## **Homework 5 implementation**

Name: Arun Raj Deva ASU ID: 1218410609

Step 1: Data preprocessing: In this step, first I sampled and reduce the data. I have considered the data only of dogs which have taken to the orbital.

Step 2: The attributes I used were Name, Flights, Fate, Latin Name, Rocket, Gender, Notes.

Quantitative – Number of flights taken by the dog represented as stars. Ex: 4 stars represent that the dog took 4 flights

Categorical – Fate represented with the type of star. A gold color star represents the mission is successful and the dog is alive. Whereas the black star represents the death of the dog. Another categorical attribute is gender of the dog. Different dog svgs are used to represent the gender of the dog as shown below.

Step 3: After the preprocessing, I implemented the visualization using d3 is and html.



Each row represents the one dataset. Squirrel name of the dog, this dog image is used to represent the female gender, 4 stars represent that this dog was in orbit for 4 times. The last star a black star represents that the dog was dead on the 4<sup>th</sup> flight and the gold star represents that first 3 journeys were successful. The hover over the dog gives some additional details and facts about the journey. Finally, this represents a female dog named squirrel took 4 flights to space where 3 missions were successful and 4<sup>th</sup> flight failed and caused death of dog.



This represents the male dog named Little wind went once to orbit and it was successful.