**Read Me: Library Management System**

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1. **Overview**

The Library Management System (LMS) is designed to streamline library operations, manage resources efficiently, and enhance the user experience. This system covers the management of books, members, loans, fines, and related entities, ensuring accurate tracking and reporting of library activities.

1. **Features**

* **Book Management**: Cataloging and managing book details including title, author, ISBN, genre, category, publisher, publication date, and price.
* **Member Management**: Handling member information such as personal details, membership status, and contact information.
* **Loan Management**: Tracking book loans, including issue dates, return dates, and loan status.
* **Fine Management**: Calculating and recording fines for overdue books and maintaining fine status.
* **Status Management**: Managing various status values for members, loans, and fines.
* **Search and Reporting**: Providing search functionality for books and generating detailed reports on library activities.

1. **Usage**

**Book Management**

* Add, update, delete, and view book details.
* Categorize books by genre and category.

**Member Management**

* Register new members and update existing member information.
* Manage membership status and track member activities.

**Loan Management**

* Issue and return books.
* Track loan statuses and due dates.

**Fine Management**

* Calculate and record fines for overdue books.
* Manage fine statuses.

**Reporting**

* Generate reports on library activities, including book loans, member activity, and fines.

1. **Prerequisites**

* MySQL or any compatible relational database system
* Python (for scripting and automation)

1. **ER Diagram**

A diagram of a library management system

Description automatically generatedThe ER diagram for the Library Management System is structured as follows: