Criterion A: Planning

1. **Defining the problem**

   I(**client**) have throughout high school found it difficult to organize and remember my various recurring commitments. Apps such as Google Calendar became extremely cluttered as my commitments clashed with each other; also, I wasn't able to reflect on each session of a specific activity which made me more forgetful regarding past and future sessions. Finally, I wanted to be able to view what times I actually did a session over a time frame; a lot of commitments on google calendar I didn't end up attending, which only made it more cluttered and me confused. I aimed to create a system that would enable me to easily input data regarding when I did a certain activity and make it clear to see how much of an activity I've done over a time period while providing a way for me to jot down some thoughts on each session. My sister(**advisor**) is currently majoring in CS at Caltech and has worked on web applications similar to this; she agreed to advise me on my project..

2. **Rationale for the proposed product**

   Creating a new computer calendar will allow me to reflect on my activities better while also planning them out better in the future. Through discussion with my advisor, as detailed in the **Appendix** under consultations 1 and 2, we agreed that the main focus of this product should be to present an easy way for users to track their recurring activities. So, I planned to design a system for users to add activities to a tracker, then come in whenever they did a session under that activity(Ex: track would be an activity, and an individual run would be a session). To solve the clarity issue, I planned to have a simple GUI with the ability to easily enter/alter data. A graph would additionally help on this front as it would allow the user to see how much they interacted with a specific activity over a certain period of time, and thus gauge how they were doing.

I used python 3-7.10 and specifically the library Django for the frontend/backend as it has the following characteristics:

- It has a simple template to collect/display data with an sqlite3 database.
- It uses the typical view/model/template format, but mainly only requires python.
- It provides an easy to use interface for integrating HTML/CSS into the frontend.
- Password encryption is handled accurately leading to data safety.

Additionally, the use of heroku for the webserver allowed for free hosting for everyone, and made the web server easy to deploy / alter.

3. **Success Criteria**

1) It should be easy to access the website on a personal computer.

2) Entering data should be easy and streamlined. There should only be a certain amount of essential fields to enter information in that indicate when the user is entering incorrect information.

3) Viewing all data under all different activities as well as sessions pertaining to a specific activity should be simple, easy, and efficient.

4) Sorting data according to when it was entered(past day, week, etc.) should be simple and presented meaningfully.

5) Graphs about the data should be easy to understand as well as convey important information. They should also have options to help analyze the data more clearly(zoom, etc.).

6) Creating an account should be easy for the user. Also, logging out and logging in should be as simple as possible.

7) It should be simple to delete an entry if it is unneeded or edit an entry if it is needed.

8) User information such as their password, data they entered, etc. should be secure and impossible for other users to access.

9) The administrator should be able to view all the data as well as see which users own which data.

Word Count: 432