

LibraryAPI

A simple .NET Core Web API for managing a library system with a Book entity and its associated Review entity (1-to-many relationship).

Prerequisites:

Before running this project, ensure you have the following installed on your system:

- *.NET Core SDK (version 7.0 or higher)*
- *SQL Server (or a local instance like SQL Server Express)*
- *Visual Studio or VS Code (optional, but recommended for development)*

Getting Started:

1. Zip file / Clone the repository

To get started, Download the zip file or clone the repository to your local machine using Git:

git clone <https://github.com/yourusername/LibraryAPI.git>

cd LibraryAPI

2. Database Setup (SQL Server Configuration)

i. Ensure SQL Server is running:

If you're using SQL Server locally, make sure it's installed and running.

Ensure you have the correct **connection string** configured in the **appsettings.json** file.

ii. Configure Connection String:

Open the **appsettings.json** file located in the root of the project.

Update the **ConnectionStrings** section to match your local SQL Server instance configuration

3. Apply Migrations to Create the Database

1. Open the terminal in NuGet Package (in Visual Studio or VS Code)

2. Run the following commands to apply migrations and create the database:

```
dotnet ef database update
```

This command applies any pending migrations to create the database schema.

If you haven't created any migrations yet, you can generate them with:

dotnet ef migrations add InitialCreate

Then run the *dotnet ef database update* command again.

4. *Run the application*

If you're using Visual Studio, you can press F5 to run the application in debug mode and view its on Swagger.

API Endpoints

Books

- GET /api/books: Get all books (including reviews).
- POST /api/books: Add a new book.
- PUT /api/books/{id}: Update an existing book.
- DELETE /api/books/{id}: Delete a book and its reviews.

Reviews

- POST /api/books/{bookId}/reviews: Add a review for a specific book.
- DELETE /api/reviews/{id}: Delete a review by its ID.