Fairbanks Veterinary Case Study

- 100 points (out of 1000)

- Due on Sunday, October 25, at 11:59 p.m.

- Late work accepted up until Wednesday, October 28, 11:59 p.m. with 20% penalty.

- Submission: a PDF file uploaded via the link found in "Week 8, October 12 - 18" in Canvas.

- "Pair Programming" is allowed. Submission must contain the names of all students who worked on the project together. Each student must turn in a copy of the team's final document.

Objectives

- Familiarize yourself with an unfamiliar company

- Gain an understanding of the unfamiliar company's data and business processes

- Use a data modeling tool to design a database to meet the needs of the client company

- Use the data modeling tool to generate the DDL to create the database you have designed

- Create the database you have designed by executing the DDL you have created

- Insert test data into the database you have created, and run some queries against your database

Deliverables

- A key-based, fully-attributed data model (like HW # 2)

    - Add one attribute: Animal Type

- The output of a DESCRIBE <table> for each of the tables in your database.

- The SQL query and the output of some SELECT queries against your database

Submission

- A picture (screen shot or PDF) of your complete data model.

- The results of a DESCRIBE command for each table in your database.

- SQL query and the output of several queries against your database.

Scope

- Includes the following from Homework # 1 & 2
  – Capturing and storing **OWNER** data
  – Capturing and storing **PET** data

- Includes the following additional business area:
  – The scheduling of **Pet Training** events as described in "Journal 3" on pages 55-56 of the case study.

Scope

- **DOES NOT include** any other activities going on at the clinic, such as:
  - Pet visits, Pet vaccinations, Pet surgeries, Pet allergies (from HW 1 & 2)
  - Pet Boarding/Kenneling
  - Pet Grooming
  - Clinic Business Administration, Accounting, Payroll, etc.

Step-By-Step Instructions

1. Read the entire Fairbanks Veterinary Case Study

2. Document the ENTITIES and ATTRIBUTES regarding Pet Training Events.

3. Design the tables necessary for the Training Events business area of the database.

4. Add to your data model from HW # 2 all new entities and attributes needed for pet training events.

5. Generate the DDL to create the database

6. Execute your DDL to create the complete database

Step-By-Step Instructions

7. Populate (via SQL INSERT statements) each table in your database with several rows of test data of your own creation:

   – Add some Pets (at least 4 rows)

   – Add some Owners (at least 4 rows)

   – Add some Trainers – Including Shey and Marie

   – Add some Training Events (at least 6) coming up during the current month including Basic Skills, Walk-Train-Play, Off-Leash Operation

Step-By-Step Instructions

8. Create and run queries to show the following:
    – A list of Owners and Pets showing the owner name, pet name, <mark>animal**</mark>, breed, gender, date of birth
    – A list of Upcoming Training Events showing the date, time, trainer, event type, owner, pet

    ** not included in HW 1 & 2

Some Considerations:

- Assume a maximum of two teachers per training event
- FVC may hire more teachers in the future
- FVC may add new types of classes in the future
- A pet can take many classes over time
- A class may be attended by many pets
- A class can take place several times per week/month
- Some business rules (such as max of 5 or 10 dogs per class) will be implemented via application code
- You should keep track of whether or not a pet actually attended a class they were scheduled for
- Private training classes can be scheduled by appointment
- Note the Training Registration Form on page 69

Some Considerations:

- Be able to provide:
  - A trainer's schedule for the week
  - A list of classes offered with day/time/trainer
  - A list of pets/owners scheduled for each class
  - A report showing recent history of classes and attendance
  - Someday: allow customers to sign up for classes on the website