GraphQL Api .NET 5 Hot Chocolate

Diagram

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Graphical user interface, text, application

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# Creating a project using command line for a different version of DotNet than the latest on machine

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Firstly I only get .NET 6 installed, which can’t be the case because I have all different types of projects on this machine.

In anycase .NET 5 is not LTS, so try and do it in .NET 6, although this might make it more difficult down the line.

# Installing the packages

dotnet add package HotChocolate.AspNetCore

dotnet add package HotChocolate.Data.Entityframework

dotnet add package Microsoft.EntityframeworkCore.Design

dotnet add package Microsoft.EntityframeworkCore.SqlServer

dotnet add package GraphQL.Server.Ui.Voyager

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# 2. Setting up SQL Server in Docker

Going to use docker compose to set up an instance of SQL Server in Docker.

Create a docker-compose.yaml file in the project root folder. This file will tell the machine how many containers to run and what services need to be setup.

Text

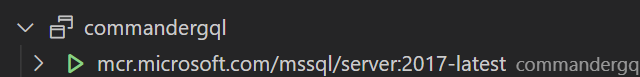
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Port needs to be exposed so that we can access the instance running in the container.

Then to spin up

docker-compose up -d

Can see that it is there



Then just check we can get into it. Open SSMS, enter the port number specified in docker compose file, and use SQL Server Authentication with the sa username and password specified in docker compose file.

Graphical user interface, application

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And then we are connecting to the instance running in the docker container.

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# 3. Coding up GraphQL Api

Create the Platform model

Create the DbContext

Provide Connection String it can use

Register it through DI.

# 4. Migrate the Db (these commands work for VSCode but are a bit different for studio)

dotnet ef

use this command to check that the relevant tools are installed to do migrations. If not,

dotnet tool install –global dotnet-ef

or replace ‘install’ with ‘update’ if they ask

Then we want to create the Migration file.

dotnet ef migrations add AddPlatformToDb

Then to actually insert the db using the

dotnet ef database update

# 5. Setting up the Query

Add GraphQL to configure services

Create the Query itself

Use GraphQL endpoints in Program file