# **Act Report**

## **Insights**

#### p1 predicts that the tweet image is a dog 87% of the time.

I used the Pandas `.mean()` function to find out how often the neural network was able to predict a breed of dog based on a tweet image for its first prediction. The function revealed that the neural network was able to do this 87% of the time. This means that 13% of neural network's first predictions were not a breed of dog. Perhaps this is something that can be improved in the future so that the first predictions are able to predict dog breed with better accuracy.

#### Number of Favorites for each Dog Stage.

I used the Pandas `.groupby().mean()` function to find out which dog stage yielded the most favorites on average. The 'puppo' dog stage yielded the most favorites on average (approximately 21,577 per tweet), followed by 'doggo' (approximately 20,242 favorites per tweet), followed by 'floofer' (approximately 12,581 favorites per tweet), followed by 'pupper' (approximately 7,276 favorites per tweet).

#### **Number of Retweets for each Dog Stage**

I used the Pandas `.groupby().mean()` function to find out which dog stage yielded the most retweets. This time the 'doggo' stage yielded the most retweets on average (approximately 7,001 retweets per tweet), followed by 'puppo' (approximately 6,143 retweets per tweet), followed by 'floofer' (approximately 4,641 retweets per tweet), followed by 'pupper' (approximately 2,281 retweets per tweet).

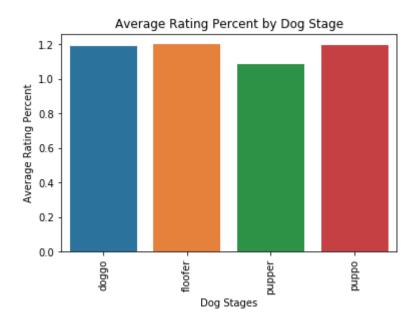
### Visualize the Data

#### Average Rating Percent for each Dog Stage

I used the Pandas `.groupby().mean()` function to calculate the mean rating percent by dog stage and then converted the series to a data frame by using the Pandas `.to\_frame() function. I used Pandas `reset\_index()` function to convert dog\_stages from index to column and then used `.sort\_values()` to order the dog stages by descending rating percent values.

	dog_stages	rating_percent
1	floofer	1.200000
3	puppo	1.195238
0	doggo	1.192593
2	pupper	1.086470

I then plotted the data as a bar plot using Seaborn.



'Floofer' received the highest rating on average (1.200), followed by 'puppo' (1.195), followed by 'doggo' (1.193), followed by 'pupper' (1.086).