

Fitness center

Customer entity

Customer(id, birthDate, name, mobile)

CustAddress(customer, number, street, city)

FK: (customer) \subseteq Customer(id)

Equipment entity

Equipment(serialNumber, name, status)

using(equipment, customer, length)

FK: (equipment) \subseteq Equipment(serialNumber)

FK: (customer) \subseteq Customer(id)

Supplements entity

Supplements(name, calories, cost)

canBuy(name, customerId)

FK: (customerId) \subseteq Customer(id)

FK: (name) \subseteq Supplements(name)

Weak entity and ISA hierarchy

Membership(customer, endDate, startDate, cost)

FK: (customer) \subseteq Customer(id)

Standard(customer, endDate, standardCard)

FK: (customer, endDate) \subseteq Membership(customer, endDate)

Platinum(customer, endDate, platinumCard)

FK: (customer, endDate) \subseteq Membership(customer, endDate)

Classes entity

Classes(name, length, datum, classCode, cost)

Employee and recursive relationship

Employee(id, name, mobile, wage)

EmplAddress(employee, number, street, city)

FK:(employee) \subseteq Employee(id)

Manager(employee, manager)

FK: (employee) \subseteq Employee(id)

FK: (manager) \subseteq Employee(id)

Ternary relationship

Has(customer, name, length, datum, employee)

FK: (customer) \subseteq Customer(id)

FK: (name, length, datum) \subseteq Classes(name, length, datum)

FK: (employee) \subseteq Employee(id)