**Reflection Document by Sophie Yeh**

**Instructions about how we should go about testing and using your project**

The application opens to an empty dashboard. The bottom left has a button that will popup a page with instructions. If you click “View & Edit Routine” without selecting a user first, a message will pop up too. First, select a user from a selection. Try selecting ‘New User’ to generate a new user ID. You can also select User 1 for a user with existing data. The pie chart displays how much of each muscle you’ve worked on this month. Use the calendar to navigate to a different date. If a date with a different month is selected, the pie chart will change to data for that month. Once you’ve selected a desired date, click “View & Edit Routine” to access a editing page.

There are several features in this Edit page. In the Record frame, click “Autogenerate Task” to get a task recommendation. The program will recommend an exercise that addresses a muscle you’ve worked on the least this month. You can keep autogenerate tasks until you find one you like, then click “Add Record”. Below, the box lists all the muscles that the exercise covers. Another feature is the text and search box. To add a brand-new exercise, you can select from the dropdown menu. Adding a filter will narrow down the search selection. Instead of selecting from the box, you can also start typing and the entry box will autocomplete your entry. Another feature is “Update Record”. Select a record and use the Record entry box to edit your task. Other features include ‘Remove all Records”, “Remove One Selected”, and “Remove Many Selected” can be used with a selection in the treeview list. Use Cmd or Shift to select multiple.

**What you completed and anything that you didn't complete in the project that you would finish later.**

I was not able to make the algorithm more sophisticated by generating tasks based on the frequency of different tasks in the past in addition to recommending an entire weekly routine. Some features that would enhance the user interface is adding background music and creating my own theme for the widgets to look more appealing.

**Discuss challenges you faced and how you overcame them**

Some challenges I faced is learning how to make a nested dictionary from scrap and writing xpath to extract the information I want from the html code on the website. I watched several tutorials and tested different xpath strings by using xpather.com, which allows you to paste and query html code. That allowed me to understand xpath and html structure, and reduced debugging when applied to my website. Another challenge is integrating the sqlite3 database into the tkinter program. In addition to understanding frames and the widget structure, I had to use variables and functions across different classes. I was able to weave these packages together by testing each class individually before integrating parts step by step.