The final project for this course focused on building knowledge and skills working with several different data sources and advancing data cleaning knowledge. To complete this project, several milestones were needed. I began by researching and selecting potential data sources for the project, including a flat file, a web file suitable for web scraping, and an API with appropriate data.

After data selection, I began data exploration for each data type. This included replacing missing values, cleaning column names, creating new columns, and separating out datetime information. For Milestone 3, which dealt with the web scraping, I found that the source I had initially chosen was written in Javascript, not html, therefore could not be parsed through BeautifulSoup. This caused me to pivot to an alternative data source containing similar information. The other sources remained the same and I was able to effectively work with each.

The final step in the project was merging the data frames I previously created and loading them into a database. This was the easiest step in the process for me and where I began to understand how much I had learned during the semester. Creating the final visuals was also a great check of the knowledge gained up to this point.

Through this project, I gained a wealth of information and new applications for the information I had learned. The most impactful lesson was the sheer amount of time needed to carefully analyze and clean data for future usage. I also advanced in my code writing abilities and understanding of how components work together to achieve a result. This project also taught me that *StackOverflow* is sometimes the best resource you can have when coding. Overall, this project taught me greater patience and to think ahead when working with data. I found several times during the project where I had to return to earlier steps because I had forgotten to transform the data in certain way. This project has made me a better programmer and a more astute data wrangler.