1.



Fig. 1 Animal shelter ERD

A person can adopt multiple animals but an animal cannot be adopted by more than one person. I assumed the adoptee is a single person and not a group of people like a family. Therefore, the relationship is one to many.

2.

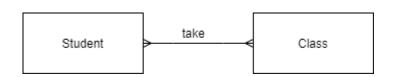


Fig. 2 Student and class ERD

This relationship is many-to-many because a student can take more than one class and a class has more than one student. I assumed the class has more than one student taking it and a student takes more than one class.

3.



Fig. 3 Car Dealer ERD

A person can purchase multiple vehicles at the car dealer shop but a vehicle cannot be bought by more than one person so the relationship is one-to-many.

4.

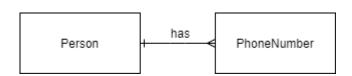


Fig. 4 Person and phone ERD

I assumed a person can have more than one phone number but two or more persons cannot use the same phone number therfore it is a one-to-many relationship.



Fig. 5 Computer owner ERD

A person owns multiple computers which makes the relationship a one-to-many with the assumption that a computer is not owned or jointly owned by two or more persons.

6.

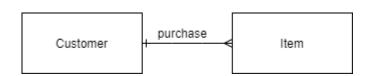


Fig. 6 Website sales ERD

Customers can purchase multiple items on the website but a single item cannot be purchased by more than one person as a result this is a one-to-many relationship.



Fig. 7 Student park vehicle on campus ERD

Students can park more than one vehicle in campus and a vehicle can be parked by more than person that has an access to the vehicle key. Therefore, this is a many-to-many relationship.

8.



Fig. 8 Parent child ERD

I made two assumptions which are;

- I. A parent has more than one child
- II. A child has only one parent

Therefore, it is a one-to-many relationship. However, if a child has more than one parent and which could also include adopted parents or grandparents then it is a many-to-many relationship.

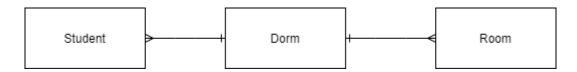


Fig. 9 Student dorm ERD

A dorm has multiple students and multiple rooms; this is a one-to-many relationship.

10.

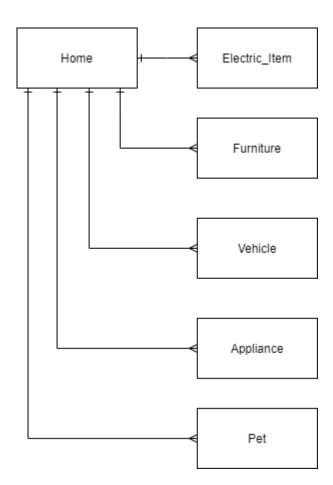


Fig. 10 Homeowner ERD

In this case, it is assumed a homeowner has one home which includes different types of furniture, electronic items like heater/cooker, two or more vehicles, appliances, and more than one pet. So this is a one-to-many relationship.