



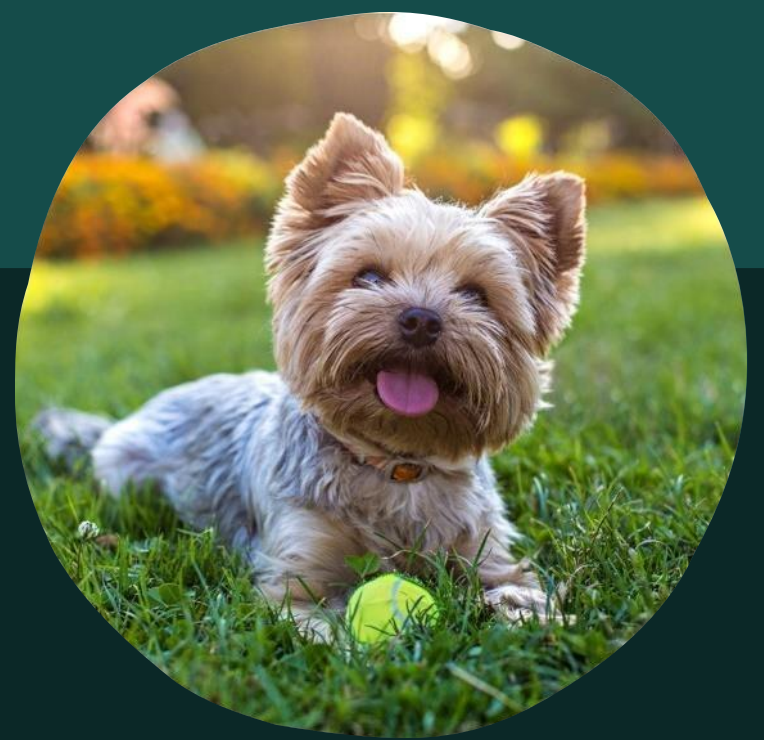
EPPS 6454.001 – Vet App

Final Project Presentation

Tyler Merrill

Introduction

A database for a community-tier veterinary clinic's 'appointment flow' was designed. An end-user application was designed to work as an additional layer in a 'two-tier' architecture via a Shiny application.



Not real patients.

For Who?



For Clinical Visits

- What vet?
- What pet?
- What readings?

For Check-Ins

- Date
- Time
- Client
- Reason



Data?

- Biometrics from simulated ranges in the medical/scientific literature.
- Salary ranges from BLS.



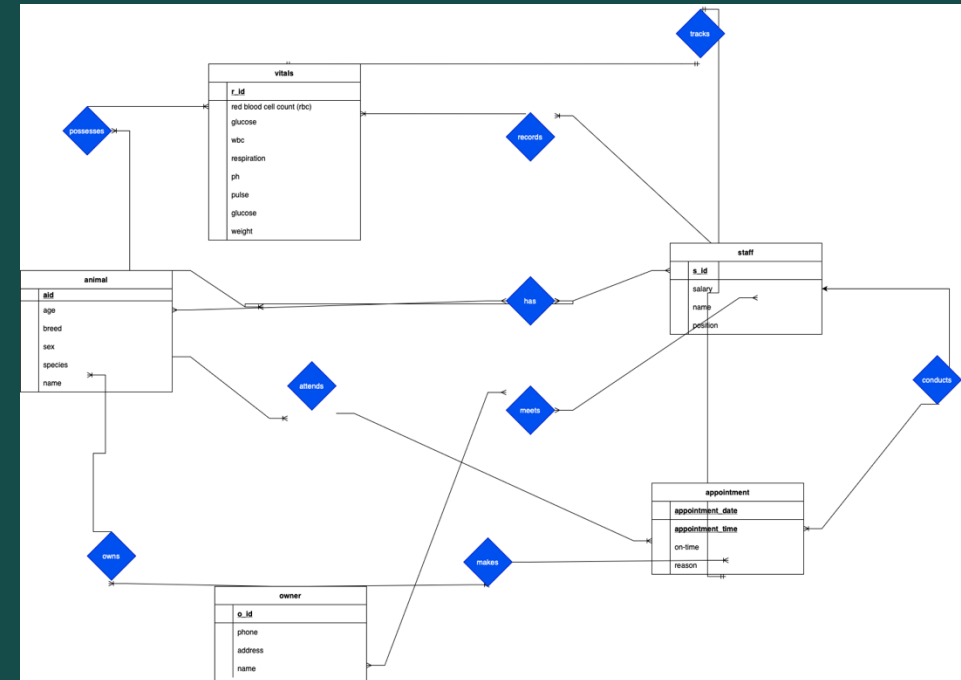
College of
Veterinary Medicine

E-R Schema



Five Entities

- Nine Relationships
- One composite key
- Cardinalities: 1-to-1 (1), m-to-m (2), 1-to-m (6)



Relational Model



Seven Relations

- 1NF (Domain atomicity)
- 2NF (Can't get attribute from sub-component of key)
- 3NF (Can't derive a non-key attribute from another non-key attribute)
- Two Cross-Tables (m-to-m)

own			vital			animal_vet		
PK	o_id	VARCHAR(255) NOT NULL	PK	r_id	VARCHAR(255) NOT NULL	PK	aid	VARCHAR(255) NOT NULL
	name	VARCHAR(255) NOT NULL		weight	NUMERIC(5, 2)	PK	s_id	VARCHAR(255) NOT NULL
	address	VARCHAR(255) NOT NULL		rbc	NUMERIC(5, 2)	FK	aid	VARCHAR(255) NOT NULL
	phone	VARCHAR(255) NOT NULL		wbc	NUMERIC(5, 2)	FK	s_id	VARCAHR(255) NOT NULL
				respiration	NUMERIC(5, 2)			
				ph	NUMERIC(5, 2)			
				pulse	NUMERIC(5, 2)			
				glucose	NUMERIC(5, 2)			
			FK	s_id	VARCHAR(255) NOT NULL			
			FK	aid	VARCHAR(255) NOT NULL			
staff						owner_vet		
PK	s_id	VARCHAR(255) NOT NULL				PK	o_id	VARCHAR(255) NOT NULL
	name	VARCHAR(255) NOT NULL				PK	s_id	VARCHAR(255) NOT NULL
	salary	INTEGER NOT NULL				FK	o_id	VARCHAR(255) NOT NULL
	position	VARCHAR(255) NOT NULL				FK	s_id	VARCAHR(255) NOT NULL
animal								
PK	aid	VARCHAR(255) NOT NULL						
	name	VARCHAR(255) NOT NULL						
	age	INTEGER NOT NULL						
	breed	VARCHAR(255)						
	sex	VARCHAR(255) NOT NULL						
	species	VARCHAR(255) NOT NULL						
FK	o_id	VARCHAR(255) NOT NULL						
			appointment					
			PK	appointment_date	DATE NOT NULL			
			PK	appointment_time	VARCHAR(255) NOT NULL			
				reason	VARCHAR(255)			
				ontime	VARCHAR(255)			
			FK	s_id	VARCHAR(255) NOT NULL			
			FK	aid	VARCHAR(255) NOT NULL			
			FK	o_id	VARCHAR(255) NOT NULL			
			FK	r_id	VARCHAR(255) NOT NULL			

Application

- To display the results of select views, and present searchable database.

← Original Schematic



Thank You

Subtitle

