

Database Design Group Project Requirements

1. Search Pet(s) by Owner
 - a. Multiple pets can belong to one owner, which resolves into a many (pet) to one (owner) relationship; you can search for owners by using the ownerID attribute in the pets table.
2. Track Vet(s) By Clinic
 - a. Multiple veterinarians can belong to one clinic, which resolves into a many (vet) to one (clinic) relationship; you can search for the clinic that a veterinarian works at by using the clinicID in the veterinarian table.
3. Track Clinic By Company
 - a. Multiple clinics can belong to one company, which resolves into a many (clinic) to one (company) relationship; you can search for the company a clinic belongs to by using the companyID in the clinic table.
4. Track Visits Per Pet
 - a. A pet can participate in multiple vet visits, which resolves into a one (pet) to many (visits) relationship; you can find what pet participated in a given visit using the petID attribute in the visit table.
5. Track Visits Per Clinic
 - a. Because multiple clinics can host multiple visits, we use veterinarian as an associative table, resolving the many-to-many relationship into two many-to-one relationships (described previously). You can track visits per clinic by joining the visit, veterinarian, and clinic tables, and counting/summing the number of visits/visitID per across any given clinic/clinicID (uses visitID and clinicID).
6. Track Total Transactions Per Clinic
 - a. A Visit will only have one bill, and a Bill only applies to one visit; thus, Visits and Billing is a one (visit) to one (billing) relationship. We can obtain the total transactions done per clinic by going through a similar process as tracking all visits, but instead of just counting the visitID attributes across clinics, we would need to join Billing to the other three tables, and count on the receiptID attribute from Billing.
7. Track Billing Per PetOwner
 - a. Because Billing and Visit is one-to-one, Pet and Visit is one-to-many, and PetOwner and Pet is one-to-many, we can manage data between these tables without many-to-many relationship complications. To track Billing per PetOwner, we would need to join Billing, PetOwner, Pet, and Visits; from there, we can search for all unique visitIDs for the given ownerID.
8. Track Visits Per Vet
 - a. One Veterinarian can participate in many visits, but any given visit can only host one veterinarian; thus this relationship resolves to a one (veterinarian) to many (visit) relationship. To get visits per vet, we would need to join Visit and Veterinarian, and search by the vetID attribute.