

CSE 370– Database Systems

Assignment 2

Fall 2024

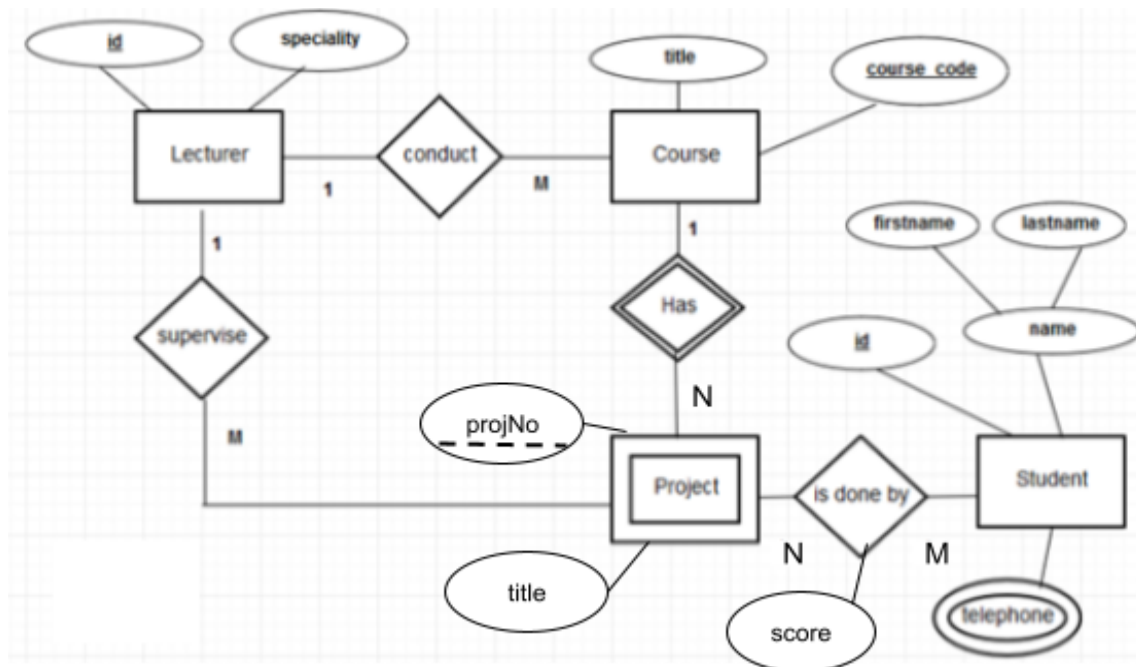
Submission Instructions:

1. Write your name, id, section on top of the first page
2. Your answer should be handwritten, take pictures and create a single pdf.
3. **Submit the pdf in the following form:** <https://forms.gle/EwfufEVe2qst89Pt7>
4. **Submission Deadline:** 11th December (Wednesday), 2024 11:59 pm (midnight)
5. **NO LATE SUBMISSION WILL BE ACCEPTED**

QUESTION 1

[8 Marks]

Construct a relational schema by mapping the following ER diagram.



QUESTION 2

There are Food Items with the following attributes: ID (unique), Name, Price, Description. The food Items can fall under any of the three categories: Indian Item, Japanese Item and Chinese Item. There are no other categories. Some food items are fusions, so they can fall under multiple

categories. Indian Items have an origin_state attribute, Japanese items have a calorie count attribute and Chinese Items have Chef's name attribute.

A. Represent the above scenario using an EER diagram. [2 Points]

B. There are four options for mapping specialization/generalization. Map the above EER using all four options. If any option is not applicable for the above scenario then explain why. [8 points]

QUESTION 3

[12 Marks]

Construct a relational schema by mapping the following EER diagram. For the specialization/generalization use any applicable option except option 8A (Separate tables for superclass and each subclass).

