



Business School
UNIVERSITY OF COLORADO DENVER

Information Systems Program

Module 7

ERD Rules and Problem Solving

Lesson 3: ERD Problems I



Lesson Objectives

- Gain confidence to work assignment problems
- Work problems with entity types and 1-M relationships
- Use the ER Assistant or another tool to draw ERDs

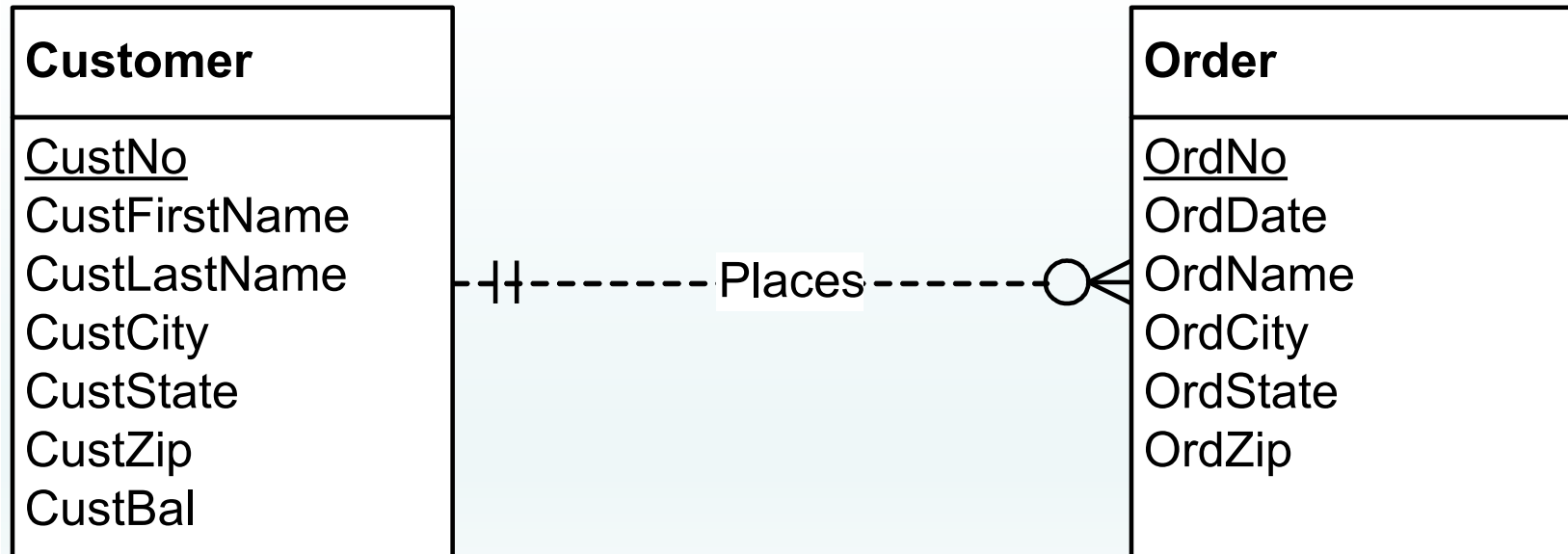


ERD Notation Problem 1

- Draw an ERD containing Order and Customer entity types
 - CustNo (PK), CustFirstName, CustLastName, address attributes, CustBal
 - OrdNo (PK), OrdDate, OrdName, address attributes
- Connect with a 1-M relationship
- Order optional for a customer
- Customer mandatory for an order

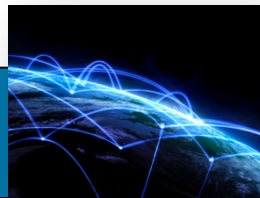


ERD Notation Problem 1 Solution

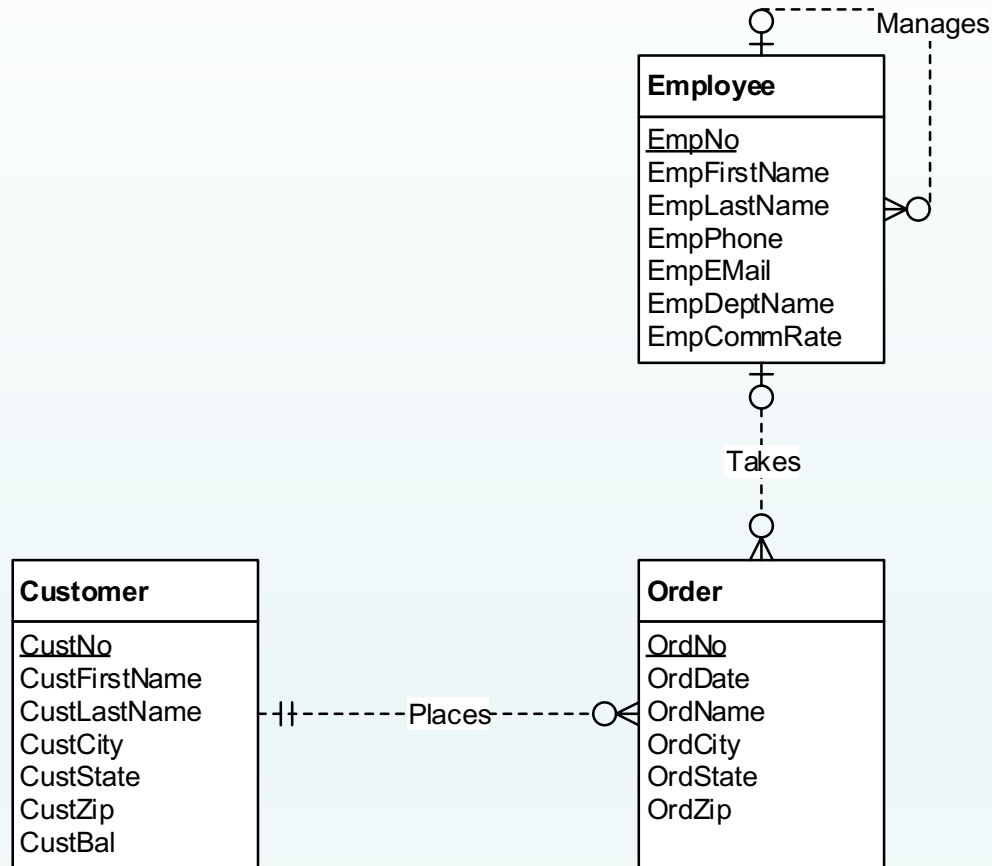


ERD Notation Problem 2

- Add employee entity type
 - EmpNo (PK), EmpFirstName, EmpLastName, EmpPhone, EmpEmail, EmpCommRate, EmpDeptName
- 1-M relationship from Employee to Order
- Employee optional to Order
- Employee not required to process any orders
- 1-M self-referencing relationship for employee, optional in both directions



ERD Notation Problem 2 Solution



Summary

- Work problems to gain confidence with the Crow's Foot notation
- Use the ER Assistant or Visual Paradigm for creating ERDs
- Use notation precisely in business data modeling problems

