

# WRANGLING REPORT

In other to wrangle my data, first I imported the libraries I will be using - *pandas*, for data wrangling, *requests*, used the library to download the *image-prediction.tsv* file and the *json* library; used this library to load the json object from the provided *tweet-json.txt* file.

I then loaded each dataset into a DataFrame and saved in to a variable.

After this, I began assessment on the datasets, beginning with the first dataset; *twitter-archive-enhanced.csv*.

On the *twitter-archive-enhanced.csv*, assessing visually I called the *.head()* method on the DataFrame, I was quick to spot some issues included:

- the DataFrame appears to have a lot of missing values.
- the *\_expanded\_urls* can be dropped as it holds the same values as the ones in the *\_tweet\_id*.
- from the *source* columns, the source of the tweet can be extracted and the source of each tweet used to replace the urls.
- a lot of missing values in the following columns - *\_in\_reply\_to\_status\_id*, *in\_reply\_to\_user\_id*, *retweeted\_status\_id*, *retweeted\_status\_user\_id*, *retweeted\_status\_timestamp*. (can't be clean)
- the *doggo*, *floofer*, *pupper*, *puppo* columns can be collapsed into one column.

Further performed programmatic assessment on the dataframe and also was able to spot issues that included:

- the *\_tweet\_id* column should be converted from integer to string.
- convert the *timestamp* and *\_retweeted\_status\_timestamp* from object to datetime.
- the minimum value for the *\_rating\_denominator* appears to be zero and diving by zero causes an error - *ZeroDivisionError*.
- the *name* column appears to have invalid values and letter/words that is not a name, I performed a random sample on the dataset and examples of inconsitent values can be found in row **801, 924, 2334**. These issues concluded my assessment on the *twitter-archive-enhanced.csv* dataset.

Moving to the next dataset, the *\_images-prediction.tsv\_dataset*. Assessing visually I was only able to spot and issue with the dataset:

- the *p1*, *p2* and *p3* columns have inconsitent form of values - some values in title case and some in lower case. The dataframe appeared to have quality issue.

Using programmatic assessment, the issue I spotted was the issue of wrong datatype

- the *\_tweet\_id* column should be converted from integer to string.

The *image-prediction* dataset is less messy compared to the *twitter-archive-enhanced* dataset. This concluded my assessment on the images-prediction dataset.

And to the last dataset, the *\_tweet json.txt* dataset, before assessing this dataset, first I had to read in the *.txt* file, convert to json and stored the json object in a list, then went on to convert it into a dataframe. Carried out visual assessment on the dataframe and the dataset appears to be okay.

When on to perform programmatic assessment on the dataframe and the only issue spotted was

- the *id* column should be converted from integer to string/object.

This concluded my wrangling processes.