Library Project

1. Library Item - Abstract Class
    Books - Class that derives from Library Item
    Journal - Class that derives from Library Item

    Library Item Class Properties:

    - ID
    - Publisher/Company Name
    - Publish Date
    - Genre
    - Price
    - Borrow Date
        - Discount

2. Class Books - Derives from Library Item class

    Properties:
    Author

3. Journal - Derives from Library item class

4. Manager Class

    Roles:
    - Add Library Item
    - Edit Library Item
    - Add a copy of an item
    - Delete Library Item

5. User Class

    Roles:
    - Borrow Library Item
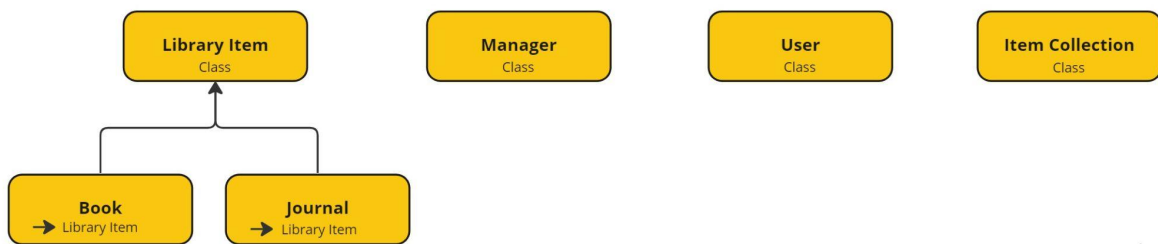   - Return Library Item

6. Item Collection Class
    - List / Dictionary of Library Item
    - Add item
    - Search by conditions

7. General

    - Filtering by a condition and represent a list of items by the condition.(name, author, genre, publisher).
    - Show a message to the user if the item was not return on its time.

- Daily Report - Amounts - Borrows
- Serialization
- MVVM
- Unit Tests
- Logic in Class Library
- Dealing with errors
- Creating a Gui
- Checks

Library Item — Class

Manager — Class

User — Class

Item Collection — Class

Book — Library Item

Journal — Library Item

LibraryItem — Abstract Class
- Properties
  - _borrowDate
  - _genre
  - _id
  - _price
  - discount
  - isAvailable
  - isOnSale
  - Name
  - PublishDate
  - Publisher
- Methods
  - Borrow
  - IsLate
  - LibraryItem
  - Return

Book — Class : LibraryItem
- Properties
  - _author
- Methods
  - Book
  - ToString

Journal — Class : LibraryItem
- Methods
  - Journal
  - ToString

Manager — Class
- Fields
- Properties
  - tempCustomer
- Methods
  - AddItem
  - AuthorDiscount
  - CheckIfLate
  - CheckUserName
  - DateDiscount
  - DeleteUser
  - EndDiscountAu...
  - EndDiscountDate
  - EndDiscountGe...
  - EndDiscountPu...
  - FindCustomer
  - GenreDiscount
  - GetUserName

Customer — Class
- Fields
  - collection
  - isLateOnReturn
  - passWord
  - userName
- Properties
  - _price
  - customerMessa...
  - tempUserCart
  - userCart
- Methods
  - Customer
  - Price
  - ToString

ItemCollection — Class
- Fields
  - libraryColletion
- Methods
  - AddItem
  - EditItemAuthor
  - EditItemDate
  - EditItemGenre
  - EditItemName
  - EditItemPrice
  - EditItemPublish...
  - GetItemByGenre
  - GetItemByName
  - GetItemByNam...
  - GetItemByPubli...
  - RemoveItem

Genre — Enum
- Romance
- Fantasy
- Mystery
- Horror
- Adventure
- Historical
- Drama
- Comedy
- Crime
- NonFiction
- YoungAdult
- Children
- Poetry
- Sports