

This is a report explaining my project's goal, my approach to its design, and its SQL interactions. In addition to this file, there are files containing SQL code that can replicate the project;

**twitter\_sql\_create** creates the database and tables (as requested in the assignment).

**twitter\_sql\_insert** inserts various testing data into the tables (as requested in the assignment).

**twitter\_sql\_functions** runs select statements (as requested in the assignment).

**twitter\_sql\_select** selects all tables for inspecting everything at once.

The goal of this project is to create a clone of the twitter model. This requires 5 tables:

1. Users
2. Tweets
3. Retweet
4. Favorites
5. Following

Each table has certain properties:

1. Users.
  - Uses a primary key to specify the user.
  - Uses a Username variable to keep the username of the user.
2. Tweets.
  - Tweet\_PrimaryKey holds this table's primary key.
  - Content holds the text message contained in the tweet.
  - Date holds the date the tweet was made.
  - Users\_idUsers contains the id of the user that posted the tweet.
3. Retweet.
  - Users\_idUsers contains the id of the user that retweeted the tweet in question.
  - Tweets\_Tweet\_PrimaryKey has the primary key of the tweet being retweeted.
  - Date holds the date the retweet was made.
4. Favorites.
  - idFavorites is the primary key to keep each instance of favoriting a tweet independent.
  - Users\_idUsers holds the id of the user that favorited the tweet in question.
  - Tweets\_Tweet\_PrimaryKey holds the primary key of the favorited tweet in question.
5. Following.
  - Users\_idUsers\_followed holds the id of the user that is getting followed.
  - Users\_idUsers\_follower holds the id of the user that initiated the follow.

All other tables refer back to the idUsers primary key in the Users table. It is discovered via the Users table primary key, as some users may have the same username and is isolated to prevent conflictions.

Tweet\_PrimaryKey is referenced by the Favorites table and the Retweet table.

The following table can be used by matching the Users\_idUsers\_followed to Users\_idUsers in other tables.

Tweets and Retweets made by users can be viewed at the same time by using a union statement.

Diagram:

