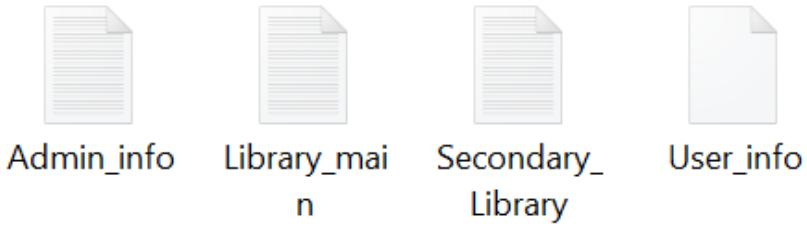
GUIDE TO BETTER UNDERSTAND THE MANAGEMENT SYSTEM

SUMMARY:
The guide's purpose is to explain how the file handling behind the program works and to list out the important boundaries on which the program operates.

FILE HANDLING:



Library_main------> This text file is the library. It stores all the books in the following format.

ISBN << TITLE << AUTHOR << GENRE << NOOFCOPIES << RATING <<TIMESISSUED

E.g.

1 RomeoAndJuliet WilliamShakespeare Drama 6 0 0

Everything you do (add a book, remove a book, add a rating, issue the book) to the library in the program the library will be updated in this text file.

Secondary_Library------>This text file is the second library. It also stores the book in the same format. The purpose of this is when admin imports the book the program will find the book in this library and then check if that book is or is not in the primary library if it is not then it will import from this library (Secondary_Library) to library_main.

Admin_info------> This text file stores the adminId adminName and passcode for the user. The only admins who will be allowed to login into the program are the ones who are on this text file.

User_info------> This text file is something the program creates on its own. When a user signs up the info that is userId username and passcode will be saved to this file. The users who are on this text file will be the ones allowed to login into the program.

KEYNOTE------> Whenever the User is issued the book a text file will be created of that user that will store the info of the book issued and the time when it is issued to that specific user and when the users log in again that text file will be loaded in so that the program knows what books the user has been issued at what time which will help late in fine calculations.

SOME CONSTRAINTS:

1. When searching for a book using any method the typed-in values should be exact if searching by name author genre or ISBN.
2. Also, when searching by genre please write the name of the genre with first name capital example Fiction.
3. You can only import a book from the secondary library if a book is not available in the primary library.
4. The Program will not allow 2 same user ids.
5. You cannot sign up as an Admin.
6. Initially the ratings and times issued will be 0. As the library is used then ratings will done and the time issued will be increased and the admin can generate the top 10 books so that he can restock the popular books.
7. Rating a book can only be done when a user returns the book.
8. Fine is calculated in real time 7 days that is 1000 rupees per day after the deadline of 7 days.

TEST VALUES TO CHECK FUNCTIONALITY OF THE PROGRAM:

Searching a book ----> You can manually open the library_main select any book and then search for it.
Top 10 books------> Since we will bring you the program with ratings and times issued 0 0 we will manually set the ratings in the library main and then generate the top 10 books or you can rate the books in the program.
Fine calculations check------> The program applies a fine if the book is returned after 7 days in real-time, we will manually change the fine setting to 1 minute so that you can check the fine calculations.
Exception handling-----> You can enter absurd ISBNS wrong passwords or wrong userId to check if the program throws exceptions.

Class Diagram: