CSE434 Final Project Report Jesse Allmon

This project overall was very interesting. This was my first time truly getting my hands "dirty" working with AI in an application setting. The knowledge and experience I gained from this is truly invaluable. So starting off I knew I was going to have to find a way to structure both the input and output of the OpenAI API. So that was the first big hurdle. By doing some research into the API Documentation, I was able to find a structured output mode where you can pass in a response format object, and using pydantic module with the BaseModel class, you are able to in theory essentially get a response from ChatGPT using your own supplied object. Once I was able to get this implemented it truly helped everything out, therefore my parsing logic was easy and efficient and didn't have to worry about extra things. Another thing I had to worry about was using too many tokens for both input and output. Luckily by using a structured, user and system message, I was able to keep those to a minimum. The AI integration in my opinion was essentially making the AI the "game master", therefore the AI would want to take over control of the game. I want it to be making more of the decisions rather than the coding logic. So overall, I enjoyed this project and was rather fun to implement.

In my opinion, I don't think this project has "captured" exactly what we've been trying to learn this semester. I found it to be somewhat out of scope as we really didn't do anything like this over the semester except for maybe an in class demonstration of a colab doing something somewhat similar, but not exactly. I also found myself a bit misguided due to the instructions not being entirely clear, I felt like it wasn't exactly describing what was needed for this project, maybe just a bit too brief. If we did something in class to build up to this project I feel as if that would've been very beneficial. However, for myself, I haven't coded a game since one of my first CSE classes a few years ago, therefore I wasn't exactly expecting a game to be the final project. Regardless, I still found it fun and interesting. As well as it's also making more inclined to get into game development.