

Based on 100 points total, roughly 0.9 per check box unless noted as a %. Extra credit evaluated separately.

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## Final Project

# PROJECT OVERVIEW

Work in a team to design and build a website! You cannot use your lab files for the final project. You will have at least four pages plus an admin only area.

Team size 1-3 people

Roles (if you work alone you are everyone, most members will take on more than one role):

**Project Stakeholder** (instructor). Think of this role as the investor in your project.

**Project Manager** The captain of the development team. They facilitate communication, set expectations and make sure the team is on track.

**Lead Developer** Responsible for all technical aspects of the project. This role should be assigned to one group member identified as your strongest programmer.

**Junior Developer** Everyone on the team that is not a Lead Developer is a Junior Developer. Junior Developers are expected to take technical direction from the Lead Developer and contribute to the project source code.

**Web Designer** The web designer is responsible for the overall design of the user interface. The Web Designer creates the Story Board / wireframe mockups of the site.

**Content Developer** Responsible for generating content (text, images, etc.)

**Quality Assurance** Responsible for testing the website. All links, images, HTML/CSS validation, etc. Errors are reported back to the Lead Developer, who either corrects the error or delegates the fix to a Junior Developer.

You may create a web site for:

- Business.
- Non-profit Organization.
- Personal.
- Site can Fictional or real (however Latin text is not allowed).
- It is a fairly open ended project to allow for creativity. Keep in mind if you do the minimum then you get a minimum grade.
- Some examples are: Spotify Tuner, UVM Sailing, Music Through the Decades, UVM Auto-Registration, Blue Pomegranate Studio, Starting Out Curly, Tech Helper, SCOTUS

Case Finder, Food Destiny.

Consider entering your project in the [CS Fair](#) being held in Dec.

## TO DO

1. Develop a Team.
2. Assign Roles: Project Manager, Lead Developer, Junior Developer, Web Designer, Content Developer and Quality Assurance
3. Brainstorm Website Ideas.
4. Project Manager sends a report to the instructor with the group member names and role assignments including a brief description of what each person will be working on by Monday noon Nov 22<sup>th</sup>.

Your design must include a minimum three related tables (relation table in a many to many counts)

You are going to create a complete and functional web site incorporating the concepts learned in this class (you do not need to use everything only the items that make sense for your site or are listed below).

## REQUIREMENTS

- ☒ Create a new private GitHub project in the class Repo named Final-FirstName-LastName. For example, mine would be Final-Robert-Erickson. Please follow the case and hyphens.
- ☒ Put all group member names in the README file for the repo.
- ☒ Add a link to your final project live site to the README file.
- ☒ git commits must be spread out over the time. if all your commits are in the last week you will lose 10% as that is not how you work in a group.

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## Data

- ☒ Create a new database naming it Final. <https://webdb.uvm.edu/account/>
- ☒ Create a Data Dictionary being sure to link to this file (image is ok) under supporting documents.
- ☒ Create an ERD saving the image being sure to link to this image under supporting documents.
- ☒ Name your database table(s) with good names that reflect the data, be sure to use naming conventions.

- ☒ You need at least 3 related tables minimum.
  - ☐ Name your database fields with good names that reflect the data, field1, field2 are all bad names. Be sure to use naming conventions
  - ☐ Have at least five records in your table to display data.
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## Web interface

- ☐ Minimum of four public web pages.
- ☐ Your interface should be easy to follow and understand.
- ☐ You need to have one hundred words minimum per page. Three pages must meet this requirement (form page does not need to). Information can be pulled from database, ex display critter easily would meet this requirement.
- ☐ One public page should retrieve information from the database and display the information in some way.
- ☐ Your SQL statement needs to include at least one JOIN
- ☐ Identify the above page on your main index page.

Must include the following on all pages. NOTE: you will have separate versions for the admin site.

- ☐ top.php
  - ☐ top.php should have the correct meta tags and viewport.
  - ☐ header.php (included in top)
  - ☐ nav.php (included in top)
  - ☐ footer.php
  - ☐ Database.php (included in top)
  - ☐ constants.php (included in top)
  - ☐ Navigation should have an if statement to print the class for the active page.
  - ☐ Group member names must be in footer.php
  - ☐ Each group will prepare a presentation of their final project.
  - ☐ Each group will present to the class in some fashion. Details to be figured out.
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## Admin site

- ☐ Minimum of three admin web pages.
  - ☐ admin web pages need to use an .htaccess file allowing only rerickso, yxue and yourself.
  - ☐ Your interface needs to allow the administrator to do the following (for all tables, if you have more than three talk to me.):
    - ☐ Add new records (populating relation tables automatically)
    - ☐ Update Existing records
    - ☐ Delete records (deleting relational records automatically)
  - ☐ At least two admin reports. ie list of orders, list of adoptions, total donations raised etc.
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## **Form requirements - these requirements can all be met on one form or many.**

- ☐ You need a minimum of one public form.
  - ☐ Include one text box for a users email address (public form).
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Add at least two other widgets for example:

1. ☐ Include three check boxes.
  2. ☐ Include three radio buttons.
  3. ☐ Include one list box.
  4. ☐ Include a text area.
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- ☐ Include a Submit button.
- ☐ Include field sets and legends as needed.

## **Form Sanitization**

NOTE: all forms must: sanitize all data, validate all the data, save the data, provide feedback and be sticky.

- ☐ You must sanitize all your data on the server with PHP.
- ☐ You must sanitize the email address
- ☐ You must sanitize your second text box
- ☐ You must sanitize your third text box

- ☐ You must sanitize your first widget
  - ☐ You must sanitize your second widget
  - ☐ You must sanitize any other form elements you used.
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## Form Validation

- ☐ Your form should use client side validation as described in the text for HTML5 form validation attributes.
  - ☐ Check for empty for all required inputs.
  - ☐ Your validation should use the PHP filter var for the email address. See text and my sample code putting it all together.
  - ☐ You must validate your second text box
  - ☐ You must validate your third text box
  - ☐ You must validate your first widget for correct values
  - ☐ You must validate your second widget for correct values
  - ☐ You must validate any other form elements you used.
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## Form Features

- ☐ Make the email value sticky.
  - ☐ Make the email value sticky.
  - ☐ Make the 2nd text box value sticky.
  - ☐ Make the 3rd text box value sticky.
  - ☐ Make your first widget sticky.
  - ☐ Make your second widget sticky.
  - ☐ Make any other form elements you have sticky.
  - ☐ Form should update two tables at the same time like we did for lab.
  - ☐ The from address needs to be your email address so I can reply to the email. [Read this](#) to help you be more creative with the email message (You can use their code but do not use charset=ISO-8859-1). Having my style would be considered wrong.
  - ☐ The form email needs to be different than the sample.
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## CSS for your site

- ☐ Use a grid or flex box layout. If you did not cover this in cs 008 ask and we will help you.
  - ☐ Link to the desktop css file (custom.css) with the link element.
  - ☐ Link to the tablet css file with the link element.
  - ☐ Link to the phone css file with the link element.
  - ☐ Create the CSS for your desktop design, custom.php.
  - ☐ You are graded on the quality of your desktop design.
  - ☐ Create the CSS for your mobile design.
  - ☐ Do not duplicate rules in your mobile css that are already in custom.css.
  - ☐ You are graded on the quality of your mobile design CSS.
  - ☐ Create the CSS for your tablet design.
  - ☐ Do not duplicate rules in your tablet css that are already in custom.css.
  - ☐ You are graded on the quality of your tablet design CSS.
  - ☐ Update custom.css for your larger desktop design if needed.
  - ☐ You are graded on the quality of your desktop design CSS.
  - ☐ Add custom breakpoints in your style sheets as needed (you may not need any).
  - ☐ Don't let text get longer than 70 to 80 characters on each line.
  - ☐ Style the activePage class to have it stand out.
  - ☐ Have any html tables have zebra stripping.
  - ☐ Have any html lists have zebra stripping.
  - ☐ Add the view port tag to the head section of each page.
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## Standard Requirements

- ☐ Main goals of assignment not met.
- ☐ Be sure DEBUG is set to false.
- ☐ Make sure you copy lib/pass.php to the live site.
- ☐ Update your main index.php file with links to all the files in the correct place (public and

supporting).

- ☐ Do not use any banned elements (div, span, br).
- ☐ Be sure your text is still legible with and without the Color blindness tool.
- ☐ All files must use proper coding guidelines.
- ☐ Make sure paragraph, lists, forms text is not centered. Centering boxes is ok.
- ☐ (5% of your grade) Proper use of version control (commits on a regular basis, commits small with good message about what was accomplished with this commit) [jigsaw.w3.org/css-validator/](https://jigsaw.w3.org/css-validator/)
- ☐ (5% of your grade) Make sure your files all pass w3c HTML validation: [validator.w3.org/](https://validator.w3.org/)
- ☐ (5% of your grade) Make sure your files all pass w3c CSS validation: [jigsaw.w3.org/css-validator/](https://jigsaw.w3.org/css-validator/)
- ☐ sFTP your files to your silk account which is our web server. All members need to have the code on their web site.
- ☐ Submit your assignment only once in blackboard. Only one member of the group needs to submit. See next direction first.
- ☐ Copy this code as a text submission in blackboard, look for the Write Submission button. You will need to click on the html button once you are in the editor and paste this code there:

```
<a target="_blank"
href="//lcarrera.w3.uvm.edu/cs148/live-final">>
http://lcarrera.w3.uvm.edu/cs148/live-final</a>
```