

COMP3311 Tutorial Week 3

Yifan He

Week 2 Summary

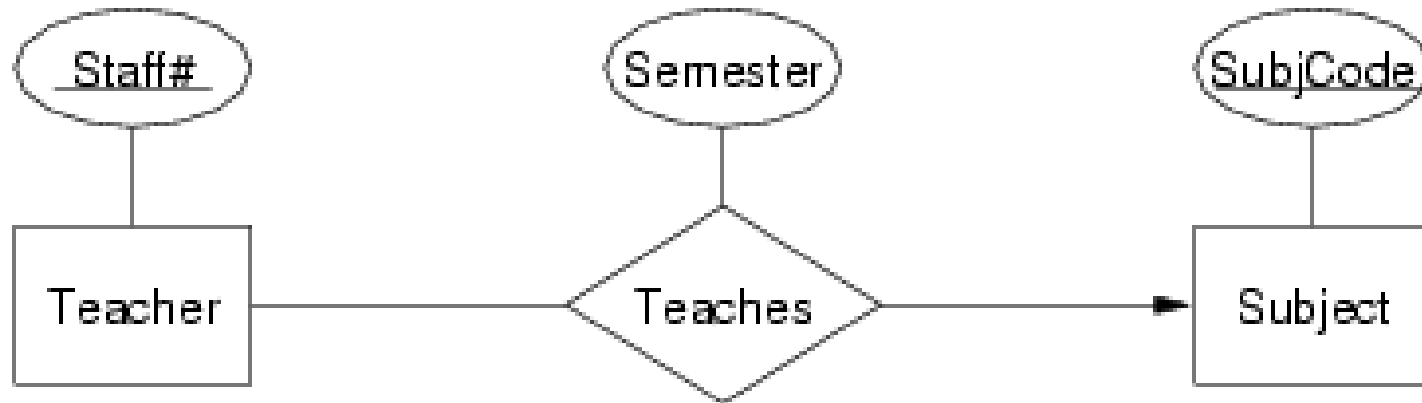
- Self check:
 - ER → SQL mapping
 - create table, insert, delete, update
- Due date: Quiz 2 (2%), Friday this week
- All code will be uploaded to
<https://github.com/hharryyf/COMP3311-23T1-Tutoring>

Today's plan

- ER → SQL mapping
 - Map relationship (n:n, 1:n, 1:1); Q2
 - Map hierarchy; Q4
 - Example: Q15
- Insert table with circular dependencies

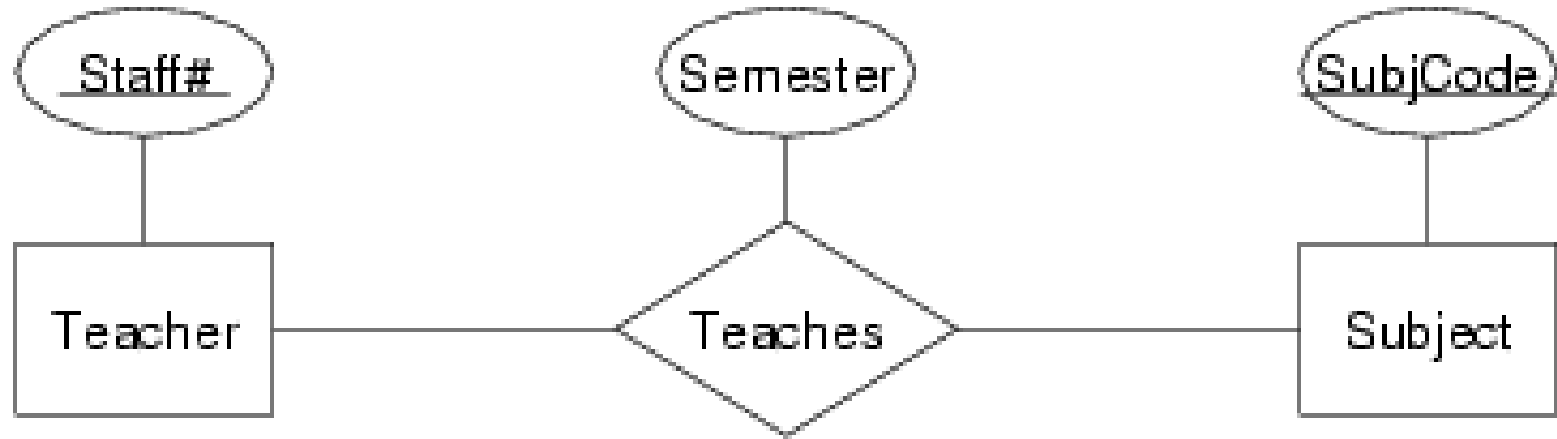
Q2 (1)

a.



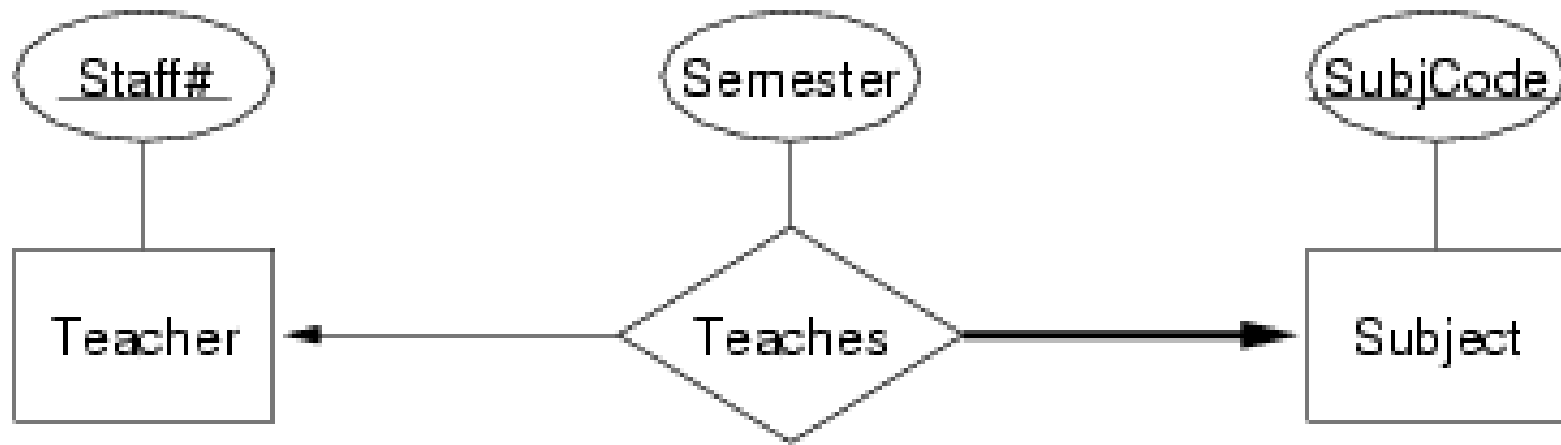
Q2 (2)

b.



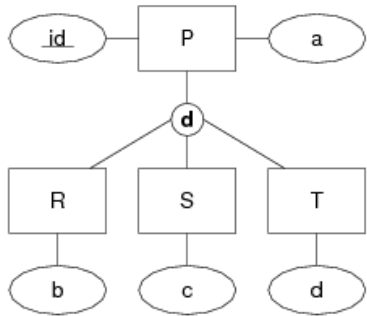
Q2 (3)

C.



Q4

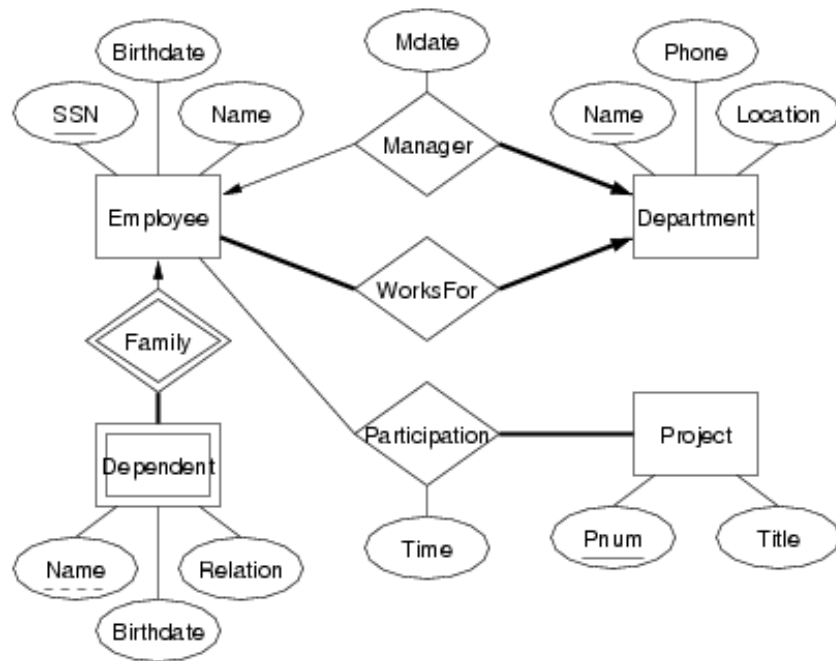
4. Now consider a variation on the above class hierarchy where the sub-classes are disjoint. Show the three possible mappings for the class hierarchy and discuss how effectively they represent the semantics of the disjoint sub-classes:



Use box-and-arrow diagrams for the relational models.

Q17

17. Convert the following ER design to relational form:



Which elements of the ER design do not appear in the relational version?

Q17 Remark

- The tables in Q17 can be created normally
- How can we insert any tuples into the following tables?

