Tools & Technologies

- IDE: Visual Studio 2022

- Language: C#

- Platform: .NET Core MVC (6.0)

- Software Architecture: UI & API

- Database: MSSQL

Folder Structure

- Controllers
  - HomeController (for main view page)
  - LibraryApiController (for api views)
- Models
  - Categories
  - SubCategories
  - Authors
  - BookDetails
- Views
  - /Home/Main.cshtml (used for main page view)
- Data
  - Library Context (containing the context of database as for entity framework)
- Migrations
  - Contains initital migrations
- Utils
  - DB Config (connectin string with database name is defined as for to use "**Store Procedure**")

Configuration

- First of all define the **"LibraryConnectionString"** located in appsetting.json

- Do run the migrations using "update-database"

- Schema for demo data is given in file name **"LibraryData"** in the root path of this doc (so you can insert the demo data and test the application).

Work Flow

- Default view page will be open with two select option (one for the category and the other one for the subcategory) & a button and grid.

- Select Category & then the subcategories list will be updated according to the selected category.

- Select the subcategory and click the "View Book Detail" button.

- The result according to your selection will be displayed in grid.

Api Endpoints

- ➤ /api/Library/BooksDetail
- ➤ /api/Library/BooksDetail/{id}
- ➤ /api/Library/BooksDetail/SubCategory/{id}
- ➤ /api/Library/Categories
- ➤ /api/Library/SubCategories
- ➤ /api/Library/Author

NOTE: Stored Procedure is used to get SubCategories else entiry framework is used.