
LAB THREE

ERD CONSTRUCTION

CS1103, Winter 2021

LEARNING OUTCOMES

At the conclusion of the lab, students should be able to

- Interpret word problems describing information and relationships
- Identify the types of entities and relationships involved
- Create entity relationship diagrams for these simple situations

BACKGROUND

Lab Two introduced you to ER Diagramming and a generic tool for creating diagrams with the shapes to allow ER Diagramming. Most database management systems come with very specialized diagramming tools specific to their software, and MySQL is no different. MySQL Workbench is available on the lab machines and can produce very detailed diagrams that embed sufficient information to enable automatic generation of database structure. This week we'll focus on generating ERDs with the only the level of detail we've used so far.

EXERCISE

A library wants to build a simple online recommendation system for a summer reading programme. The system involves people reading and recommending books and authors.

- Readers (people) have a screen name as well as a real name and contact information, including phone numbers.
- Books have a title, ISBN, genre and reading level.
- An author has a name and nationality. They can write one or more books.
- Assume that Books are written by only one author.
- The database records what books a reader has read.
- Readers can “like” books.
- Readers can “like” authors independent of the books the author has written.

Using MySQL Workbench, create an entity relationship diagram describing this circumstance for a database designer.

SUBMISSION

Before 4:30pm on the day after this lab, students should submit online to the lms

- The word-processor report as a pdf file, containing the ERD image and any other requested information.