TopUp Beneficiary Solution - NET6

Created a robust backend solution for the topup beneficiary application, enabling users to efficiently manage their top-up beneficiaries, explore available top-up options, and execute top-up transactions for their UAE phone numbers. Implements a maintainable enterprise-level API application with Middleware, EntityFrameworkCore, Serilog, and Swagger using Domain Driven Design (DDD) and architecture principles.

Table of Contents

Prerequisites

You will need the following tools:

- Visual Studio Code or Visual Studio 2022 (version 17.5.0 or later)
- .NET Core SDK 6.0
- Microsoft SQL Server

Architecture Overview

This is a multi-project solution that utilizes Domain Driven Design (DDD) and CQRS patterns to create a maintainable web API application using .NET 6 that allows it to run on Linux or Windows and in Docker environments.

Instructions

Installation:

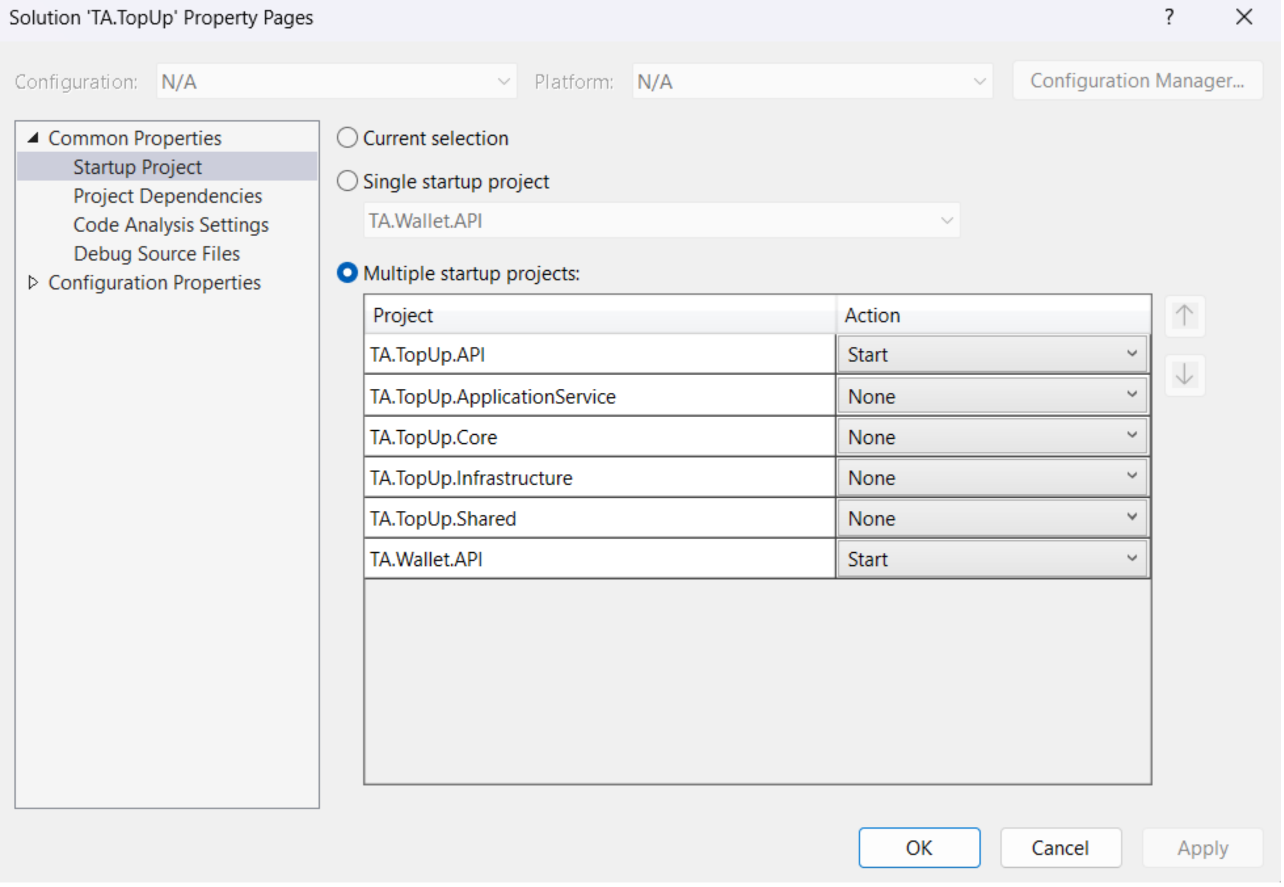
1. Install the latest .NET Core 6 SDK.

2. Used Database first approach, so kindly execute the attached SQL script.

3. Clone Github repo https://github.com/Shivvvvvvvvv/TechnicalAssessment.git

4. Restore Nuget Packages

5. Rebuild and run the program by setting below projects as startup,



Solution 'TA.TopUp' Property Pages

Configuration: N/A

Platform: N/A

○ Current selection

○ Single startup project

TA.Wallet.API

● Multiple startup projects:

Project	Action
TA.TopUp.API	Start
TA.TopUp.ApplicationService	None
TA.TopUp.Core	None
TA.TopUp.Infrastructure	None
TA.TopUp.Shared	None
TA.Wallet.API	Start

You should be able to browse and test the application api by using the below URL :

```
Swagger - TopUp Service: https://localhost:7024/swagger/index.html
Swagger - Wallet Service: https://localhost:7085/swagger/index.html
```

Database Setup

To setup the SQL Server database following the instructions below:

1. Reveiw the **connection string** in **appsettings.json** and update the database name.
2. Execute the Script uploaded in below path ./Script/ScriptWithMasterData.sql

Third Party Libraries

- Serilog

Future Enhancements

- Implement migration concept to create application database on initial run
- Implement polly
- Implement ciruit breaker
- Refractor Topup Service
- Write Unit test and Integration test