



Business School  
UNIVERSITY OF COLORADO DENVER

Information Systems Program

# Module 7

## ERD Rules and Problem Solving

### Lesson 4: ERD Problems II

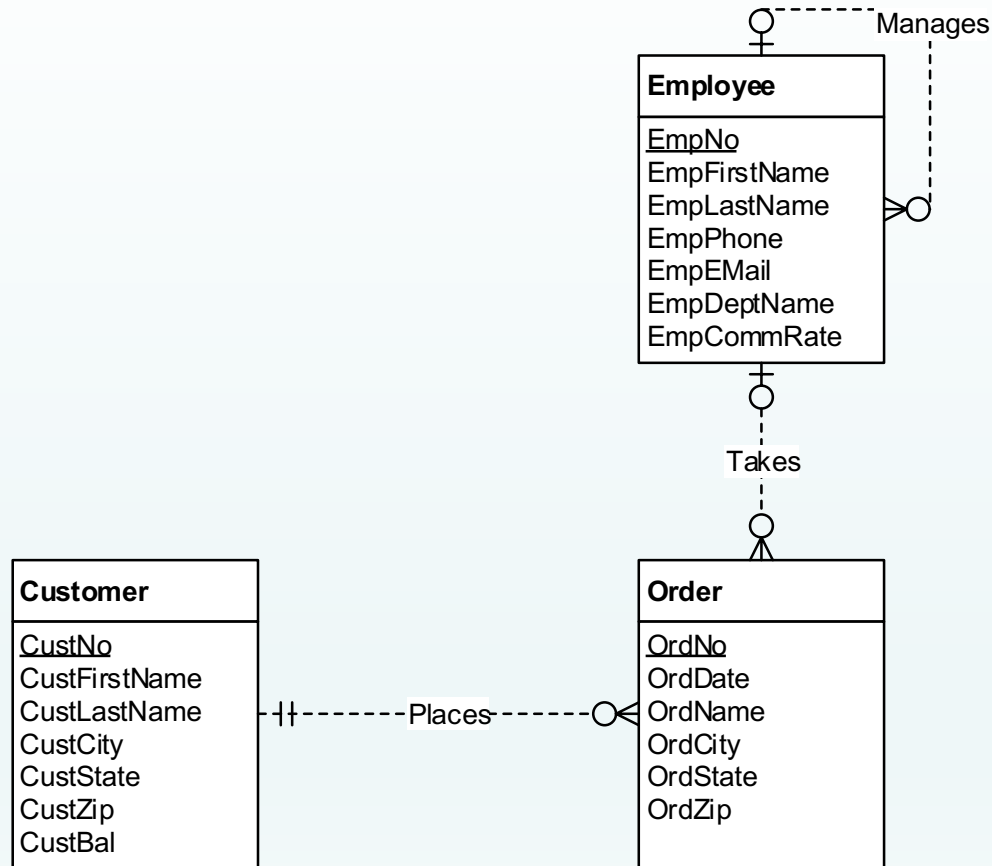


# Lesson Objectives

- Gain confidence to work assignment problems
- Work problems with M-N relationships, associative entity types, and diagram error detection
- Use the ER Assistant or another tool to draw ERDs

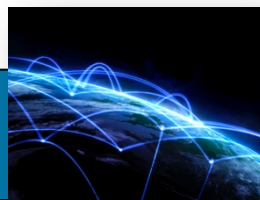


# ERD Notation Problem 2 Solution

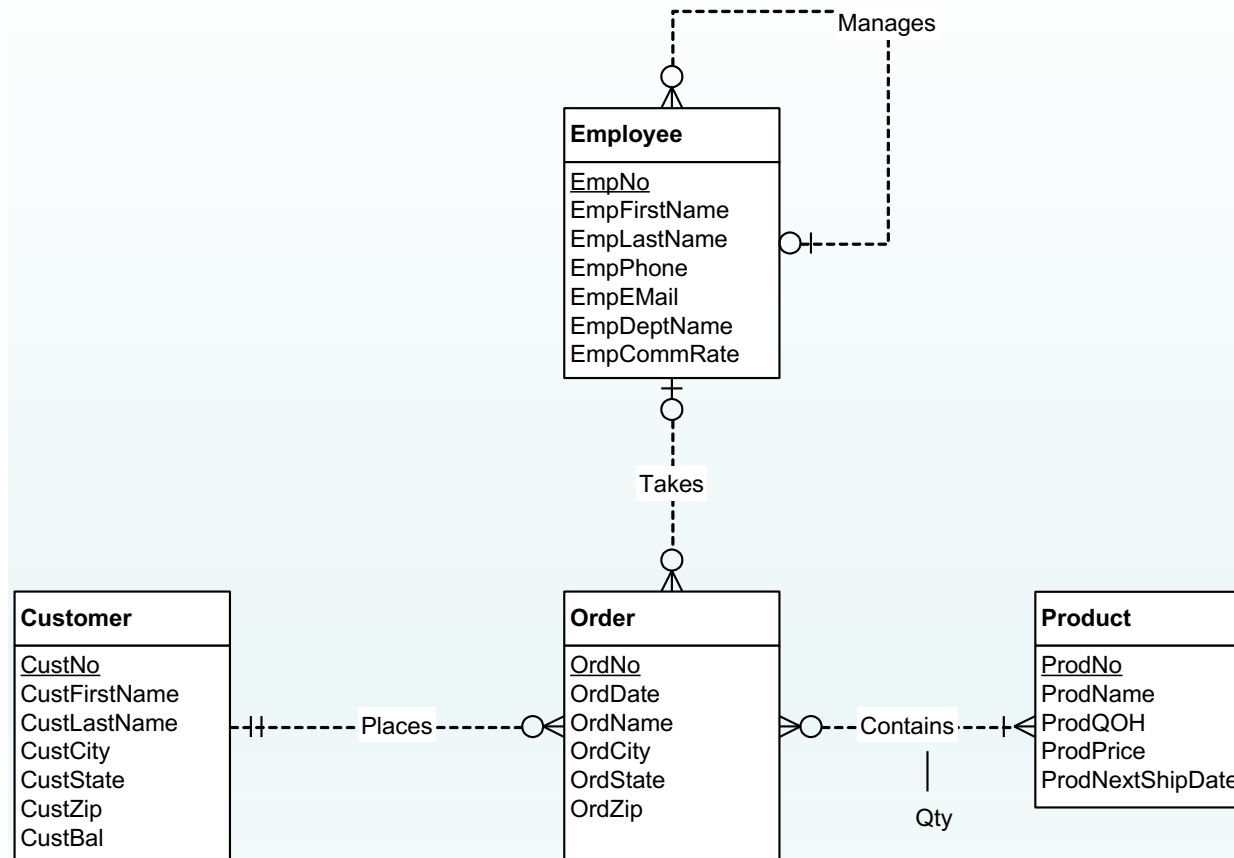


# ERD Notation Problem 3

- Product entity type
  - ProdNo (PK), ProdName, ProdQOH, ProdPrice, ProdNextShipDate
- M-N relationship between product and order with order quantity attribute
- Order optional for product
- Product mandatory for order



# ERD Notation Problem 3 Solution

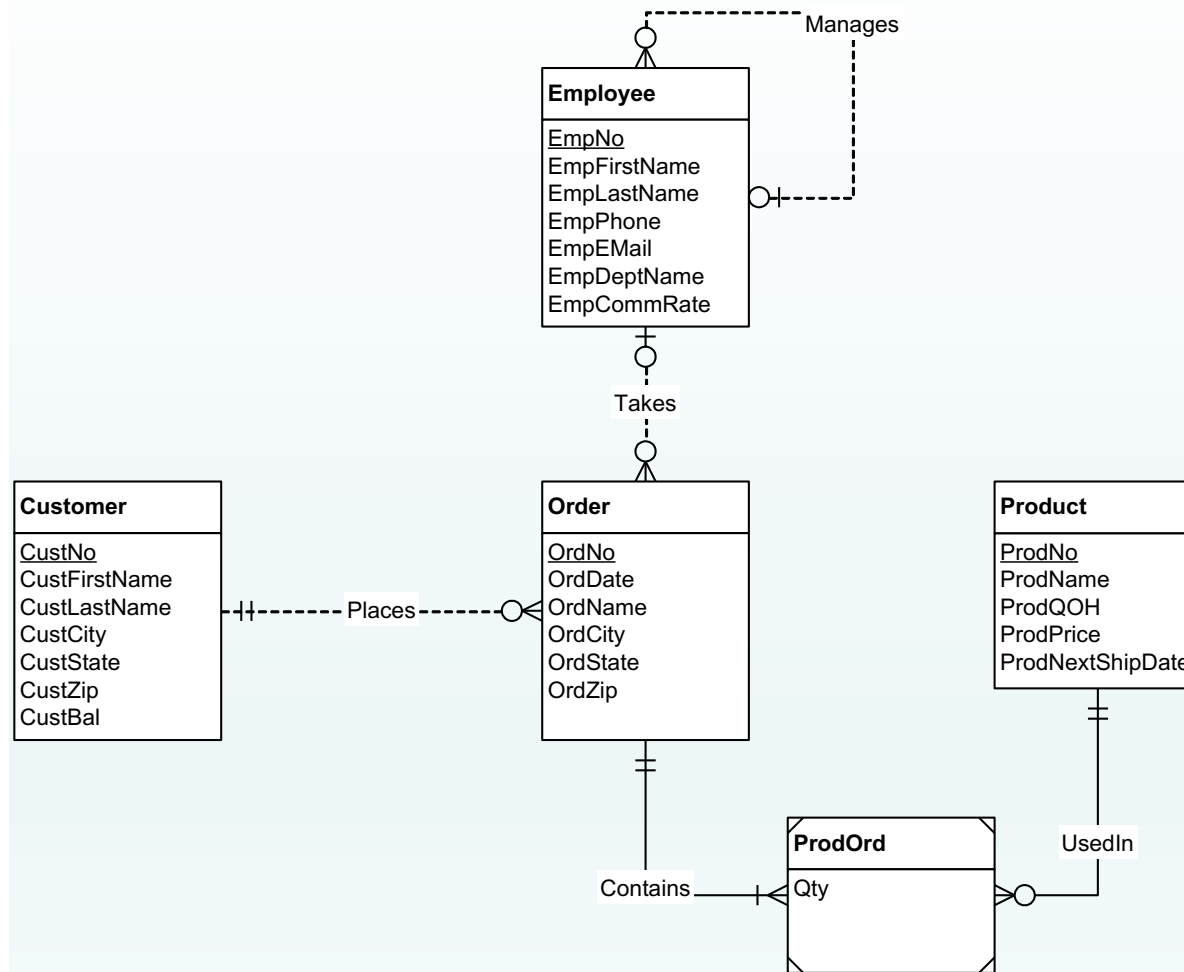


# ERD Problem 4

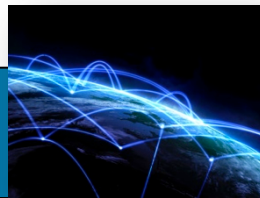
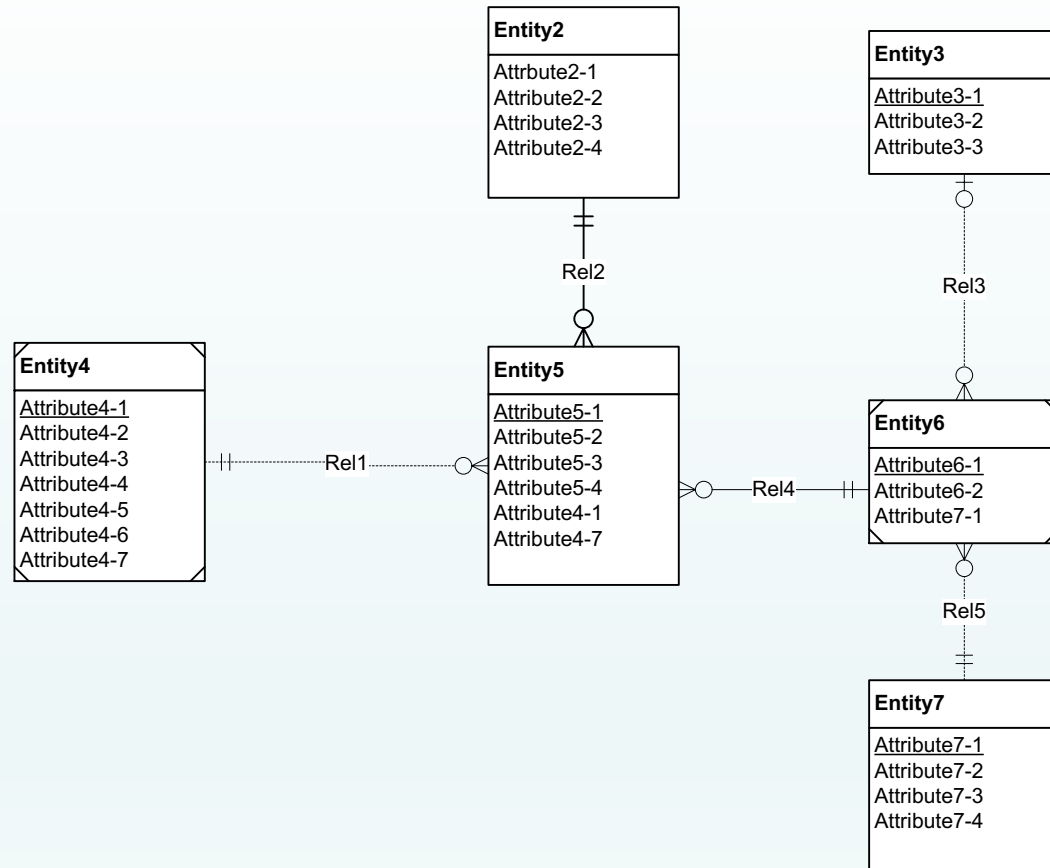
- Transform M-N relationship
- Associative entity type
- Two identifying, 1-M relationships



# ERD Notation Problem 4 Solution

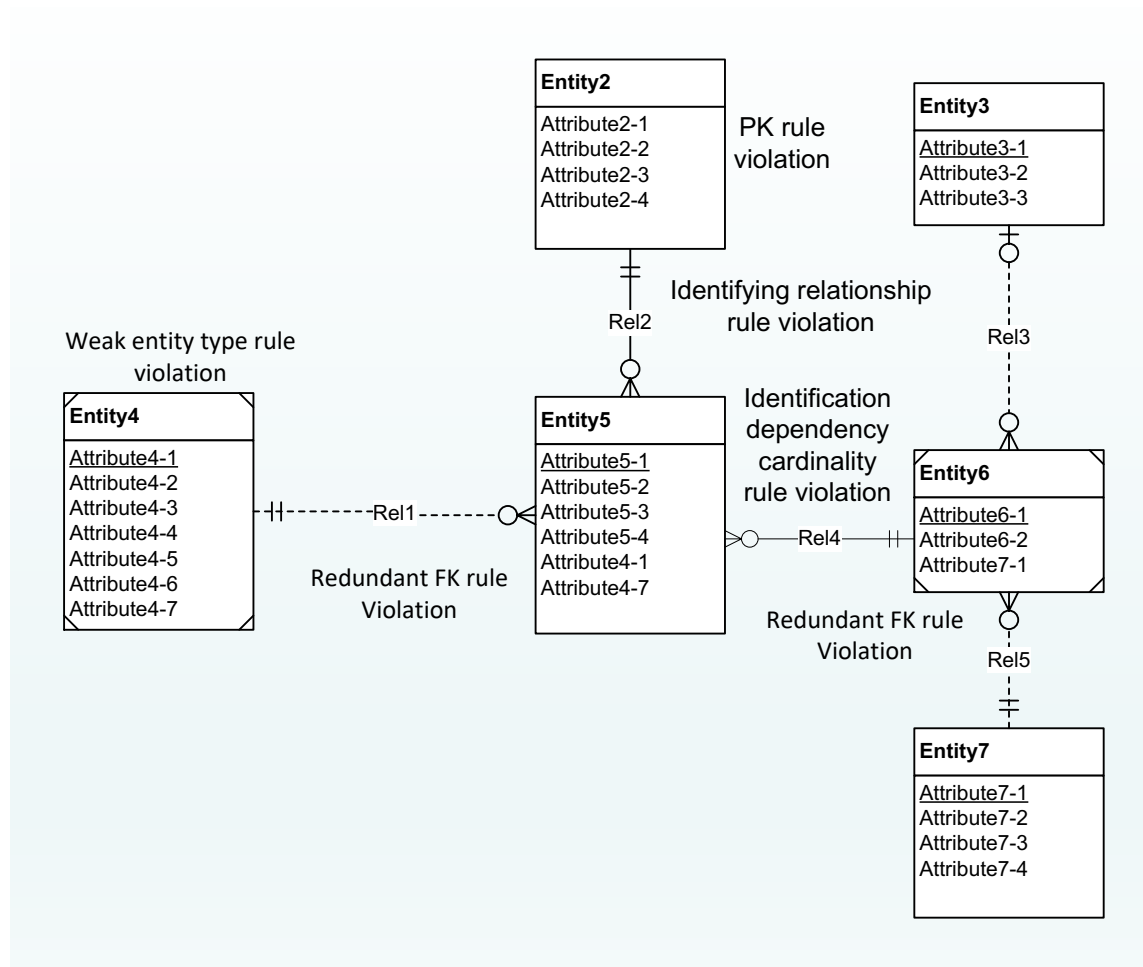


# Diagram Error Problem





# Diagram Error Problem Solution



# Summary

- Work problems to gain confidence with the Crow's Foot notation
- Identify and resolve diagram errors to avoid errors in business data modeling problems
- Use the ER Assistant for drawing and detection of notational errors
- Use Visual Paradigm for experience with a feature rich product
- Use notation precisely in business data modeling problems

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