

1. Conceptual Model

a. Entities

Clinic
Staff
Owner
Pet
Exam

b. Relationships

Clinic employs Staff
Staff works at Clinic

Clinic is managed by Staff
Staff manages Clinic

Owner owns Pet
Pet is owned by Owner

Pet is registered at Clinic
Clinic has Pets

Owner contacted Clinic
Clinic was contacted by Owner

Staff performs Exam
Exam is performed by Staff

Pet undergoes Exam
Exam undergone by Pet

c. Multiplicity

Clinic employs Staff 1..*
Staff works at Clinic 1..1 (assumption that staff can only work at one clinic)
1:*

Clinic is managed by Staff 1..1
Staff manages Clinic 0..1
1:1

Owner owns Pet 1..*
Pet is owned by Owner 1..1
1:*

Pet is registered at Clinic 1..1

Clinic has Pets 0..*

1..*

Owner contacts Clinic 1..1

Clinic is contacted by Owner 0..*

1..*

Staff performs Exam 0..*

Exam is performed by Staff 1..1

1..*

Pet undergoes Exam 1..*

Exam undergone by Pet 1..1

1..*

d. Attributes

Clinic (clinicNo, cName, cAddress, cTelNo)

Staff (staffNo, sName, sAddress, sTelNo, sDOB, sPosition, sSalary)

Owner (ownerNo, oName, oAddress, oTelNo)

Pet (petNo, pName, pDOB, pSpecies, pBreed, pColor)

Examination (examNo, eComplaint, eDate, eTreatment)

e. Candidate and primary keys

Clinic (clinicNo (PK), cName, cAddress, cTelNo (CK))

Staff (staffNo (PK), sName, sAddress, sTelNo (CK), sDOB, sPosition, sSalary)

Owner (ownerNo (PK), oName, oAddress, oTelNo (CK))

Pet (petNo (PK), pName, pDOB, pSpecies, pBreed, pColor)

Examination (examNo (PK), eComplaint, eDate, eTreatment)

f. E-R Diagram

