

wrangle_report

December 12, 2020

1 Wrangle Reporting for this Project

Create a 300-600 word written report called `wrangle_report.pdf` or `wrangle_report.html` that briefly describes your wrangling efforts. This is to be framed as an internal document.

For this project I was tasked to look into three data sets that needed to be gathered, merged and cleaned. Two of these reports were provided for us while the other was had to be attained using an API. This was a Twitter API and I used the Twitter IDs from the `twitter_archive-enhanced.csv` to look for the tweets on the API. There was a lot of missing data and even some instances where the API was not able to locate some of the `twitter_ids`. There were some that had 0 favorite counts which I thought was very odd considering how well liked the WeRateDogs page on Twitter is.

During the assessing process I noticed there was a lot to be fixed:

2 Quality issues:

1. Quality: Drop Column we don't need:

-There were a few columns that were not relevant to my assessment such as `retweeted_status_id` that did not give any valuable insight.

2. Quality: Fix denominator

All of the denominators are supposed to be 10 yet some were variously different numbers.

3. Quality: Viewing and drop outliers

For the rating numerator there were plenty of ratings that went beyond 10 but that was part of the fun on the Twitter page so I only tried to remove outliers above 100 because they seemed far too exaggerated.

4. Quality: Convert P1-P3 to string

felt it was easier to handle the value if they were string values.

5. Quality: if there is a missing confidence, replace with 0 to make easier to compare to the other two.

There were some confidence numbers that were missing and so to make it easier to read I just turned them into 0

6. QUALITY: Clear all false names and convert to Nan

There was some data that rated possible predictions(3) and choose the best prediction, therefore I deleted the predictions that were likely since I can not speculate and just need best guess on the breed of dog.

7. Quality issue: Some of the names are capitalized and some are not

This could cause future issue if one wanted to categorize the breeds in a graph

8. Quality issue: Change Timestamp to `to_datetime`

Allows one to analyse the dates more effectively

9. Quality: Drop nan values in rows since we won't know what dog they are rating or talking about.

There were some rows that did not have any dog predictions therefore we would not be able to tell which dog was even liked.

3 Tidiness issues:

1. Tidy Issue : Merge all dataframes to a master table

- I had to merge all the data based on the twitter_id

2. Tidy Issue , Clear all false name and combine 3 columns to give the breed and confidence only

- has to combine the prediction do we only have the best guess prediction to work with since the other would be irrelevant.

3. Tidy issue: Combine the stage column into one dog stage column

- There were three separate columns for the stages and I had to combine them to have one column to work with

4. Tidy issue: Drop unneeded columns

more columns needed to be dropped as the table became simpler.

Conclusion: It becomes a huge skill to wrangle and assess data because often times the data that you wrangle will more often than not be very dirty data. It will have the most Tidiness issue along with the most Quality issues.