



# ORACLE

## Academy



# Database Design

**5-1**

**Relationship Transferability**

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# Objectives

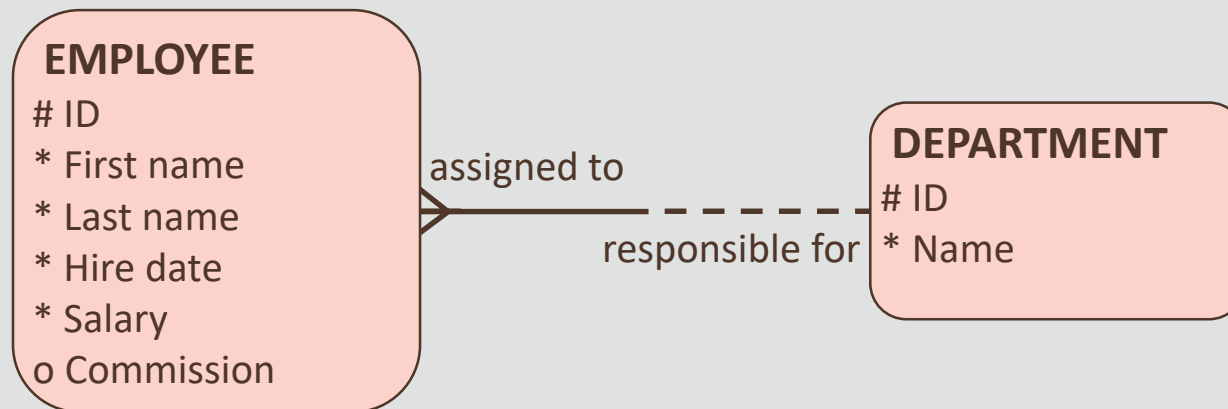
- This lesson covers the following objectives:
  - Describe and give an example of relationship transferability
  - Understand the difference between transferable and nontransferable relationships
  - Illustrate nontransferable relationships on ERDs

# Purpose

- Once a class has been allocated to a teacher, can that class later be transferred to another teacher, possibly in mid-semester?
- Usually yes, because if not, what would we do if the original teacher becomes sick?
- Some health clubs allow memberships to be transferred from one person to another, but other health clubs don't
- This business rule is normally determined by what is most efficient and most profitable for the club

# Relationship Review

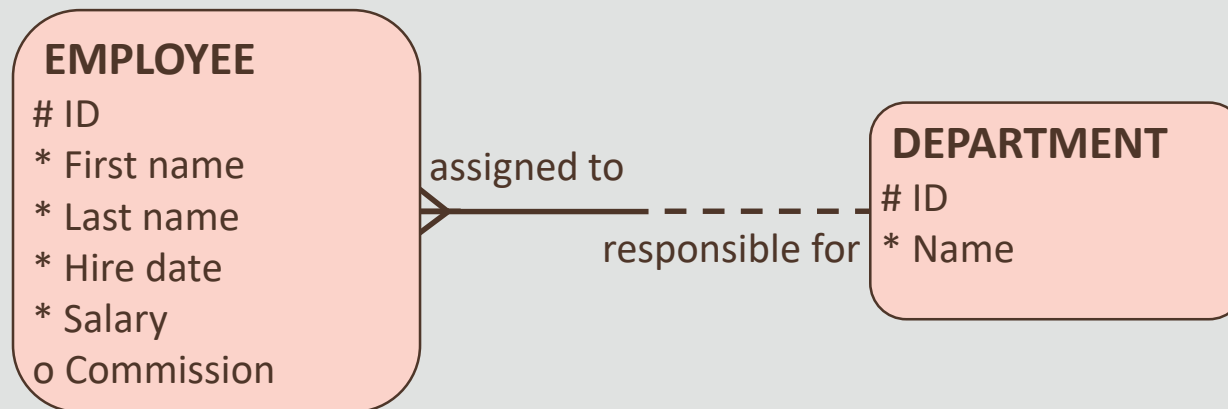
- Let's review a simple relationship between EMPLOYEE and DEPARTMENT
- Optionality:
  - Must every EMPLOYEE be assigned to a DEPARTMENT?
  - Must every DEPARTMENT be responsible for an employee?



# Relationship Review

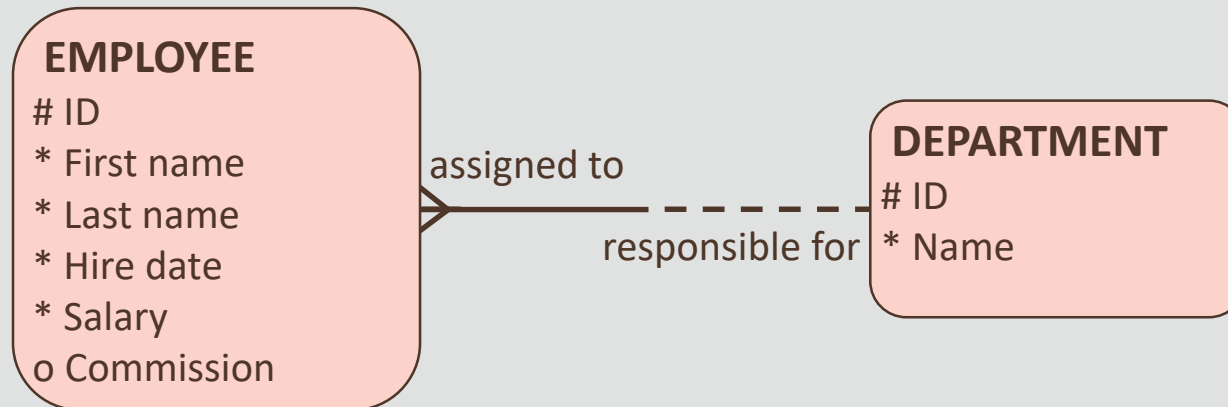
- Cardinality:

- How many EMPLOYEEs can a DEPARTMENT be responsible for?
- How many DEPARTMENTS can an EMPLOYEE be assigned to?



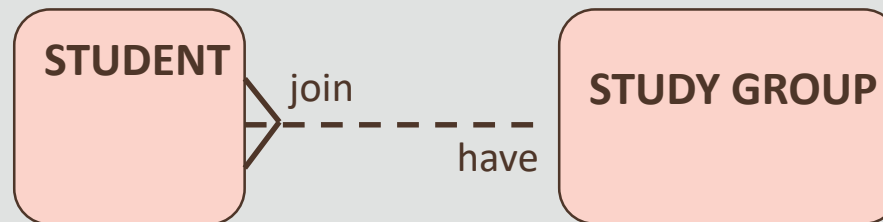
# Relationship Review

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



# Relationship Transferability

- Transferable: A STUDENT being allowed to move from one STUDY GROUP to another
- There is a relationship between STUDENT and STUDY GROUP that is transferable

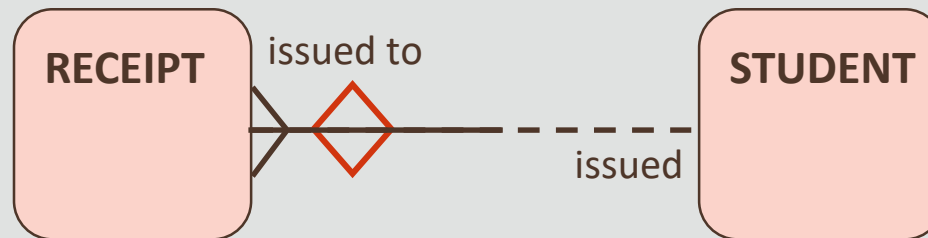


**Transferable Relationship**



# Relationship Transferability

- Nontransferable: A STUDENT can be issued a RECEIPT for paying tuition fees, taking a certification exam, or purchasing items at the bookstore
- Once a RECEIPT has been issued, it cannot be transferred to another STUDENT

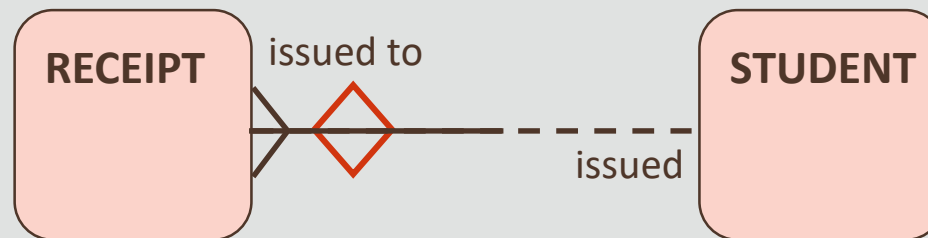


## Nontransferable Relationship

A nontransferable relationship is represented with the diamond on the relationship

# Relationship Transferability

- If it was issued in error, it would have to be cancelled, and another RECEIPT would have to be written up
- The relationship between STUDENT and RECEIPT is nontransferable

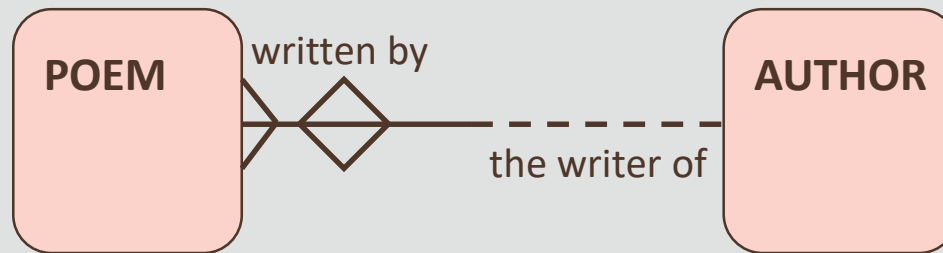


## Nontransferable Relationship

A nontransferable relationship is represented with the diamond on the relationship

# More Nontransferable Relationships

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



# Terminology

- Key terms used in this lesson included:
  - Nontransferable
  - Transferable

# Summary

- In this lesson, you should have learned how to:
  - Describe and give an example of relationship transferability
  - Understand the difference between transferable and nontransferable relationships
  - Illustrate nontransferable relationships on ERDs



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