Savvy

API .NET CORE REST API Assignment

Framework and Libraries Used : .Net Core, .Net EntityFramework.SqlServer, MS Sql Server

.Net Core :

ASP.NET Core is the open-source version of ASP.NET, that runs on Windows, Linux, macOS, and Docker..NET Core is a new version of .NET Framework, which is a free, open-source, general-purpose development platform maintained by Microsoft. It is a cross-platform framework that runs on Windows, macOS, and Linux operating systems.

.NET Core Framework can be used to build different types of applications such as mobile, desktop, web, cloud, IoT, machine learning, microservices, game, etc.

.Net EntityFramework.SqlServer:

Entity Framework Core is a modern object-database mapper for . NET. It supports LINQ queries, change tracking, updates, and schema migrations. EF Core works with many databases, including SQL Database (on-premises and Azure), SQLite, MySQL, PostgreSQL, and Azure Cosmos DB.

In real world projects, data models change as features get implemented: new entities or properties are added and removed, and database schemas needs to be changed accordingly to be kept in sync with the application. The migrations feature in EF Core provides a way to incrementally update the database schema to keep it in sync with the application's data model while preserving existing data in the database.

Web API Endpoints and Details:

1. **GET All: URL** : : https://localhost:{port}/api/Books

Request	Response HTTP Code 200
No Parameters	[{"id":1, "title":"The Monk Who Sold his ferrari", "description":"The Monk Who Sold his ferrari", "author":"Robin Sharma", "coverImage":"C://Robinsharma.png","price":24}, {"id":2,"title":"The Power Of Now", "description":"The Power Of Now", "author":"Eckhart Tolle", "coverImage":"C://Tolle.png","price":19}, {"id":3,"title":"The Secret Book", "description":"The Secret Book"," author":"Rhonda Byrne","coverImage":"Demo.png","price":19 }]

2. GET By Id : URL : https://localhost:{port}/api/Books/3

Request : HTTP GET	Response HTTP Code 200
Paramter : id {fromURI} **datatype** : int **scope** : The book's id which you want to retrieve	{"id":3,"title":"The Secret Book - New", "description":"The Secret Book", "author":"Rhonda Byrne", "coverImage":"Demo.png","price":19}

3. POST :

HTTP Method : POST URL : https://localhost:{port}/api/Books/

Request : HTTP POST	Response HTTP Code 201
Paramter = Book object {fromBody} **datatype** = JSON **scope** = Book's object in Jsontype in Body **Value** = {"title":"Think Like a Monk","description":"Think Like a Monk","author":"Jay Shetty","coverImage":"Demo.png","price":19 }	{"id":5,"title":"Think Like a Monk","description":"Think Like a Monk","author":"Jay Shetty","coverImage":"Demo.png","price":19 }

4. **HTTP PUT** : URL : https://localhost:{port}/api/Books/3

Request : HTTP PUT	Response HTTP Code 204
Paramter A: id {fromURI} **datatype** : int **scope** : The book's id which you want to update **Paramter B** = Book object {fromBody} **datatype** = JSON **cope** = Book's object in JSON in Body **Value** = {"title":"Think Like a Monk", "description":"Think Like a Monk", "author":"Jay Shetty","coverImage":"Demo.png","price":19 } 	No Response

5. **HTTP Delete :** URL : https://localhost:{port}/api/Books/4

Request : HTTP DELETE	Response HTTP Code 204
Paramter : id {fromURI} **datatype** : int **scope** : The book's id which you want to delete	No Response

References :

https://dotnet.microsoft.com/apps/aspnet/apis
https://docs.microsoft.com/en-us/ef/core/providers/sql-server/?tabs=dotnet-core-cli
https://docs.microsoft.com/en-us/ef/core/managing-schemas/migrations/?tabs=dotnet-core-cli