Mauricio Deguchi

UID: 405582562

CS 31

February 23, 2022

**Project 5**

**Gyms and Gym Members**

*Challenges:*

By far the biggest challenge for this project was becoming comfortable with the idea of classes and their implementation. At first, I struggled with the syntax and organization of the various header and .cpp files. Once I understood what needed to be placed where, the actual program itself and all its functionalities were quite straight forward. The biggest logical puzzle was figuring out how to check whether a gym had the features a member wanted. This took me a bit to solve but the solution came to me fairly quickly. Aside from that, this project provided me much needed practice with classes as I developed a concrete understanding of how they can be applied across various tasks.

*Testing*

I have various test cases on my main driver using cassert. I provided test cases for all the possible functions in either of my classes. The one thing I didn’t test was the “other” Kind. I interpreted it as “other” members can only workout at “other” gyms so it’s testing with regards to the other Kinds was less relevant. For the test cases, I created one of each type of member and one of each type of gym and crossed them with one another to ensure the hierarchy was in its correct place.