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Matt Elpus & Eddy Boris
Professor Aguiar
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## Project Part 1

a. Identify the main entity types

Clinic (strong entity)

Staff (strong entity)

Pet (strong entity)

Owner (strong entity)

Examination (strong entity)

b. Identify the main relationship types between entities from a

Clinic employs Staff

Clinic registers Pet

Owner owns Pet

Pet undergoes Examination

Staff conducts Examination

c. Determine multiplicities of relationships from b

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1 clinic employs at least 1+many staff => Clinic (1..1) employs Staff (1..*)
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1 clinic registers at least 0+many pets  $\Rightarrow$  Clinic (1..1) registers Pet (0..\*)

1 owner owns at least 1+many pets  $\Rightarrow$  Owner (1..1) owns Pet (1..\*)

1 pet undergoes at least 0+many examinations  $\Rightarrow$  Pet(1..1) undergoes

Examination (0..\*)

1 staff conducts at least 0+many examinations => Staff(1..1) conducts

Examination (0..\*)

1 staff manages only 1clinic => Staff(0..1) manages Clinic(1..1)

d. Identify strong entity attributes and assign them to proper entities from a Clinic: clinicNo, name, address, phone

Staff: staffNo, name, address, phone, DOB, salary, position

Owner: ownerNo, name, address, phone

Pet: petNo, name, DOB, species, breed, color

Examination: examNo, complaint, description, date, action

e. Determine candidate and primary key attributes from d

Clinic: clinicNo

Staff: staffNo

Owner: ownerNo

Pet: petNo

Examination: examNo

f. Construct E-R diagram (without foreign keys)

