Criterion E - Evaluation

= Evaluation of Solution =

-Success Criteria-

- What the program will do
 - Able to store data about difficult situations and how to deal with them in the future.¹
 - Able to use the user's input and database to decide which action to take and what to keep in mind.²
 - It is able to calculate damage based on input and the database.³
 - Must work on OU tier format.⁴
 - Able to give an analysis of the opponent's Pokemon.⁵
- User-friendly features
 - The program can be hidden
- Error/exception handling
 - Check whether the required information is entered or not

-Effectiveness-

Generally, for beginners who don't have much experience in the game, memorizing every Pokemon in the meta-game and how to use or deal with them would take a lot of effort. With the program able to assist in memorizing how to deal with or use certain Pokemon and give suggestions on certain situations, the learning curve for the beginners would become shallower.

The most time-consuming part is making the if/else for the basic move advisor algorithm, as there are many things to check in each turns to make a decision on what to do during the turn, the if/else loop gets really long and complicated. Even so, the algorithm cannot perfectly predict what the opponent will do, thus it's better for the user to make their own decision based on their experience than blindly follows what the program suggests.

¹Julian F. John, <u>first interview</u> by Thachakrit Komolkhetruck, Bangkok, November 19, 2019, <u>transcript question # 7</u>, 3:10 - 4:00, Appendix 1 Initial Interview

²Julian F. John, <u>first interview</u> by Thachakrit Komolkhetruck, Bangkok, November 19, 2019, <u>transcript question # 7</u>, 2:33 - 5:00, Appendix 1 Initial Interview

³Julian F. John, <u>first interview</u> by Thachakrit Komolkhetruck, Bangkok, November 19, 2019, <u>transcript question # 8</u>, 5:00 - 5:27, Appendix 1 Initial Interview

⁴Julian F. John, <u>first interview</u> by Thachakrit Komolkhetruck, Bangkok, November 19, 2019, <u>transcript</u> <u>question # 3, 1:20 - 1:38</u>, Appendix 1 Initial Interview

⁵Julian F. John, <u>second interview</u> by Thachakrit Komolkhetruck, Bangkok, December 5, 2019, 5:12 - 5:34, Appendix 2 Prototype Interview

Upon further inspection, the feature of calculating damage based on the user's input and information from the database is too complex for a highschool student to do, as there are too many factors that affects Pokemon damage, and some of the factors cannot be correctly guessed by the user.

The client likes the move prediction algorithm, he found the predicts to be accurate most of the time⁶. He also likes the ability to note multiple countermeasure against certain Pokemons. The one thing he doesn't like is the set team feature because inserting sets one by one is slow. In the end, the client agreed the program was usable and successful.

=Recommendations for Further Development=

- -Minor Improvements-
 - More Sophisticated Advise Make the basic move advisor algorithm more robust and sophisticated.
 - Detailed Notes More option on Notes page such as add the ability to record and check moveset of the opponent Pokemon
- -Major Improvements-
 - Update Pokemon List Give the user the ability to add more Pokemon to the JSON file/data-base for when new generation comes and new Pokemon got added to the game
 - Manage Files Give the user the ability to easily sort and manage saved notes and teams.
 - **Easier Import** Being able to import the team through import/export set feature of the game

Word Count: 451

⁶Julian F. John, <u>Email feedback</u> by Thachakrit Komolkhetruck, Bangkok, March 27, 2020, Product Feedback