

Reading in, manipulating, and converting the API data was easier than I had initially expected. The fact that I had already practiced all of these skills on various homework and in-class assignments made it more manageable. As I was working, I realized that I had already done all of the steps at some point before and that this project was simply about synthesizing all of these concepts. The biggest challenge I faced was getting my code to handle errors effectively. After I kept running into an error that would only happen sometimes depending on the user input, I realized I had to find a way to fix that. Eventually, I was able to figure out where the error was occurring, and I found a way to filter out the data responsible for it.

Working with data from the CSV source proved to be easier than expected in some ways but also posed some unexpected complications. For example, after I had read the CSV into a Pandas dataframe, it was much easier than I anticipated to convert that dataframe to a JSON object and put it into an SQLite database, since these were all topics we covered a lot in class and in the homework. However, reading in the CSV, which is something that I never expected to be difficult, proved tricky because Kaggle did not specify the delimiter used in the CSV dataset, so I had to try out all combinations of potential delimiters for a CSV file before it was able to be read in properly.

The skills needed to complete this project could be helpful in future projects because being able to convert between data structures (JSON, CSV, and SQLite) is a very versatile tool, given that each structure has different strengths and weaknesses that could be useful in particular contexts. You never know when you might need a data source in a certain format to perform particular operations, so having a program that allows you to do so many combinations of transformations will most likely be very helpful. This project has also taught me a lot about how to take individual concepts learned in a data science course and figure out how to use them all together in a larger project. I often find that it can be easy to lose sight of the big picture when you get into the nitty-gritty of the coding involved in computer and data science, so this project taught me a lot about how to look past the scope of smaller skills and see how they can be used in a larger process.