the kind of application you create.

- a web application for illustrating achievements and to display a portfolio of work to show employers (an interactive resume/portfolio)
- a web application to support community interaction and information dissemination (e.g. for club, fraternity, sorority, church, family, etc.)
- a game
- a web application for a business
- web-based tools to support work activities
- a photo sharing web application
- a web application to support bands and music listeners
- a fan site web application for an actor, musician, game, movie, etc.

1. The web application must use HTML 5 and CSS for page content and layout. Pages must be properly formatted using the HTML 5 specification. Tables are not to be used for general content layout. Tables can and should only be used for tabular information. CSS must be used for styling the content and doing the visual layout. An HTML 5 DOCTYPE is required.

2. The pages/sections that make up the web application must have a consistent design/interface. There should be elements of each page/section that they share in common such as a header, menu, footer, etc. You have flexibility in how you implement your design, but it should not just be a random set of page/section designs. The user should have a consistent and understandable experience when moving from page to page, section to section, or application function to application function.

3. The web application must be well-structured and logically organized. Changes to common elements in a page design must be easy to implement. A common element is an element that is repeated on multiple (or all) pages/sections such as a header, menu, and/or footer. If a common element has to be changed by editing it in multiple places, then your implementation is not correct.

4. The web application must have content or functions that are publicly available and content or functions that can only be accessed if authenticated (logged-in). When a user is logged-in they must have some visual cue that indicates they are logged-in. The ability to logout must be available. After the user logs out or if they never log in, they must not be able to access the protected pages or functions.

5. For the purpose of testing the login and accessing the protected content the following user ID and password must work for general access to protected content:

User ID: test

Password: pass

If you need to implement a separate login for administrative features or a different category of user, then supply the login credentials that are necessary to perform the login.

6. The web application must utilize PHP.

7. You must properly use GET **and** POST. Using GET for private information is not acceptable. GET should not be used to take an action such as deleting information or submitting a password. Remember that GET places the information in the URL!

8. The web application must use form elements beyond what is needed for a login form.

9. Any place where users can provide input you must supply appropriate and informative feedback if the information entered is not complete or correct. For example, if the user provides incorrect login information they should receive feedback that the login failed...not just be re-presented with an empty login form with no message.

10. The web application must contain a page where there are multiple photos presented on the page.

11. The web application must contain a page that contains a YouTube or other video embedded in the page.

12. The web application must utilize JavaScript.

13. The web application must utilize jQuery.

14. The web application must utilize jQuery UI or Bootstrap interface elements.

15. The web application must utilize AJAX. AJAX can be implemented using jQuery or the capabilities provided by JavaScript.

16. The web application you build is not to be trivial in simply meeting the technical requirements set forth in this document. Yes, you are to meet the requirements but you are also to build a web application that has a purpose and delivers functionality or capability. The requirements are parameters to be used in design and implementation of the application; they are not intended to be the end product. You should build a web application that you would be happy to show to a prospective employer or client. You should also make sure that you can complete the development by the due date.

17. A document is to be written that a) **provides the link to the web application** and b) **describes how you met the criteria** provided in this document. You should be able to point to instances in your web application where the criteria have been met. This document is for your protection!! If the grader/instructor has to search your application to find the places where you met the criteria then they may miss where you met the criteria. This document should be like you looking over the shoulder of the grader and saying, "Yeah, right there is where I use jQuery." By explicitly identifying how you met the criteria the grader/instructor can be sure they are not missing something. It will also save time for the grader, which is in short supply during finals week. Easy to find things = makes grader happy = good grade.

18. You are to provide the document (see 17.) that contains the link to the web application and that describes how you met the criteria along with copies of all of the files for your site in a zip file. The submission of the final project is via the Final Project Assignment available in the list of assignments. Attach the zip file to this assignment on the class web site as your submission. The URL that is in the document must point to an operational version of your web application.