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Insights and Visualization from the Data

Introduction: This article will describe and displays the three (3) insights and one (1) visualization from the We Rate Dogs projects. The following are the insights:

- 1. Breed of dog with more social appeal
- 2. Display the dog with highest prediction and the subsequent insight from it.
- 3. Dogs types with highest rating
- **1. Breed of dogs with more social appeal:** The sum of each type is determined by calling value_count() function on each of 'doggo', 'floofer', 'pupper' and 'puppo' fields. The total sum is therefore determined by adding each respective sum together. The percentage of each dog type was calculated by the following formula:

percent_doggo = (sum_doggo/sum_dog) * 100

This was computed for all dog types.

It was found out that 66% of dog type were pupper while the other dog type made up 44%. This shows that pupper has more social appeal than any other dog type and will be suitable for movie or television commercial.

- 2. Display the dog with highest prediction and the subsequent insight from it: The pillow was installed to display the dog with highest confidence level of prediction in the third column. The particular dog was identified by calling idxmax() function on the 'third_conf_level' field. The image was retrieved from the URL using urllib.request.urlretrieve(https://pbs.twimg.com/media/CfFNk7cWAAA-hND.jpg The display was a young pupper called Eskimo Dog. This actually agree with our earlier assertion in one (1) above.
- 3. **Dogs types with highest rating:** The dog with the highest rating determine from we_rate_dog_df by calling idxmax() function on the DataFrame. The value return the details for Bluebert which has a rating of 50.0. Unfortunately, its dog type was not stated.

Visualization: This was achieved using matplotlib. A bar chart was used to plot the dog type against the total numbers in each category. Below is the output of the visualization.

