

# Module 9 Data Modeling Problems and Design Errors

Lesson 2: Data Modeling Problems II



# Lesson Objectives

- Practice analyzing a complex narrative problem statement
- Extend data modeling skills
- Learn from mistakes





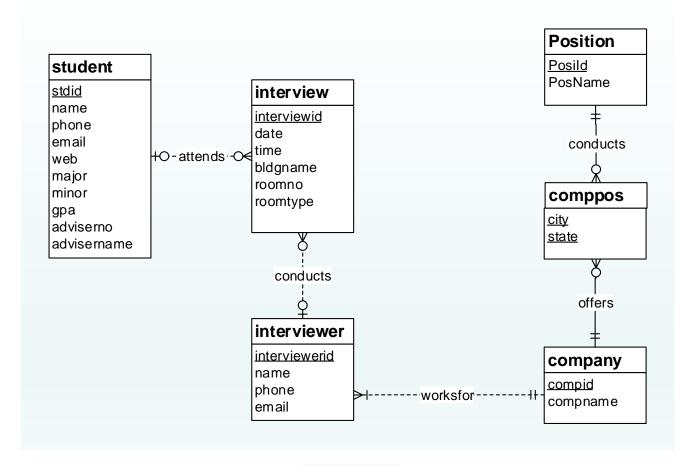
## Problem 1

- Placement office database for interview scheduling and searches
- Major nouns: student, position, company, interviewer, interview
- Connections in sentences
  - Interview includes a student and interviewer
  - List of positions and interviewers for a company
  - Company lists cities for each position.
  - Each interviewer works for a company.





## Problem 1 Initial Solution







## **Problem 1 Revision**

#### Positions

- Local to each company
- No standardized list of positions

#### Interview blocks

- Blocks of time for interviews
- Companies reserve interview blocks before placement office schedules interviews.

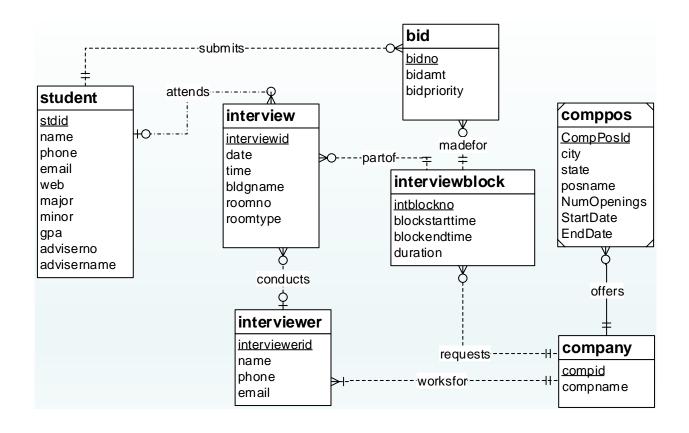
#### Bids

- Students can submit many bids for an interview blocks.
- Interview block can receive many bids.





## Problem 1 Revised Solution







## **Graded Problems**

- Similar to exercise problems
- Basic problems
  - Simple narratives
  - Incremental extensions
- Advanced problem
  - More complex narrative
  - Revision to narrative





# Summary

- Work problems to gain confidence analyzing requirements
- Focus on goals of narrative problem analysis especially on unstructured problem statements
- Use the ER Assistant or another tool for drawing ERDs
- Use notation precisely in business data modeling problems



