

CECS 323 LAB LIBRARY BOOKS

OBJECTIVE: Model our first many to many relationship.

INTRODUCTION: The local library wants to automate their antiquated card catalog system. The information that they have is:

- Publishers: Publisher name, address, phone.
- Author: Author name, current address.
- Catalog Item: Book title, publisher, genre, year published. For this exercise, let us assume that a given catalog item has one and only one publisher.
- Authorship: Priority of the author, role that the author played.
 - A given book can have more than one author, and, of course, a given author will often write many books.
 - Within the group of authors for a given book, **one** will be the primary, another the secondary, and so forth.
 - An author might have a role that they play. Some examples would be: chief researcher, illustrator, editor, tour planner.
 - A given author can fulfil more than one role on a given book, and a given role could apply to several authors within a given book.

PROCEDURE:

1. Model the above business rules in a UML class model.
 - a. Be careful about any alternate keys for the authorship.
2. Build the relation scheme diagram for the UML model.
3. Build the tables and populate them with data about three of your textbooks.
4. Write and execute a SQL query that joins all of your tables together.

WHAT TO TURN IN:

- Your UML diagram.
- Your Relation Scheme diagram.
- The DDL for your tables.
- The SQL for your join statement.
- The output from running your join statement.
- Your team's Collaboration document. You can find the template for that document on BeachBoard | Content | Student Helps | Lab Collaboration Document.