

# Data Wrangling

## We Rate Dogs

Our goal is to wrangle WeRateDogs Twitter data to create interesting and trustworthy analyses and visualizations. The Twitter archive is great, but it only contains very basic tweet information. Additional gathering, then assessing and cleaning is required for "Wow!"-worthy analyses and visualizations.

### Gathering Data :

I gathered the data from three locations, the first it came from the Twitter API but unfortunately they declined my application and I took it with a tweet-json file from your website, the thread file I downloaded from the URL you gave me.

### Assessing Data :

In the assessing part we try to find the issue and find a solution, we find too many issues but we take some of them and try to prepare the data for analysis.

Quality :

In `twitter-archive-enhanced.csv` :

- Rating should not be more than 10.
- I have a lot of missing values in (`in_reply_to_status_id` , `in_reply_to_user_id` , `retweeted_status_id` , `retweeted_status_user_id` , `retweeted_status_timestamp` ).
- I don't have any duplicates (This is comfortable ). (:
- Timestamp type it should be datetime not a object.
- I can merge these four columns ( `doggo` , `floofer` , `pupper` , `puppo` ) into one.
- The null values inside the four columns ( `doggo` , `floofer` , `pupper` , `puppo` ) it should come as (null) not (None).

In Tweet\_json.txt:

- I have a lot of missing values(Tweet\_json.txt) in (contributors , coordinates, geo, in\_reply\_to\_screen\_name , in\_reply\_to\_status\_id , in\_reply\_to\_status\_id\_str , in\_reply\_to\_user\_id , in\_reply\_to\_user\_id\_str , place , quoted\_status , quoted\_status\_id , quoted\_status\_id\_str , retweeted\_status ).
- tweet\_id should be as String instead of float

In Image\_prediction:

- in image\_prediction there is no column for most confidence breed of dogs.
- there are missing tweets since the tweets in tweet\_arhive are 2356 and in image\_prediction are 2075.
- we need tweet with images together

Tidiness :

- 1- All three database it's should be in one dataframe.
- 2-All columns 'doggo','floof', 'pupper' and 'puppo' it should in one column.
- 3-some columns like "in\_reply\_to\_status\_id and" they have too many missing value, my opinion is deleting them.
- 4- In p1, p2 and p3 some of the dog names wrote as lowercase and other is uppercase.

## **Data cleaning :**

after we assessing the data we make a copy and drop unwanted columns and in some columns such as (doggo, floofer, pupper, puppo) the system does not read them it come (None) and put them in one columns (dog\_stage), in image\_prediction file that don't have column for most confidence breed of dogs so we crating one, after we almost finished cleaning data we merage all the three file in one, in the last we change columns (timestamp) type to datetime, after we clean all the issue we save the database in file the called(final\_data.csv), i drop the null (jpg\_url) for best analyses.