

Project - Part 1

a. Main entity types:

- Clinic
- Staff
- Owner
- Pet
- Examination

b. Main relationship types between the entity types:

- Clinic **employs** staff
- Clinic **registers** a pet
- Owner **owns** pets.
- Pet **undergoes** an examination
- Staff **performs** an examination
- Staff **manages** Clinic

c. Multiplicity constraints for each relationship:

- One clinic employs many staff members
- One pet can only be registered at one clinic, but a clinic can have many registered pets.
- One owner can own one or more pets, but a pet can only have one owner.
- One pet can undergo many examinations by many members of staff, but an examination can only be performed on one pet by one member of staff.
- Only one staff member can manage only one clinic

d. Attributes associated with entity or relationship types:

- Clinic: **clinicNo**, name, address, telephone number
- Staff: **staffNo**, name, address, telephone number, DOB, position, salary
- Owner: **ownerNo**, name, address, telephone number
- Pet: **petNo**, name, DOB, animal species, breed, color
- Examination: **examNo**, chief complaint, description, date seen, actions taken

e. Candidate and primary key attributes for each entity type:

- Clinic: primary key – clinicNo, candidate key - clinicNo, address, telephone number
- Staff: primary key – staffNo, candidate key – staffNo, address, telephone number
- Owner: primary key - ownerNo , candidate key – ownerNo, address, telephone number
- Pet: primary key – petNo, candidate key - petNo,
- Examination: primary key – examNo, candidate key - examNo,

