

Software Engineering Career Track Capstone One: Step Four - Coding User Flows

You're about to tackle step four of your first capstone project. To review the steps of the project, <u>refer to this document.</u>

Coding User Flows (25-30 Hours)

Now go make your website!

This is your time to apply everything you've been learning and develop your engineering and problem-solving mindset. Be creative and persistent! This may be difficult at first but will pay off in the long run. Start simple and add complexity in the next step. What matters right now is that your site works, not that it is sleeky styled. You can work on bells and whistles in the next step.

While we do not have specific instructions for you to follow, here are some items to consider as you build your website:

- 1. First, set up your database and fetch the API data for it.
- 2. Next, set up the environmental variables on Flask so it's configured for development. When this is done, run Flask.
- 3. Import Flask and SQLAlchemy into your codebase, then set up the app and database objects so you can work with them. Create classes for all of your database tables through SQLAlchemy.
- 4. Now you can begin to serve up Jinja templates to create dynamic Front-end pages. We will let you take it from here.

- 5. Think about the bigger picture of how a user is going to experience your site. Imagine their user experience. How will they go from the landing page, through login, to the interactive portions of your site fully take advantage of its features? Your goal should be to create a smooth and simple user experience.
- 6. Consider how you're displaying the data from your API, and how a user will interact with it. How are they going to add in more data? Think about the edge cases where a user might encounter an issue with your site and write code to avoid these situations.
- 7. Don't forget to test your work! Make sure that you include tests, either in a separate file or in a folder, and that you have tests that work in production. Your project should contain extensive unit tests and integration testing.
 - a. When a possible employer is evaluating your portfolio, they will be looking for documentation of this kind of testing.
- 8. You'll be done with this phase of the project when you have a simple and functional website that achieves the essential and basic functionality of what you have laid out in your proposal.

Submitting Your Work

1. When you are ready, submit a link to your GitHub to your mentor. Your mentor will review your work, but does not need to give you the approval to start working on the next step.