* Database Details

The database was designed inside of MySQL workbench.

* Functionality
* Experiences

This project has served as a very impactful experience in managing a database and the usefulness of SQL queries and the importance of data organization. Going into this project, our group had no knowledge of SQL and very minimal knowledge of the Twitter API Tweepy with which we scraped information from Twitter with. With the project completed, we now have a far greater understanding of how to pull and cache data requests from twitter through a web page with Python backend and how to effectively utilize SQL queries to accurately pull information from a custom database.

As far as difficulty faced during the project’s development, there are only a few worth noting. One small defect of our project was the HTML code for the website’s design showing erroneously on some devices, with our applications navigation bar being hidden from view on Windows devices but no on Apple devices. Fortunately, this issue did not affect the overall integrity of the project. An additional problem we faced was the multitude of caching and query errors we would receive while testing. One such error we faced was while pulling data for Tweets with significantly large attributes, where we would receive errors for storing duplicate users as the same account could act on a single tweet multiple times or that the mere size of the attributes cause some form of overflow errors within our python code that stored the information into our database.

If allowed to work on our project further, we would like to perfect the HTML layout and design of our project to ensure it is portrayed and functions correctly across all devices and operating systems. In the case of migrating our project to more mature systems, we hope to have more advanced functions integrated into our system to allow for more unique analysis of our data, such as searching for retweets with certain number of likes and finding what users acted upon a tweet multiple times by using more advanced SQL queries in our system

* References

For this project we turned heavy to the twitter API. We used it to retrieve all of our data. We also use tweepy which is an python plugin library which makes it easier to access the twitter API. With tweepy we were able to use special functions that did not come with the usual Twitter API. Most of our code was written in Python. We used this because we believed it would be the easiest language to interact with the Twitter API. For the database of our project we decided to use MySQL and MySQL Workbench. Many of the queries we ran were tough in class or found on the documentation for MySQL commands.