Business School
UNIVERSITY OF COLORADO DENVER

Information Systems Program

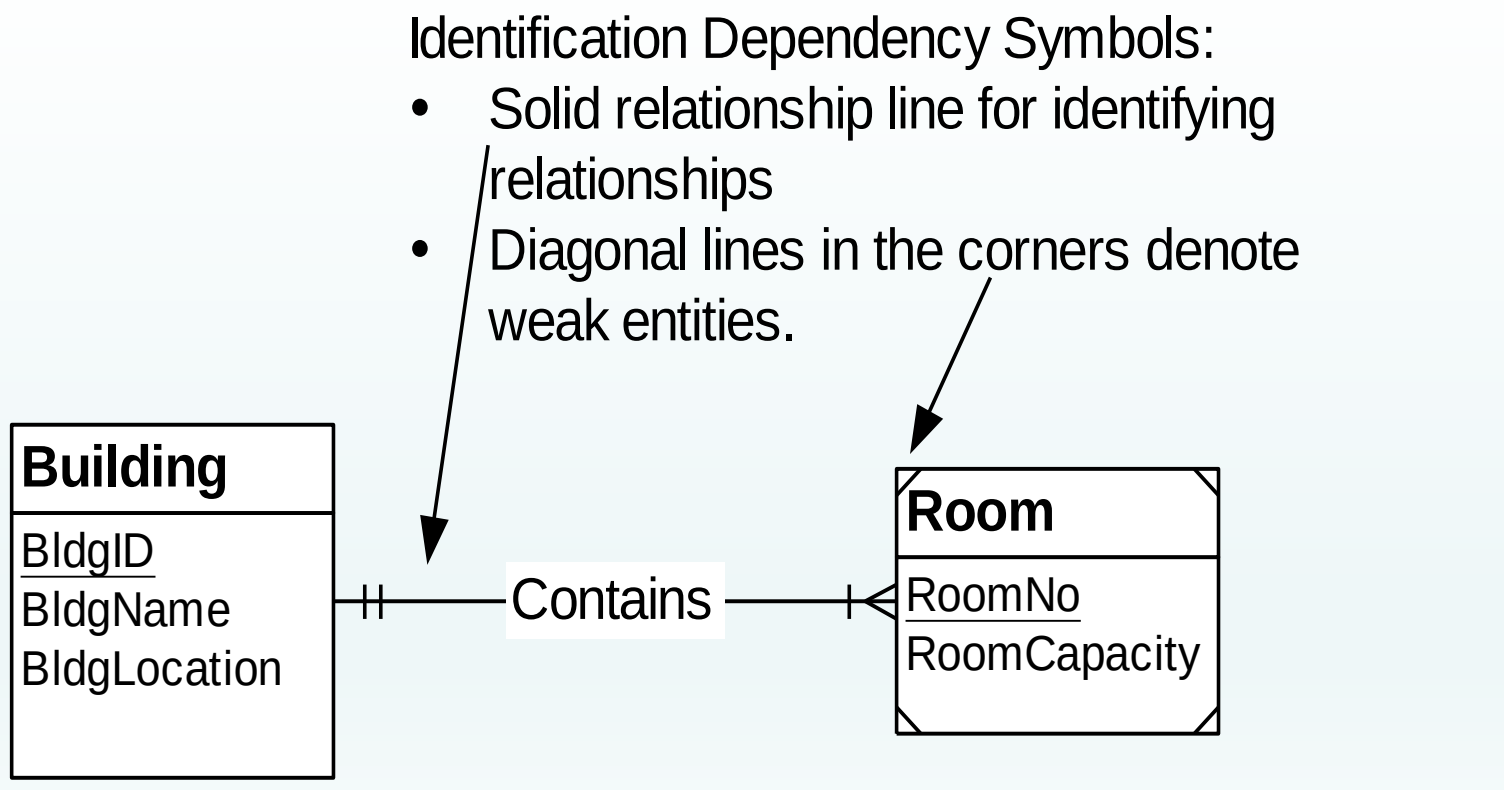
Module 6
Notation for Entity Relationship Diagrams

Part 3: Relationship Variations I

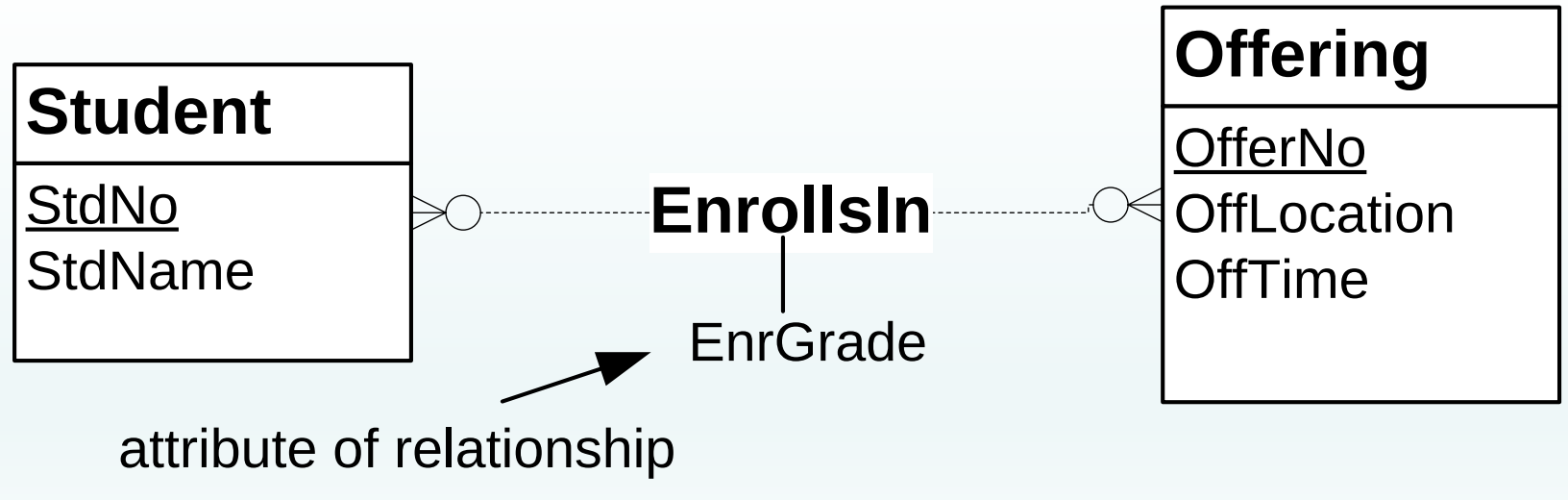
Lesson Objectives

- Explain an example involving identification dependency
- Apply relationship equivalency between M-N relationship and associative entity type
- Appreciate specialized relationships but resist temptation to overuse them

Identification Dependency

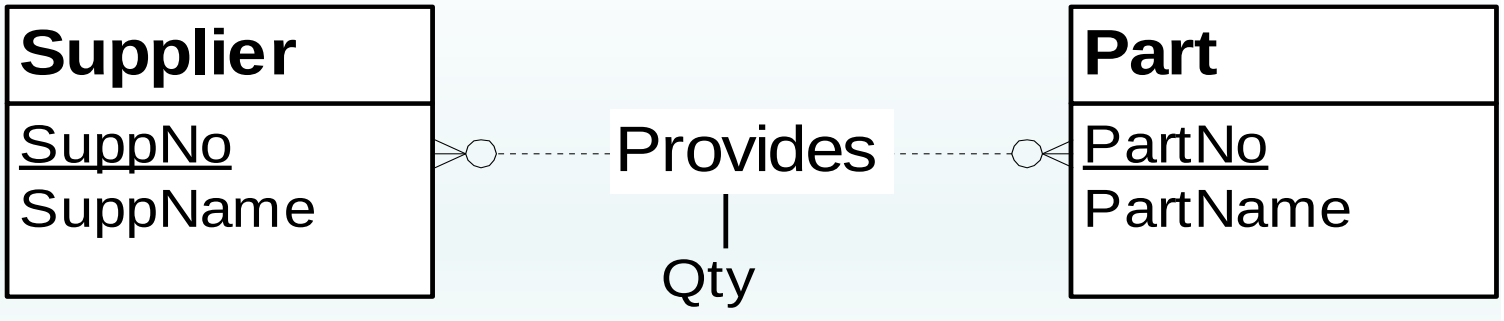


M-N Relationships with Attributes

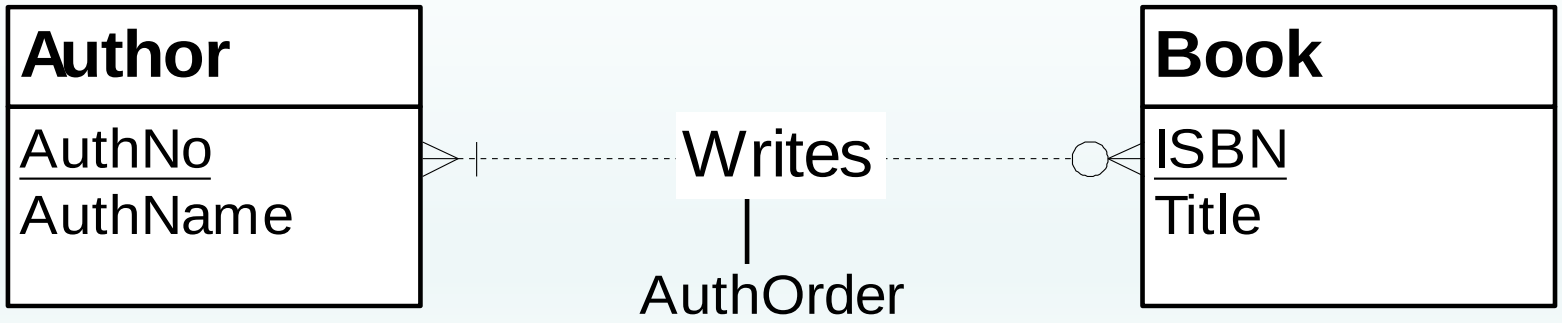


M-N Relationships with Attributes (II)

a) *Provides* relationship



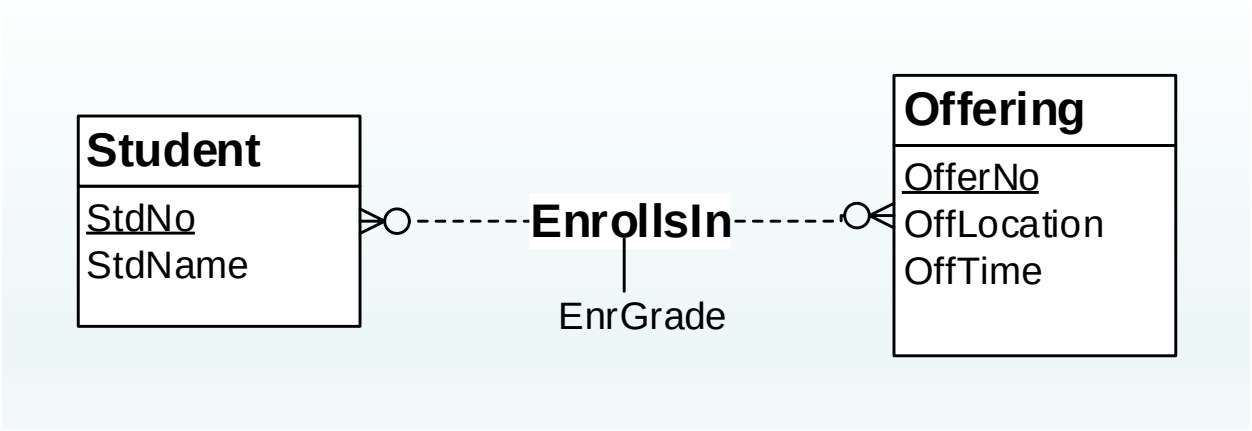
b) *Writes* relationship

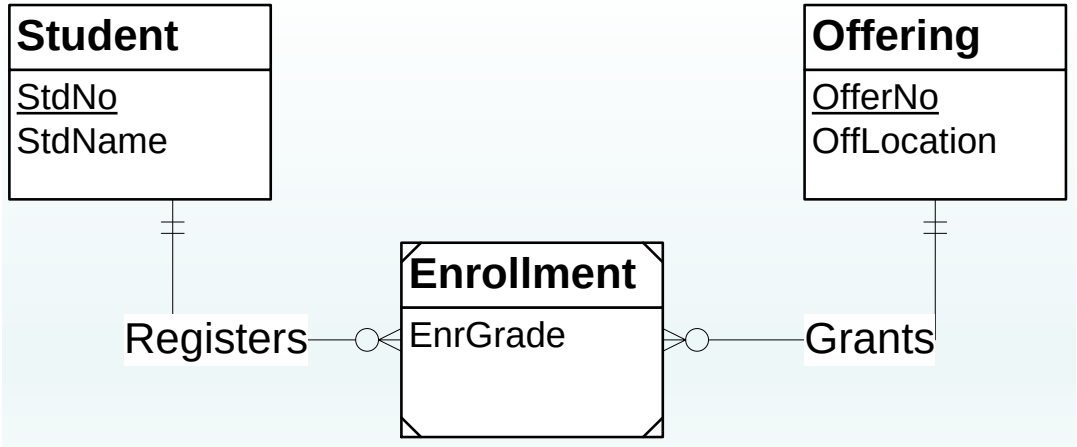


M-N Relationship Equivalency Rule

- Replace M-N relationship
  - Associative entity type
  - Two identifying 1-M relationships
- M-N relationship versus associative entity type
  - Largely preference
  - Associative entity type is more flexible in some situations

Relationship Equivalency Example





Summary

- Specialized relationships are not common but important when necessary
- Do not overuse specialized relationships
- Avoid notation errors with specialized relationships