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CIS 344

Project 1

## Final Report

During our first project one we focused on creating a mini-world database with my focus centered around a pet grooming business. with the goal to better understand the structure of ER-diagrams and data bases. During my research stage I was able to connect with a work teammate who use to be a representee at a pet grooming center allowing me to grasp a better understanding during my interviewing / documentation process. These conversations proved productive as it allowed me to understand to importance of structure not only in a database but a business as well. The mini-world based on my documentation process has several key entities such as Customer, Pet, Grooming-Service, Appointment and Payment with attributes associated to them.

Entities have their own relations or tables where data is stored. My Customer table requires attributes such as its primary key represented by *customer\_id*, followed by *name*, *phone\_number* and *email* attributes to gather data that would prove useful in efficiently running the min-world. Pet table also include attributes consisting of primary key and simple attributes however it also introduces foreign keys such as *customer\_id* linking it to the *Customer* relation.

We also further explore relationships between entities as they are essential for drawing connections between relations. We come to understand some relations are simple such as one-to-many relationships, one customer can have multiple pets. Likewise, many-to-many relationships such as one appointment having multiple grooming services highlights the need for deep understanding.

In conclusion, understanding how to recognize, define and link entities and their attributes and relationships using primary and foreign keys is essential to a database if it is going to function as it allows for communication within a well-organized structure to operate.