




RELATIONAL DATABASES

BSc IoT



Objectives

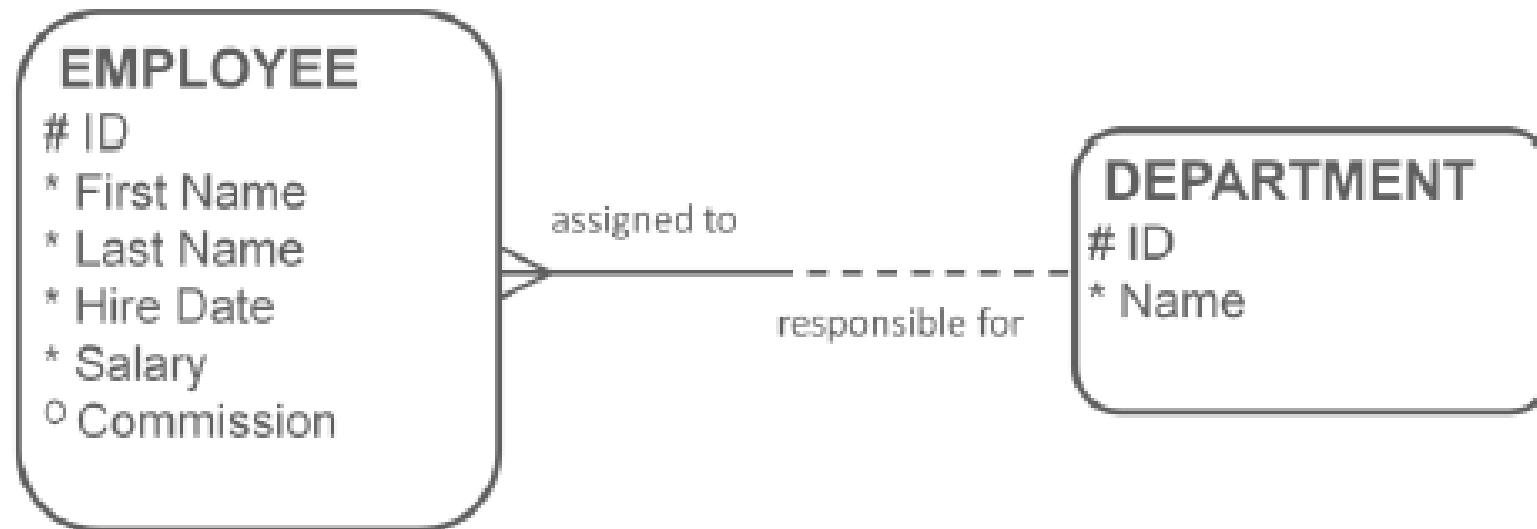
- Describe and give an example of relationship transferability
- Understand the difference between transferable and non-transferable relationships.
- Illustrate non-transferable relationships on ERDs

Purpose

- Once a class has been allocated to a teacher, can that class later be transferred to another teacher, possibly in mid-semester?
- Some health clubs allow membership to be transferred from one person to another.
- This business rule is normally determined by what is most efficient and most profitable for the business.

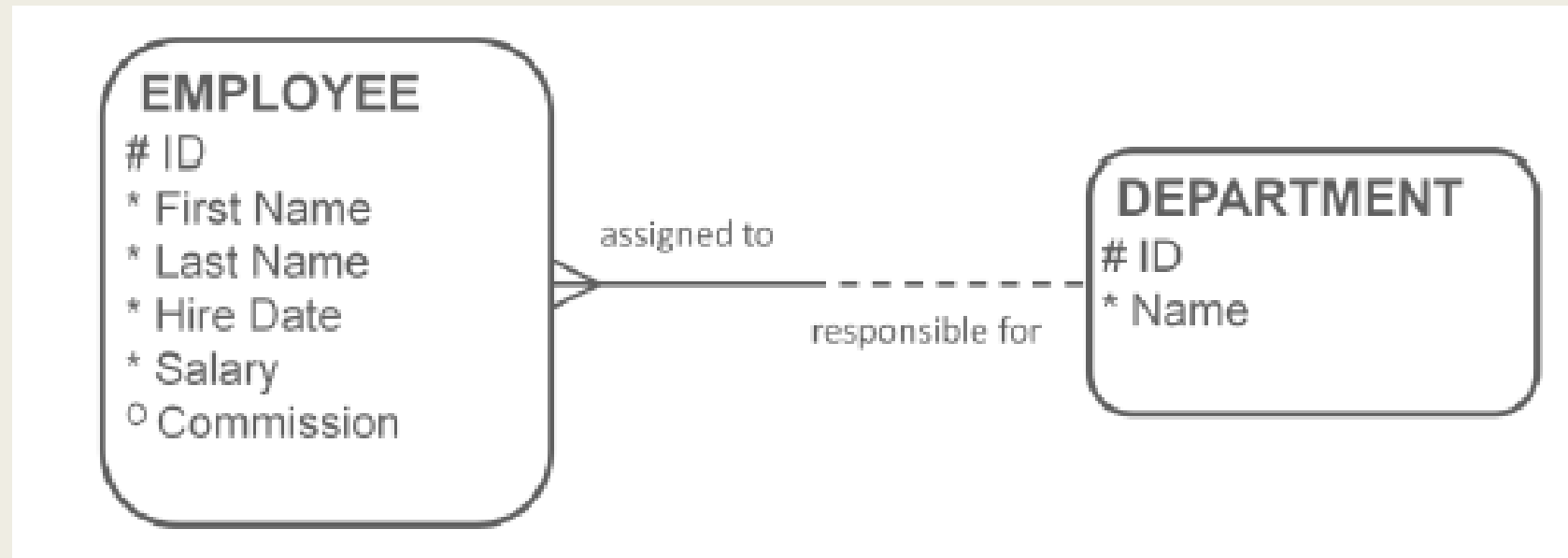
Relationship Review

- Must every EMPLOYEE be assigned to a DEPARTMENT?
- Must every DEPARTMENT be responsible for an EMPLOYEE?
- How many EMPLOYEEs can a DEPARTMENT be responsible for?
- How many DEPARTMENTs can an EMPLOYEE be assigned to?

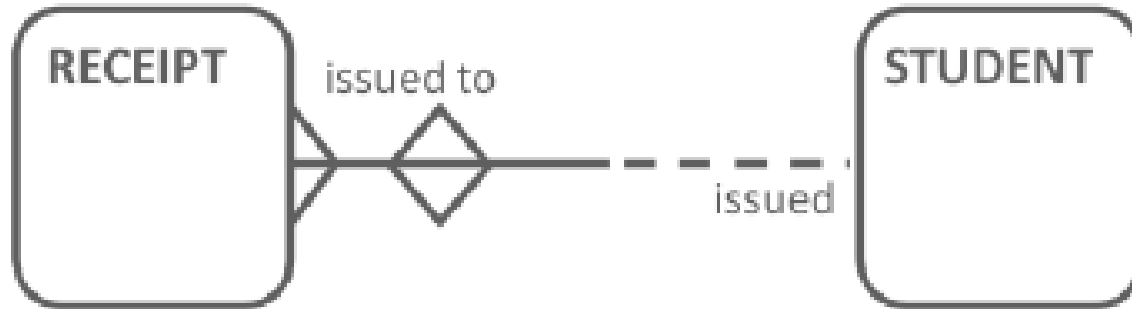


Relationship Review

- Transferability:
 - *Can an EMPLOYEE be transferred from one DEPARTMENT to another DEPARTMENT?*



Relationship Transferability



Nontransferable Relationship

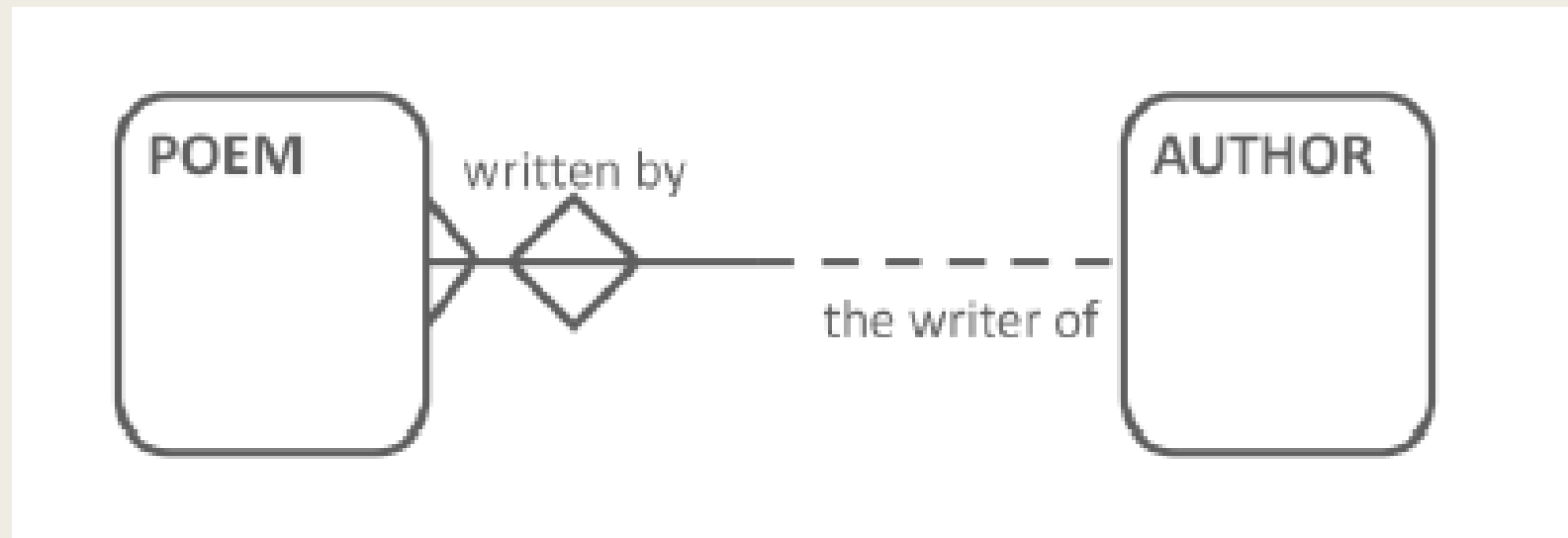
A nontransferable relationship is represented with the diamond on the relationship.

- A STUDENT can be issued a RECEIPT for paying tuition fees, repeat exam fees, buying a book. Once a RECEIPT has been issued, it cannot be transferred to another STUDENT.

The diamond is typically drawn on the “many” side of the relationship

Nontransferable Relationship

- Ownership of a POEM belongs with its AUTHOR. Authorship is a relationship that cannot be moved to another person.



Nontransferable Relationship

- A CHAPTER is contained in a BOOK and cannot be transferred to another BOOK

