

In my final project for CS 132, I elected to create an additional view for an FAQ page, which is Option 6. Despite the senior project guidelines permitting the omission of a "cart" feature and requiring only one Chosen Feature instead of two, I went above and beyond to also implement a "cart" feature, as well as Option 2, which enables a user to purchase a product/item from the e-commerce platform. I hope this added effort may yield some extra credit. I only realized my project partner was not a senior in the last moment, so I undertook the entirety of the project alone, handling both front-end and back-end development, as well as the database.

Overall, I am pleased with the outcome of this project. The website is well designed, incorporating essential features, and can serve as a foundation for future entrepreneurial opportunities. The most challenging aspect of the project for me was implementing the SQL database, due to my lack of a database background. While the CS 132 lecture slides were invaluable for tackling the majority of problems, the SQL database required additional time and effort to master. I found the GPT-4 to be a remarkable resource for learning SQL, as it helped clear the confusion caused by outdated and cluttered online content, which posed much confusions to me as I couldn't even tell which is good or correct.

While I was able to successfully complete all the features, an additional feature to consider for the future would be a user signup/login system, where each user could have a unique ID, enabling the cart to store user-specific information. This could also pave the way for the use of cookies, facilitating a more personalized user experience through product recommendations based on user interests. If I had one more week or so, I might consider adding such feature.

As a student majoring in Medical Engineering, I develop wearable medical devices and machine learning algorithms for personalized health. This was my first full-stack project and proved to be immensely rewarding. I invested a significant amount of time studying CS 132 and preparing for this project, envisioning the application of the full-stack programs for wearable systems. I really enjoyed the learning and interplay of front-end and back-end, and the successful connection of the website with the API I developed was truly rewarding.

I think the project breakdown and checkpoints are very meaningful. The proposals and the front-end draft allowed me to concentrate more on JavaScript and back-end development subsequently. I would urge future students to initiate their projects early, secure partners promptly (possibly even at the course start), and invest substantial effort in the full project implementation.

To conclude, I found the web development course to be an enriching experience and can confidently state that it ranks among the best courses I've taken at Caltech. El's guidance was instrumental and extremely patient, and the completion of the final project was indeed a rewarding achievement. I look forward to applying these web dev skills to develop innovative medical apps for health tracking.