# wrangle\_report

### April 9, 2019

# 0.1 WeRateDogs Data Wrangling Report

#### 0.2 Introduction:

WeRateDogs is a Twitter account that rates people's dogs with a humorous comment about the dog. I performed the data wrangling three steps (gathering, assessing and cleaning) on the WeRateDogs data to get clean data set for further analysis.

### 0.3 1- Gathering

For this project we will gather the data from three resources:

- Enhanced Twitter Archive CSV file: that already prepped and downloaded manually from Udacity.
- The tweet image predictions: hosted on Udacity's servers and downloaded programmatically using the Requests library.
- Twitter API: Using the tweet IDs in the WeRateDogs Twitter archive, query the Twitter API for each tweet's JSON data using Python's Tweepy library.

### 0.4 2- Assessing

After I assess the three data file that I gather I found the below issues:

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#### 0.4.1 tweet\_arch\_df:

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### 0.4.2 Quality Issues:

- in\_reply\_to\_user\_id has many null.
- in\_reply\_to\_status\_id has many null.
- in\_reply\_to\_user\_id , in\_reply\_to\_status\_id , retweeted\_status\_id and retweeted\_status\_user\_id are float not int.
- Wrong dog names (a, an, the, such).

- Dogs names with symbol Gšrdşn , Devşn , Ralphl' , Olivil'r , Aml'lie , Flvio and Frűnq.
- There are retweet and replays in the tweet\_arch\_df that may result in misleading and redundant rating for same tweet indirectly.
- have two dog stage for same dog.
- expend url in tweet\_arch\_df is duplicated for jpg\_url in img\_prediction\_df.
- duplicated expend url in the same recored.
- duplicated expend url in tweet\_arch\_df.
- source column url can be categorizes like iPhone Twitter, TweetDeck , Twitter Web Client and Vine.
- source has html code with the url.
- Timestamp is string not date time.
- huge number in rating\_numerator & rating\_denominator, since they are humour tweets some of them are right ratings and other were wrong and captured from other numbers that mentioned in the tweets but not for rating.
- None value insted of NaN.
- less than 621 with dog stage values.
- Undescriptive column names expend url

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#### 0.4.3 Tidiness Issues:

- Many column for dog stages insted of one .
- Timestamp has date with time

### 2.

# 0.4.4 img\_prediction\_df:

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### 0.4.5 Quality Issues:

- duplicated jpg\_url.
- Dog breed name with upper first letter and other without.
- Dog breed name with '\_'.
- Undescriptive column names .
- Records with False prediction for all algorithms.

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# 0.4.6 Tidiness Issues:

- Image algorithms prediction column the dog breed with false results presented.

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#### 0.4.7 tweet\_df:

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# 0.4.8 Quality Issues:

- Html code in multiple column like source, entities.
- Undescriptive column names id .

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#### 0.4.9 Tidiness Issues:

- repeated column like id and id\_str.
- Most columns in tweet\_df are duplicate of tweet\_arch\_df columns.

# 0.5 3 - Cleaning:

During the assessment I found many issue and in druring cleanning step I cleaned the below issues:

During the assessment I found many issue and in this cleanning section I will clean the below issues:

### • ### Quality Issues:

- Undescriptive column name id in tweet\_df.
- Undescriptive column names expend url in tweet arch df.
- There are retweet and replays in the tweet\_arch\_df that may result in misleading and redundant rating for same tweet. so, original tweet will be keep it for accurate investigation result.
- Records with False prediction for all algorithms.
- Wrong dog names (a, an, the, such).
- have two dog stage for same dog.
- source column url has html code and can be categorizes like iPhone Twitter, TweetDeck
  , Twitter Web Client and Vine.
- Timestamp is string not date time.
- None value insted of NaN.
- huge number in rating\_numerator & rating\_denominator, since they are humour tweets some of them are right ratings and other were wrong and captured from other numbers that mentioned in the tweets but not for rating.
- Dog breed name with upper first letter and other without in img\_prediction\_df .
- Dog breed name with '\_' in img\_prediction\_df.

### • ### Tidiness Issues:

- Many column for dog stages insted of one.
- timestamp split timestamp into two column date and time in tweet\_arch\_df.
- Image algorithms prediction columns for the dog breed with false results presented.
- Most columns in tweet\_df are duplicate of tweet\_arch\_df columns.

 columns that repeated and that don't provide useful information for our we rate dog tweet exploration like in\_reply\_to\_user\_id , in\_reply\_to\_status\_id , retweeted\_status\_id and retweeted\_status\_user\_id and jpg\_url.