

Gold Gym: Gym Management System

Changes:

The changes we made to the P2 ERD to account as per professor's feedback are:

1. Manager sub-type unnecessary:
Manager subtype of Employee supertype was unnecessary hence it has been removed by us and has been added as a recursive foreign key in the Employee entity itself.
2. Do all locations have the same equipment, same locker, same weights?
No. The categorization of subtypes machines, lockers, and weights under the supertype utilities means that each utility may have its own distinct set of machines, weights, and lockers. As a result, a gym location can only purchase utilities for a specific location, and their subscription will associate any utility they purchase with a particular location.
3. Same products in all locations.? How does employee relate to locations? What if you need to order only for a specific location:
The relationship between a particular location with employee and a particular location with a customer and their order is significant. The employee is assigned to work in a specific location, while the customer places an order for a particular location. As a result, the three entities (employee, customer, and order) are related to the location with location being the common factor.
4. We have also eliminated the equipment set entity and made weights and machines subtypes of utilities, thus eliminating the two-tier relationship that previously existed between weights, machines, and utilities. As a result, the categorization of weights and machines under utilities is now more streamlined and efficient.