CPSC 321 Web Application

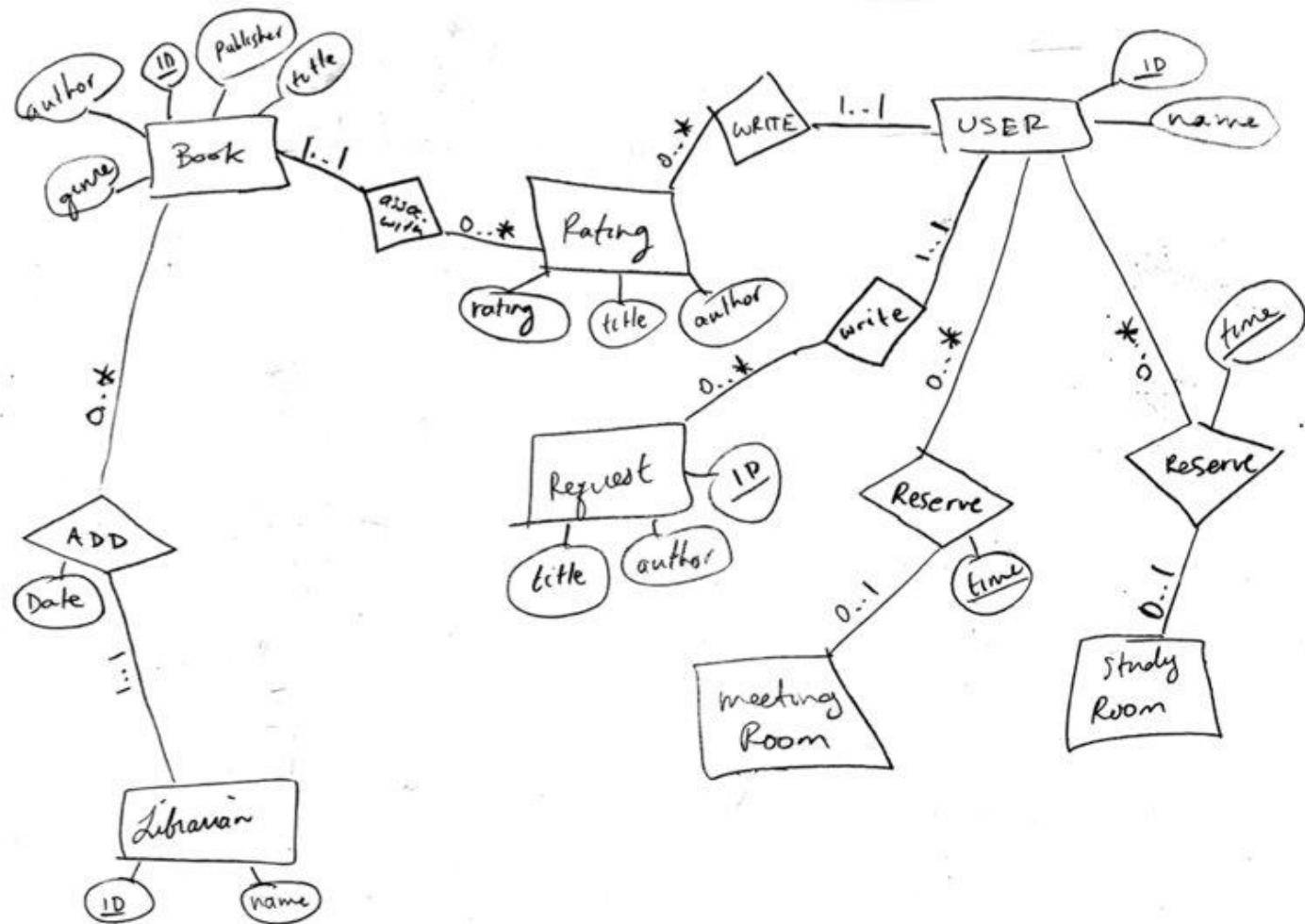Aidan Lewis

JR Palmer

Goals

Users

- Create account
- Browse books
- Request books
- Leave ratings
- Reserve meeting/reading rooms

Librarians

- Review requests
- Add books
- Delete requests
- Free up reservation times
- Delete books

Technology

- Back end: MySQL on Gonzaga MariaDB

- Front end:

  - Structure: HTML

  - Connecting to DBMS: PHP

- Ran using Gonzaga Barney server

Note:
Not all privileges/functions are represented in the ER diagram.

- Librarian remove book
- Librarian remove request
- All times table
- Ratings VIEW

Queries

SELECT start_time, end_time

FROM AllTimes

WHERE start_time NOT IN

                (SELECT reserve_time FROM StudyRoomStatus);

CREATE VIEW BookRatings AS

SELECT book_title, book_author, AVG(rating) as rating

FROM Ratings

GROUP BY book_title, book_author;

Workload

- Login/Create Account ~ 10%
- Search ~ 40%
  - Index on title (most searches will probably be on title)
- View book ~ 20%
- Review book ~ 5%
- Add book ~ ~5%
- Remove book ~ 5%
- Request book ~5%
- Reserve room ~5%
- Delete reservation ~5%