

Week 3 - Q&A

Thursday, January 28, 2021

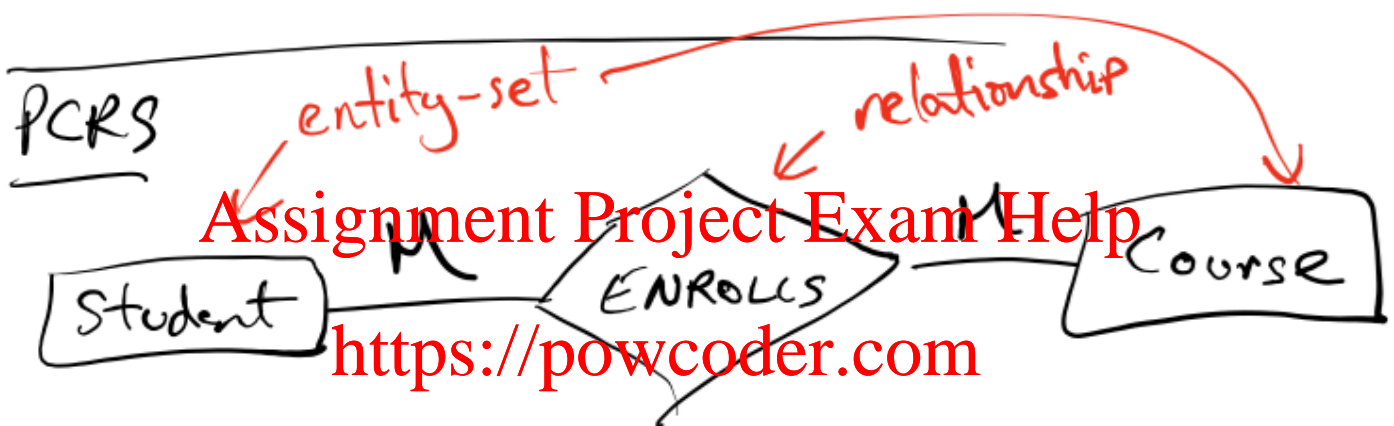
2:49 PM

- Hour 1: Q & A + Chats 3:10pm
- Hour 2: Synchronous Lesson/
Problem Solving 4:10pm

Interesting Read:

<https://news.microsoft.com/innovation-stories/project-natick-underwater-datacenter/>

Under-sea cabling: <https://www.submarinecablemap.com>



Given the ERD above, how many relations will there be? Answer: 3

Relation \equiv Table

↳ Student

↳ ENROLLS

↳ Course

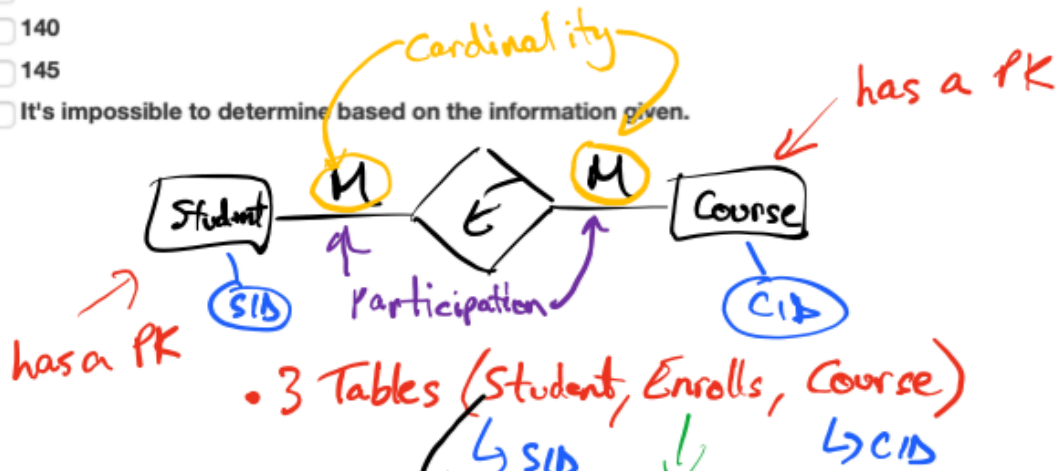
Part 3 of 3 (PCRS)

[Pause.Think. Answer]

"Multiplicity" → Participation (Total vs. partial)
→ Cardinality (How many connections)

Let's assume that there are 20 students, 35 instructors, and 4 courses populated into their respective relations. What are the possible number of entities that could exist in the relation "ENROLLS"? Assume that all participation is partial (i.e. all solid lines are now dashed).

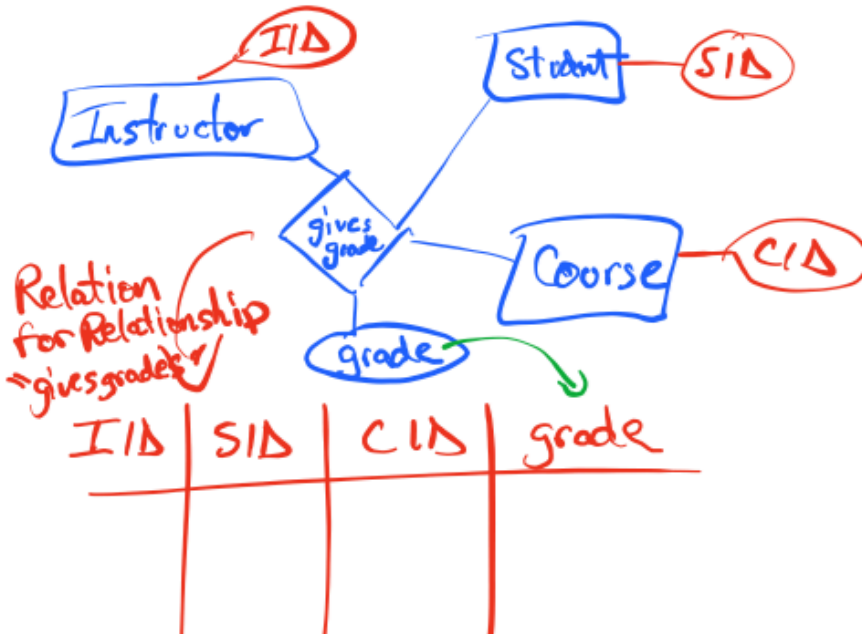
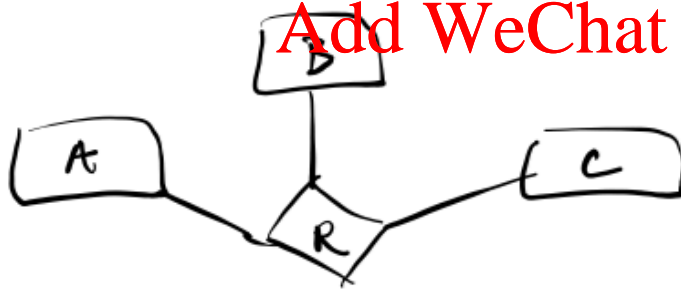
- ☐ 70
☐ 50
☐ 65
☐ 140
☐ 145
☐ It's impossible to determine based on the information given.



SID	Name ...	SID	CID
1	Joe	1	343
2	Joe	2	358
3	James	3	343
		1	358

Ternary Relationship

Add WeChat powcoder



Assignment Project Exam Help

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ERD Construction

You have been hired by **S.H.I.E.L.D.** as a Database Architect. Your task is to create a database which helps them in tracking known **Superheroes** and **Villains**. Create an ER Diagram (ERD) which satisfies the following requirements:

- SuperClass* → **Extraordinary Citizens** (Superheroes and Villains) have a **unique identifier (cid)**, a name, and an age, a place of birth and weight. *subclass*
- Superheroes are Extraordinary Citizens and we know *they've* how many people they saved as well as their last known city.
 - Villains are Extraordinary Citizens; ~~and~~ we know how many people they've killed as well as their imprisonment status.
 - Each Superhero and Villain can have multiple aliases.
 - Each Superhero and Villain can also have multiple archenemies.
 - Each Superhero and Villain has a power grid, which includes their:
 - Intelligence
 - Strength
 - Speed
 - Durability
 - Energy Projection
 - Fighting Skillall of which are rated on a scale from 0-10.

Be sure to use the notation document provided by your instructor!

