Practices for Lesson 15: Mapping Your Entity Relationship Diagram to a Relational Database Design

Chapter 15

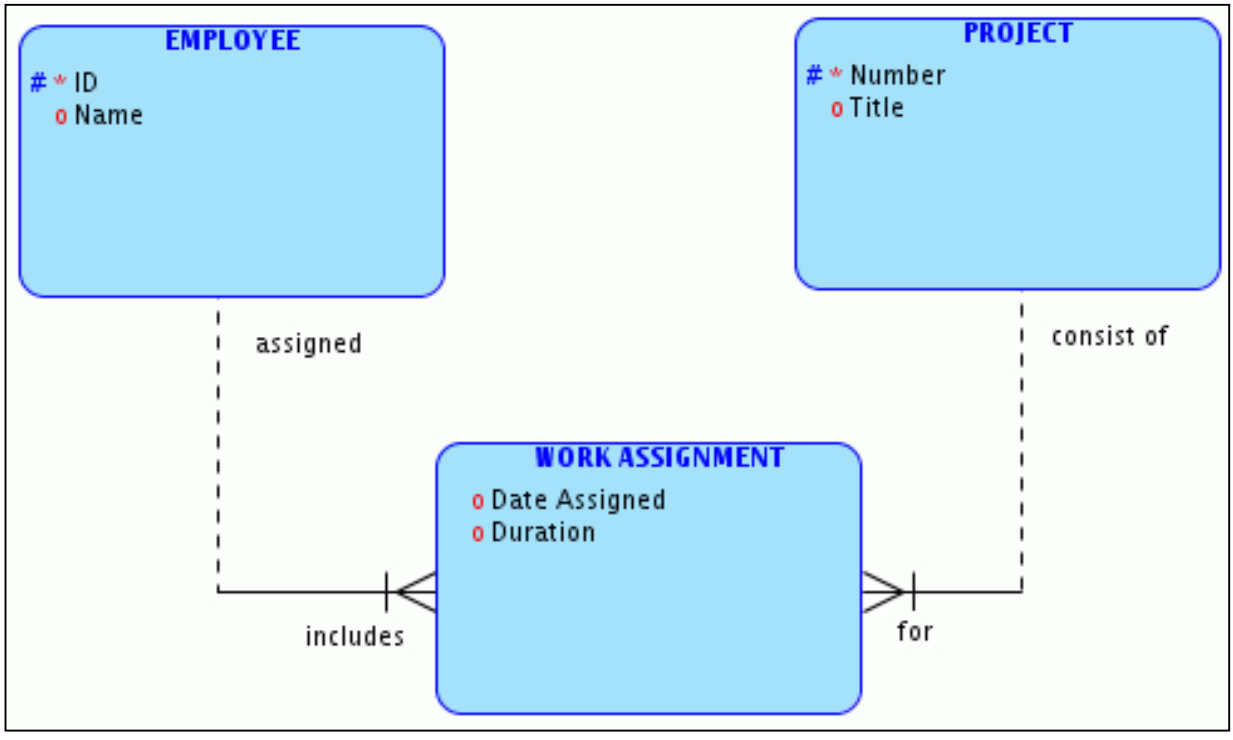
Practice 15-1: Create an Initial Relational Model

Task

For the following ERD, perform the following tasks:

1. Make sure that all attributes have a logical data type assigned.
2. Create a glossary with abbreviations for all the words in the model.
3. Associate the glossary with the model.
4. Add a short name and preferred abbreviation for each entity.
5. Run Design Rules to make sure that you do not have any errors. (Warnings are OK.)
6. Engineer the model to a relational model.
7. Change the Name template for primary keys and foreign keys to have `PK` and `FK`, respectively, as prefixes rather than suffixes.
8. Add a prefix called `OU_` for table names and apply it to the model.

Note: You can open `sol_12_01_a.dmd` as the starting point for this practice, or you can use your completed and saved work from practice 12-1. If the logical model is not displayed, right-click the **Logical** node under the `sol_12_01_a.dmd` node, and then select **Show** from the pop-up menu. The Logical design is displayed.



Practice 15-2: Forward-Engineer a Model

For the following ERD that you created in Practice 13-1, perform the following tasks:

1. Review the data types assigned to each attribute. Note that this is the same model that you created domains and a data type model for.
2. Run Design Rules to make sure that you do not have any errors. (Warnings are OK.)
3. Make sure that the FWD engineering strategy is set to Single Table for the entity type hierarchy.
4. Engineer the model to a relational model.
5. Review the results.
6. Create another relational model.
7. Change the engineering strategy for the entity type hierarchy to Table for each entity. Engineer the model again. What differences do you see?

Hint: Open `sol_13_01.dmd` as your starting point, or open the model that you created and completed in Practice 13-1. If your logical model is not displayed, right-click anywhere on the desktop in the **Logical** tab, and then select **Show** from the pop-up menu.