Books App — MySQL Mini Report

Course: Object-Oriented Analysis & Design + Advanced Web Programming
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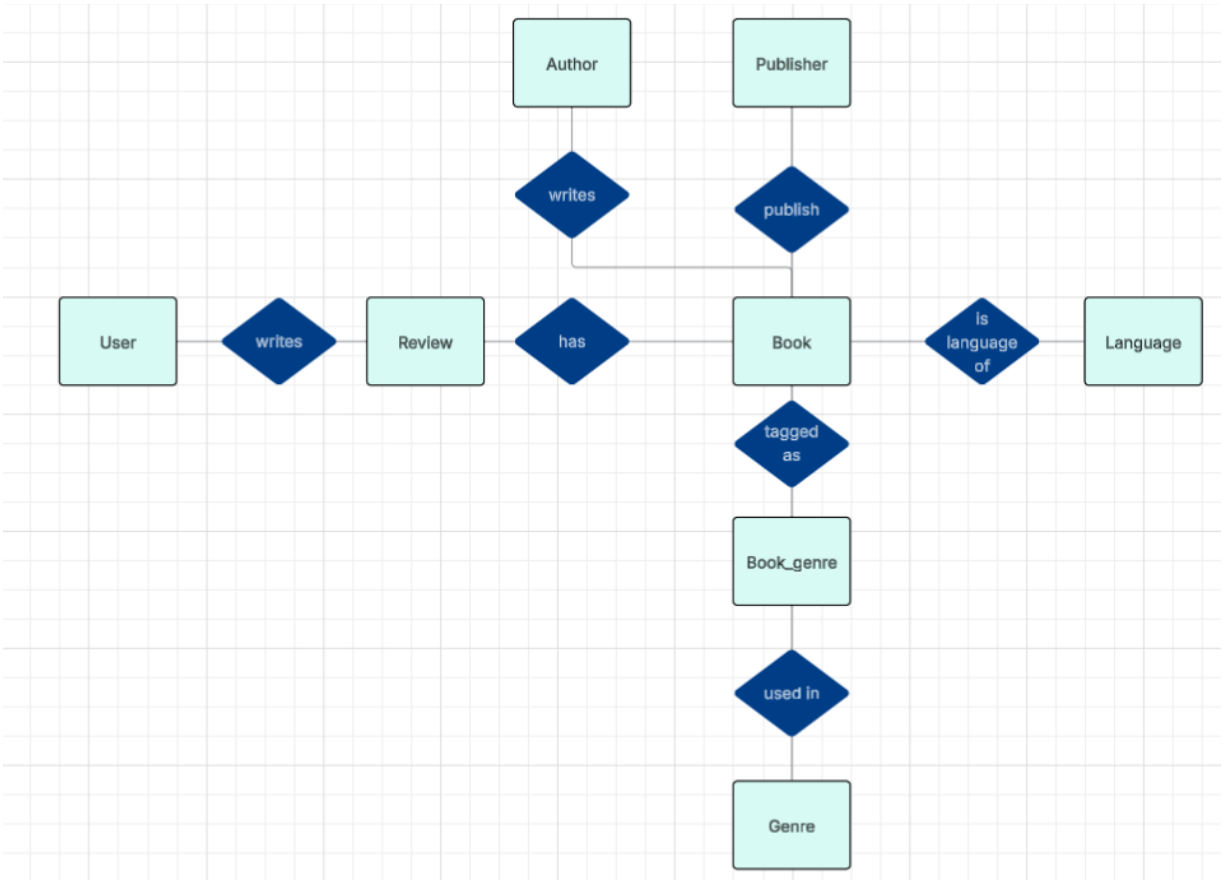
1) **Goal**

Build a simple, normalized MySQL-backed website for discovering books, browsing by genre, and posting user reviews.
This version adds a more detailed database structure and an entity-relationship model to illustrate our design choices.

2) **ER Diagram**

The ER diagram shows how the main entities are connected:

- Book is the central entity.
- Each Book is written by one Author, published by one Publisher, and written in one Language.
- A Book can belong to several Genres through the link table Book_Genre.
- Users can post Reviews about di erent books.
- Relationships are mainly one-to-many, except Book ↔ Genre, which is manyto-many.



3) **Table Structure Description**

The database contains eight main tables: Authors, Publishers, Books, Users, Reviews, Genres, Book_Genres, and Languages.

- Authors
  Stores information about book authors, including their names, nationality, and biography.
  One author can write many books (1 → N relationship with Books).

- Publishers
  Contains details about publishing companies such as name, country, website, and contact information.
  Each publisher can publish several books (1 → N with Books).

- Books
  The central table of the database.
  Each book is linked to one author, one publisher, and one language.
  It can have multiple genres (M ↔ N through Book_Genres) and multiple reviews.

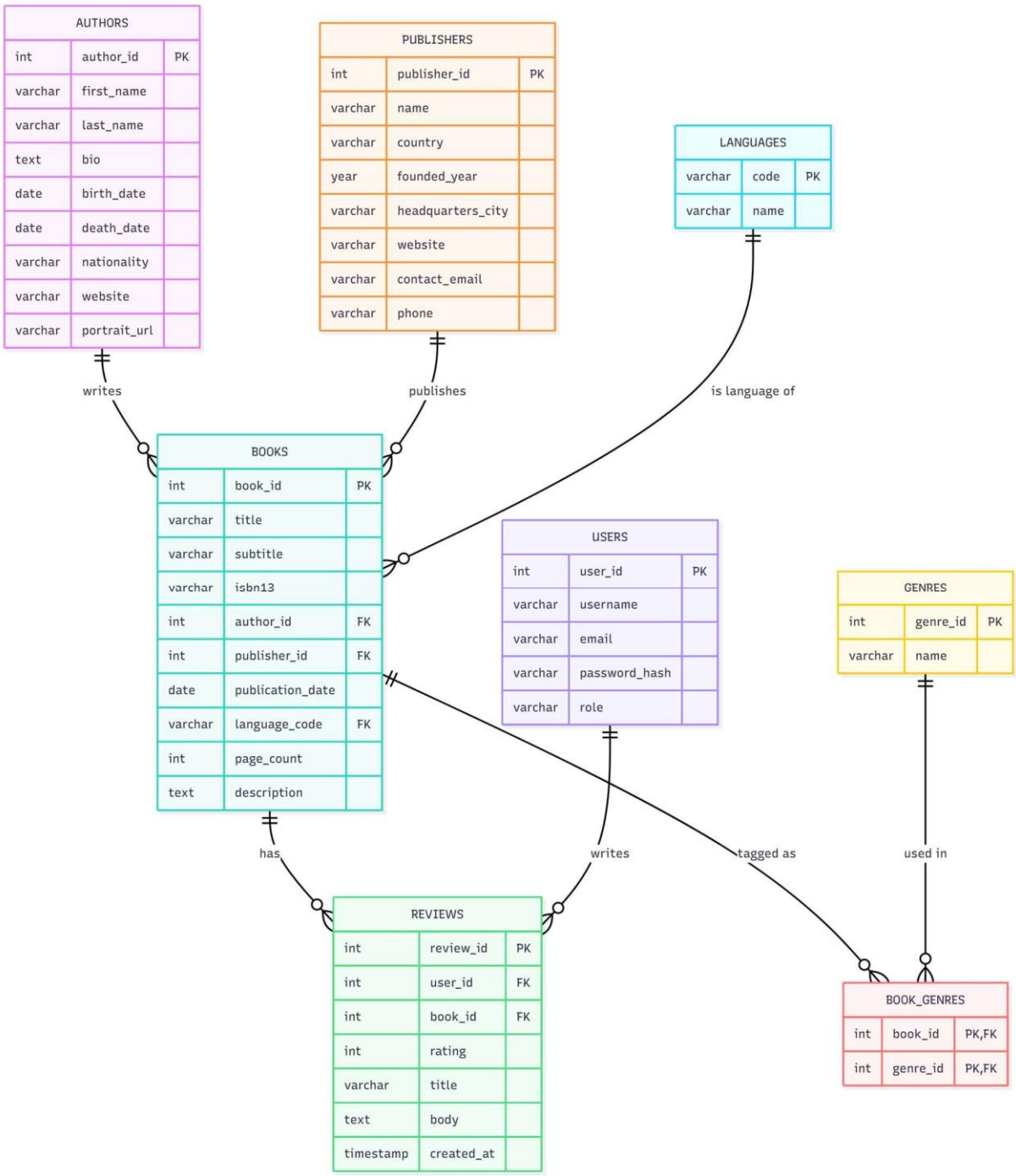
- Languages
  Lists the available languages for books.
  One language can correspond to many books (1 → N).

- Users
  Represents the registered users of the website.
  Users can write reviews for books (1 → N with Reviews).

- Reviews
  Stores the comments and ratings that users leave on books. Each review is linked to one book and one user.

- Genres
  Defines book categories like “Fantasy” or “Thriller”.
  Used to classify books through a many-to-many relationship.

- Book_Genres
  A link table between Books and Genres that manages the many-to-many association.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