

Assignment FP4 – Final Project

All sections [A-E] due: FRIDAY, December 09, 2022. 11:59 pm ET

This is an **individual** assignment.

1 Learning objectives

- Finalize an entire project from start to finish
- Organize your code, assets, etc. to be shared with others.
- Document your project.

Your final project will be graded according to the requirements in the Final Project goals. **Please review the Final Project goals for your respective Section (A-D or E) on Canvas.**

2 Deliverables

All deliverables will be submitted to GitHub, including the write up. The max. file size of your write up (PDF) is 50MB.

(1) Deployed, functional web project:

- Host your webapp on GitHub, as in previous assignments.
 - Remember to update the `index.html` in your root repository to link to this homework.
 - Check that your code is online (**pushed**) & that your webpage works properly online.
- Interactions should work as described without error (you will do the description in the write-up below)
- Website should be **responsive**: work for multiple distinct (i.e. >1) screen sizes. State in your PDF, with which screen sizes we should test your interface.
- Website should be **accessible** (no errors, valid alt-text after using the [WAVE tool](#))
Paste screenshots of the “Summary” and “Details” sections into the writeup, showing *no errors*. Caution: “Null or empty alternative text” is listed under “Features”. Please make sure that you *have proper alt-text for all applicable elements*.
If you have multiple pages, add screenshots of “Summary” and “Details” for every page. Collapse the lower level items in “Details” for brevity. If it breaks your flow, feel free to add it as an [appendix](#) and refer to it.
- All pages should render without errors in the browser
 - Be sure to check that all your links (to assets, libraries, images, etc.) are properly working when the page is deployed! The console will be your best friend for this HW.
 - Test on other computers, and/or browser incognito mode.

(2) Well organized code:

- Push all your code to github.
- Your code should be well-organized, indented, and well-commented. We will be stricter with grading of this part.
- Please organize your CSS/JS/images/other files into appropriate folders, according to what we discussed in class (e.g., `/css/style.css`, `/js/function.js`, `assets/someimage.jpg`, etc.)

- If you have many HTML pages, you should organize them in folders as well. For example, for those of you who chose to build a *web portfolio*, each of your “projects” you will display should be a different folder. For *Information tools*, each of the “concepts” you want to teach ideally would be a separate folder if the concepts are not sharing much content with each other.
- These points apply to those people who are not using an MVC framework. If you use MVC, it is fine to follow the structure it imposes.

(3) Presentation and Live Demo:

- Prepare a brief (3 minute) presentation and live demonstration of your project, to show during your Lab section. Since this presentation will take place before the final due date, your project does not need to be 100% complete, but you should be able to demonstrate that the core features of your project are working.

3 Write-up

The goal of your write-up is to clearly convey the work you did on this project (i.e., make it VERY clear to your TAs how to evaluate your work). The following will also be useful to you when you showcase it. **In your write-up, please clearly mark each part (i.e., Part 1, Part 2 and so on).**

- (1) **Part 1:** In 300 words (only!) describe your website (We will stop reading at 300 words, so please be concise). Include the following:
 - What is the purpose of your website?
 - What information do you convey with your website?
 - How is it interesting and engaging?
 - Who is the target audience?
- (2) **Part 2:** Use a bulleted list to describe how a user would interact with your website. For each item in your list, state
 - the interaction type you implemented
 - how we should reproduce it (e.g., click on X on page Y, or scroll on page X, etc.)
- (3) **Part 3:** Describe what external tool you used (JavaScript library, Web API, animations, or other). Following the bulleted list format below, reply to each of the prompts. (We will stop reading at the 4th sentence, so please be concise)
 - Name of tool
 - Why you chose to use it? (2-4 sentences max)
 - How you used it? (2-4 sentences max)
 - What does it add to your website? (2-4 sentences max)
- (4) **Part 4:** Describe how you iterated on your prototypes, if at all, including any changes you made to your original design while you were implementing your website. (4-8 sentences max)
- (5) **Part 5:** What challenges did you experience in implementing your website? (2-4 sentences max)
- (6) Submit your write-up with proper grammar, presentation, style, etc.
- (7) Upload this write-up as PDF to GitHub.

4 Submission

- (1) **Deploy** your webpage on GitHub. Check that your README shows the correct links.

Check that your code is online (**pushed**), that your webpage works properly online, and that your repository contains your write-up as PDF. If GitHub complains that the PDF is too large, compress it and push again.

- (2) Submit your final project **repository** to **Gradescope**.

Verify that it was submitted to Gradescope before the deadline!

Appendix: Example of Screenshots from WAVE

“Home” page

The image displays two screenshots of the WAVE (Web Accessibility Evaluation Tool) interface, which is powered by WebAIM. Both screenshots show the tool being used on the URL <https://interactive-structures.org/publication>.

Left Screenshot (Summary View):

- Header:** WAVE logo, "powered by WebAIM", and "web accessibility evaluation tool".
- Address Bar:** <https://interactive-structures.org/publication>
- Styles:** A toggle switch set to "ON".
- Summary Section:** A navigation bar with tabs: Summary (selected), Details, Reference, Structure, and Contrast.
- Summary Data:**
 - Errors: 0 (indicated by a red X icon)
 - Contrast Errors: 0 (indicated by a red circle icon)
 - Alerts: 96 (indicated by a yellow triangle icon)
 - Features: 2 (indicated by a green checkmark icon)
 - Structural Elements: 33 (indicated by a blue triangle icon)
 - ARIA: 96 (indicated by a purple square icon)
- Buttons:** A "View details" button with a list icon.
- Message:** "Congratulations! No errors were detected! Manual testing is still necessary to ensure compliance and optimal accessibility."

Right Screenshot (Details View):

- Header:** Same as the left screenshot.
- Address Bar:** Same as the left screenshot.
- Styles:** Same as the left screenshot.
- Details Section:** A navigation bar with tabs: Summary, Details (selected), Reference, Structure, and Contrast.
- Alerts:** 96 Alerts (checked).
 - ☐ 82 X Justified text
 - ☐ 1 X Long alternative text
 - ☐ 1 X Skipped heading level
 - ☐ 1 X Redundant link
 - ☐ 11 X YouTube video
- Features:** 2 Features (checked).
 - ☐ 1 X Linked image with alternative text
 - ☐ 1 X Language
- Structural Elements:** 33 Structural Elements (checked).
 - ☐ 2 X Heading level 1
 - ☐ 13 X Heading level 4
 - ☐ 1 X Unordered list
 - ☐ 13 X Inline frame
 - ☐ 1 X Header
 - ☒ 1 X Navigation
 - ☐ 1 X Main content
 - ☐ 1 X Footer
- ARIA:** 96 ARIA (checked).
 - ☐ 47 X ARIA
 - ☐ 49 X ARIA label
- Footer Note:** "If an icon does not appear within the page, turn off Styles above to view it."