**Bruna’s Capstone Proposal**

**Executive Summary**

My first topic of choice is about pet adoptions and/or shelters. My motivation for this topic is that our country has a big issue when it comes to over filled shelters with unwanted pets, overbreeding puppy mills, and backyard breeding. With all that in mind, I would like to research and find out if there are areas in the country or just maybe in TN that needs more attention or education regarding animal adoption.

I would assume that the government may have some sort of data regarding shelters or rescues associations that can be used. The challenge I may encounter may be that I would have to request the data from each shelter rather than have it all in one place. That may take time to get a response from the shelters and getting the data itself.

**Motivation**

Growing up in Brazil, my dogs and cats’ friends were always mutts, I would find them on the streets, and I would bring them home and I would bring my most sad face and the most incredible compelling pitch in hope that my mom would allow me to keep them and on many occasions she did. Despite knowing that going to the vet for checkups is important for you and your pet, my childhood doggies and cats never saw a vet and they lived furrever.

However, when I moved to US and I was able to afford a pet, everyone would tell me to look for a breeder with AKC registration and that paying the price up front would allow me to have a healthy dog later, so I believed on the idea. After purchasing two Rottweiler from a back yard breeder for $500 a pop, my furry kids grew up with a lot of joint and health problems. The issues included 3 joint surgeries, constant allergies, skin, and ear infections, bone cancer, hip dysplasia, and painful arthritis, combined with endless vet bills and medications. I loved my dogs, and I would do it all over again, however I discovery a much cheaper, sustainable, and still very loveable way to find my furry friend…SHELTERS!!!

There so many mistreated animals and a lot of overbreeding cats and dogs that leads to major health concerns when they grow up. Puppy mills are a big business in this country, where especially dogs and cats are bred in very poor conditions leading to unhealthy puppies and a very short and painful lifespan for the mothers.

Also, there are so many great companions in shelters that are in many cases they are euthanized because of the lack of space, resources, and not enough adoptions. By educating the population about the horrible practices that back yard and puppy mills breeding are and how animal shelters are full of great companions I believe that we could decrease greatly overbreeding and subsequently animal euthanasia. Adopt don’t shop!

**Data Question**

Where can I find the highest numbers of adoption, in shelter, and euthanasia in the US for dogs and cats?

What are the numbers of adoptions vs euthanasia in Austin and Dallas, TX?

What breed of dogs are the most adopted and most euthanized?

What age of dogs are most adopted vs euthanized?

How can we promote or educate about adoption in our communities so that we can empty shelters, decrease euthanasia cases, and decrease/eliminate backyard breeding and puppy farms?

**Minimum Viable Product (MVP)**

I will attempt to answer my data questions by starting broad, like number and statistics from the US then narrow down to Austin and/or Dallas TX.

Investigate numbers of dogs adopted, numbers of animals in shelters, and numbers of animals euthanized per year, per age, and per type of breed. Hopefully the data will be from recent years.

It will be divided into animals’ category like dogs, cats, and so on. Possibly the investigation will be regarding breeds and see if there is any correlation there.

The visualization will be an interactive dashboard (Power BI or Tableau, still deciding), with maps showing the regions, bar charts and any other possible interactive graph. Thinking on having 3 to 4 sheets in one dashboard.

The audience is for anyone that is considering adding a companion to their lives or to anyone that cares for the welfare of the animals.

**Schedule (through <date of demo day>)**

1. Get the Data (08-03-2022)
2. Clean & Explore the Data (08-09-2022)
3. Create Presentation of your Analysis (08-12-2022)

* Should be a presentation, but could include a Jupyter Notebook or dashboard in Excel, Tableau, or PowerBI

1. Internal demos (08-12-2022)
2. Demo Day!! (08-19-2022)

**Data Sources**

I attempted to contact Nashville Humane Society and Metro Animal Shelter, however none of then got back to me. However, I have found two sources that I can access their data. The first one, I had to request the data online through their website, then they allowed me a onetime free download. The second dataset was available at OpenData website. Here I was able to find public information regarding Austin and Dallas shelters.

[*https://www.opendatanetwork.com/dataset/datacatalog.cookcountyil.gov/vgij-ygt3*](https://www.opendatanetwork.com/dataset/datacatalog.cookcountyil.gov/vgij-ygt3)

[*https://www.shelteranimalscount.org/*](https://www.shelteranimalscount.org/)

**Known Issues and Challenges**

*Explain any anticipated challenges with your project, and your plan for managing them. Be sure to include:*

* *I may need to request the data from Nashville Humane Society or any other shelter which may take time and it’s not guaranteed that the data they have will be useful.*
* *Multiple sources to form a cohesive dataset, possibly a lot of cleaning and organizing before extracting any valuable information.*
* *To manage these challenges, I would be in constant communication with instructors and have a second set of eyes every step of my capstone so that I waste time digging into nothing.*
* *I have two other topics that I can jump into in case I cannot find enough data to research.*