Final Project Reflection

When I first started discussing this project with my CORE179A team, I envisioned it being a complete platform that could be advertised to teachers at the end of the semester. I saw it being on the web with a database that stored all the resources that teachers had uploaded. However, when I started designing the website from scratch, I realized that I did not have much background in website development in general and it would take me quite a while to figure out the html and css stuff let alone all the backend of hosting a website on the web and a database. So I decided that I would stick to keeping my website local and storing the uploaded files in a local folder. But, as I began talking to other students, I found that there are online resources such as netlify that make it convenient to deploy web apps as well as free databases such as firebase that are relatively beginner-friendly, so I did look into both of those. I was most excited about getting my website onto the internet so that I could share it with my CORE179A classmates, however, I tried three different means of hosting my website and all three had problems. With netlify, they did not support the newest version of python and my site lost all of its css styling. With the Google Cloud Platform, there was an import error that caused a 500 server error when the link was clicked. With pythonanywhere, git could not create a new virtual environment. I ended up deploying my website on netlify without the css :(

My website has 5 different pages. The home page is very basic with a short description of what the website is. The downloads page allows people to type in different search words to find climate resources that are relevant to them. This page has a working search bar that takes in keywords as well as a series of checkboxes that allow you to refine your search. After you complete a search, the downloads page produces the results in different divs. Each div has a link that you can click and open the file (only if you are running it on a local device). Once you open

the link, you can save the file using the common right-click option. The uploads page is a form that prompts you to answer some questions about your file and then choose a local file to upload to the site. The site then stores the file locally in the static folder of the app directory. Once the file is in the static folder, it can be searched for using the downloads page. The blog page just has different divs containing previews of fake blog posts. The previews of the fake blog posts link to different pages with fake blog posts for you to read (although all you have to read is "example" 5000 times). The last page is a login page that takes in a username and password and redirects you to the home page. I was not able to implement any security that ensured that only users with valid login credentials could download files (mainly because only I can download files since they're stored locally :P).

If I had more time, I would look into adding a database to my website so that the files that are uploaded could be stored somewhere other than a local folder. This way, people would actually be able to download the files and use them! I would also want to look into implementing some sort of security measure so that only certified users could access the database with the climate resources on them. Once these two functions are added, I would also want to try and figure out if there is a way to link the blog to the uploaded files so that teachers can comment on and "like" resources that they have used in their classrooms. Also, I would like to play around with the website design a little bit to customize it to my preference and ensure that it transfers well to different devices. If I have time over the summer, I would love to look into some of these future functionalities.

In retrospect, the main thing I would change about my project would be the timing. I wish I spent more time on this project so that I would have had time to look into getting a database to store my files. I also wish I had spent more time learning css concepts instead of just Googling

solutions to problems that would arise. It would be nice to have a stronger background in web development. I would especially want to learn how to use javascript because many of the solutions I found online used javascript to give their websites more functionality. Overall, though, I do not think I drastically change anything about my project's trajectory. I think it worked well to work on the website design first and then add the actual implementation after because that meant I had a static demo site to take screenshots of and add to my CORE179A presentation even though the actual website was not finished. I also think the scope of the project was the right one for me as I learn a lot about web development and file sorting.