Change 1: CSS optimization.

First I asked ChatGPT to optimize the CSS of my website, which, except for my resume page, all use one CSS file. ChatGPT was able to shorten my file by 5 lines, and found multiple spots where my code could be simplified, all while maintaining my code's functionality perfectly.

ChatGPT was able to successfully follow the broad instruction to "Help me improve my personal website," and also responded well when I asked it to explain some of it's changes.

Change 1.5: Responsive Buttons

It also responded well to the command "make the buttons in the nav-bar respond to being hovered," and although the hover effect is reminiscent of modern web design rather than my website's slightly more retro aesthetic, that is only to be expected when I didn't specify aesthetic.

Change 2: Resume Integration

My resume page uses it's own CSS separate from the rest of my website and lacks any ability to navigate to the rest of my website, so my second major change was to have ChatGPT add one. This took a whole conversation as even after I explained my situation and goals and provided the relevant code, ChatGPT failed to properly account for my resume's CSS, resulting in the html elements being horribly displaced, and ultimately I made some of my own changes rather than try to get the bot to do it itself.

Change 3: Metadata

For change 3 I had ChatGPT give me metadata for my index.html's head blocks. This change went the worst yet for a few reasons. Firstly, each file needed slightly different information and ChatGPT didn't do a good job of accounting for that. Second off, ChatGPT tried to intuit too much. Making up information such as the contents of my labs, titles, descriptions, and even social media information when I did not provide that. As a result, ChatGPT provided me with way too many metadata tags, many of which were useless.

Step 4: Spacing Standardization

Step 4 had ChatGPT working to standardize my websites spacing using variables. Other than needing to specify that I didn't want my spacing changed, just standardized using variables, it went quite well. This sort of tedious search and replace is something ChatGPT excels with.

Step 5: Creative feature

For step 5 I tested ChatGPT's creativity by asking it to "...add some extravagant feature...." to my code. It gave me several options, and after not enjoying the option to make some of my site's images float - it looked terrible, just a bad option - I added a tips feature to my homepage. Which is cute. Although it is very separate from the vibe of my page, it works well as a fifth change for that reason - very simple to implement - along with being creative and a useful way to provide extra information and personality to my website.

Conclusion:

Unsurprisingly, ChatGPT excelled at searching for complex conditions with simple replacement, such as when I asked it to optimize and remove redundancies from my code, which I did after several of my changes. While ChatGPT did a good job of maintaining my code when I needed it to, I often needed to reiterate that I wanted my website as unchanged as possible several times until it produced an acceptable result, often not considering how code it gave me to insert into my website would work with the pre-existing formatting until I explained how the inserted code did so. Otherwise, ChatGPT performed acceptably well other than not accounting things like aesthetic consistency when I failed to specify it. Once again reflecting the need for specificity, especially when I know what I want. Moreover, my idea of what ‘knowing what I want’ means and ChatGPT’s idea of what that means differ significantly. This specificity mismatch happened several times when I was intending to be specific after all, where ChatGPT needed me to be specific simply differed from my expectations for it.