Assignment 1: E-R Modelling (5% of grade)

Due: Monday, February 2, 2026 on or before 11:59 PM

You will choose to do this assignment in groups of two or three. Your group must submit a single file through D2L and ensure ALL your names are included on the cover page of the assignment AT THE TIME OF SUBMISSION.

In this assignment, you will create a conceptual data model for a social media site called BookClub. Your model will consist of an ERD together with supporting notes and any assumptions that you needed to make during the modelling process.

BookClub - Never miss a reading group meeting.

BookClub provides an online environment for users to network, share, and discuss books with their friends.

Through discussions with BookClub's founders, the following requirements have emerged.

- The site should have a large number of books on file, so before the site goes live, a large database of books should be added. After start-up, users would be able choose a book from the existing list or add their own books if the book they have read is not listed.

- Books are often available in multiple editions. It is important that all are included in the database. All books have a title, copyright year, and possibly multiple authors. Each book may also have various editions. An edition has a date, a publisher, an ISBN, and a type (hardcover, trade paperback, and so on).

- When a user reads a book, they note the date read, give it a ranking (1-10), and optionally assign it to a virtual "shelf". A shelf can be anything that a user wants, usually these are things like: fiction, non-fiction, history, computers, etc.

- After the site has been running for a while, books will have a ranking --- the average of all the rankings that users have given the book, and it will have been placed on several shelves by one or more users.

- Users sign up for the site using an email to identify them.

- Users can add a profile consisting of a descriptive paragraph and an avatar image.

- Users create a network of friends (their book club).

- Users should be able to search for books by title, year, author, and shelf.

- Users should be able to look at the list of books another user has read only if they are friends.

- Users can add "reviews" for the books they have read. A review consists of the date of the review and a block of text.

- Users can "like" other users' reviews. The total number of likes will be displayed along with the review.

- When a book and its reviews are displayed, it should be possible to display the reviews for a book in a variety of orders:
    a. chronological (oldest to newest and newest to oldest);
    b. by likes (most to least, least to most);
    c. by number of comments (replies) (most to least, least to most).

- Users can comment on reviews (even their own). In addition, a user can comment on a comment. When displaying the comments, you will need to be able to recreate the thread.

Submission:

- Your submission will consist of a single document, *.PDF, consisting of:
  a. A title page with all the names (both last and first names) of students who contributed to the assignment, and the date of submission.
  b. Your conceptual model consisting of an ERD (e.g. PNG exported from Gliffy or LucidChart, draw.io, or any other comparable tool that is used for such diagrams) and a set of notes and assumptions to support your diagram.

- Your file should be submitted through the D2L submission box. Email attachments are NOT valid submissions.
  ONLY ONE STUDENT NEEDS TO SUBMIT THE WORK. ALL NAMES OF STUDENTS WHO CONTRIBUTED TO THE ASSIGNMENT TO BE INCLUDED AT THE TIME OF SUBMISSION.