

CS 166: Lab 3 Assignment

Relational Modeling

This assignment is to practice the relational modeling: convert an ER model into the Relational model for a specific database. The correct ER diagrams for the exercises from the previous lab are given to you and you should use them as a reference, when you are creating the relational model.

To do this assignment, you need to carefully read the lab notes and understand how different ER connectors are modeled in database. Please pay attention to those constraints in the ER model. When you finish, create a single “.sql” file containing all the SQL statements that will create all the tables for both of the two exercises. (Inside the “.sql” file, you can use “—” at the beginning of a line to add comments.) Make sure you sql script is “recreatable”, i.e. add “DROP TABLE” statements in the beginning of the script, so that PostgreSQL will not complain, when you will try to create the same table twice.

1. Use the entity-relational model created for Exercise 1 (University database) in the previous lab. Here **Figure 1** is a solution for this exercise. Construct a corresponding relational schema and database in Postgres.
2. Use the entity-relational model created for Exercise 2 (Notown Records) in the previous lab. Here **Figure 2** is a solution for this exercise. Construct a corresponding relational schema and database in Postgres.

Turn-in:

1. Submit a single .sql file containing all the SQL statements that will create all the tables for both of the two exercises.
2. Submit a PDF file containing the screenshot(s) of the output after executing the created .sql file (with all SQL statements).
3. Upload the .sql script file and the PDF file to eLearn (Canvas).

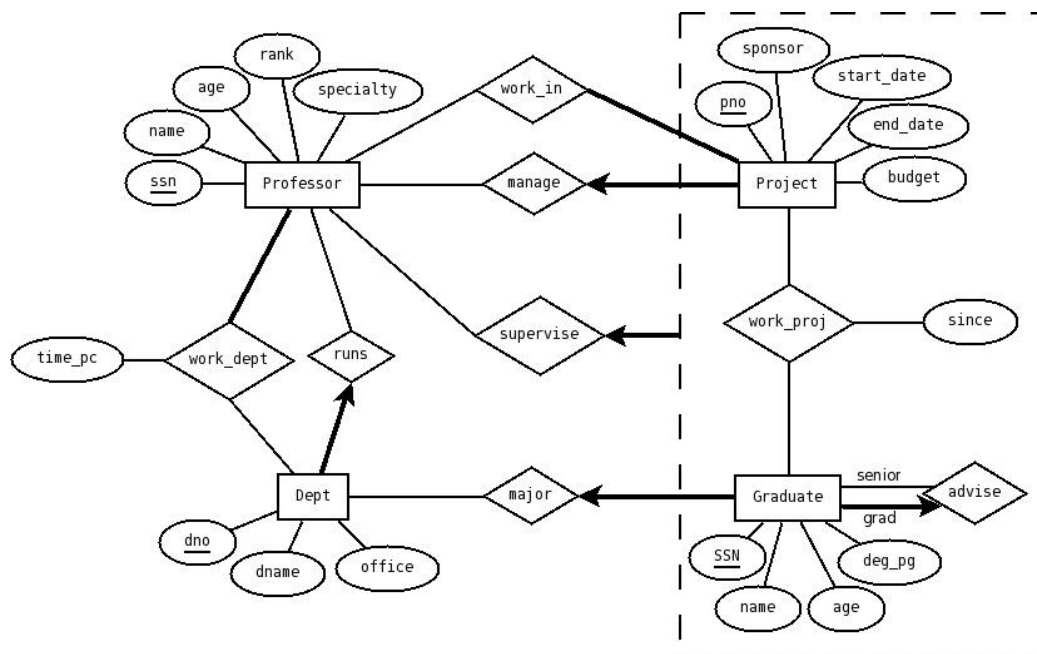


Figure 1: ER diagram of University database

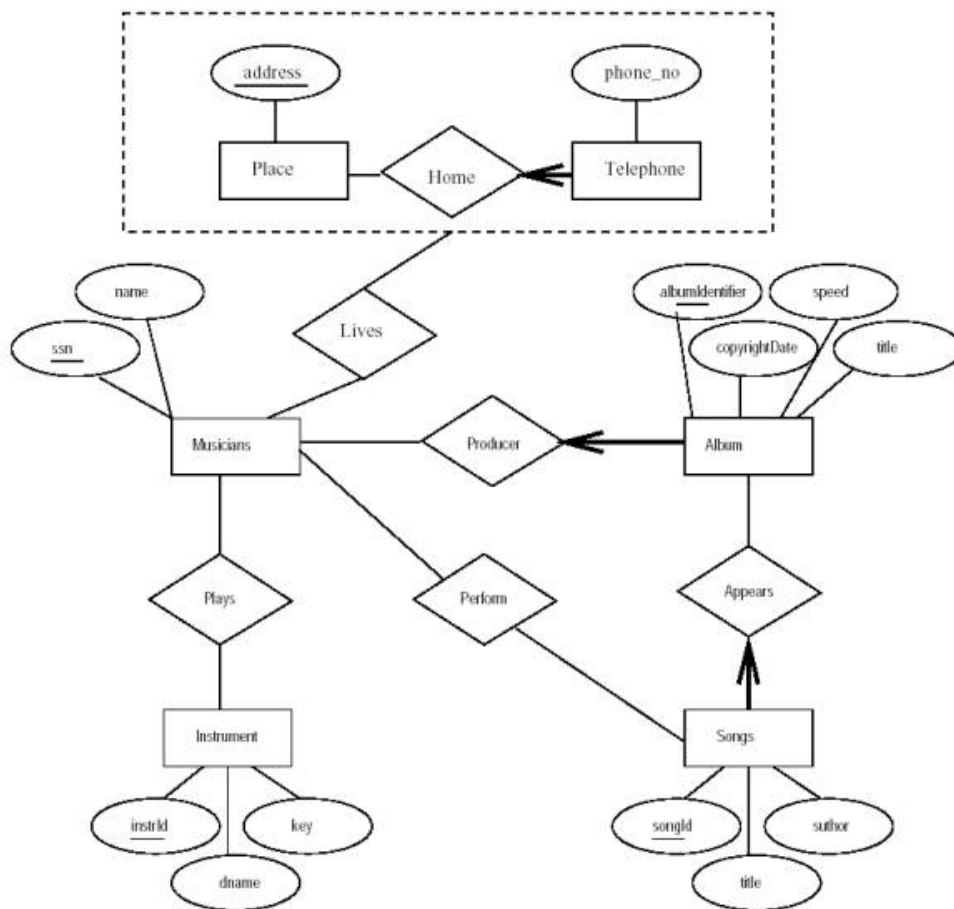


Figure 2: ER diagram of Notown Records