Pawsitive Profiling

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Did you know ...

In the U.S. ...

- 6.3 million "companion" animals arrive at animal shelters and pet adoption locations each year
- About 49% (3.1 million) of those animals are dogs

Of those dogs...

- 2 million dogs are adopted each year
- Around 44% of houses in the US have a dog, with roughly 78 million dogs owned in the US
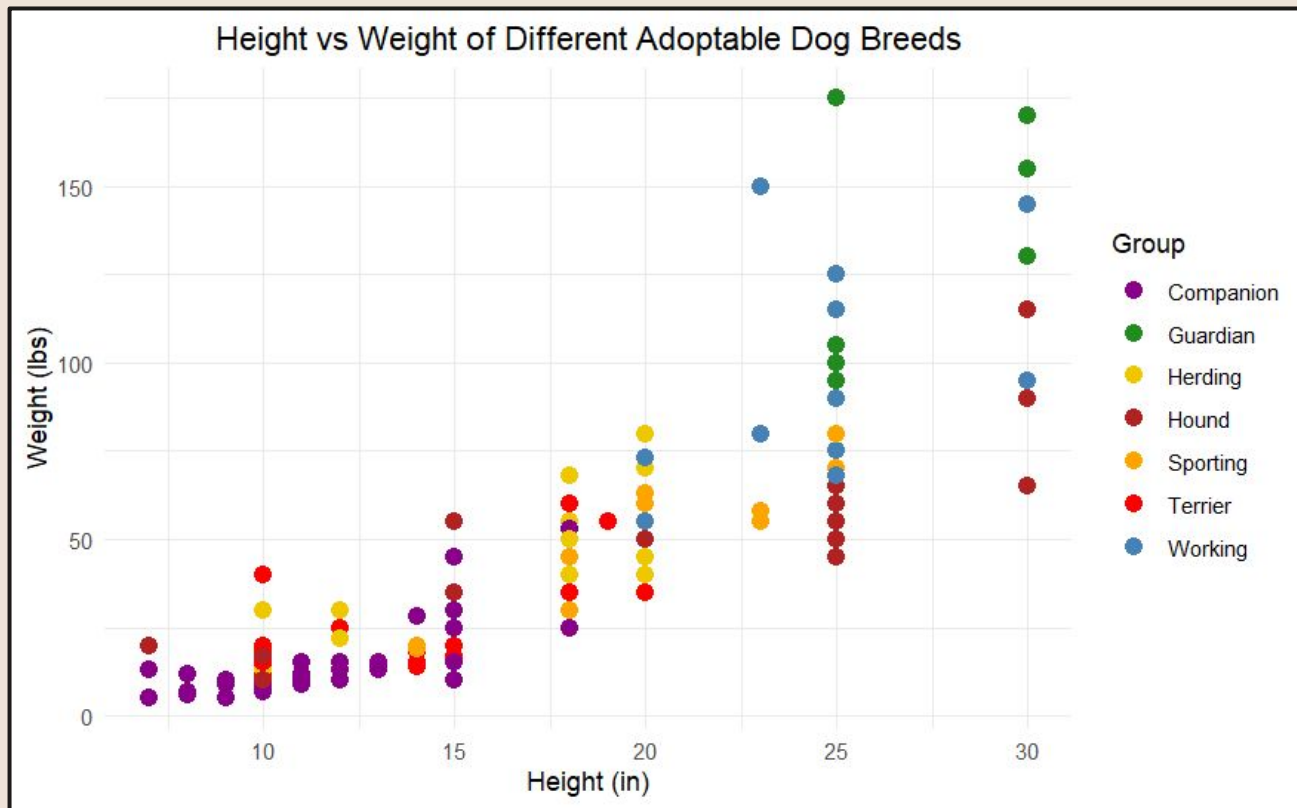
ASPCA, 2024

The Data Sourcing Process

- Our dataset was found in a list of public API's on GitHub
- Contains 209 unique dog breeds and information on their physical characteristics, behavioral traits, and care requirements
- Every breed is given either a score from 1-5 or a short description for each category

https://github.com/chase-manning/open-dog-registry

Doggy Affirmations

Height vs Weight Scatter Plot

Height vs Weight of Different Adoptable Dog Breeds

Weight (lbs)

Height (in)

Group

- Companion
- Guardian
- Herding
- Hound
- Sporting
- Terrier
- Working

Height vs Weight Scatter Plot cont.

- All dogs contained in the data set had an average height and weight for the breed
- The smallest of the 209 breeds was the Pomeranian, while the largest was the Mastiff
- While significant overlap was present between their heights and weights of the dog breeds, it is interesting that there is no overlap between the Companion dog breeds and the Guardian & Working breeds

Height vs Weight of Different Adoptable Dog Breeds

Dog Breed Popularity Assigned Group
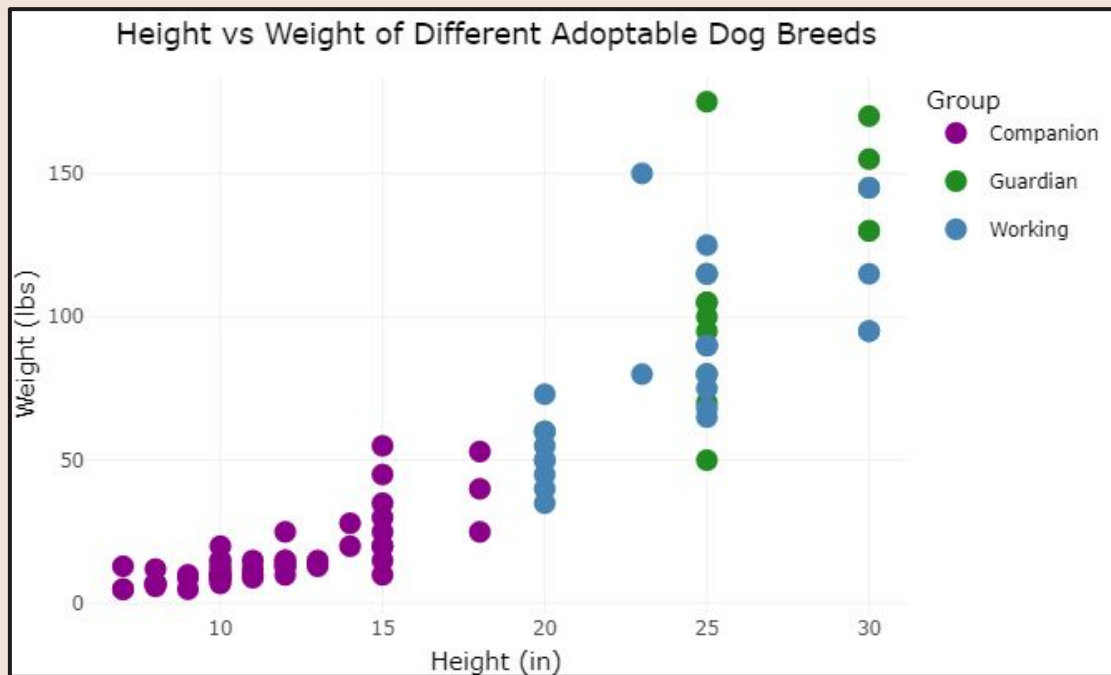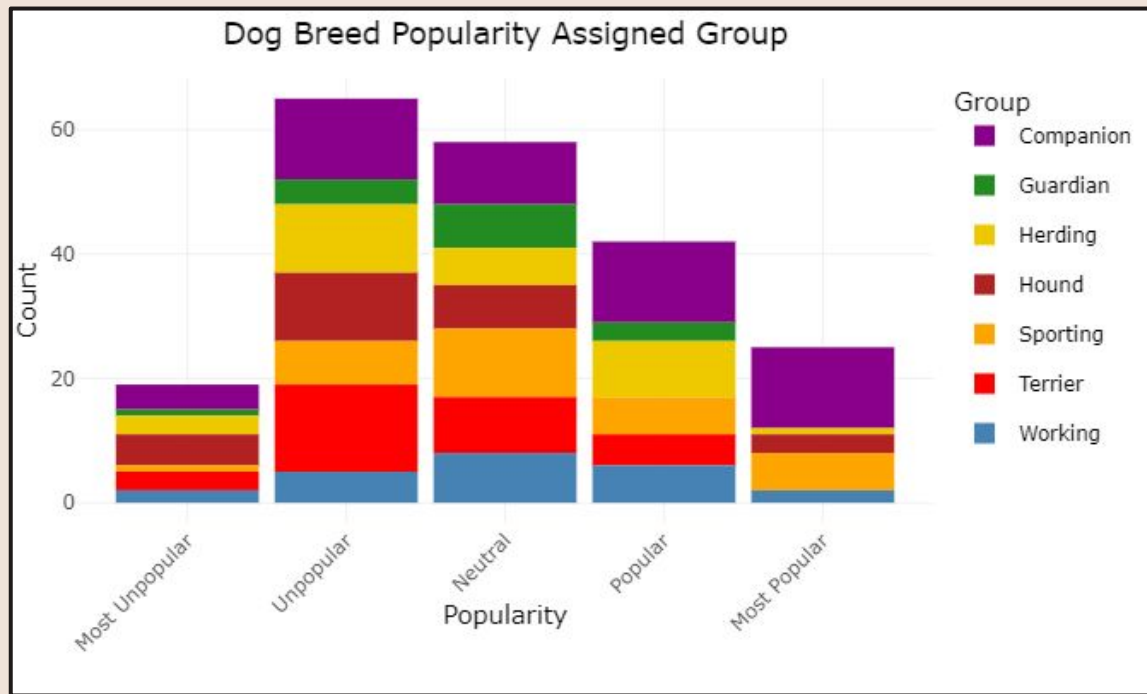
Popularity Rankings

- Many of the individual columns in the data set followed a ranking system of 1-5
- On this scale, 1 is the worst option, and 5 is the best option
- Companion Dogs were the largest portion of the 5's
- Terrier's ranked among the least popular of the seven groups

Family Affection vs Child Friendliness Heatmap

- Observed the frequency of all 25 possible combinations of Family Affection and Child Friendliness on the same 1-5 scale
- The largest ratings demographic was dogs ranked as a 5 in both cases (highly child friendly and affectionate with family)
- Only 6 out of the 209 dogs were rated as a 1 out of five for either of the two parameters

Heatmap of Family Affection vs Child Friendly Ratings for Dog Breeds
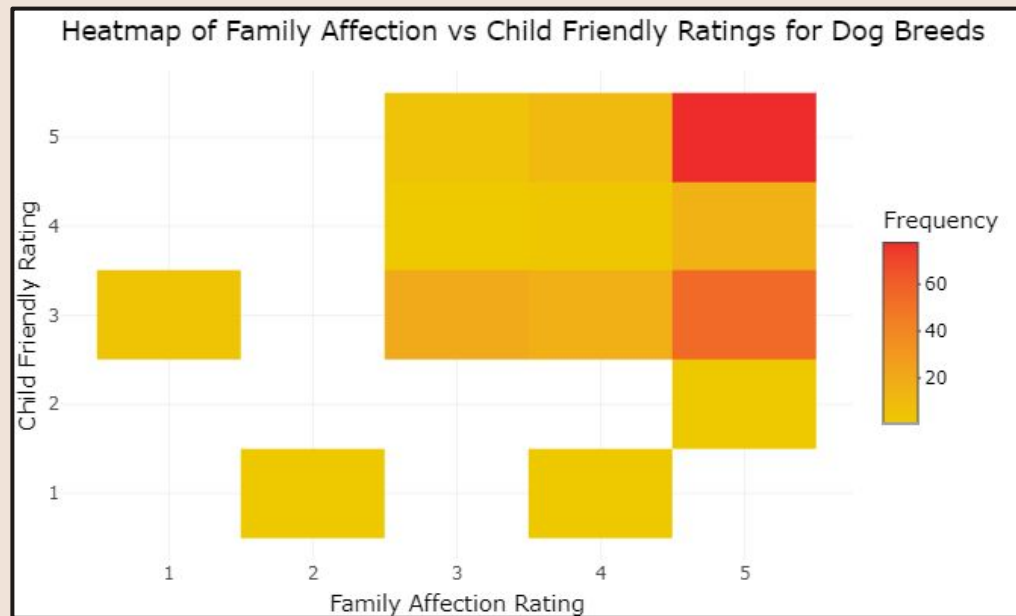
Conclusions & Future Direction

- Diverse characteristics were found for different groups
    - Companion dogs have small height and weight ratio and guardian have the biggest
    - Guardian, herding and working dogs rate low for child friendliness but high for family affection
- Notable similarity- most breeds were rated highly for family affection
- Regardless of popularity all dog types contribute pawsitively to their owners' health and happiness
- Future studies can focus on geographical adoption trends and long-term owner satisfaction for deeper insight into dog adoption patterns

Thank you !

Do you have any questions?