

Dear Professor Lightfoot,

Good evening. I am writing this letter to you as a retrospective of my team's project 3 and my contribution.

When trying to plan a roadtrip, many people face the daunting task of having to plan the activities. Often it starts with searching the route, marking each city or stop along the way, then searching for activities or weather for each of those stops. This process can be tedious and time consuming so we created a program called Route Out that would simplify this process by allowing the user to find the roadmap, the activities, and the weather along the way, all in one search.

I was mainly working with front-end development, Erik was working with back-end development, and Zach was our project manager.

I worked in the front-end with javascript, html, and css. I created the main website skeleton, came up with tasks with Zachary, set and received data from cookies, fetched the api's and read its json, displayed the map and highlighted the route, found a couple coordinates along the route and sent it to the weather api to get the current weather for each coordinate, presented the appropriate weather icon for the given weather, got the title and description of the national parks, and fixed asynchronous problem with api calling javascript functions.

Erik worked in the back-end coding in flask and python. He set up all the API's so that other members can call from the front end, fixed the asynchronous problem with cookies so that it would set before the map loads, returned all APIs in an easy-to-read json format, created a custom mapbox gl, and added national parks to the mapbox. Zachary was our project manager. Zachary led all of our scrum meetings, organized and shared with the team our progress, set up heroku and all the necessary files, added more style to the website with CSS, created an accessibility button to enlarge the text size, added an explicit zooming function on the map, added the description of the parks below the map whenever the park icon is clicked, and took on most of the responsibilities in creating documents.

Every member in our team contributed an equal amount to our project.

Status update:

- Calculated the distance between each weather coordinate and only displayed a weather icon every > 10000 meters.
- Sequentialized all the asynchronous javascript functions that fetched API calls.
- Fetched the title and description of national parks.
- Made sure cookies were set before loading the map (with Erik 60%)
- Roadblock – finding a solution that would check for cookies loaded instead of waiting a set time of 1 second. (Overcome)

- Roadblock – finding how to sequentialize the asynchronous functions by adding async to the beginning of the function. (Overcome)
- Roadblock – finding a way to minimize the API calls by placing all the functions that need APIs under one call. (Overcome)

Personal retrospective

Throughout this project, I learned a lot about working with API calls, working with asynchronous functions, and dynamically updating website information. In the beginning, it was challenging to fit in with my group being the only girl and having the least knowledge in coding. However, I made sure to pull my weight and do my part even if it took a longer time to make sure I am helping my team instead of dragging them down. Ultimately, I was able to gain a lot of experience in working with APIs and hosting websites that I will be able to put to use in my future job or personal project.

Design thinking retrospective

I found it enjoyable to diverge/converge on possible solutions. In class, when we just threw out ideas good or bad to the rest of the team, it was a good experience to get our ideas out there. It allowed to creative thoughts in a time constraint and allowed team members to throw out ideas even if they were scared it was a bad idea. If I were to teach this course, I would give detailed examples of tasks vs user stories because the examples given in the slides made it a little confusing.

The design thinking process teaches us that learning is knowing how to find solutions to problems. Once you find a problem, you either are taught how to solve it or have to think of possible solutions and trying different prototypes. Similarly, our professional life also needs the design thinking process by thinking of many different solutions to a client problem. Applying the solutions to the prototypes and seeing which one works is the design thinking process to learning.

Considering different perspectives retrospective

Gathering information from the point of view of an outsider brought an insightful challenge to our team by giving us more issues or constraints to consider, such as accessibility needs. From my personal experiences, it would be beneficial for every engineer to incorporate outside feedback to their development process. This would help the engineer know if their product is able to be used by people who are just given the product without any information, which simulates clients in the real world. Seeking out and considering diverse perspectives initially seemed unnecessary before I actually applied it to our project and gained insight into how much our group of three missed out on in designing the product.

Peer evaluation retrospective

After having more practice, the peer evaluation seems very important as team members are able to give constructive criticism to other members without feeling pressured to give compliments. I believe the peer evaluation should be stricter by making people explain a specific situation that caused the person to not give five stars. If the person just explains why without a situation, the recipient may still not know how to improve themselves. However, I ultimately believe that the peer evaluation was beneficial to the cooperation of the team by enticing each member to work harder for their team.

Overall, our team has been very strong in their work ethic and are reliable. We were able to successfully finish our project and I personally learned many technical and soft skills throughout the process. Our project creates a unique platform for outdoor enthusiasts to plan their trips without the hassle.

Thank you and have a great day,

Sincerely,
Jiwon Lee