

Project Phase 3

CS4.301 - Data and Applications (Monsoon '23)

Deadline: 11:59PM, Nov 12, 2023

Objective: Convert the ER model of your project mini-world to a relational model and iteratively normalize the database to reduce redundancy

You are required to submit a snapshot of the relational model at the following stages:

- After mapping ER to relational model
- Relational model after conversion to 1NF
- Relational model after conversion to 2NF
- Relational model after conversion to 3NF

If there is no need to convert to a certain normalized form, mention it in the submission document(and its justification). In such cases, you are not required to submit the snapshot for that stage.

Explanations:

You must provide concise explanations for each of the above stages. These explanations should contain information about the changes made to entity types to reflect the relational mapping.

Note that we do not expect explanations on the individual steps of the process.

Refer to chapters 9 and 14 for more information on mapping to relational models and normal forms, respectively. The textbook provides a detailed step-by-step process for conversion that would help greatly.

How to Draw?

You must draw your relational diagrams using any digital tool. Digital/hand drawn illustrations will not be accepted.

Submission Instructions:

Submit a PDF file named <team_number>.pdf (without < and >). The PDF must contain each of the submission requirements mentioned earlier. Ensure that each snapshot/image is on a separate page, preceded by an explanation (if necessary).

All the best!