Criterion A: Planning

Client and Advisor:

The client for my project is Vincent Pham, a professional electronic-sports player. He is a Top 5000 player in North America for a video game called Valorant. My advisor is my father, Brian Johnson, who works at Microsoft, so he can give good insight to me throughout the project.

(View Appendix for the transcripts of my conversations with my client and advisor)

Problem:

The problem that my client described is that he wants to have a tool that will help him understand his gameplay better. Vincent Pham's livelihood depends on his performance and improvement in the game of Valorant. He is constantly looking for more ways to improve his gameplay and making the best agent (in-game character) selection.

(View Appendix for the transcripts of my conversations with my client and advisor)

Solution and Rationale:

My solution is to create an application that serves as a database full of my client's statistics and reports trends in his gameplay for specific maps. Valorant game matches can be played in different maps with different agents (in-game characters), so this application will give advice on which agents should be used and avoided on each maps based on my client's statistics of his match history. This application will make it easy to access information that would take a lot of effort to file through and deduce from. It is a database analyzer specifically made for the needs of my client.

(View Appendix for the transcripts of my conversations with my client and advisor)

Success Criterion:

- 1. A page to calculate the most prevalent trends in a specific game map.
 - a. It will calculate trends based on each specific time matches have been played on a specific game map.
- 2. Transfers information from Google FireBase to a List and show on the "Match History" page
 - a. Match History page shows the matches from Google FireBase.
- 3. Allows for sorting the Match History page
 - a. User can use a switch on the page to sort Match History from newest to oldest or oldest to newest
- 4. Allows for game matches to be added to Google FireBases
 - a. Fields can be filled out
 - b. A switch button to determine whether the match is a win or loss
 - c. Button allowing a match to be uploaded to the FireBase
- 5. A user-friendly UI that is easy to follow.
 - a. All the buttons on the program are easy to follow with simple descriptions of what they do.
- 6. A working log-in system.
 - a. When the user's username is entered, the user will be allowed into the program
 - b. (Error Handling) When anything else is entered and trying to log in, it will not let the user past the first page and an error message will show.
- 7. Saves and loads information for the app to Google FireBase
 - Uses FireBase with an implemented hierarchical system to store data that is accessed and edited through the app.
- 8. Displays game map descriptions.
 - a. When a map is entered, a description of the map is displayed on the page.

Word Count: 474 words