Library Management System

1.Design a class (Library) representing a library containing common attributes and methods. You should design such a class that you can create instance of different libraries.

2.A library can have two types of members (Librarian and Normalvisitors). Each member has at least id, name, phone email etc.

3. NormalVisitors can be three types. Students, PublicUsers, PremiumUsers. Teachers are default PremiumUser. A visitor can be member of multiple libraries.

4.In a library books can be three types. TextBooks, Newspaper, Literature. Again Literature can be divided into three major parts. Poetry, Novel, Fiction. Each book has name, book id, the author, edition, shelf no. , status(available or not).

5.In a library, there is a borrowing system. The Users can borrow books for fixed days. If they fail to return the books in time or damages to the books, they have to pay a certain amount (50 taka per day). All this transaction actions are maintained by librarian.

6. Each library has premium package. If one takes the package, he gets the access of E-book app.