## **Description of Artifact**

- This artifact is my project from CS-340. It is a full-stack webpage that displays information about animals in a shelter.
- It was created in February 2024

## **Inclusion of Artifact**

- This was a great choice for the data structures and algorithms enhancement because there is a lot of data involved. This data needs to be sorted and managed.
- I have enhanced the artifact by using a linked list to keep track of the user's activity.
- I used a binary search tree to filter through data. I stored each entry from the database in a binary search tree, which allows for efficient searching.
- I used a quicksort algorithm to sort the data. The user can sort any of the columns in ascending or descending order.

## Course Outcomes

- I met the course outcomes in this enhancement
- Using algorithmic principles, I was able to solve a problem efficiently and effectively.
- I also demonstrated my knowledge of data structures and algorithms.