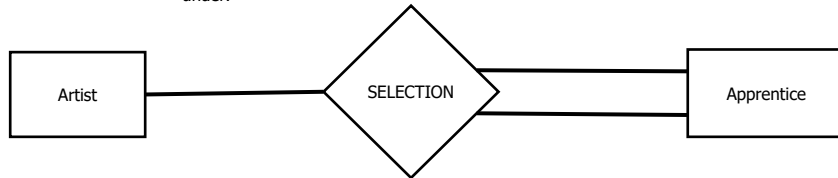
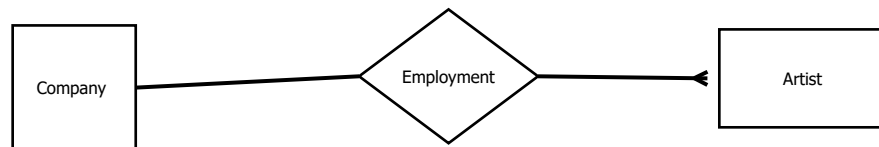


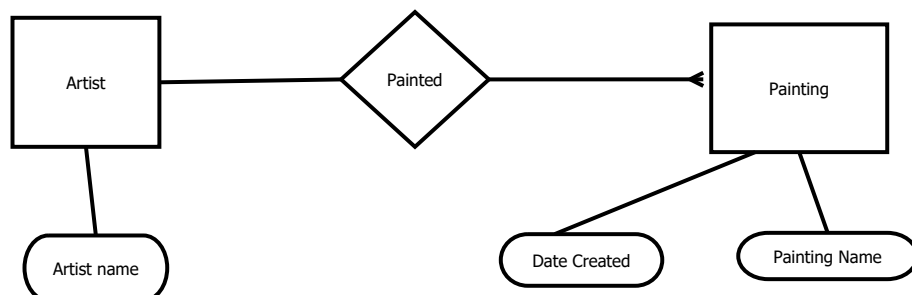
One to one with total participation by the Apprentice. An apprentice must have an artist they study under otherwise the apprentice doesn't exist. This requires total participation by the apprentice in this relationship. Not every artist has an apprentice so they participate partially in this relationship. Artists can have one apprentice and apprentices can have only one artist they study under.



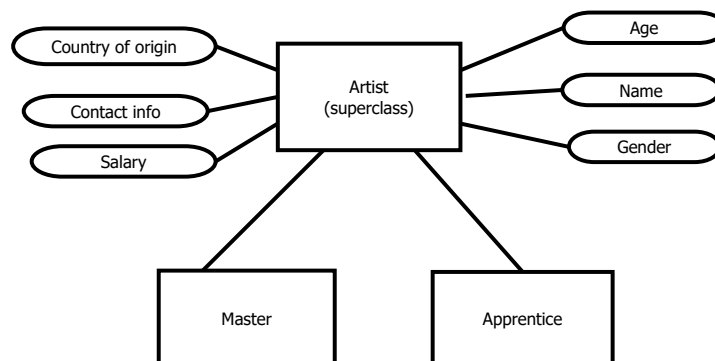
One to many with partial participation on both sides. Both company and artist participate partially with each other as the company has the artist's name and only the painting id's that the artist painted while working for the company. It isn't every single painting the artist has ever done. An artist is tied to a company by a salary and jobs/paintings they are paid for. Artist can work for one company and company's can have many artists.



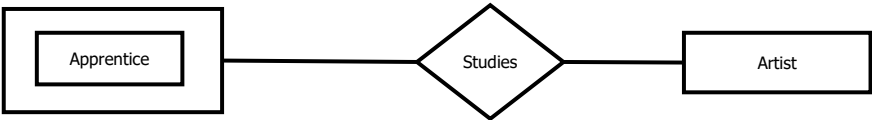
An Artist is related to a painting, this is a one to many relationship as an artist can paint several paintings but each painting can have only one artist. This relationship has attributes of date created, artist name, and painting name.



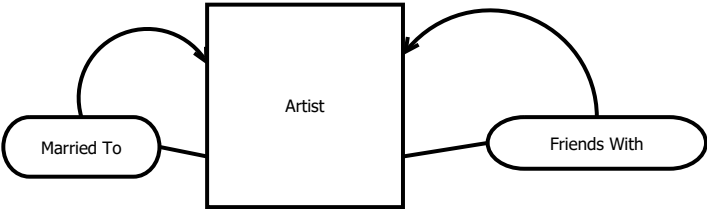
The overlapping inheritance hierarchy. This is when a superclass has multiple subclasses that share the same attributes. Both Master and Apprentice are subclasses of Artist. This is overlapping inheritance.



A weak entity type is an entity type that relies on it's foreign key to create a primary key. This is the apprentice entity, in order for an apprentice to have a primary key of apprentice id, they must have an artist to study under.



A reflexive relationship is when an entity has attributes that are related to itself. The artist table has a couple reflexive relationships with the columns married to and friends with. Artists can find love with other artists as well as become friends with other artists.



An integrity check is when data depends on accurate information. There are several in this table but one example is that a painting can't have an art style related to it if the art style was founded/created after the painting was completed.

