**TVMazeApi**

This API obtains the data from the programs located at https://api.tvmaze.com and the information about the selected show through endpoints that receive the information. All the process executes with files created with the json recieved thougth the endpoints of TvMaze page.

**How to run the ap**

Run the API in Visual Studio, the browser opens and displays the documentation through Swagger. It is possible to verify all endpoints from this page by commenting out the Authorization ([Authorize(Policy = "ApiKeyPolicy")]) line of code in the controller you want to test.

First of all, it is necessary to run the endpoints in UpdateFilesController, these endpoints will create all the files that the API needs to receive the information. All files will be created by making different calls to the TvMaze endpoints so the network connection is necessary (after this process network connection won't be necessary). The files will be updated every time we call these endpoints.

**Api Architecture**

To do this API I have used the repository pattern, I have created three principal layers:

* Controller: where the api receive the request through the body. I have created a model with all the parameters that I need to make the different requests in the api.
* Service: where the api realize the query to the file needed and gets the information.
* Repository: where the API receives data from files (in this case, or from the database in other cases).

In this architecture this Api has the models folder where there are models to map the data it receives from files or databases. If the data was received from the database, this API would have another folder with mapping done with automatapper.

To authorize the API, I used policy-based authorization, I enforced API key authentication by defining a custom policy that checks the presence and validity of the API key.

I have done this Api trying to implement SOLID principles, with interfaces and dependency injections to services and repositories.

**Unit Testing**

I have used a Xunit project to do the unit testing, but in the response of the methods in the controllers I have used a Custom Response model, so I think that in this api the methods always have a good response (with the data or with the mistake). It's my first time trying to do unit testing so I only used two methods, sorry, I´m trying to improve in this thing.

**Postman methods**

https://api.postman.com/collections/10553253-a379c47d-fa97-4cc9-bba5-21924fc8d77d?access\_key=PMAT-01J7162HEEDDDCF88282T9SKMR