Library Management System

Objective:

The Library Management System is designed to manage a library's operations, including books, members, and issue book. This assignment focuses on implementing CRUD operations for the system. You will create entities to represent the data and use DTOs to encapsulate the data transferred.

Operations

1. Book:

    Add book to the library

    Retrieve a particular book by its UId

    Retrieve book by its name

    Retrieve all books

    Retrieve all Available books which are not issued

    Retrieve All Issued Books

    Update book

2. Member:

    Add new member

    Retrieve member by UId

    Get all members

    Update member

3. Issue:

    When user issues book from the library Issue book entity should be created

    User should be able to get issue book by UId

    User should be able to update existing issue entity

DTOs

1. Book

```
public class Book
{
   public string UId {get; set; }
   public string Title {get; set; }
   public string Author { get; set; }
   public DateTime PublishedDate { get; set; }
   public string ISBN { get; set; }

   public boolean IsIssued{get; set;}
}
```

2. Member

```
public class Member
{
   public string UId { get; set; }
   public string Name { get; set; }
   public DateTime DateOfBirth { get; set; }
   public string Email { get; set; }
}
```

3. Issue

```
public class Issue
{
   public string UId { get; set; }
   public string BookId { get; set; }
   public string MemberId { get; set; }
   public DateTime IssueDate { get; set; }
   public DateTime? ReturnDate { get; set; }

   public boolean isReturned{get; set;}
}
```

In this assignment, you will be implementing CRUD operations for a Library Management System. Through this assignment, you will gain hands-on experience with creating, reading, updating, and deleting data, which are fundamental operations in any data-driven application.