

Sustainable information structure project

COM 421 (Spring 2025)

Overview

I'm giving you the contents of a website that I wrote and designed with collaborators several years ago: *The Research Paper Toolbox*. The site was originally to serve as a resource for incoming graduate students. Although we did our best to create a unified information structure for the site, it was a "design by committee" project with a limited timeframe to develop a final version, so it has several inconsistencies and limited ability to sustainably expand or modify content in the future.

The overall instructional design architecture is a module-based learning environment with self-assessments at the end of each module. I've preserved that module structure, but that is all the information structure information I will give you. You'll infer the rest from the stylistic cues in the document that imply the semantic relationship between elements and execute your markup based on the following principles:

1. The document should conform to the W3C Specifications on valid HTML5 and should pass validation;
2. The site should be extensible to accommodate additional modules as they become available, meaning you should provide a template for the inclusion of a new module that anyone with your level of familiarity with HTML5 can successfully develop into a fully-formed module;
3. The stylistic choices, while not elaborate, should use CSS to present the information in a coherent structure that a user can follow as they engage in self-directed learning (HTML navigation should support this feature, both within modules and in a top-level navigation that makes it easy for users to progress through the course).
4. The final site should have file names and directory structures that an outsider could reasonably understand if they inherited the project.

Project scope

In order to make the project feasible and not overload you on markup, you're only responsible for two of the eight original modules we wrote. The rest you will represent in your site by including placeholder text in the top-level navigation that directs to a single placeholder page (the logical choice for a placeholder is the template page you're creating, but feel free to create a separate page if you like). I've also omitted the self-assessment quizzes as we're not learning HTML forms in this course. The only hyperlinks from the original that you must include are in the copy itself (I've omitted others).

Expected deliverables

I'll give you some elements of the original site to expedite the design process. You can use them as you like, but I'd take advantage of what you're given to lessen the burden on yourself of marking up and styling the site. This section also explains what I expect you to provide and the criteria your submitted materials must meet.

What I'm providing you

- **Icons from the original site (in the form of various tools, per the motif).** You don't have to use these if they don't fit your idea for the design. If you decide you want different icons, I strongly recommend using Google's Material Symbols Page or DALL-E 3 (or similar AI image generator). Designing a new icon set is too much work for this project since that's not the focus.
- **Illustrations from the original modules.** These are screen captures and should appear as is where the notations indicate. Decide yourself on scale and text wrapping.
- **All of the copy.** I've included notations in the content where you should insert images and sidebars using the `<aside>` element.

What you should submit

- **The website itself.** A website consisting of a home page with top-level navigation and two modules presented in an information structure that facilitates self-directed learning on the part of the reader;
- **The template for adding a new module.** A separate page with examples of structure and styling that anyone with working knowledge of HTML should be able to use as a template to add additional information to the site. You should demo at least one instance of each structural element and the styling should be evident from looking at the template. You may wish to include some notes as well in the HTML comments if some of the styling requires combinations of multiple classes, divs, etc. The link to this template should appear in your top-level navigation.
- **A self-critique.** Around 150 words on your information structure choices and parts of the site you would improve if you had more time.

Criteria for your submission

1. All HTML written by you, human readable, in valid HTML5 with no significant syntax errors. It's against the rules to share or copy another student's markup, with or without permission;
2. HTML follows accessibility principles;
3. Styling done in CSS as a separate file, single-sourced and linked to in each HTML file (i.e. no styling in the HTML itself);

4. A working navigation, both top-level and within modules themselves (as needed);
5. A coherent file-naming scheme and directory structure that a reasonable outsider could interpret and understand at face value with minimal explanation, and an information structure that is sustainable and can accommodate future content expansion;
6. Aesthetics based on our discussion of effective document design in technical communication, but with the realization that good information structure is more essential than aesthetic flourishes (form should follow function).

Advice

This is a classic handoff project, where you've been given content and must format and present it effectively. You must first scan the available content and try to identify common structural features, then use your knowledge of HTML standards and structural features in technical communication along with your knowledge of consistent document design to construct a site that has a consistent feel (the user should feel like they're looking at modules in a unified course).

Using AI to mark up some of the content could save you time, but be aware that AI won't necessarily give you accessible markup, and it can also make mistakes. I don't recommend handing off all the markup duties to AI without supervision. Since you have this tool at your disposal, I'm looking for highly organized and accessible markup that is semantically correct.

Do not worry about errors or inconsistencies in language within the copy; your main consideration is information structure and presentation, not copyediting.

Don't go down a rabbit hole of having each paragraph be a different page or something to that effect. You want to effectively divide content into manageable chunks for the user, so making a 500-page site is not going to help anyone.

That said, you can't just dump all the content in a module into one extremely long HTML page without any navigation assistance. Too much content without structure will discourage readers from engaging with the material. Consider breaking up modules by section or using a second navigation specific to each module.

Pay attention to the cues that the formatting in the original copy gives you: not just block elements, but inline as well. Each collaborator clearly had an idea of how they wanted to structure the information, so you are given the challenging task of merging them into a coherent, replicable structure. Feel free to ask me questions in class and on Discord; I'll play the part of the client in this exercise.

Lastly, observe the navigation and information structure on sites that you encounter in your daily life, especially instructional sites. You may be able to emulate a structure you've encountered, and that would be something interesting to talk about in your self-critique.

Evaluation

Remember, this is an exercise that demonstrates your facility with structuring technical information on the web, not a life-or-death project that determines the fate of humanity. As such, I'm evaluating you on your ability to:

1. Come up with a sustainable information structure
2. Effectively and accessibly structure content using HTML, and
3. Employ stylistic features using CSS that make that structure apparent to the reader (and to a lesser extent, aesthetically pleasing to look at for an extended period, as that's also a consideration for an instructional design project like this).

I'll create a rubric and post it on Canvas.

Work process

I'll create a discussion board that you can use for peer feedback (you'll evaluate two of your classmates). You'll also get some feedback from me during the design process. The final draft will be submitted via a link to GitHub. Here are the milestones:

Date	Component	Expectations
W 3/12*	Project draft due	You should have marked up the home page and have links to your module pages. Limited CSS would also be advisable at this point, but the purpose of the draft is only to receive feedback from peers and myself, so treat it as such.
M 3/24	Peer feedback due	You should have provided your peers with a short list of constructive criticism, and you'll receive an email from me with the same.
W 4/2	Final submission	You should submit, via Canvas, a PDF with the link to your published GitHub repo and a short self-critique of around 100-150 words explaining your approach and what you would have done differently if you had more time.

**All work due by 11:59 p.m. on associated due date.*