

### Project Description

The objective of my project is to build a management system for a public library that holds various types and genres of books for the general public to borrow and return. As I am a customer of the library, the database will store all my information with respect to the books I borrow, the books I finish reading, the highest rated books I have read and other aspects of my account.

Details pertaining to the branch will be stored in the system, including the manager's id, name, and branch address. Employees are important aspects of the management system, therefore attributes of the employee that will be stored in the system, are name, position, employee id, and the salary. The major role of an employee is to update the books in the system, whether they are being issued, returned, or are new arrivals in the library. The system will also store information about the books, as well as my details pertaining to my account within the library. With respect to the customer, attributes such as customer's id, name, address, and date of registration with the system, and the books they borrow will all be stored in the database. In regards to the books, the attributes stored will be the title, genre, author's name, publisher, status of the book as to whether it is borrowed or available. The status will be split in two parts, the issue status and the return status. The issue status will consist of attributes such as the name of the book being issued by the customer, the issue id, and date, ISBN of book, and the id of customer borrowing the book. Similar to the issue status, the return status will consist of the return id, date, customer id, name of book being returned, and its ISBN.

Once I have the library database built, I will be able to retrieve various forms of information from the database. The database will have the answers to the following queries:

Queries in relation to my account at library

- What books have I borrowed?
- What books are overdue?
- What's the total fine on my account?
- What authors do I most commonly read?
- When my borrowed books are due?
- How many books can I check out at a time?
- What are the highest rated books that I have read?
- How many books have I borrowed in the past month?
- How many books have I completed in the past month?
- What's the ISBN of the worst book I have read in the past year?
- How many times can a borrowed book be renewed?

Queries in relation to the management at library

- What are the bestselling books?
- What are some new titles arriving this month?
- What are the most borrowed books this month?