

Description of ER1

For ER diagram in problem 1, I create a complex structure to handle the relationship between seller and publisher, individual seller and company seller..... It can cover many properties including the situation that a company is both a seller and a publisher. However, there is a still a property that can not be reflected in my ER diagram:

Problem 1 shows us: a contact person for a company can also “moonlight” as an individual seller, but the books sold must be different from the ones sold by the company he/she serves as the contact person. This sentence means that if a contact person also “moonlight” as an individual seller, he or she can not sell the books that his or her company sells. In my ER diagram, it is allowed that a contact person can sell the book that his or her company sells, so this is a contradicted point. In truth, this is a constraint among entities and relations: company, individual, textbook, contact, sell. This complicated constraint is not easy to show in the ER diagram, but we can set the constraint by SQL or other database languages in real database development process.

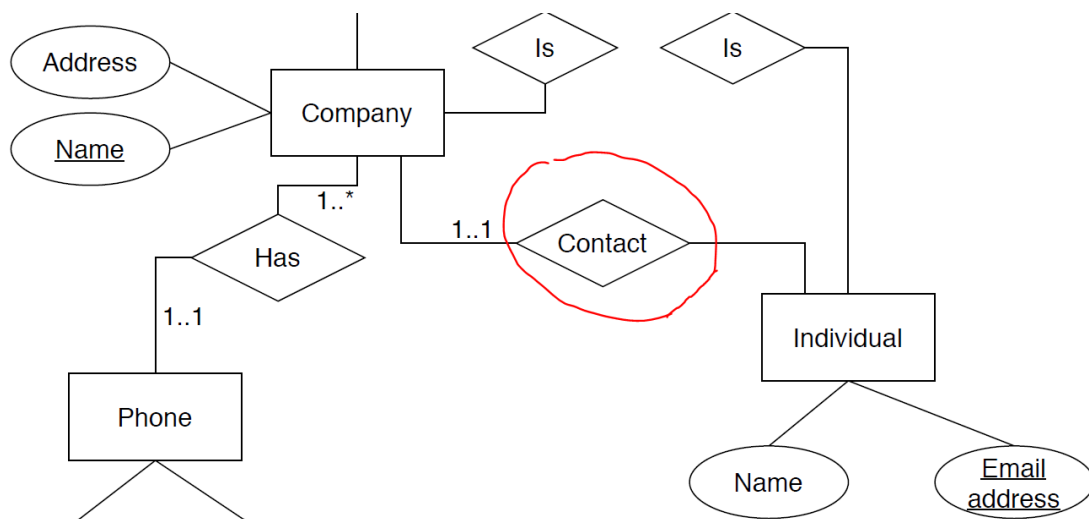


Figure 1. The contact relation between company and individual can not represent the “moonlight” constraint.