

# KitabGhar - Library Database Managing Application

## 1. APP Description

This app will manage the database in a library and perform tasks primary functions of a library like :-

- Taking a log of books issued or returned by students or faculty
- Adding or deleting books in stock
- Fine management
- Searching availability of books based on author, category and course
- Will give the position of the book in the library by shelf number, row and section for ease of access for a library's use.
- Login access for Library staff and the members that can be students with encrypted password stored in database.

## 2. Use Cases

### Actors:

- **Member** : Member who issues or returns books. They can search the book position in the library from the app. They can also check the date their book is due to return. They can see the fine they need to pay.
- **Staff** : The staff has the right to issue books to members. Maintain the books log (Addition/Deletion/Editing of books). They can also see the log of borrowed books and fine due.

### Use Cases:

- **Add/Delete/Edit Books** : Staff can add, remove or edit books present in the library.
- **Search Books** : Members can search for a book's availability, book's position in library or suitable book based on author, category and course.
- **Add/Delete Member Account** : Staff can add or delete an account of a member.
- **Add/Delete Staff Account** : When the app is handed to an institute there will be a base account already present. A staff account can be added by referencing other already present staff accounts and can be deleted by self.
- **Issue Book** : Staff will issue a book to a member.
- **Return Book** : Staff will update the log if a book is returned by a member.
- **Fine Due** : Staff can see the log of fine due along with books by member and expected date of return. Members can see their personal dues along with the book and due date.
- **Fine Paid** : Paid fine log will be updated by staff as Bool according to the fine paid by the member.

### 3. E.R. Model of APP

