

Case:

Gondor Library has a collection of thousands of books that consist of various categories. Every day there are dozens of Gondor's residence who borrow / return book. They can borrow / return the books by fill in their name, identification numbers and the book's code in the request form. Librarian will approve the form if the residence doesn't have unreturned books.

Exercise:

Please create a web application to help Gondor's librarian to track inventory of books and daily transactions.

Goals:

- Librarian can add new book to inventory
- Librarian can edit book / assign category
- Librarian can list all books alphabetically or show by category
- Librarian can see what books are available and what is borrowed out.
- Librarian can save the request form into the database
- Librarian can list people who're late to return the books, so he can ask Gandalf to send his hawk to remind them.

Rules:

- A book must have a title, author name, released date
- A book must belong to category
- When borrowing a book to a residence, date borrowed and preferred return date are required
- Must use the built in sqlite database for simplicity
- The project should be delivered as a github repo but with no terms that makes it easy to find
- It does not have to be 100% complete, however, there should be at least some examples of the following: model and controller methods, database schema, automated test and best practices codes.