

# wrangle\_report

February 13, 2019

## 1 Wrangle Report

By Abdullah Saud AlFawwaz

### 1.1 Gathering Data

Data is gathered from 3 resources:

- Gathering data from file on hand:

Read data from existing file `twitter-archive-enhanced.csv` by using `pd.read_csv` and store it

- Download file by URL:

Download file `image_prediction.tsv` programmatically from the Internet and store data as "im

- Gathering data from twitter API using Python's Tweepy library:

Read data from twitter API using Python's Tweepy and store data as "json\_tweets".

### 1.2 Assess Data

#### 1.2.1 Quality

- 1- Missing values from images dataset which are 2075 rows and the archive are 2356.
- 2- Retweets need to be removed
- 3- Timestamp should be datetime instead of object (string)
- 4- There are same `jpg_url` for more than one `tweet_ids`
- 5- Incorrect dog names, The most popular name is 'a' which is not corrected name.
- 6- Drop some columns which is not usefull for analysis.
- 7- Some columns need to rename it to understandable name.
- 8- Nulls represented as 'None' in columns 'name', 'doggo', 'floofer', 'pupper', 'puppo'.
- 9- Some tweets have additional characters in the text which is not meaningful.
- 10- The numerator and denominator columns have invalid values

### 1.2.2 Tidiness

- 1- Dog stage variable in different columns: doggo, floofer, pupper, puppo
- 2- Marge 'json\_tweets' and 'image' to 'archive' dataset

## 1.3 Cleaning

**Before Cleaning the data I make copy for the datasets to save the original data and clean the copies.**

### 1.3.1 Defines:

- Delete the duplicated jpg\_url images>
- Delete the tweets which is haven't image from the dataset
- Delete retweets from the dataset
- Convert timestamp to datetime data type.
- Delete these columns which is not usefull for analysis.
- Rename the columns to understandable name.
- Marge the cleaned datasets together
- Melt columnnes ['doggo', 'floofer', 'pupper', 'puppo'] under stage column.
- Replace incorrect name to Nan.
- Replace None to Nan in the datasets.
- Remove the Additional characters in tweet text.
- Reorder the columns and drop the additional columns to make the dataset easy to read.

## 1.4 Storing

Storing the cleaned master data as "twitter\_archive\_master.csv"

In [ ]: