

# 1.Wrangling Report

## by Mohamed Alsayed

### 1.1 Gathering and extracting data

***In this section we collected 3 different tables using different ways:***

- 1.downloaded twitter-archive-enhanced.csv manually from Udacity
- 2.downloaded image-prediction.tsv programmatically using requests library in python.
- 3.scraped data of all tweets using each tweet id represented in the twitter-archive-enhanced.csv with the Twitter API and connected to the API using Tweepy library in python.

***we gathered all files in the same directory and starting the assessing process.***

### 1.2 Assessing

In Assessing we explored the data to find quality issues for all the collected data. we looked at each file info and coloumns types and structure then tried to find redundancy related issues by assessing all the data together.

### 1.3 Quality and Tidiness

#### 1.3.1 api\_df table ( data pulled using Twitter API)

Zero Values columns (possibly\_sensitive , possibly\_sensitive\_appealable ) which adds no value to our data

values in column Source contains href a html tag which we won't be using in any of our analysis.

not related columns data to the scope of our analysis ( user, favorited, retweeted )

Null values columns (contributors, coordinates, geo, place, quoted status id, quoted status id str) which adds no value to our data

#### 1.3.2 image\_predict table ( data downloaded programmatically using requests library)

data is separated in many different ways in columns (p1, p2, p3) like the use of (-, \_)

#### 1.3.3 twitter\_archive\_df table (data downloaded from Udacity manually)

different prefix of dog names ( a , an)

empty cells are not defined as null but instead defined as string

rating is not correctly defined/entered as mentioned

Column( doggo, floofer, puppo, and pupper )values either None or its column name

timestamp is not defined as datetime but instead defined as string

## 1.4 Cleaning

***In this part we are going to clean the issues we found in our data above***

- 1.making a copy of api obtained data and dropping each retweet value so that we only keep genuine tweets.
- 2.fixing data by separating them in unique way not in many different ways as it presents in columns (p1, p2, p3) like the use of (-, \_)
- 3.timestamp is not defined as datetime but instead defined as string so we defined it as timestamp.
- 4.Merging the api\_df and image\_predict table to the twitter\_archive table, joining on tweet\_id and id.
- 5.Dropping Null values columns (contributors, coordinates, geo, place, quoted status id, quoted status id str) which adds no value to our data
- 6.Column in twitter\_archive\_df ( doggo, floofer, puppo, and pupper )values either None or its column name
- 7.dropping Zero Values columns (possibly\_sensitive , possibly\_sensitive\_appealable ) which adds no value to our data
- 8.empty cells are not defined as null but instead defined as string so we defined them as null
- 9.rating is not correctly defined/entered as mentioned