

Homework 3

Read [Database Design and Implementation](#) (DDI) Chapter 3.
Take notes on the chapter. All quizzes are open-note.

Choose one of the Project-Based Exercises at the end of DDI Chapter 3 (Section 3.9, page 68) and write a Piazza post describing how the domain requirements impact database design. *Focus on just one sentence out of the domain requirements.*

For example:

3.25 Hospital database

“Patients are assigned a specific doctor that handles all of their hospital stays.”

We’re going to need a patients table and a doctors table. Since patients are assigned to a specific doctor for all hospital stays, there is a 1:M relationship between doctors and patients. (This assumes that doctors serve multiple patients.) Therefore, the patients table will need a foreign key to the doctors table.

We can infer a *weak-strong* relationship from this requirement: *strong* from patients to doctors, since it seems that every patient must participate in this relationship; and *weak* from doctors to patients, since the requirements do not state that all doctors must have patients. In ER lingo, we have *total participation* from patients to doctors.

Ideas to write about: tables/entities, relationships, attributes, constraints.

Alternatively, you may respond meaningfully to a fellow student’s answer such that you enhance, clarify or disagree what he or she has written.