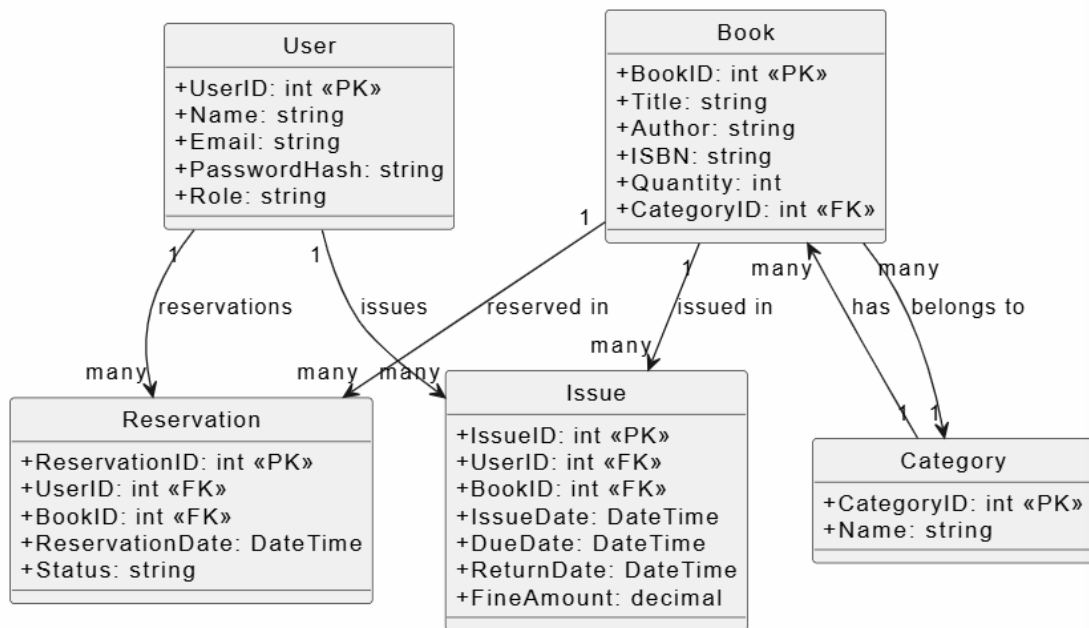


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Library Management System

Entity Relationship Diagram

The ERD below represents the entities and relationships in the Library Management System.



System Features Overview

1. User Management

- Users can register and log in to the system.
- Role-based access: Admin and Members.
- Admins manage library resources; Members can borrow books.

2. Book Management

- Admins can add, update, delete, and view books.
- Books have attributes like title, author, ISBN, quantity, and category.

3. Category Management

- Books are grouped into categories (e.g., Fiction, Non-fiction, Science).
- Admins manage categories for easier book classification.

4. Issue and Return Management

- Members can issue books, and return them before the due date.
- Admins track all issued and returned books.
- Fines are calculated based on late returns.

5. Reservation System

- Members can reserve books that are currently issued.
- System notifies users when the reserved book becomes available.

6. Fine Management

- Late returns incur fines.
- Admins can configure fine rules and view fine reports.

7. Reports & Logs

- Generate reports on issued books, fines, overdue returns, and book availability.
- Admins can view system activity logs.

8. Security Features

- Secure login with password hashing.
- Input validation and restricted access based on roles.

