

Make a project in mulesoft

Mobile application development that shows basic information about the Star Wars universe, such as existing movies, the main characters of all movies or spaceships.

What will you find in this manual?

All steps to take and create the API. And also the documentation related to the project.

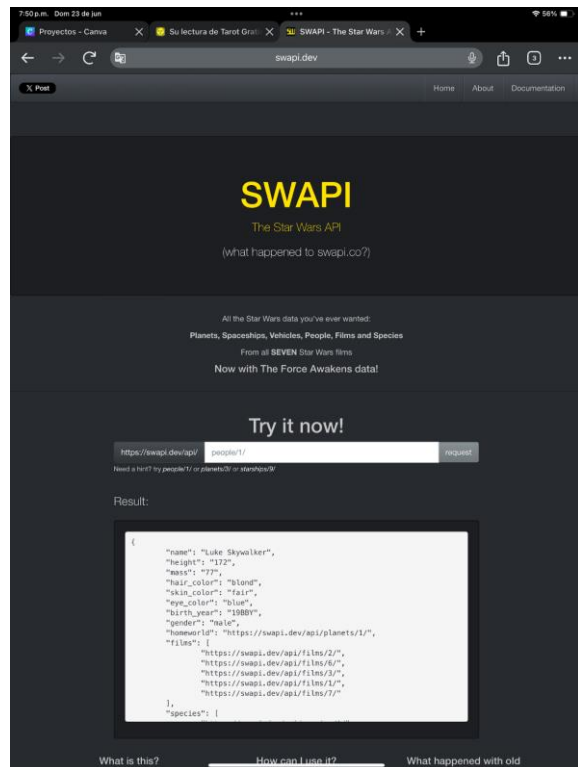
Where you can find SWAPI ? (Starwars API)

You find in <https://swapi.dev/>

It allows you to play with it! Display a previous result to give you an idea of the information you can find. You will also find a user manual in the link

<https://swapi.dev/documentation>

It will help you get familiar with the resource and how to consume it with HTTP request.



What does SPS ask me to do?

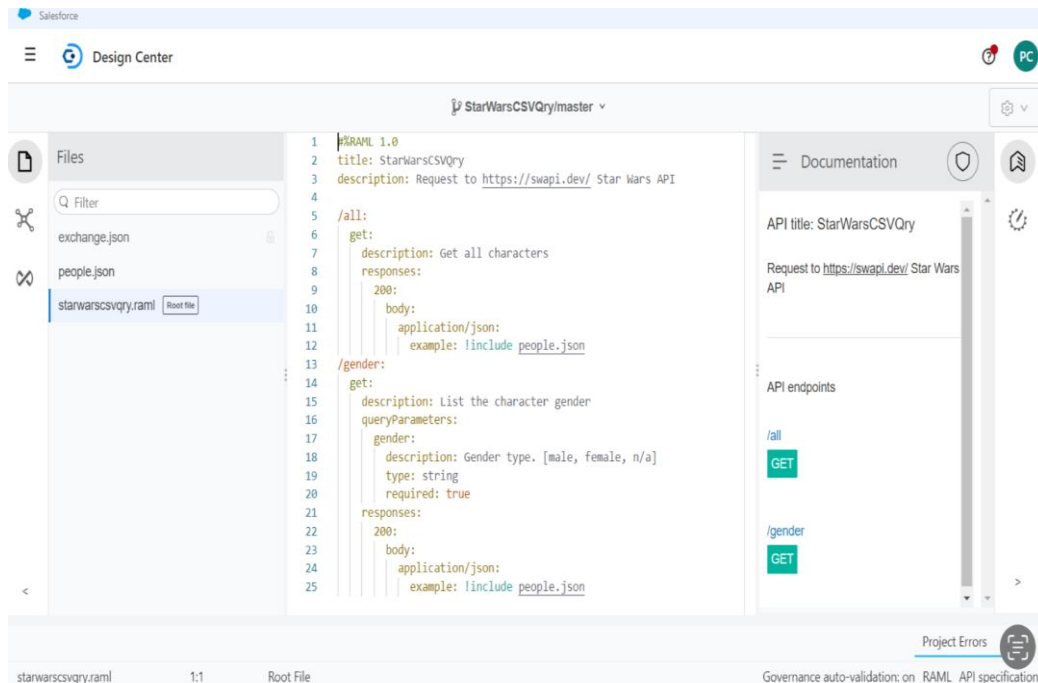
1. Design an API specification with RAML or swagger and develop a Mule project that allows recovering the information of ALL the Starwars characters that the SWAPI provides and delivering them in a CSV format.
2. The functionality must be provided that through a Query Parameter the result received in the CSV can be filtered based on the gender of the character.

How did I achieve my goal?

We read the SWAPI manual to see the scope of the consultations. And we realized that we could do the first point without any problem (<https://swapi.dev/api/people>) but, for the second option we would have to use the filter function for the payload in Mulesoft.

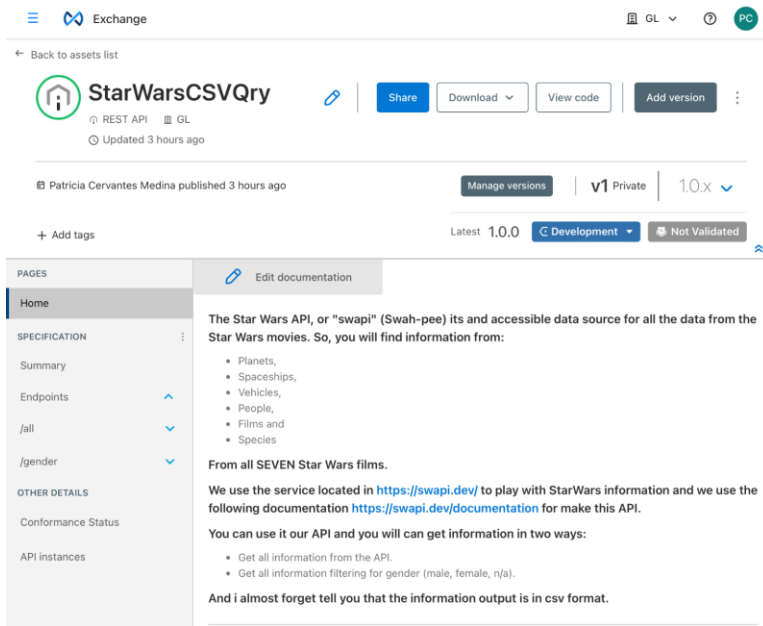
How did I achieve my goal?

We go to anypoint platform and create a RAML type file. There we add two calls that we will use: /all to obtain all the information and /gender to perform queries by gender. With this we would be covering both requested requirements of the project regarding information requests. For the query parameter, force it to be required so that it must put a value. In summary, this design will be the skeleton of the API and will serve as part of the documentation.



How did I achieve my goal?

I published RAML , so, you can find it in the exchange section of any point platform. As you can see, it's easy, right? Only by creating the RAML will you be able to see how you can consume the service. Go to “Endpoints” and it will show you in detail how to consume it. Or do you want to know what this service is about? Enter “Home”.



The screenshot shows the 'StarWarsCSVQry' API page on the 'Exchange' platform. The page header includes the 'Exchange' logo and user information (GL, PC). The main content area displays the API name 'StarWarsCSVQry' with a house icon, a REST API icon, and a GL icon. It indicates the API was updated 3 hours ago. Below this, it shows the publisher 'Patricia Cervantes Medina' and the version 'v1 Private'. The '1.0.x' version is selected. The 'Add tags' section is empty. The 'Latest' version is '1.0.0' and the 'Development' version is 'Not Validated'. The left sidebar shows the 'PAGES' section with 'Home' selected. The 'Edit documentation' button is visible. The main content area contains the following text:

The Star Wars API, or "swapi" (Swah-pee) is an accessible data source for all the data from the Star Wars movies. So, you will find information from:

- Planets,
- Spaceships,
- Vehicles,
- People,
- Films and
- Species

From all SEVEN Star Wars films.

We use the service located in <https://swapi.dev/> to play with StarWars information and we use the following documentation <https://swapi.dev/documentation> for make this API.

You can use it our API and you will can get information in two ways:

- Get all information from the API.
- Get all information filtering for gender (male, female, n/a).

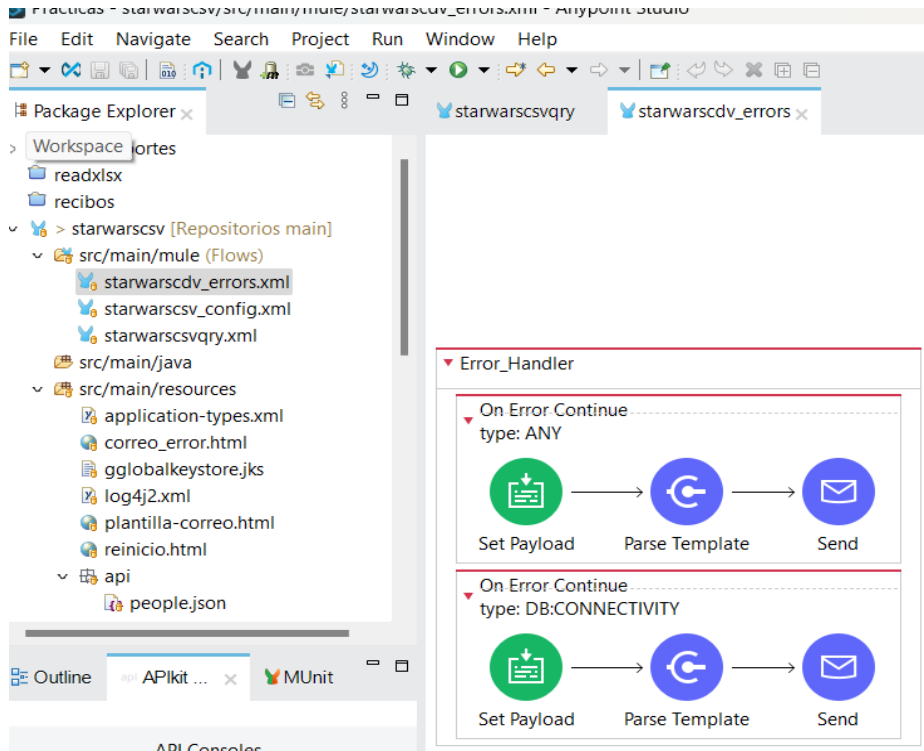
And i almost forget tell you that the information output is in csv format.

How did I achieve my goal?

Templates for API development.

Within anypoint studio I have a template where I make my projects. The structure I have is the following:

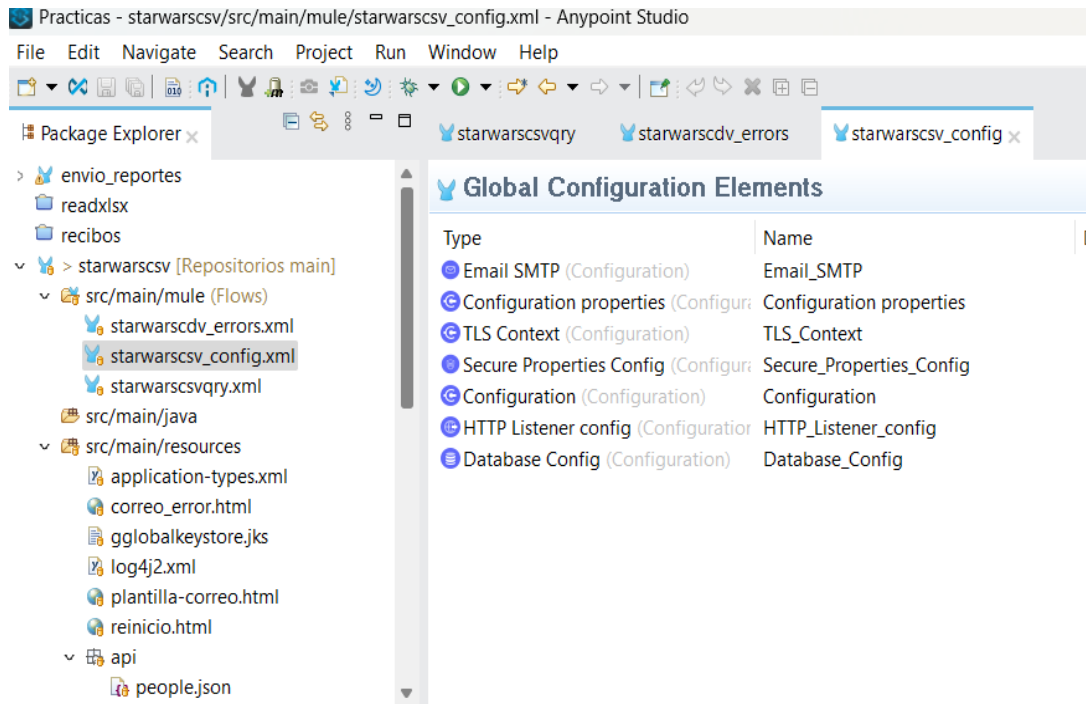
A module where errors are handled and how to send them. You distinguish it by ending in “_errors” in the src/main/module section.



How did I achieve my goal?

Templates for API development.

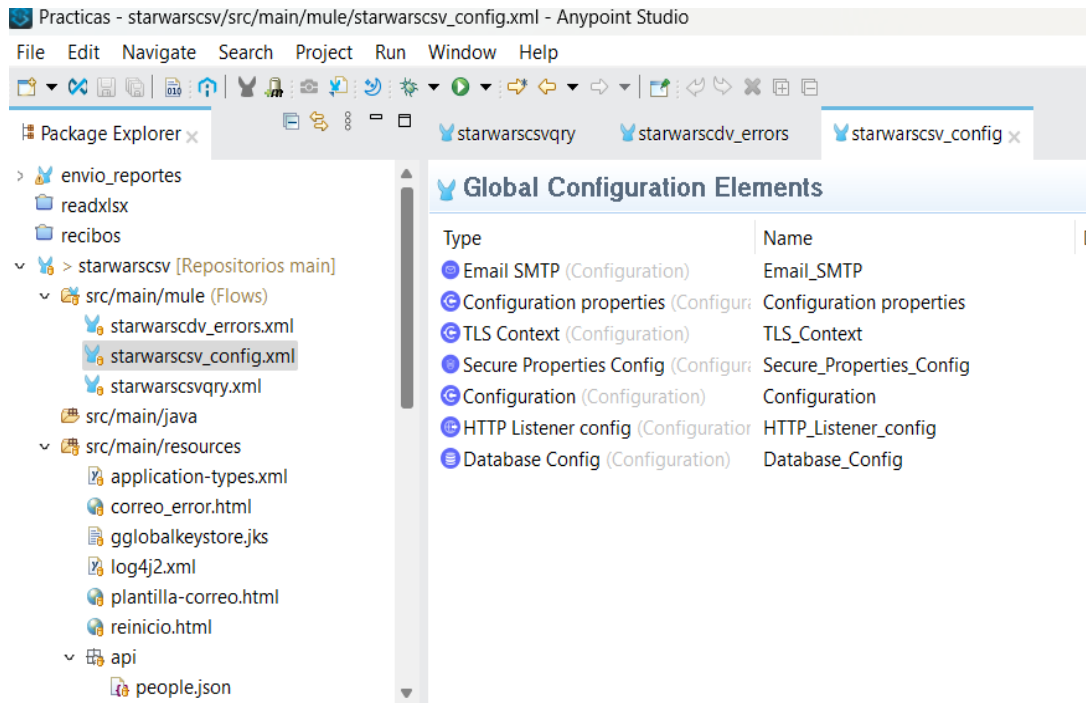
A module where the configurations of the different components to be used. You distinguish it by ending in “_config” in the src/main/module section.



How did I achieve my goal?

Templates for API development.

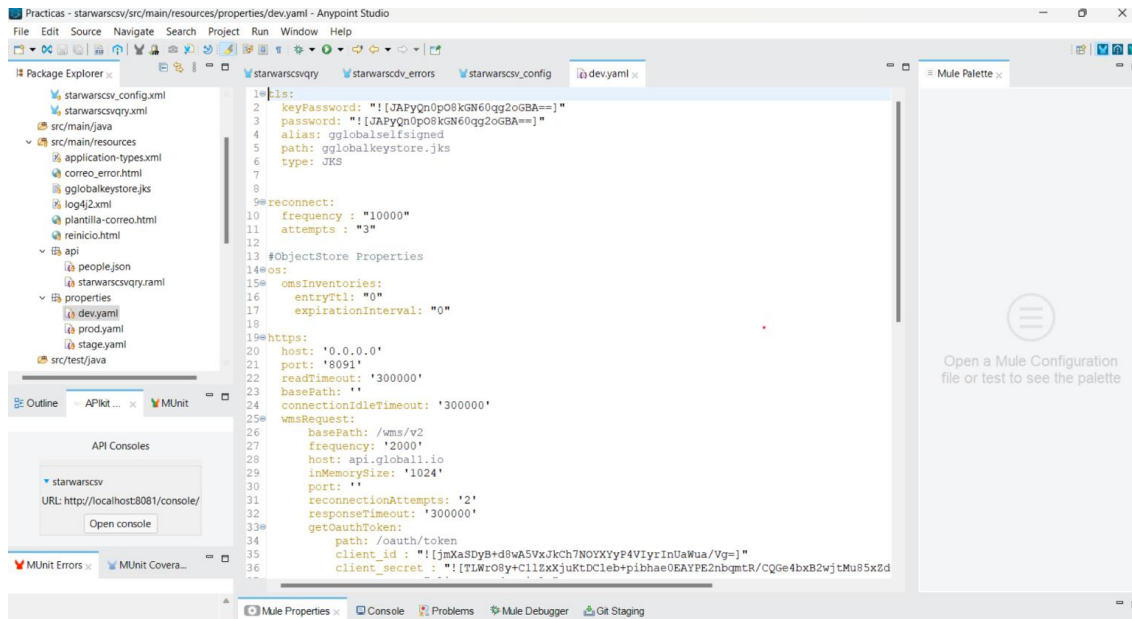
And several files located in `src/main/resources`. Here you can find templates (error_mail.html, mail-template.html, restart.html) which will be used to send error notifications or notifications to the client. Also the `globalkeystore.jks` file is an important part to ensure the integrity of the information that is exchanged with the service.



How did I achieve my goal?

Templates for API development.

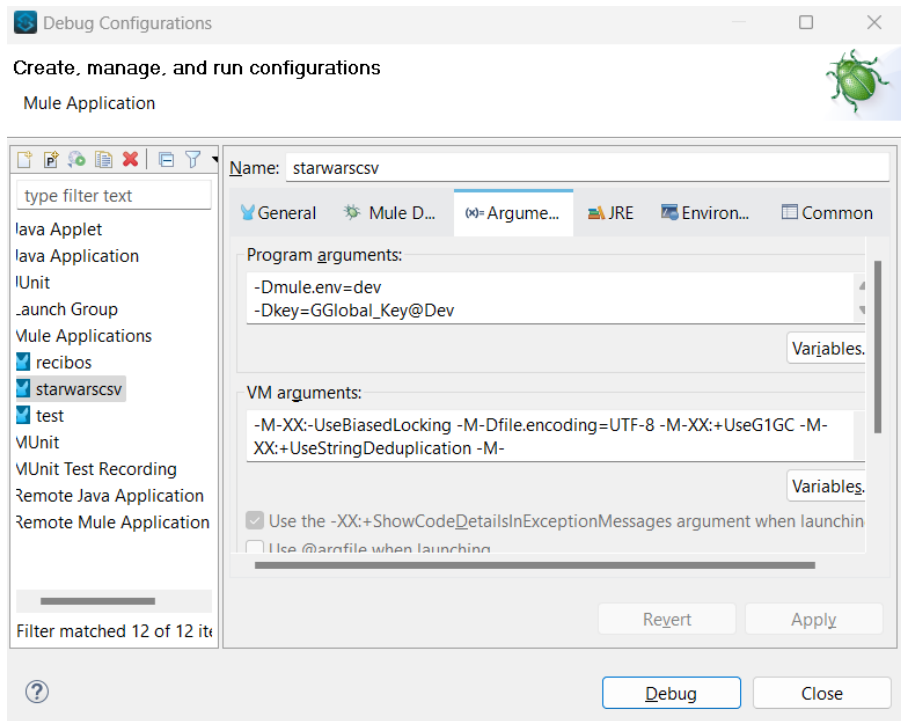
When you use different development environments such as: develop, production and stage. You deal with different configuration files with their respective keys and addresses. For that we have three files in `src/main/resources/properties`: `dev.yaml`, `prod.yaml` and `stage.yaml`.



How did I achieve my goal?

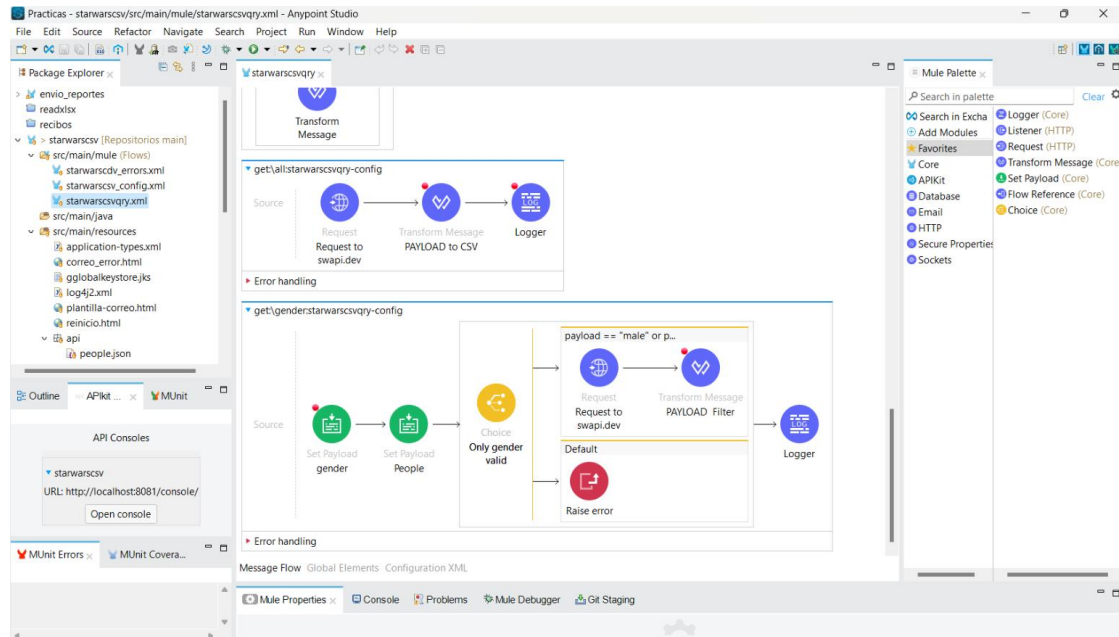
Templates for API development.

Finally, he mentioned that these parameters will be important for the API to work correctly and be secure. How do we put it? Here I show you... -Dmule.env=dev -Dkey=GGlobal_Key@Dev
Where: -D parameter indication mule.env environment variable used to determine the server to use. Key variable used to determine the key to encrypt



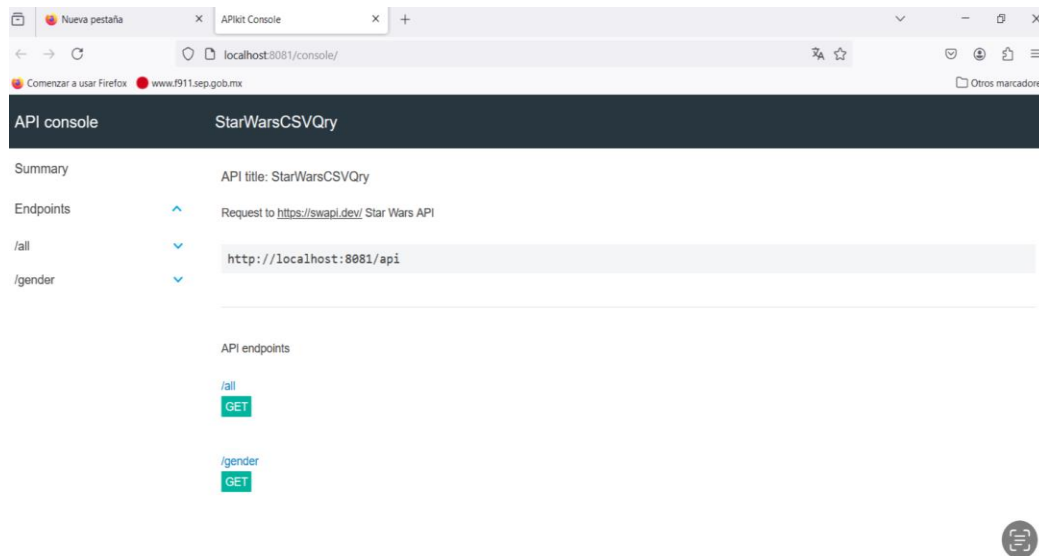
How did I achieve my goal?

We add the request component and its configuration
<https://swapi.dev/api/people>.
The transform component will help us change the JSON into csv format. To consume the service using “gender” add validation of acceptance of the values of male, female and n/a using the choice component and it will only execute the request in those cases. If a different value is requested, a gender validation error will be sent using the raise error component.



How did I achieve my goal?

Let's run the API to see how it works. Something like this should appear in the window. Here select the endpoint you want to use and we are ready for it to be used.



How did I achieve my goal?

Do you want to know
where I put a copy of
the API? .

<https://github.com/patycorreio/mi-repositorio.git>