Act Report

Hello everyone, who is reading this report today we will discuss the insights that I got from the dataset that was talking about the twitter archive for 'WeRateDogs' page that contain the dog names , dog breeds , the rating of each dog, dog stage , etc. And that made me ask the following insights

1- Which dog breed get the most rating on this page
2- What was the time that people used to post their dog images the most
3- What is the type of captions that got more high ratings

Let's talk first about the first insight 'Which dog breed get the most rating on this page'

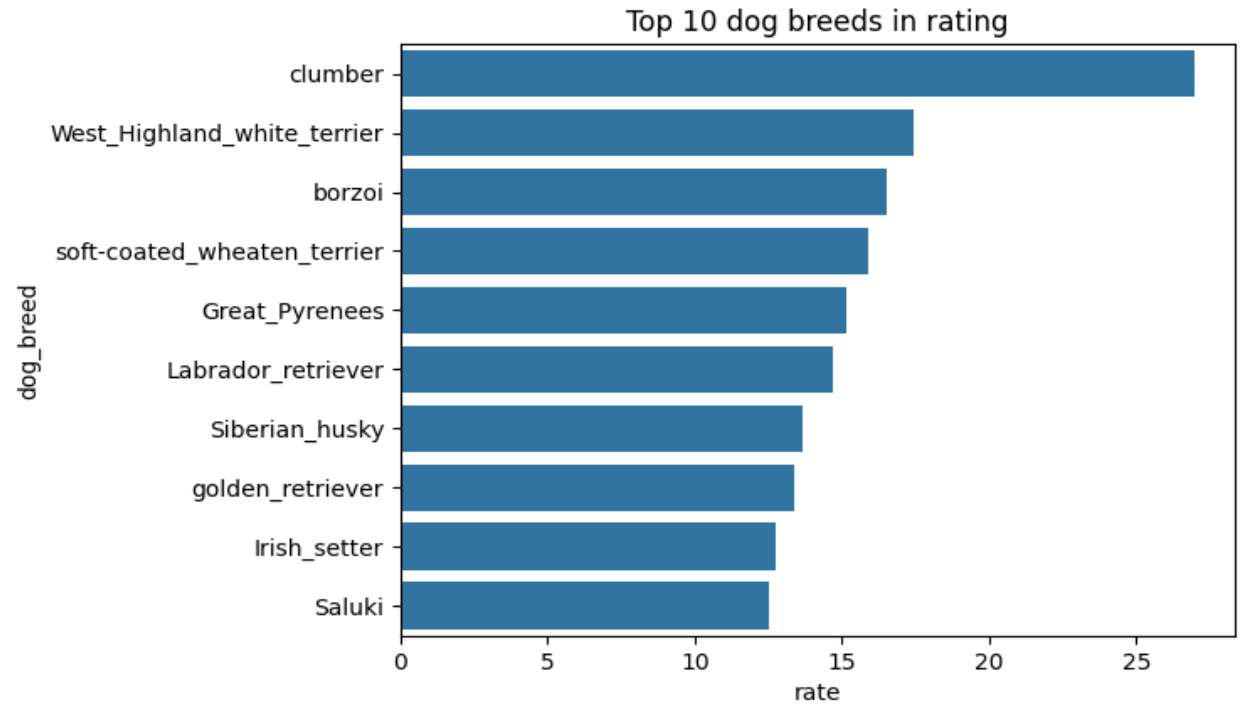
I wanted to know if there are dog breeds that look cuter or more beautiful than other.

First I got the average rating of each breed which happened using this code

```
# This code will give me the average rating for each breed

avg_rating = twitter_archive_master.groupby('dog_breed')['rate'].mean().reset_index()
```

then I made a bare chart from this variable to see the results below:



This bar chart tells us that clumber dog had the on average more than 25/10, which is quit obvious this dog breed look very cute

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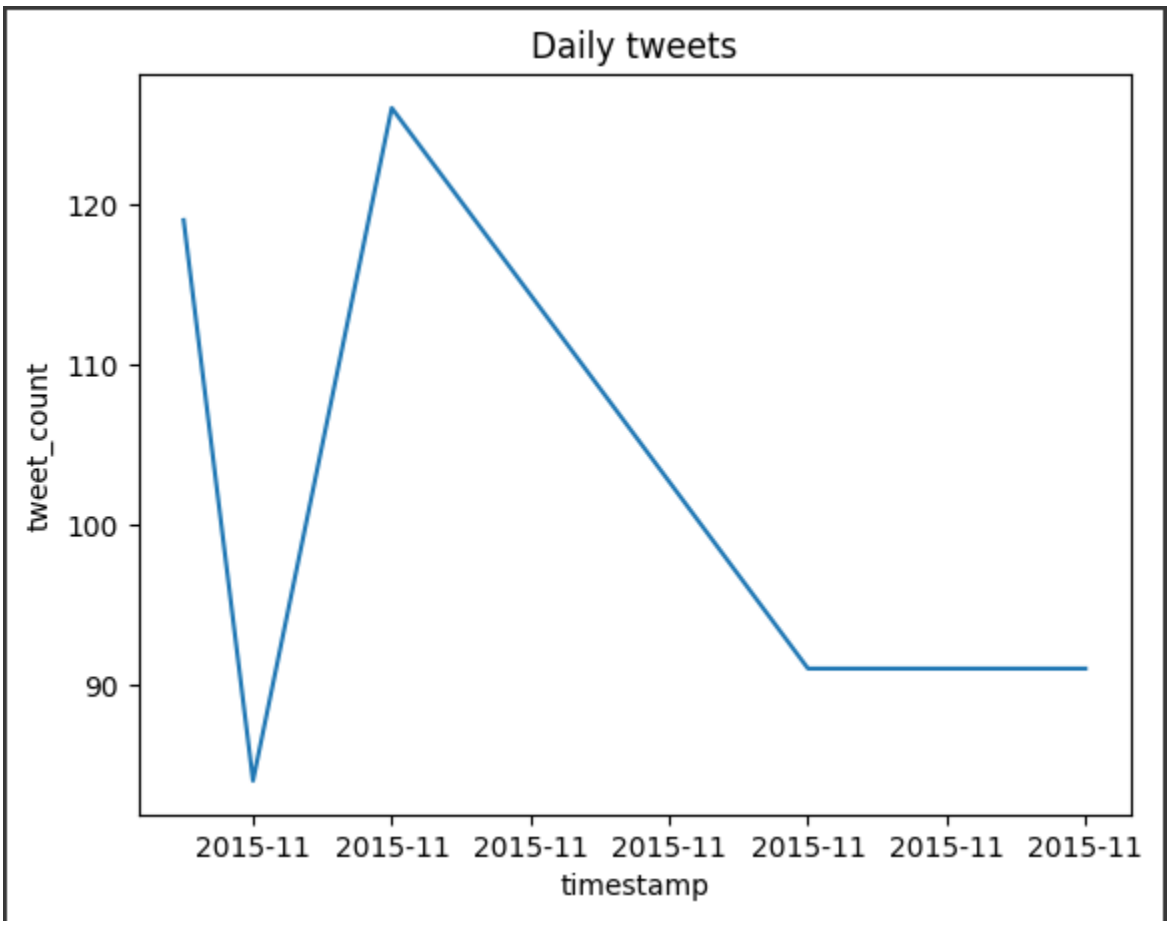
Let's move now to the second insight ‘What was the time that people used to post their dog images the most’

I wanted to know if there was an era that people used to post their dogs photos the most

To get this result first I had to have the number of tweets per day then I sorted them to the most 5 times as shown in the code below.

```
# first I will creat a dataframe that contain all timestamp with the tweet count in this time
daily_tweets = twitter_archive_master.groupby(
    twitter_archive_master['timestamp'].dt.date).size().reset_index(name='tweet_count')
top_5_times = daily_tweets.sort_values('tweet_count' , ascending = False).head(5)
```

Then I made a line plot to show the result of this as below:



This tells us that the most time that people used to post their dog’s image was in the around the beginning of November 2015

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Now lastly let me talk about the third and the last insight I found in this dataset ‘What is the type of captions that got more high ratings’

I wanted to know if type of captions on the tweet affects the rating of the dog

First, I used TextBlob library so I can make a function that detect the type of the captions and separate it to a new column in the dataframe as in the code below:

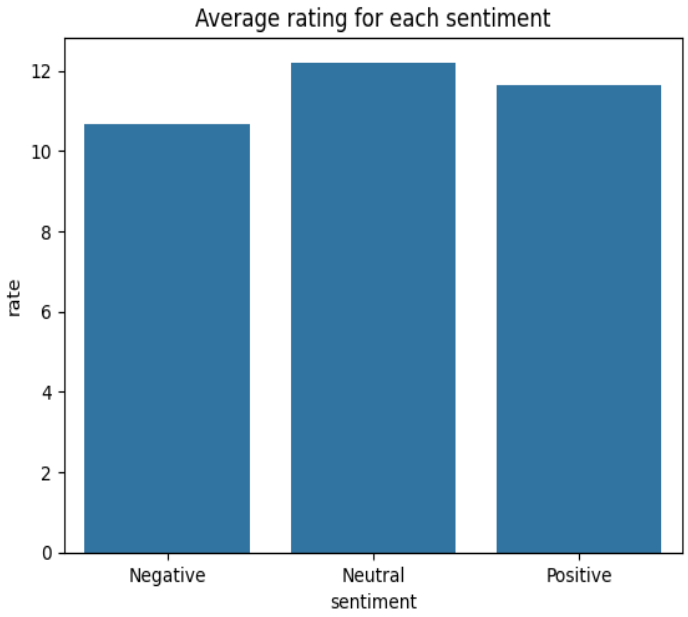
```
def get_sentiment(text):
    blob = TextBlob(text)
    polarity = blob.sentiment.polarity
    if polarity > 0:
        return 'Positive'
    elif polarity < 0:
        return 'Negative'
    else:
        return 'Neutral'

twitter_archive_master['sentiment'] = twitter_archive_master['text'].apply(get_sentiment)
```

Then I had to get the average rating for each sentiment as below:

```
avg_rating_for_sentiment = twitter_archive_master.groupby('sentiment')['rate'].mean().reset_index()
```

Then I made a bar chart form it



That tells us that Neutral captions almost get the most of high rates.