Criterion A: Planning

Defining the problem

Because of the pandemic, gyms and other facilities are closed, so it is harder for people to work out and stay fit.

One of my close friends, Philip, is extremely interested in health to keep his body in shape. The problem is that he doesn't have a good tool to track his progress daily. So, I started to think about how his problem could be resolved and I came up an idea to develop a java-based interactive program that can help people keep track of their calorie intake. The program can help us monitor how much food we eat and how much we must work out each day.

I asked my computer science teacher about the idea and she approved it.

To know how this program should look, I brainstormed with Philip several times. Both working out and eating right have immense effects on your body, and he is realizing this more now. Because of this, he wants to find a way to keep track of both his daily food intake and his work outs each day and be able to tell whether the selected diet and work out is balanced and healthy.

Thus, my project **client** is Philip and myself. I asked my father to be an **adviser** for me as he has experience working on IT industry. My adviser told me this project is helpful and thoughtful, and feasible.

Rationale for proposed product

After many discussions with my client Philip, both of us really think that if the program is developed, it would not only benefit us during this coronavirus pandemic, but also everyone else who loves to keep one's body in shape and healthy for their entire life.

The Java-based interactive solution was chosen because:

- I have just studied Java in school, and I am eager to use the knowledge and skills I learned to create a real project.
- Java is most popular programming language in Industry and is easy to install on everyone's home computers, whether it is a desktop or a laptop.

Criteria for Success

This program will be able to track and justify whether the selected diets and workouts each day are good to the client's body control and health.

- Client will be able to register and login. Once a client is registered, it does not need to be registered again even if the program is exited and re-started
- Calendar matches with the real dates
- Client will be able to add/edit/delete the available food based on its need.
- Client will be able to add/edit/delete the available work-out based on its need.
- Client will be able to add meals and workouts for each day selected from the Calendar based on the available foods and workouts that are added previously.
- Client will be able to know whether the meals and workouts for the day are good for the client's body control and health.
- Client will be able to only see their own data.
- The program will be easily backed up.

Word Count: 500