EPPS 6354.001 Progress Report:

A Veterinary Clinic K-9 Database

Tyler Merrill
The University of Texas at Dallas
tjm130330@utdallas.edu

Database Purpose

The original vision for this project has been expanded to attempt to model the K-9 appointment flow of a community-centric veterinary clinic. The application that will be built to access this database is to be utilized by veterinary staff as a way to access records of dogs under their care. Specifically, histories of each K-9's vital signs and other biometrics taken during appointments, as well as identifying information about K-9 owners and the veterinarians on staff.

E-R & Relation Schema

A new E-R schema has been developed, shown in Figure 1. There are five tables associated with this schema. 'vitals', 'dog', 'veterinarians', 'owner', and 'appointment'.

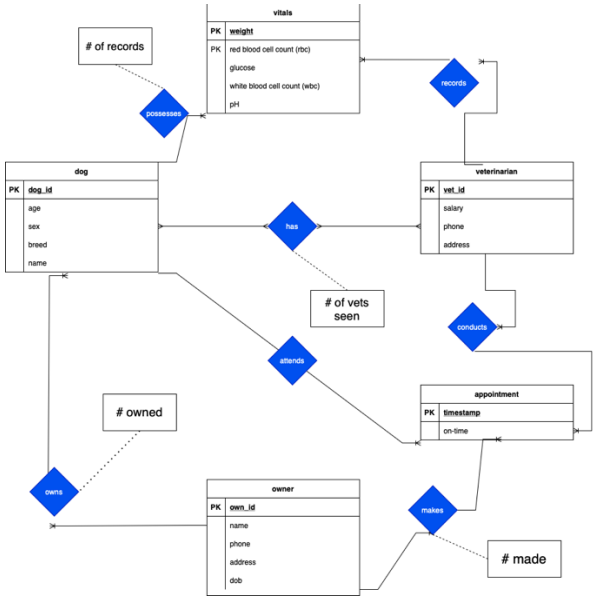

Figure 1

Currently, a relational model has been derived from the E-R model that is in first-normal form. This model has been instantiated in PostgreSQL and is populated with a subset of sample tuples to allow user interactivity with the database.

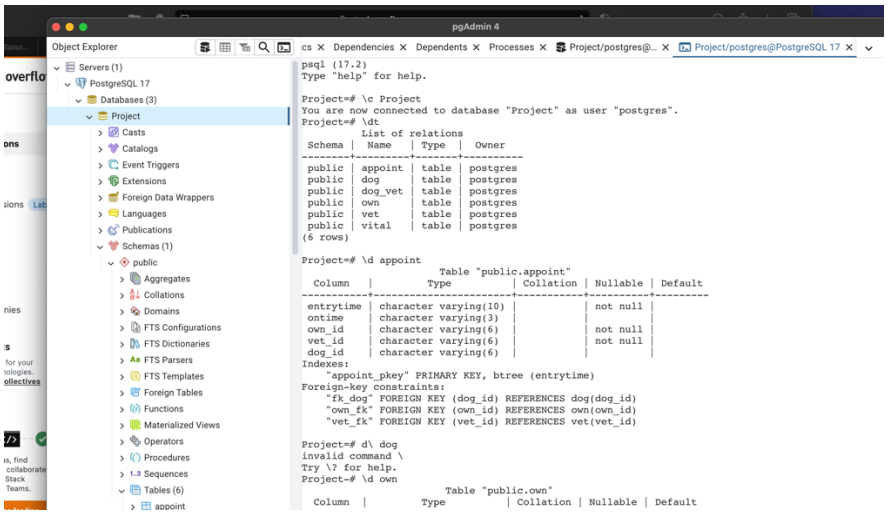

Figure 2

Figure 2 shows a snapshot of the relational schema as implemented in PostgreSQL, accessed via PGAdmin4.

Full Interface

A schematic of the potential layout of the finished Shiny front-end UI is shown below in Figure 3. It is hoped to be able to graphically compare metrics across all subsets dogs (to perhaps assist with outlier detection), as well as look-up tabular information regarding appointments, ownership, etc.

Figure 3