Project

Design a database for Library Management System,

1) **Finish the design report, which contains: conceptual modeling (using the ER model), schema design, constraints on table, etc.**

2) **Build the database by establishing the tables and input data.**

Database Description:

- This is a comprehensive university that offers multiple degrees. The students include vocational student, college students, and graduate students. The library provides book loans for all the students and staff in the university.

- According to the categories of the books (books in English, books in foreign languages, new books), the library classifies the book loans into several different types: loans of English books, loans of foreign books, and short loans (for new books).

- All books borrowed from a library must be returned before due date. If failed to return the books on time, the borrower has to pay fines according to following rules:

    1. English books: $0.2 each book per day.

    2. New books and foreign books: $0.5 each book per day

3. Before returning the overdue books and paying the fines, a borrower cannot borrow books any more, nor renew any book.

- Each borrower has its own ID, also, the name, gender, type (student/staff/faculty), department, email, etc. should be recorded.

- The library is in charge of cataloging and building the database for all books. For each book, its basic information like name, authors, ISBN, publish press, publish date, number of words, price, brief introduction for the book, catalog number, etc. should be recorded.

- The university contains three campuses, and the books are stored in three branch libraries. Branch A (Focusing on Business and Management), Branch B (Focusing on Science and Technology), and Branch C (Focusing on Law, Arts and Literature). The library may buy multiple copies of a same book and distribute the copies into different branches. The borrowers can borrow a book from any of the three branches.