

# Data Wrangling Report

## Project objectives

The project main objectives were:

1. Perform data wrangling (gathering, assessing and cleaning) on the provided sources of data.
2. Store, analyze, and visualize the wrangled data.
3. Reporting on

## Step 1: Gathering Data:

- i. Download (twitter- archive\_enhanced.csv') manually.
- ii. Gather The tweet image predictions and we will make that programmatically by request with (url).
- iii. Gathering data from twitter programmatically by Tweepy

## Step 2: assessing Data with cleaning :

Assessing by Quality and tidiness

1:df\_arch (name) have none instead of NaN and delet uniuque names

**Solve:** use dropna and replace unique values

2:df\_arch (expanded\_urls) has NaN values.

**Solve:** use dropna to delete because they are not valid data.

3:df\_arch (source) Change provided URLs to the corresponding 4 categories.

**Solve:** there is duplicated values so use replace for specafic values

4:df\_arch ('doggo', 'floofer', 'pupper', 'puppo') have none instead of NaN.

**Solve:** use replace with np.nan to match with dataframe

5:df\_arch (timestamp) is str instead of datetime.

**Solve:** use – pd.to\_datetime to convert type(date) to use it for time.

6:df\_arch (rating\_denominator) has values less than 10 and values more than 10 for ratings.

**Solve:** use Removed any rows with denominator more than 10

7:df\_api (created\_at) column is str instead of datetime.

**Solve:** use – pd.to\_datetime to convert type(date) to use it for time

8:df\_arch (rating\_numerator) make type float and extract int from str.

**Solve:** Extracted the rating score correctly and converted it to float

9:df\_api (id column) name different than the other 2 data sets.

**Solve:** rename the column

## **## tidiness**

1:df\_image (img\_num) is not needed.

**Solve:** remove column by drop column

2:df\_api (Just 3 columns needed id, retweet\_count, favorite\_count)

**Solve:** Removed other columns

3:df\_image (the columns (p1, p1\_dog, p1\_conf, ...etc)) should be just breed and confidence.

**Solve:** to make suitable for data frame and useful

4:All datasets should be combined into 1 dataset only.

**Solve:** Combined all the 3 datasets into one pandas df

## **Step 3: visualizing :**

Make visualize to show data for analyze