

## Flex - Final Report

When asked to complete a python project, I developed an exercise plan builder app called Flex. Prior to this course, I have never created anything like this from start to finish. I was a bit nervous and overwhelmed at the beginning, which makes me even more proud of the project I completed. Flex is not revolutionary by any means, but I learned a lot, and I understand Python so much better than I did prior. I am proud that I developed not only a filtering and interactable search function, but an option to customize and modify a personalized exercise plan. Finally, I am proud that the app actually works! I was able to run the program with friends and family members, and it actually could be a useful tool to find targeted exercises. The project still has a lot of potential.

I encountered plenty of obstacles, but the largest was the function to actually click on particular muscles on a body to search. The odd muscle shapes made it difficult to create clickable areas. I was able to overcome this obstacle by using clickable buttons instead. This allowed me to display the names of each muscle, which could help users during the searching process. I also planned to have more filtering options, but the process of searching by equipment would have been very complicated due to the wide range of variables in the data. I also struggled near the end to provide feedback to users once an exercise has been added to the final workout plan. I am sure I could fix this once I troubleshoot more.

Overall, I had a great experience in this class. It was fun to develop a project of our own interest from start to finish. I also really appreciated the individualized feedback you provided - it was extremely valuable to the learning process. I thought the amount of review at the beginning of the course was perfect. It was nice being able to work at our own pace and add any features we were interested in, while having you to guide us anytime we got stuck. This was my first time using Github, and it was really helpful to monitor my progress and collaborate with you on the project. I do not have any suggestions for the course moving forward. I enjoyed using Python for the first time this year, and I am grateful to have a deeper understanding of coding when collaborating with developers and statisticians. Thank you for teaching me the Spring and Summer terms!