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Library Catalogue System

I am going to create a library catalogue system for my project. It will both keep track of books along with users and what books they have checked out. Furthermore, the program will keep track of which books are overdue and their fees. Users will also be able to put books on reserve, along with checking out books, returning books and paying overdue fees. There will be two principal classes created in my project, each with a number of methods, a Book class and a User class. Finally, I will use the Java Database Connectivity API to create a database of the Books in the library and the Users with library cards.

The Book class will have data fields including the title, the author, the ISBN, how many copies the library has, and how many are checked out. Methods in the Book class will include methods to get data fields about the books, and to find the location of the book in the Dewey Decimal System.

The User class will have data fields such as their name, their card number, the number of books they have checked out, which books they have checked out, when the books are due, and how much money they owe in overdue fines. The user will have methods to get information about the user's data fields, such as checkout, return, reserve and pay fines.

Finally, the program will include a database using a Java API, the Java database Connectivity, to keep track of the books in the library and the users in the system.

This project is important to me because I have always loved reading. As a child, the library was one of my favorite places to spend time. Being able to use my computer science skills to explore and connect to something that was such an important part of my childhood is very exciting and I know will keep the project stimulating and interesting throughout the process.