

Task of the week: Design the database architecture. Database stores all the information of the bookclub management system web application.

Tool User for the purpose: MySQL Workbench Community Edition is a free visual database design tool that works with only MySQL Community Edition. It does much more than just diagramming, including the ability to monitor database performance and create SQL queries.

Identifying the master data tables: I've gone through the application requirements which has lots of data to store in the database related to the books and students and their transactions. I've identified some repeatable data in the student, books main data tables. To avoid repetition I've made them the master data tables like gender, majors, classes, semester, book categories etc.

Finally ER Diagram: I've design the complete backend architecture. Identified data tables and master tables and segregated them and made relational model to store and retrieve data from the database easily and smoothly. The below given diagram is the backend of my bookclub management system web application.

