

## Project Report

WeRateDogs is a Twitter account that rates people's dogs with a humorous comment about the dog. These ratings almost always have a denominator of 10. The numerators, though? Almost always greater than 10. 11/10, 12/10, 13/10, etc.

### Gathering the Data

Three source was given for the data gathering exercise, the first source was a CSV provided by Udacity, which was downloaded from the project page called `twitter_archive_enhanced`, the second source was a tab seperated value text extracted from a page from Udacity website, while the third source was to be from twitter API, but I resulted to using the text file provided by Udacity, after using request to get the TSV file with requests and loading the text file with JSON, all the files was read into a DataFrame with Pandas

### Accessing the Data

The data was access programtically and visually, and the following issues were indentified;

### Quality Issues

1. The following columns had missing values and they were be dropped as they will not impact our analysis

- `in_reply_status_id`
- `in_reply_to_user_id`
- `retweeted_status_id`
- `retweeted_status_user_id`
- `retweeted_status_timestamp`

2. The timestamp column is in the wrong data type and was converted to datetime

3. The source column had text in an anchor tag and we need to extract only the text

4. There were tweets that are not about dogs in the text column, this will be dropped

5. The expanded urls column is not needed for our analysis, it will be dropped

6. The none value in `doggo`, `floofer`, `pupper`, will be dropped

7. drop the `rating_denominator` and rename `rating_numerator` as `dog_rating`

8. any non dog image in the `imagep_df` will be dropped

9. rename `id` in the `tweets_df` as `tweets_id`

### Tidying Issues

1. These columns `doggo`, `floofer`, `pupper` and `puppo` will be combined into one

2. These columns `p1`, `p1_conf`, `p1_dog`, `p2`, `p2_conf`, `p2_dog`, `p3`, `p3_conf`, `p3_dog` will be combine into two columns, `dog breed` and `confidence`

### Cleaning the Data

After all the above issues were clean, the three datasets was merged in one DataFrame called `twitter_archive_master` and the `dog_rating` column was tested for outliers, which were also dropped.

### Storing the Data

The data was store as a table called `twitter_archive_master` in a sqlite database as called `WeRateDogs`