Nolan McCarter

CSC 423 - Database Systems

11/01/2022

Project: Part 1

1.a

Main Entity Types:

Clinic, Staff, PetOwner, Pet, Examination

1.b and 1.c in table in last page

Main relationships types between the entity types in "a" and their multiplicity constraints for each relationship

## 1.d and 1.e

## Attributes:

- Clinic
  - o clinicNo primary key
  - o name
  - o address
  - $\circ \quad telephone No$
- Staff
  - o staffNo primary key
  - o name
  - o address
  - o telephoneNo
  - o DOB
  - position
  - o salary
- PetOwner
  - o ownerNo primary key
  - o name
  - o address
  - o telephoneNo
- Pet
  - o petNo primary key
  - o name
  - o DOB
  - o species
  - o breed
  - o color
- Examination
  - o examNo primary key
  - o chiefComplaint
  - description
  - o dateSeen
  - o actionsTake

Entity 1	Relationship	Entity 2	Participation (min)	Cardinality (max)	Multiplicity	Type of Relationship
Clinic	Has	Staff	1	*	1*	1:*
Staff	IsPartOf	Clinic	1	1	11	
Staff	Manages	Clinic	0	1	01	1:1
Clinic	ManagedBy	Staff	1	1	11	
PetOwner	Owns	Pet	1	*	1*	1:*
Pet	OwnedBy	PetOwner	1	1	11	
Pet	RegisteredBy	Clinic	1	1	11	1:*
Clinic	Registers	Pet	1	*	1*	
Clinic	ContactedBy	PetOwner	1	*	1*	1:*
PetOwner	Contacts	Clinic	1	1	11	
Pet	Undergoes	Examination	1	1	11	1:*
Examination	DoneOn	Pet	1	*	11	
Staff	ParticipatesIn	Examination	1	*	1*	1:*
Examination	PerformedBy	Staff	1	1	11	

## Pawsome Pets - Conceptual Model

McCarter, Nolan | December 8, 2022 Examination 1..\* Undergoes examNo {PK} chiefComplaint description dateSeen actionsTaken 1..1 Pet **1..\*** petNo {PK} name ParticipatesIn DOB species breed 1..1 color Staff RegisteredBy 1..\* 🛦 1..\* staffNo {PK} name address telephoneNo DOB position salary Owns 1..\* 1..1 1..1 Has 1..1 Clinic PetOwner 1..1 clinicNo {PK} ownerNo {PK} 1..1 Manages name name ContactedBy address address telephoneNo telephoneNo 0..1