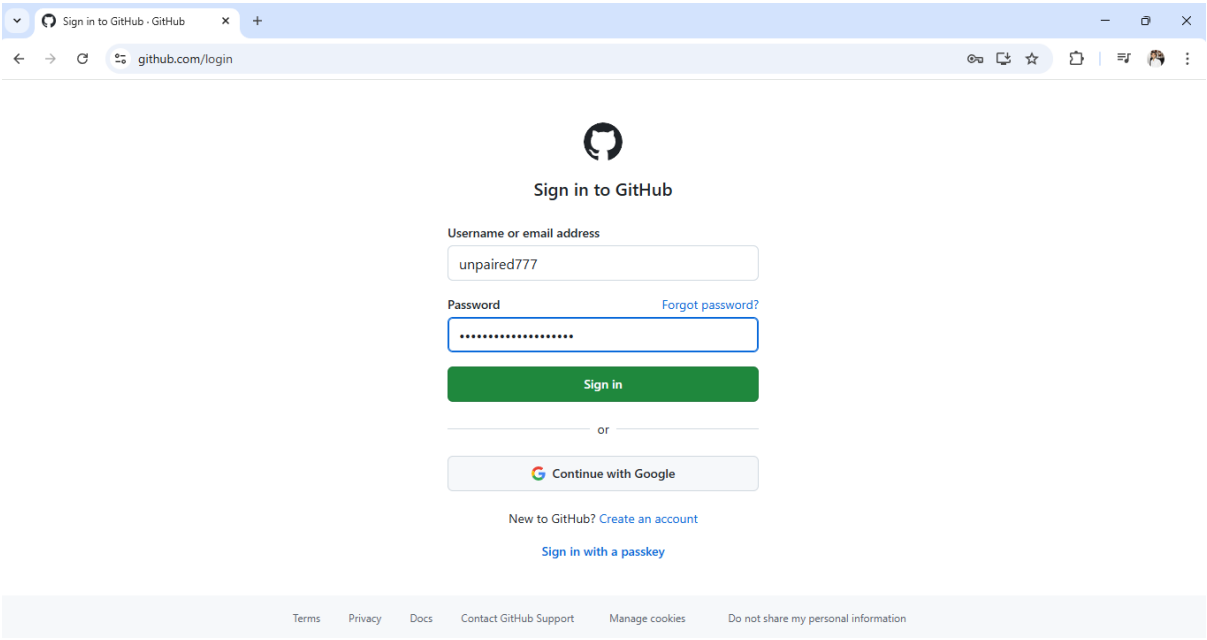
❖ IMPLEMENTATION OF GITHUB'S RESTFUL APIS IN UIPATH

- Using GitHub APIs for Demonstration Purposes

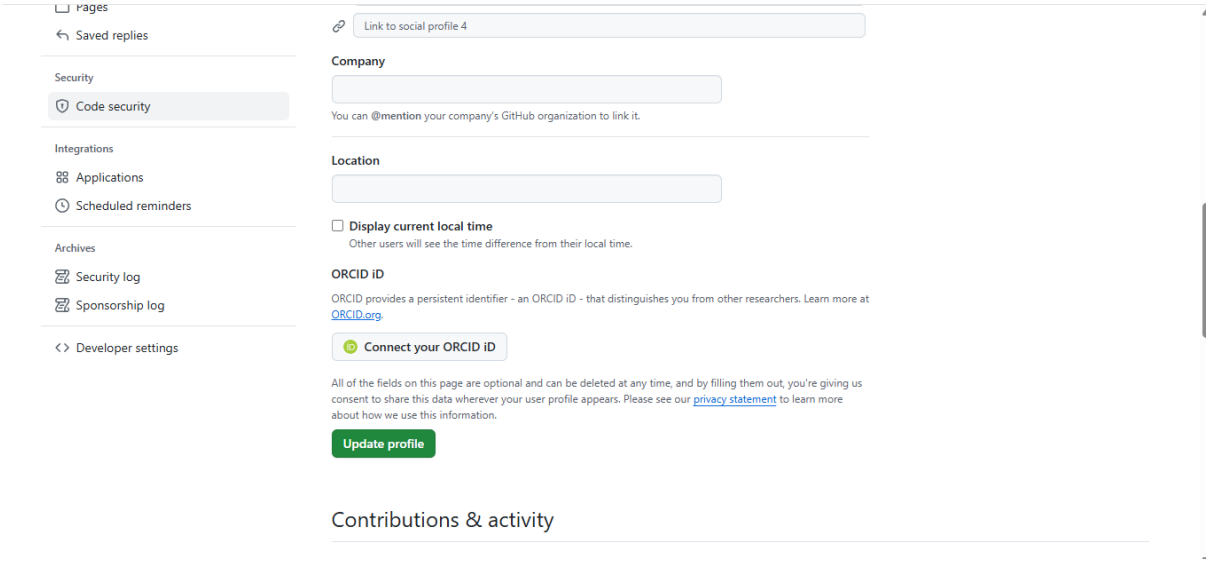
- **Prerequisites**

- GitHub **Login** – If you don't have an account, create one.
- Postman – Used for testing APIs.
- **UiPath.WebAPI.Activities** – Activities package for working with APIs in UiPath.

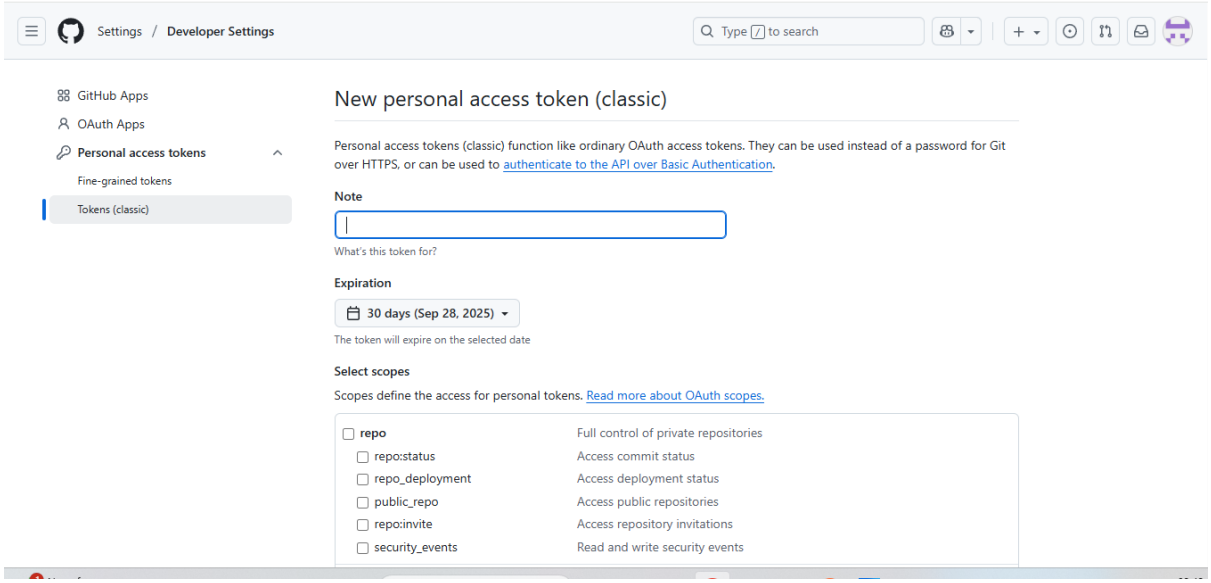


- Click on Settings, then go to Developer Settings

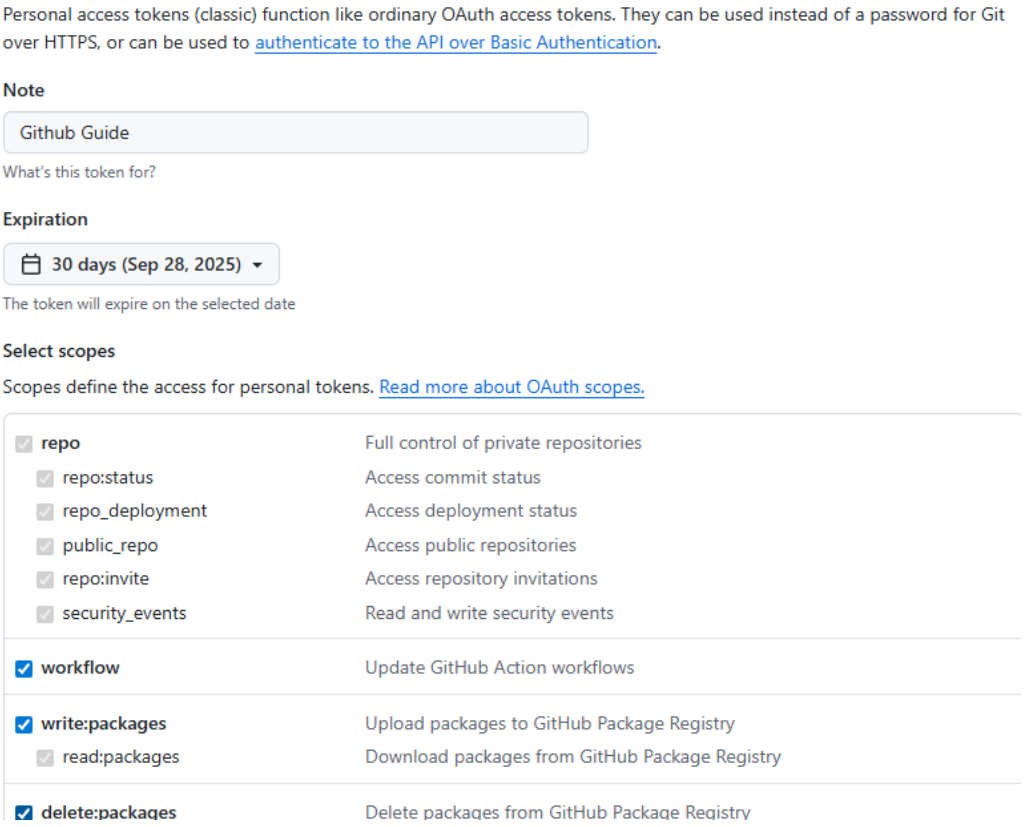
SS



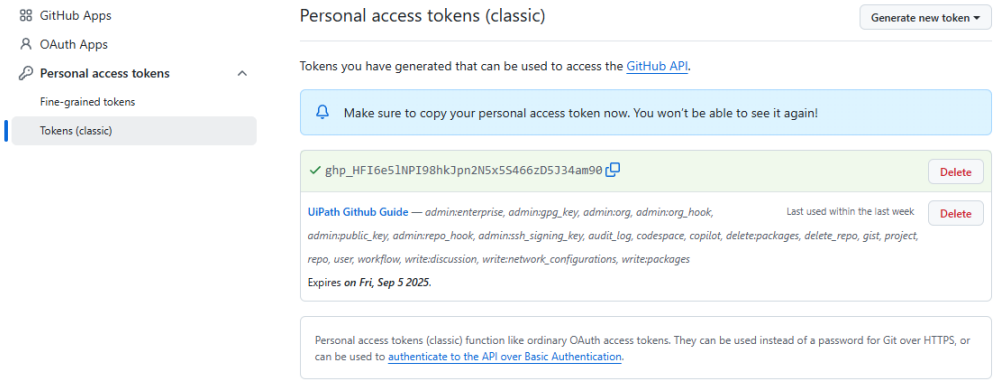
- Click on Tokens (Classic)



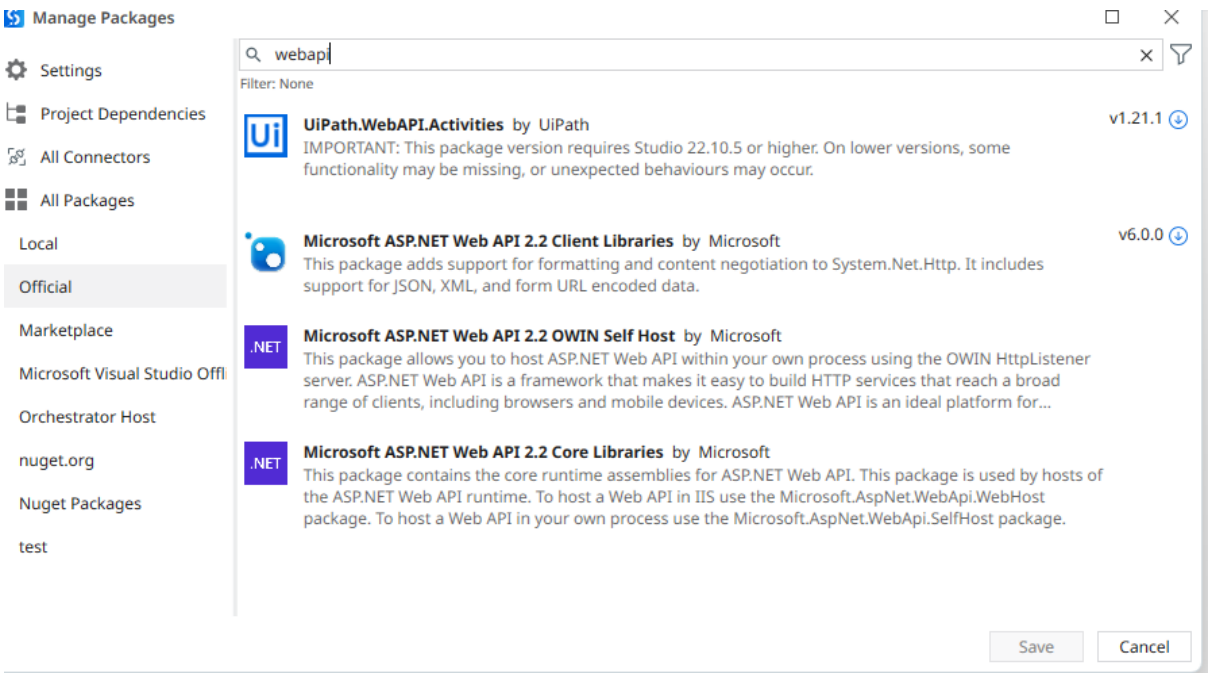
- Enter a Note name for the token.
- Set the expiration period and select the required permissions as per your needs.



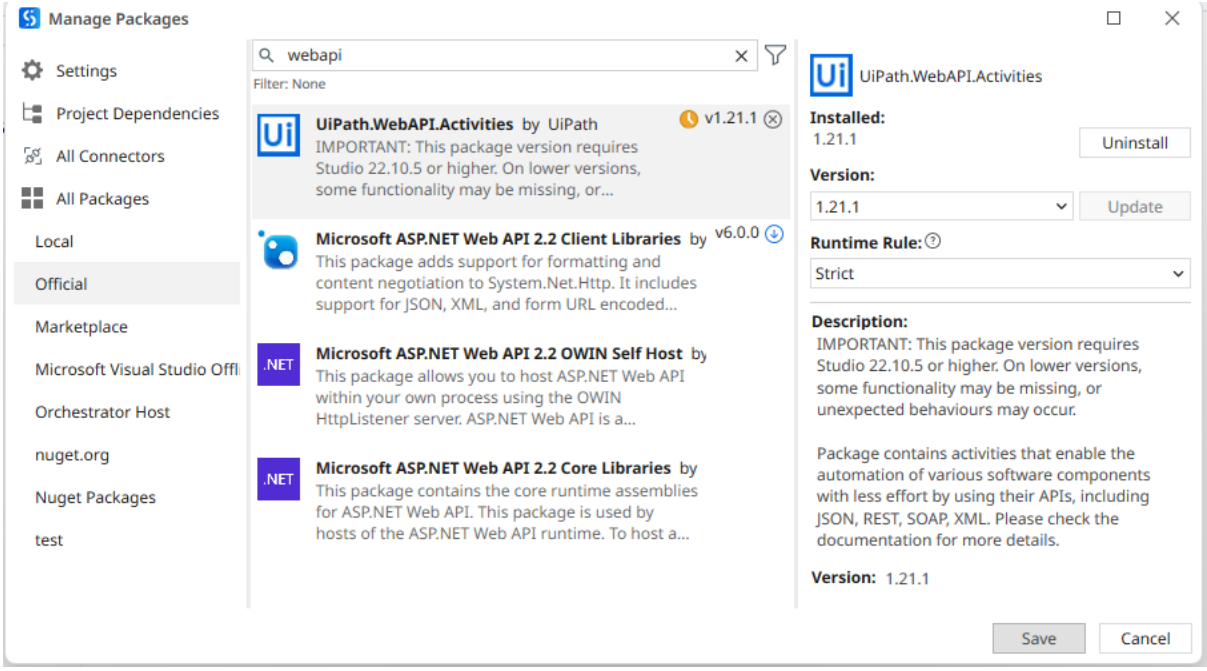
- Click on Generate Token. The token will be created and displayed as shown below.
- Do not use my API token; it will be revoked after creating this document.



- Open your UiPath project.
- Install the UiPath.WebAPI.Activities package from the Manage Packages window.



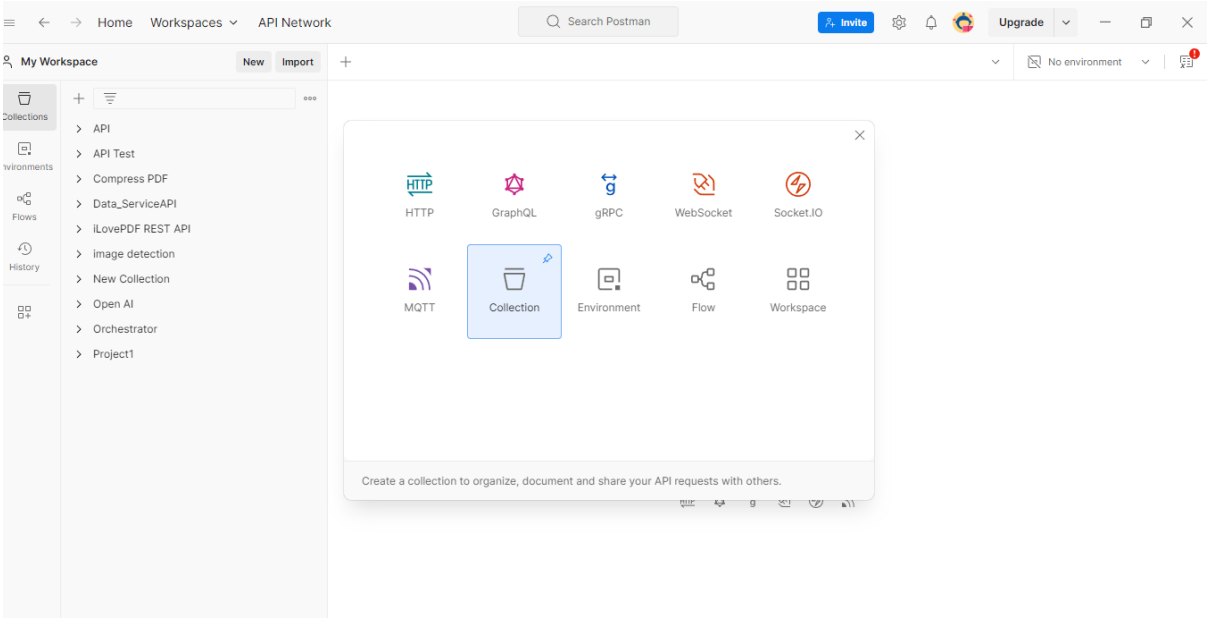
- Click on Install, then click on Save.



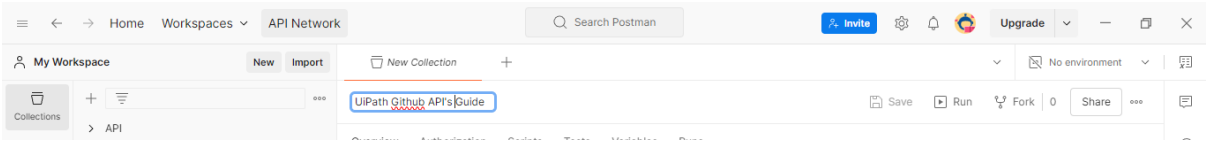
CRUD Operations:

- **Create** – Add new data.
- **Read** – Retrieve existing data.
- **Update** – Modify existing data.
- **Delete** – Remove data.

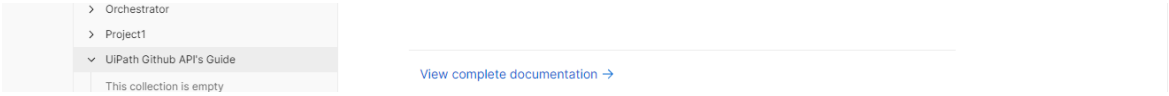
➢ Open Postman, click on New, and select Collection.



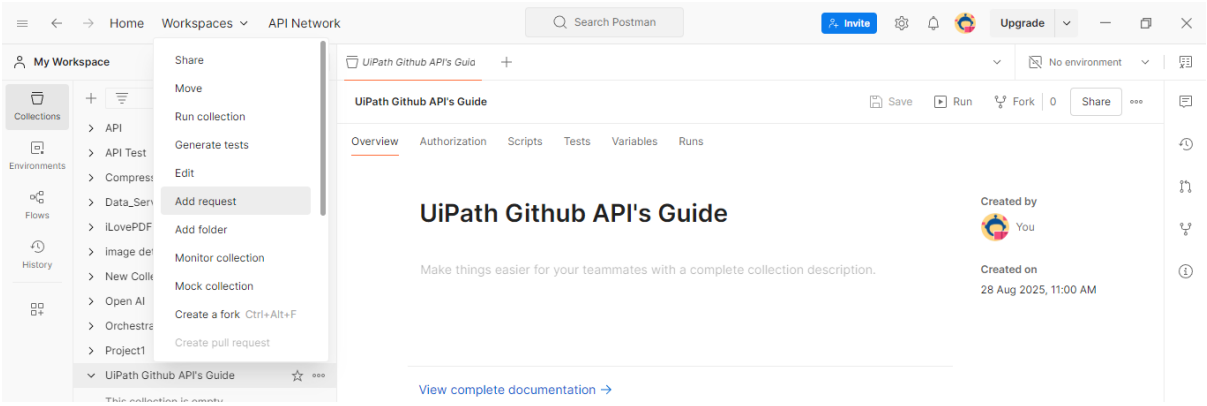
➢ Enter a name for the collection.



- The collection has been created, as shown below.



- Click on the three dots (…) next to the collection, then select Add Request.



We will start with the *Read* operation (Get Repositories).

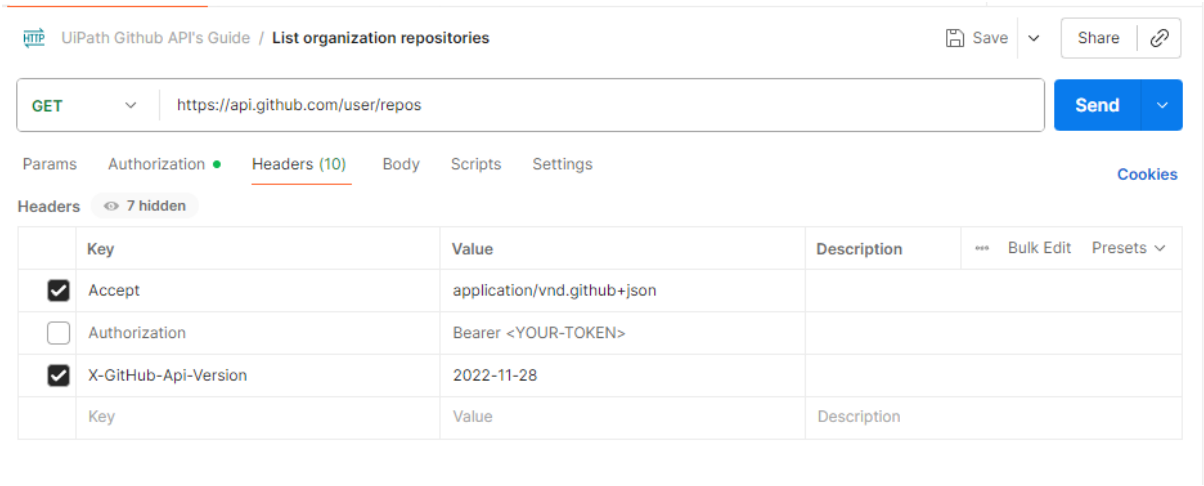
For documentation, please refer to the link below :
https://docs.github.com/en/rest/repos/repos?apiVersion=2022-11-28#get-a-repository

Provide the GET request Base URL along with the Endpoint, as shown below.

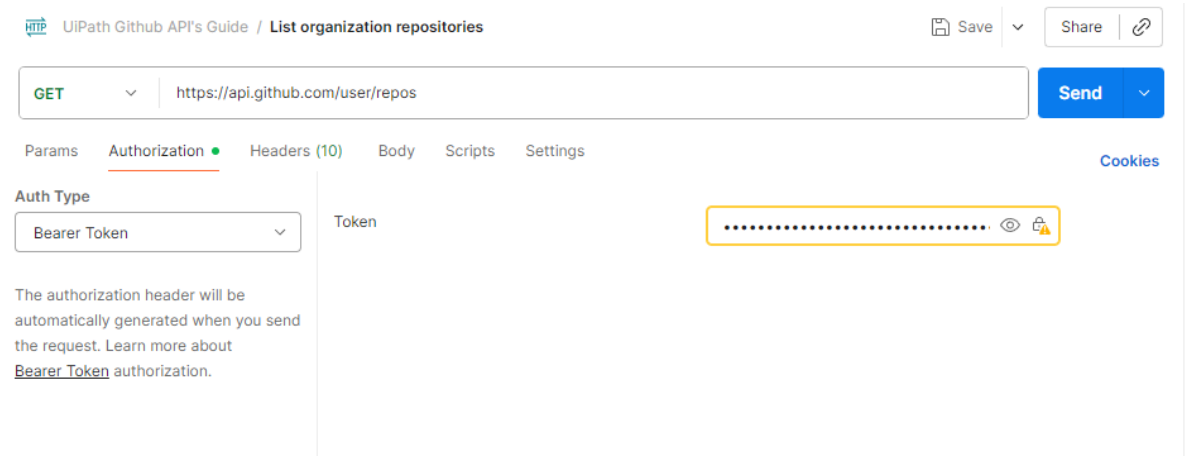
Base URL – The root address of the API server (e.g., https://api.github.com).

Endpoint – The specific path added to the Base URL to access a resource (e.g., /users/{username}/repos).

To understand the concept of Base URL and Endpoint, please refer to YouTube tutorials for additional clarity.



Now, provide the Bearer Token that we generated earlier

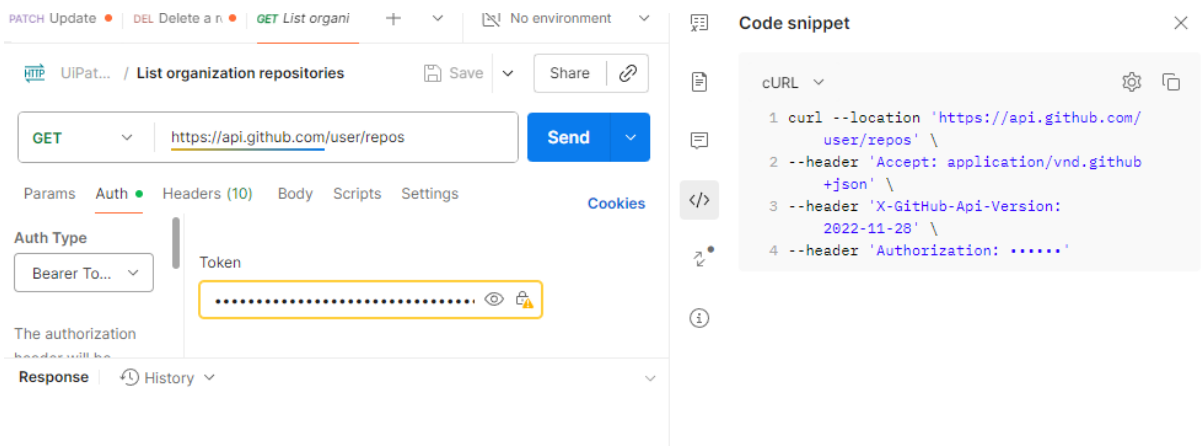


Send the request, and you will receive a response with Status Code 200 along with the response details shown below.

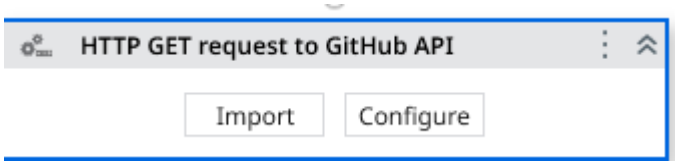
Now that the API is working, we will switch to UiPath and run it from there.

Drag the *HTTP Request* activity into the workflow and configure it as shown below.

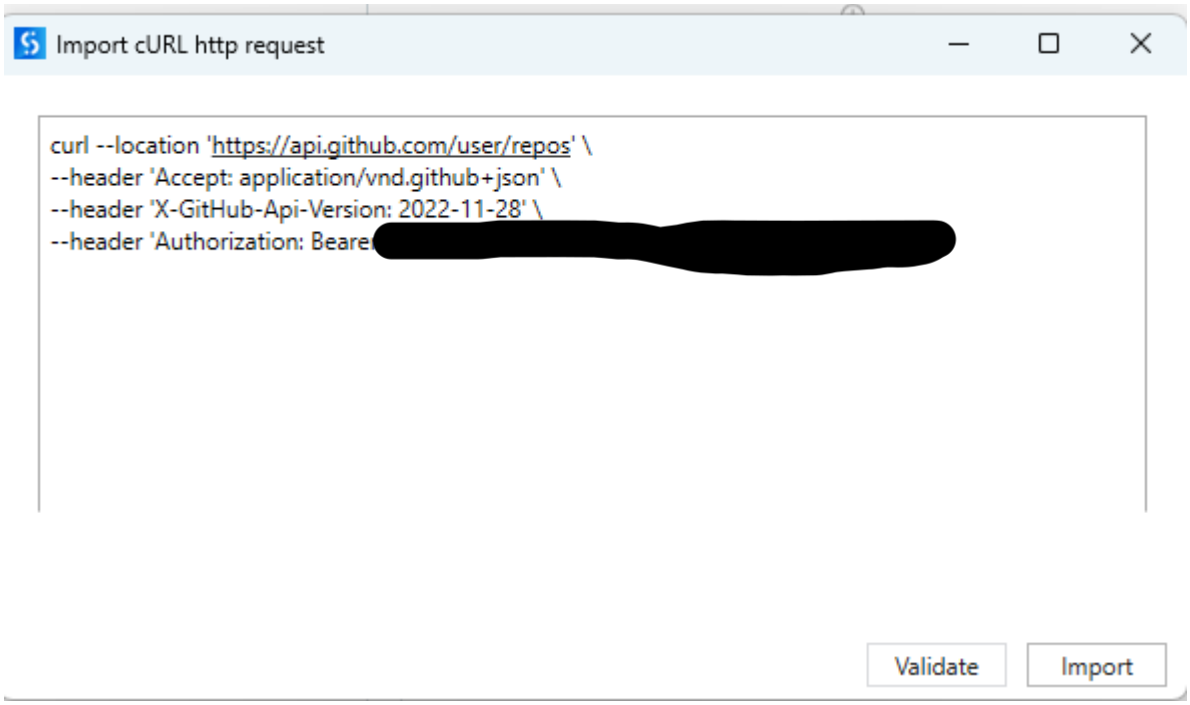
If you don't want to manually configure the parameters, you can copy them directly from Postman by clicking on the </> icon and Copy as CURL.



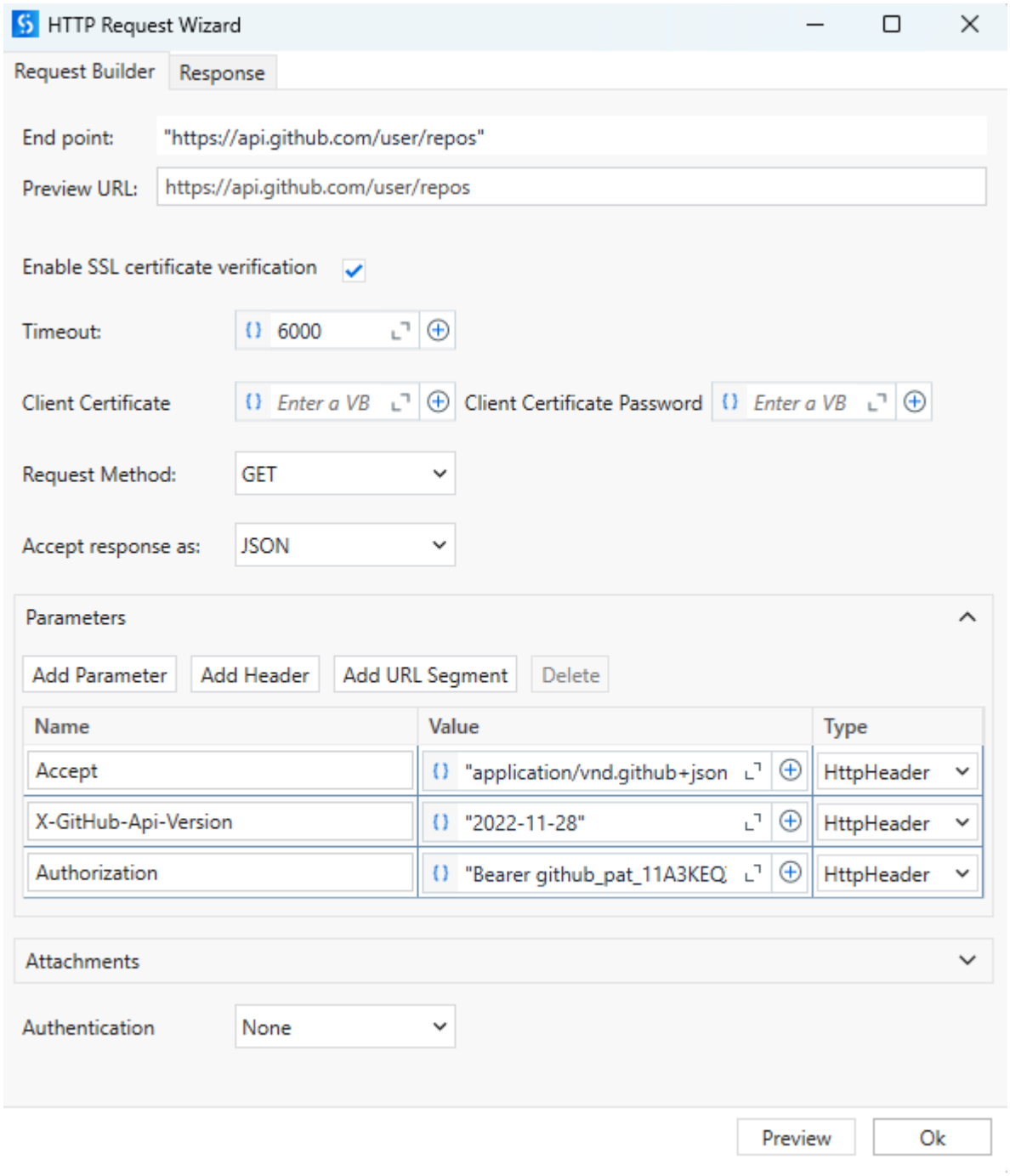
Copy the cURL command and click on *Import*.



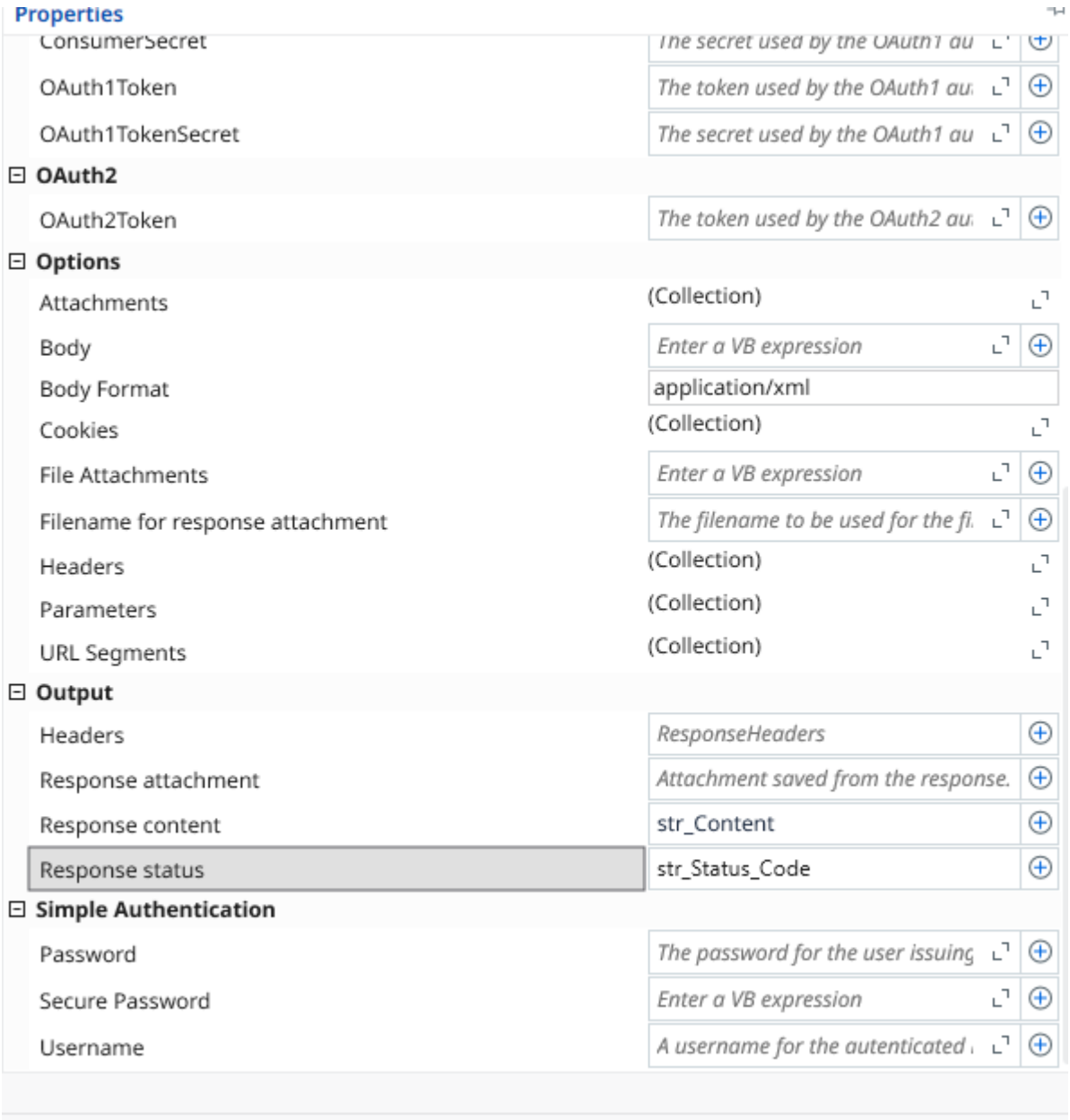
Import the cURL you copied from Postman, then click on *Import*.



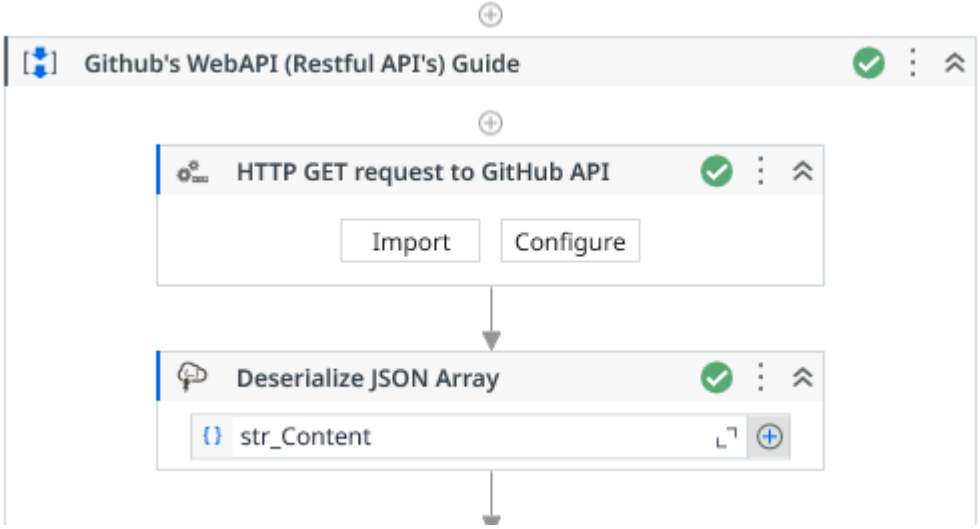
Once imported, it will look like the example shown below. Alternatively, you can configure it manually using the documentation URL.



Create variables for *Status Code* and *Content* to validate the response data.

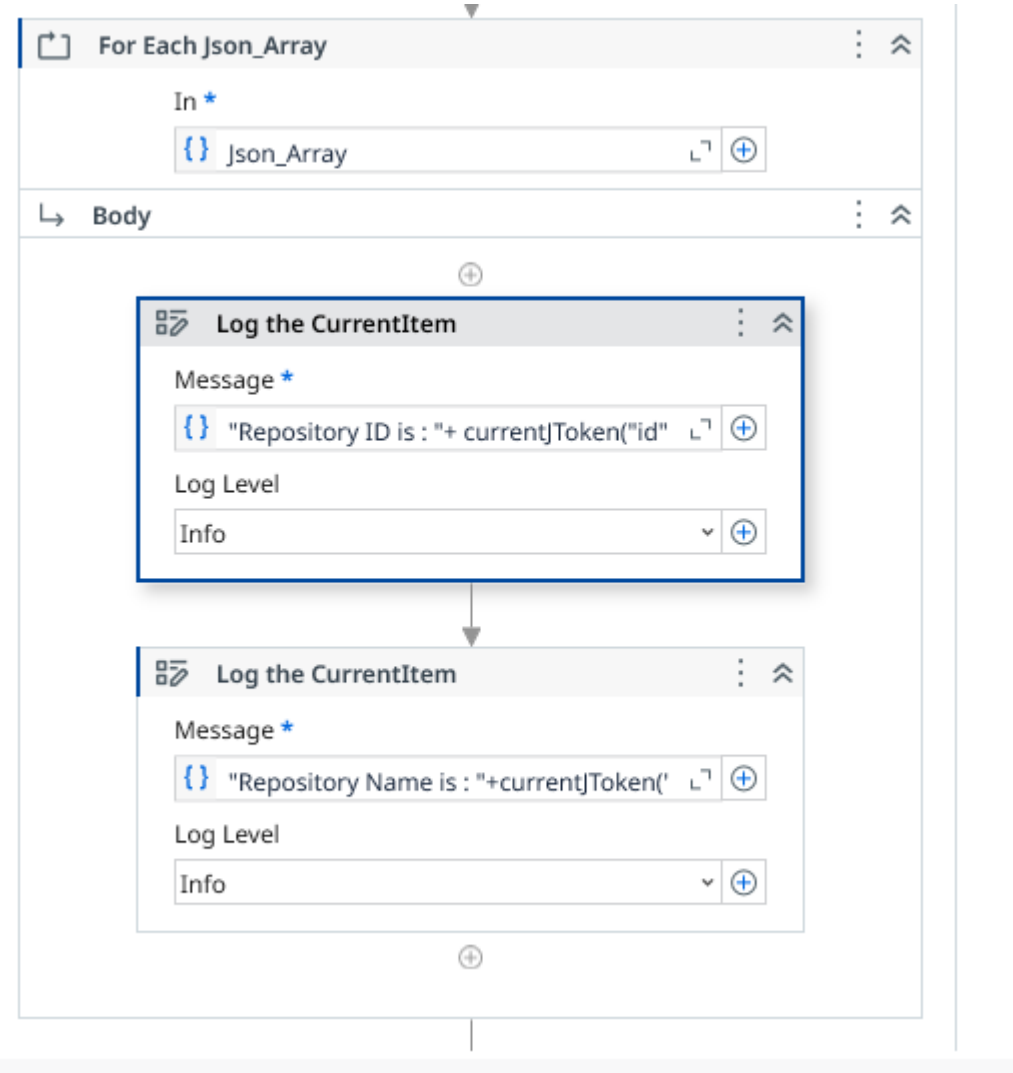


Drag the *Deserialize JSON Array*, since we have multiple repositories in the response.

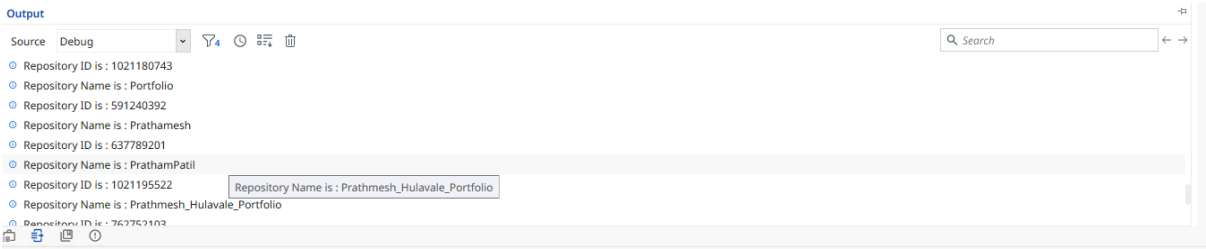


Once deserialized, iterate through the data using a *For Each* activity.

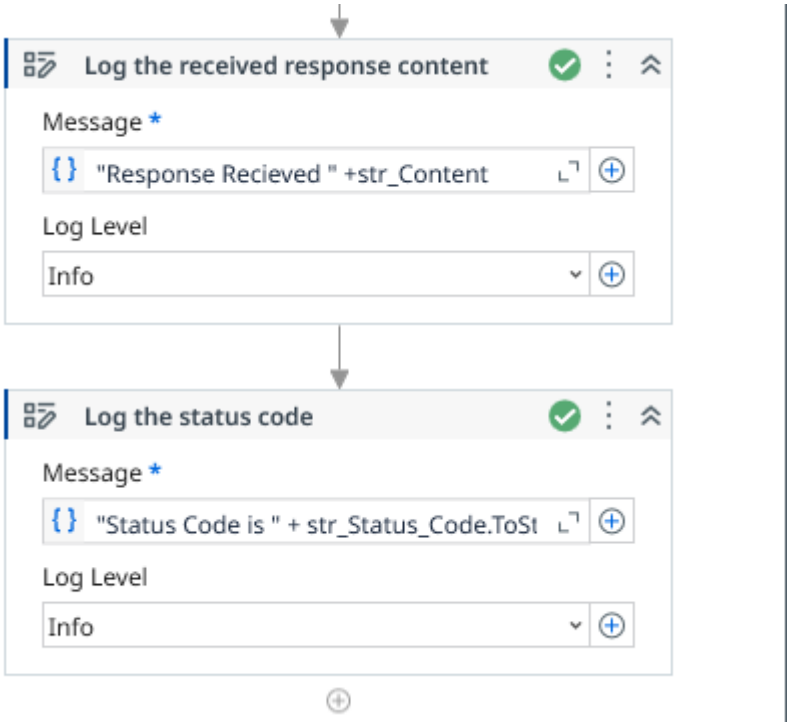
Access the Repository ID and Name with currentJToken("id").ToString.



You will be able to see the output as shown below.



Log the Content and Status Code for verification purposes.



Check the Status Code as shown below.

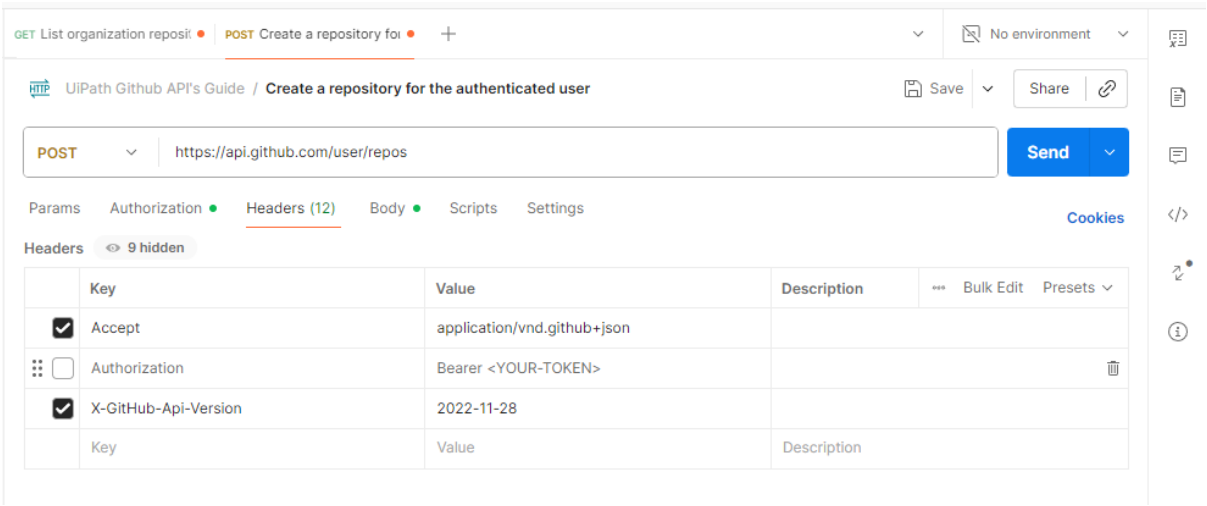
Create a repository for the authenticated user using the POST Method

https://docs.github.com/en/rest/repos/repos?apiVersion=2022-11-28#create-a-repository-for-the-authenticated-user

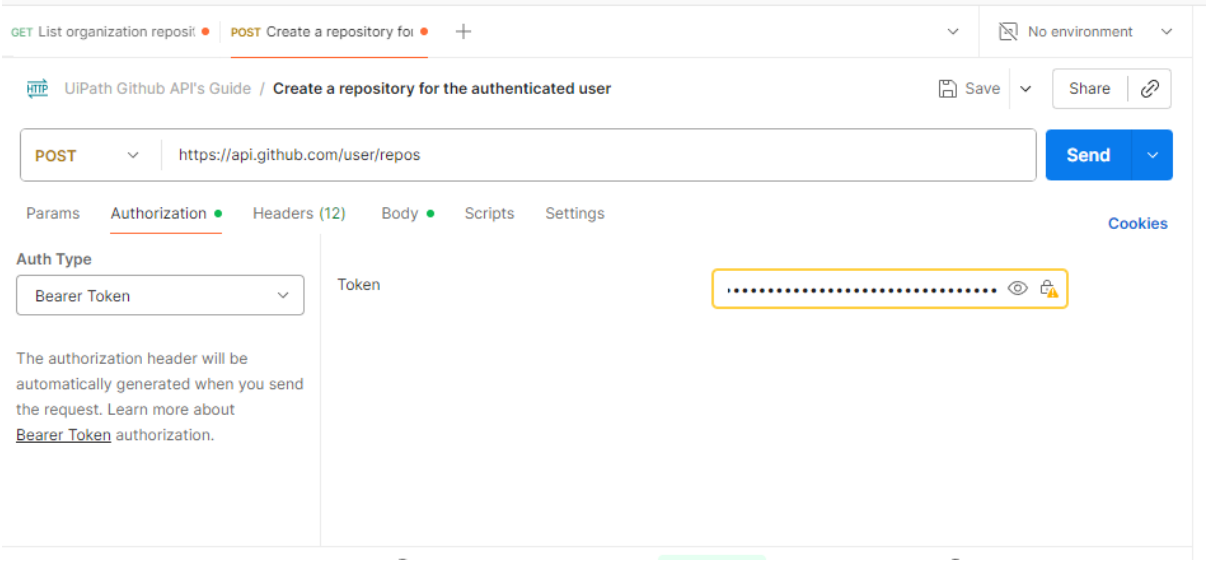
Go to the documentation URL and check the Base URL and Endpoint for creating a repository.

Configure the Base URL and Endpoint as shown below.

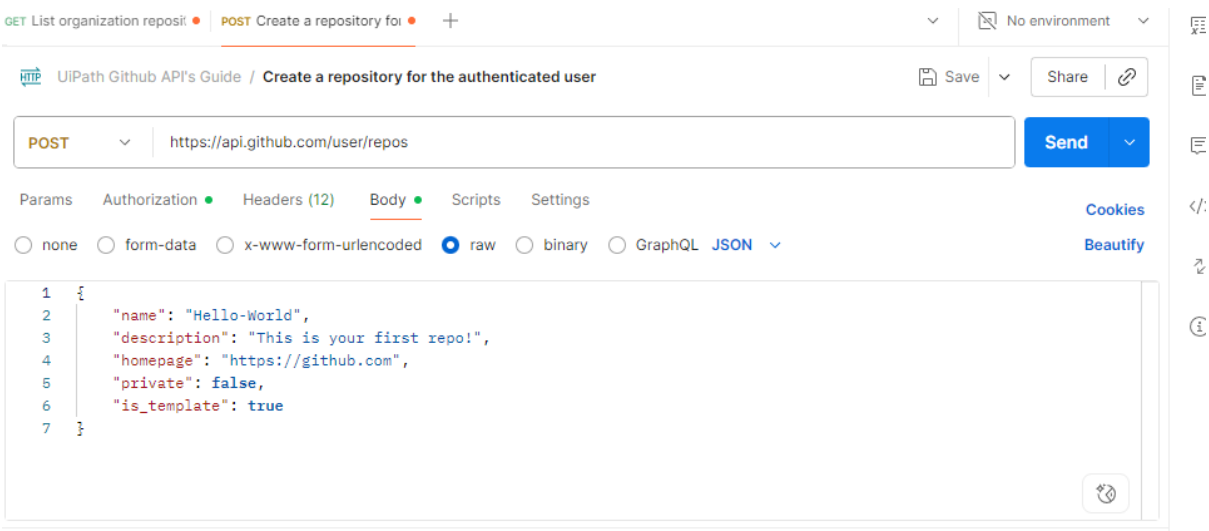
Provide the required header parameters.



Enter the Bearer Token that we copied earlier.

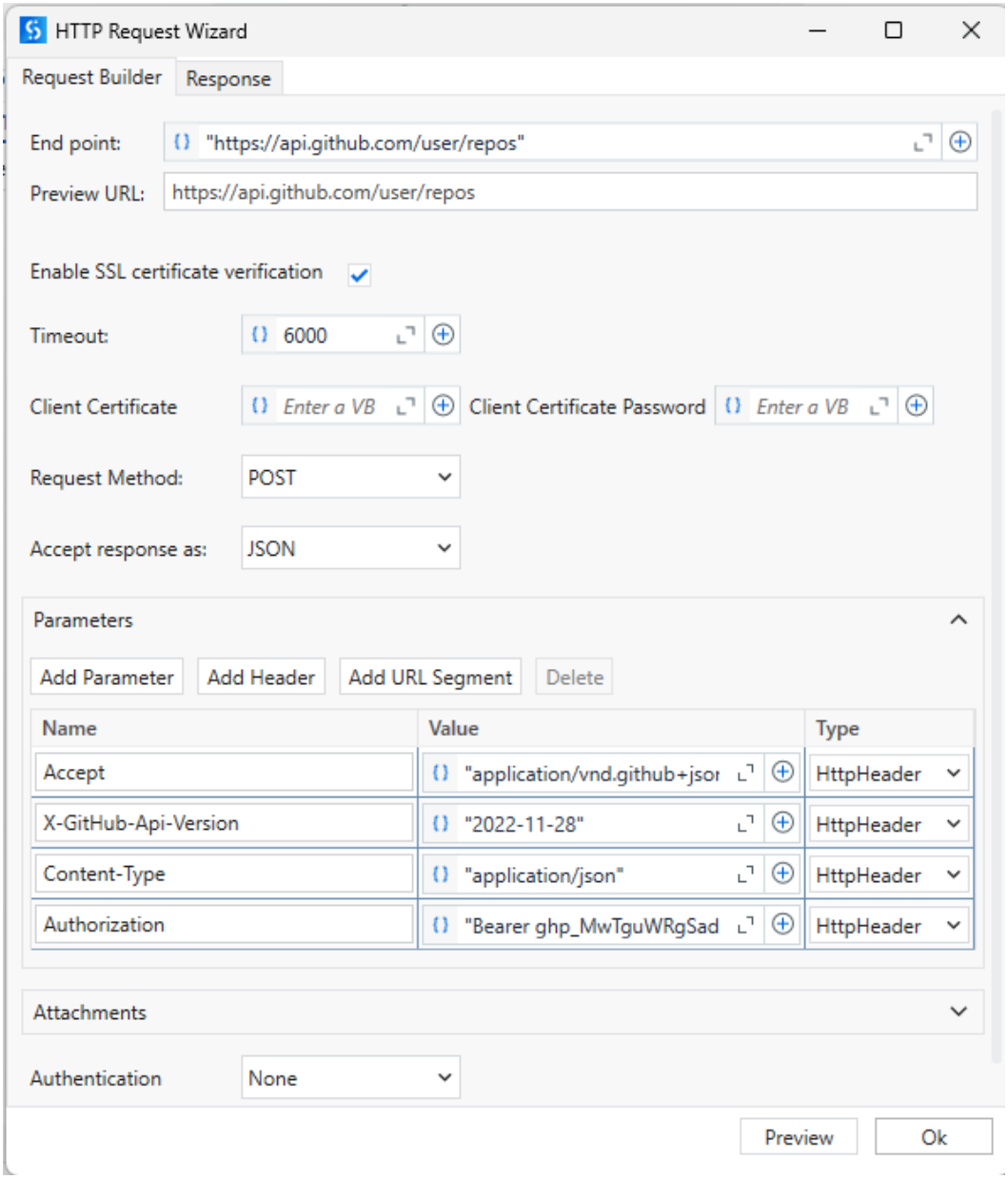


Add the JSON body by navigating to *Body > Raw > JSON*, then provide the request body and click on *Send*.



Once the request is sent, the output will be displayed as shown below with Status Code 201 Created.

Now, we will go to UiPath and configure all the parameters as shown below.



We will assign the JSON body that needs to be sent for creating a repository.

The syntax is as shown below:

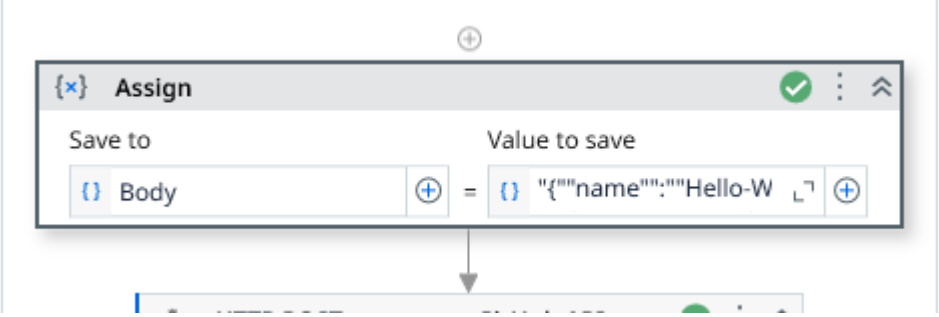
"{""name"":""Hello-World""

,""description"":""This is your first repo!"",

""homepage"":""https://github.com"",

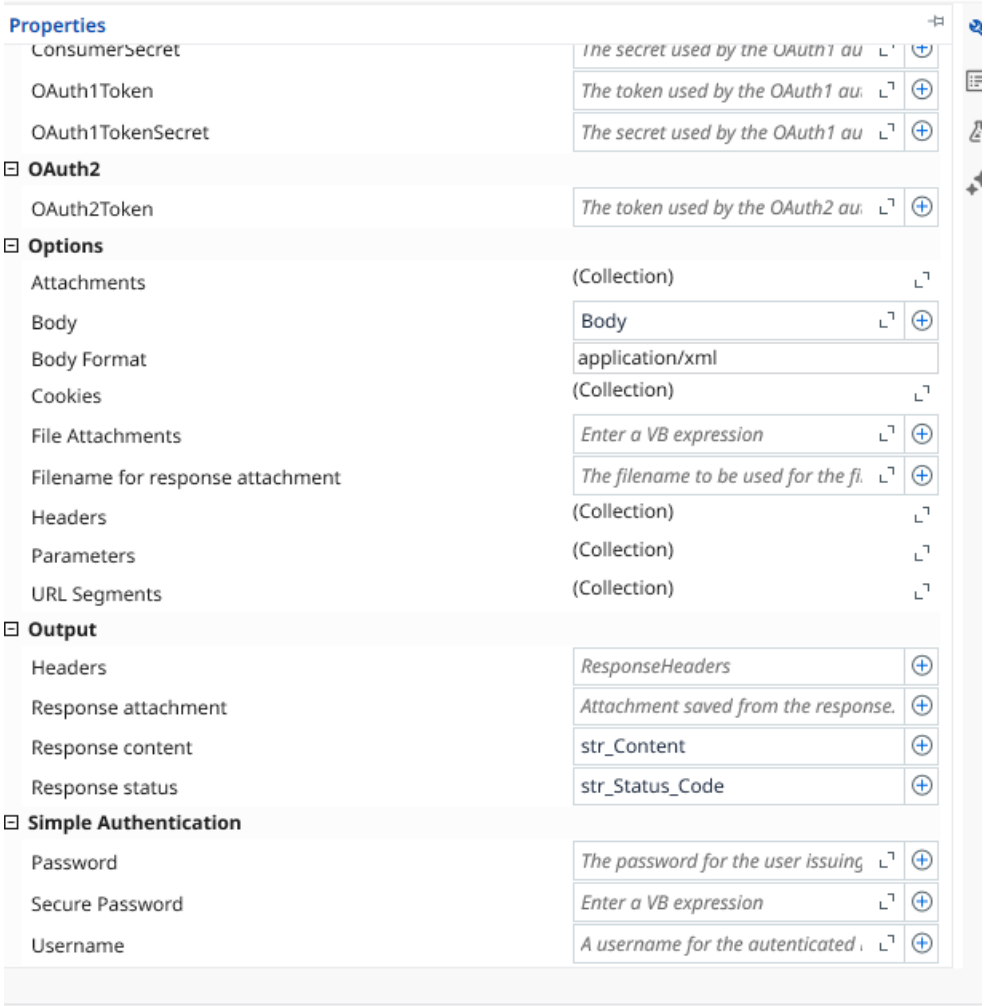
""private"":false,

""is_template"":true}"

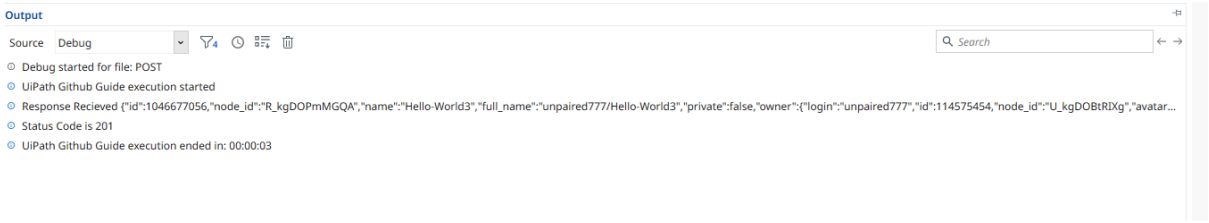


Then, pass the Body variable in the HTTP Request activity.

Create variables for *Content* and *Status Code* to capture and verify the output.



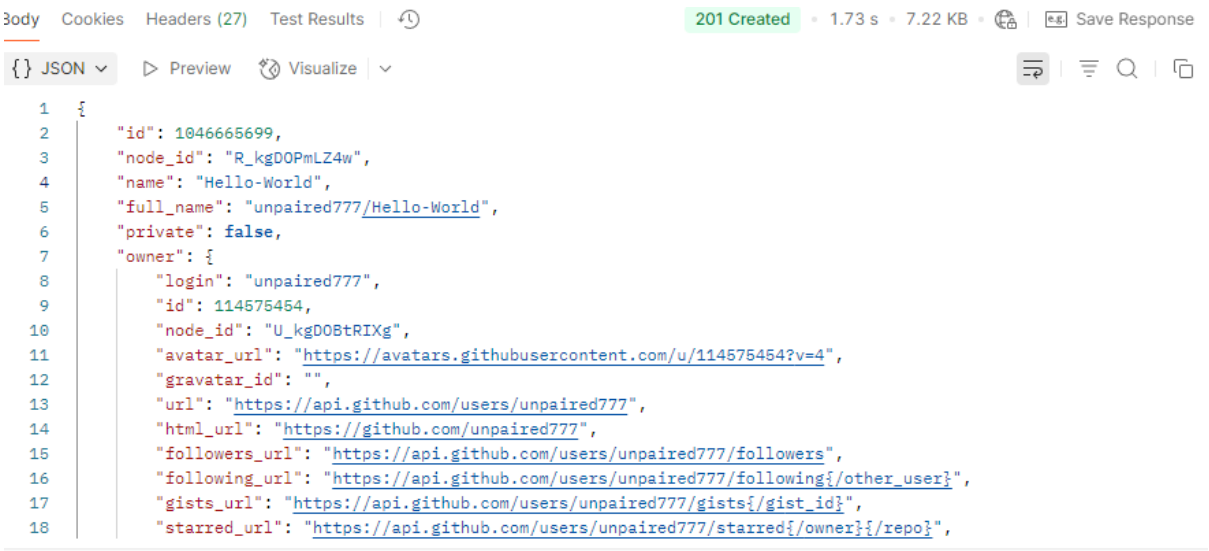
Once configured, run the project and you will get the output as shown below.



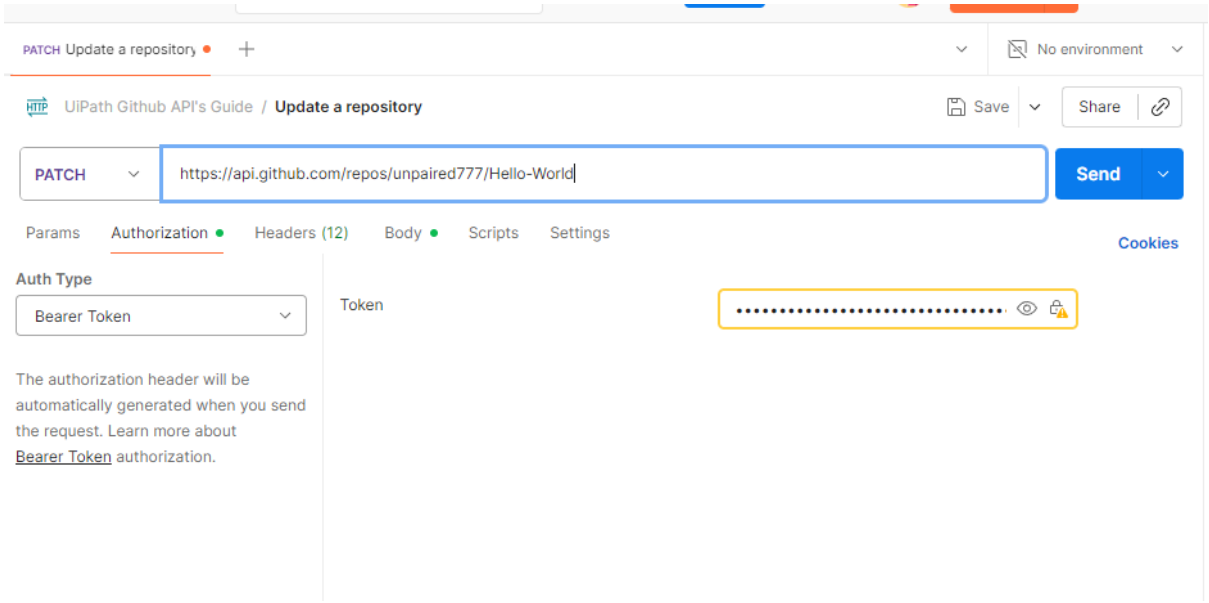
Update the repository using the PATCH method

https://docs.github.com/en/rest/repos/repos?apiVersion=2022-11-28#update-a-repository

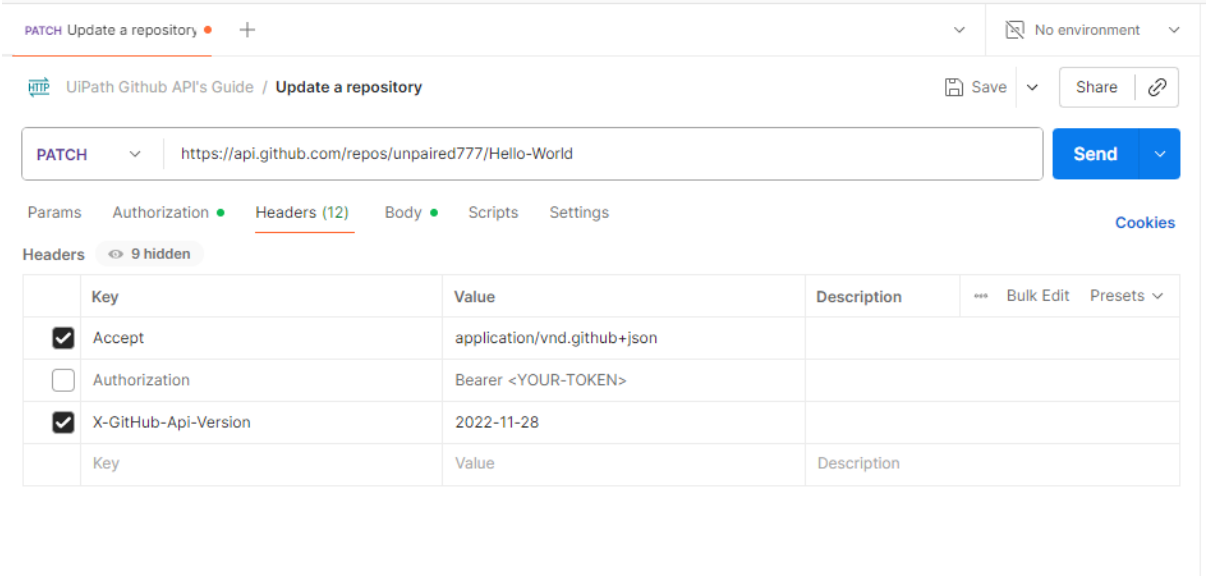
We have the repository as shown below.



Go to Postman and configure the parameters as shown below using the reference link above. Add the Bearer Token

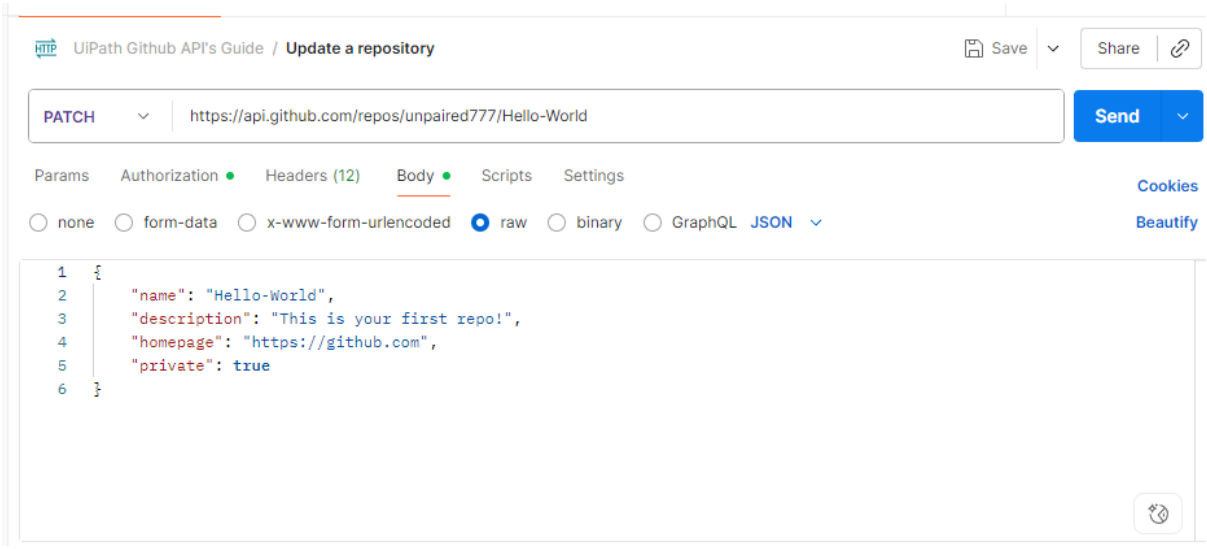


Add the required header

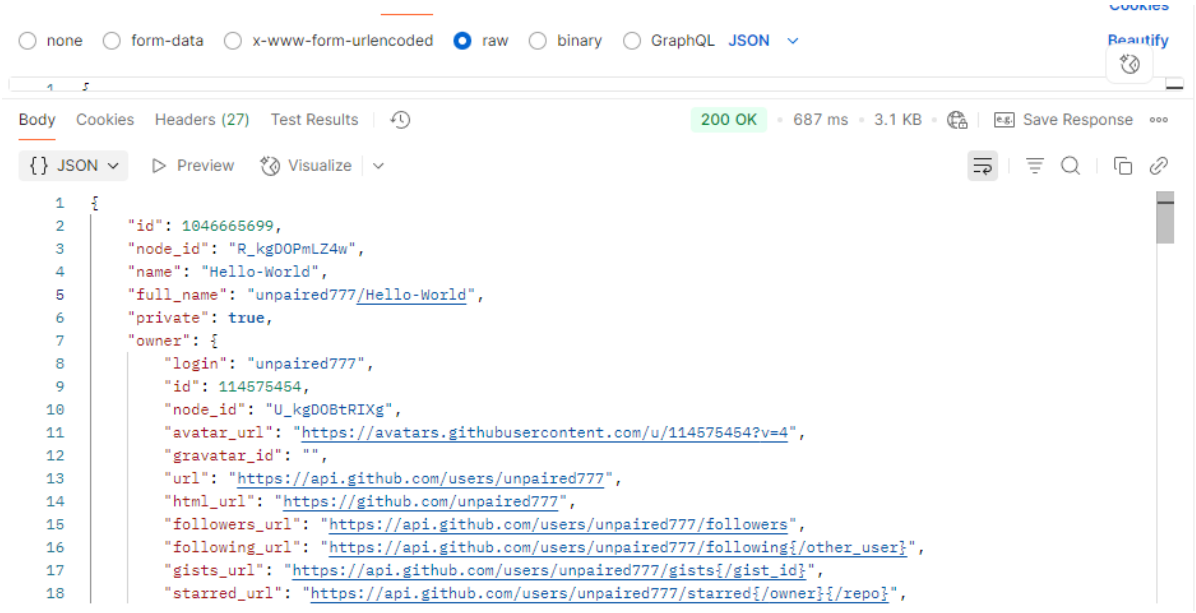


Add the JSON body with the parameters you want to update.

In the example above, the repository has "private": false (public). We will change it to "private": true, making it a private repository.



Once sent, you will receive the response as shown below.



Create a Body variable and configure it with the JSON content.

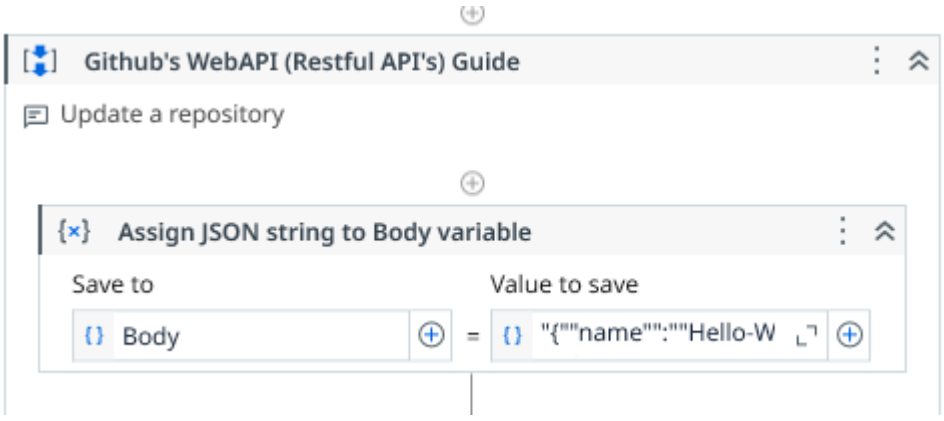
"{""name"":""Hello-World test""

,""description"":""Updating Repo"",

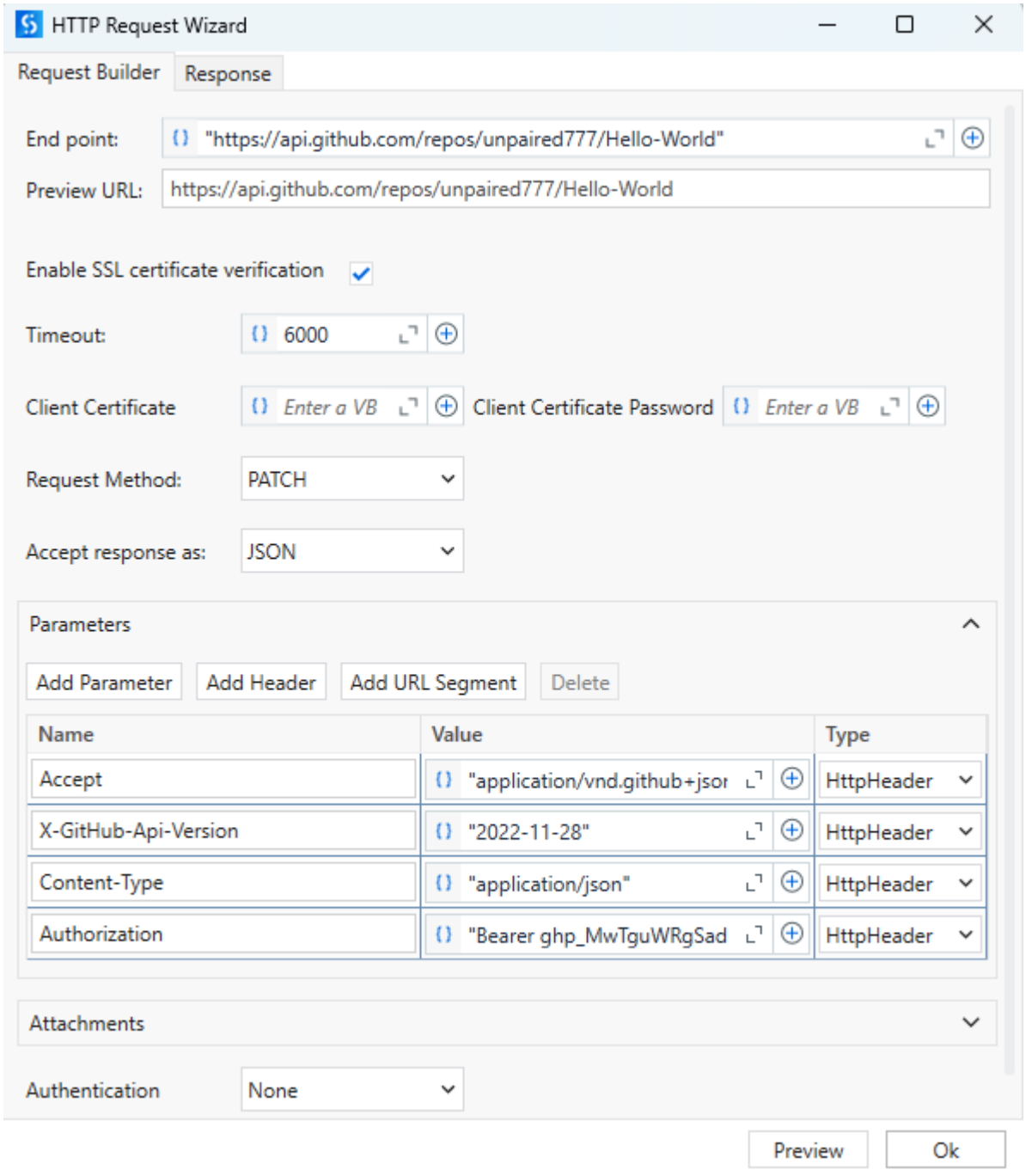
""homepage"":""https://github.com"",

""private"":true,

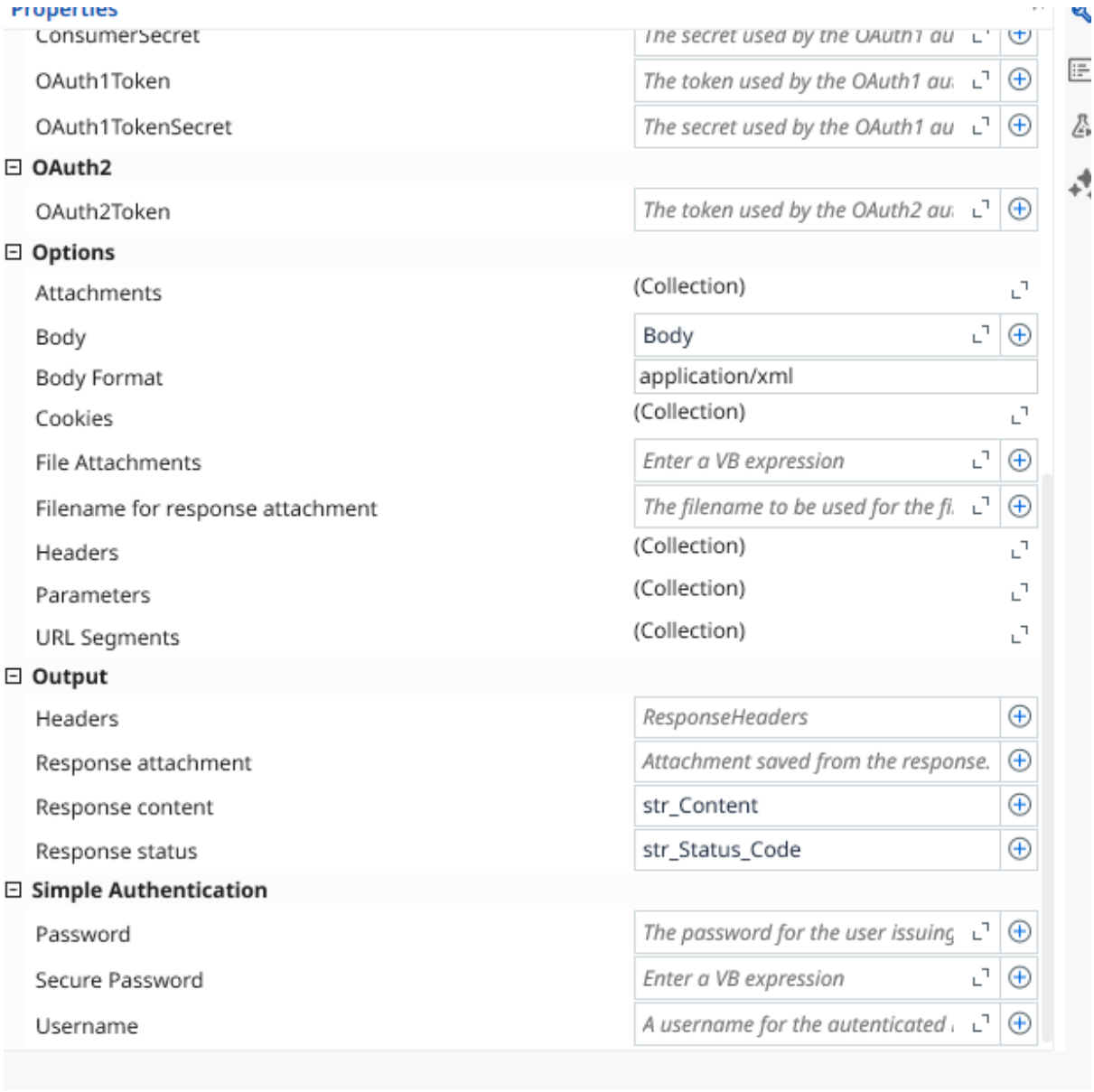
""is_template"":true}"



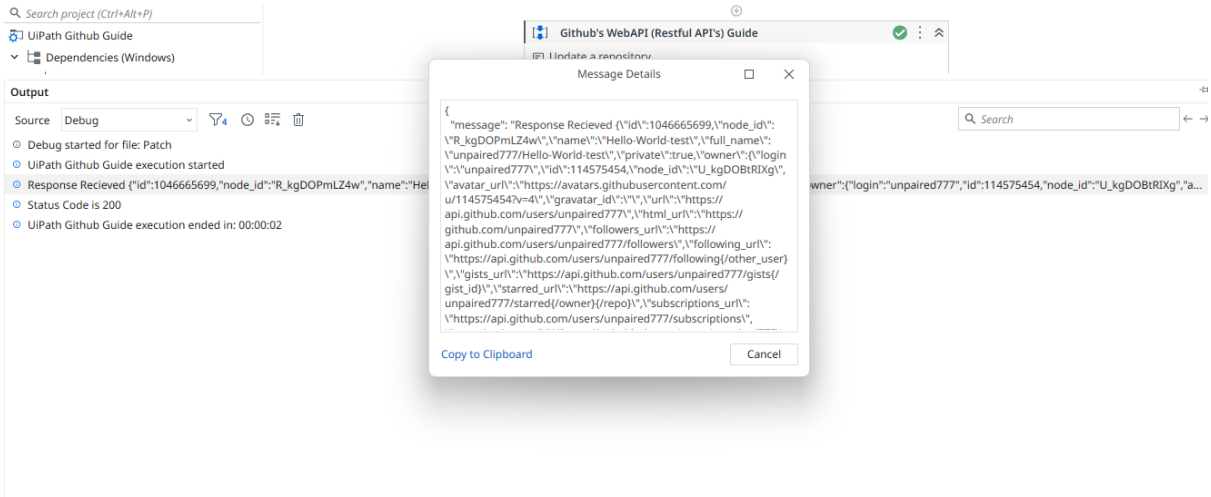
Configure the parameters as shown below.



Create a Body variable, and also create Status Code and Content variables.



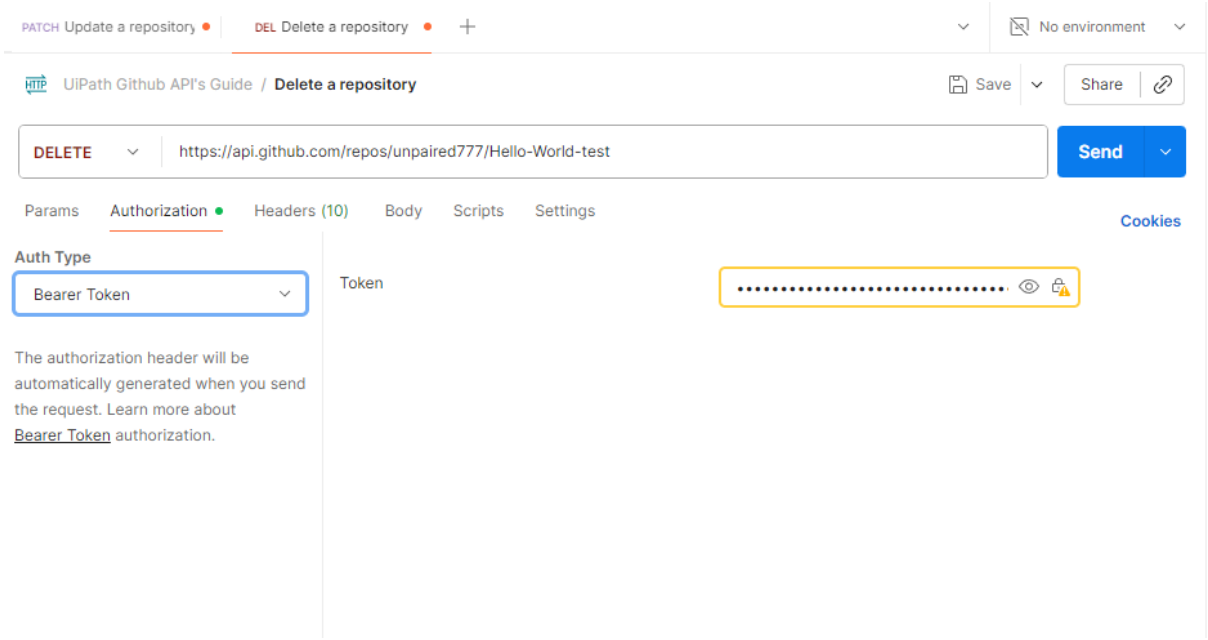
Run the project, and you will receive the response as shown below.



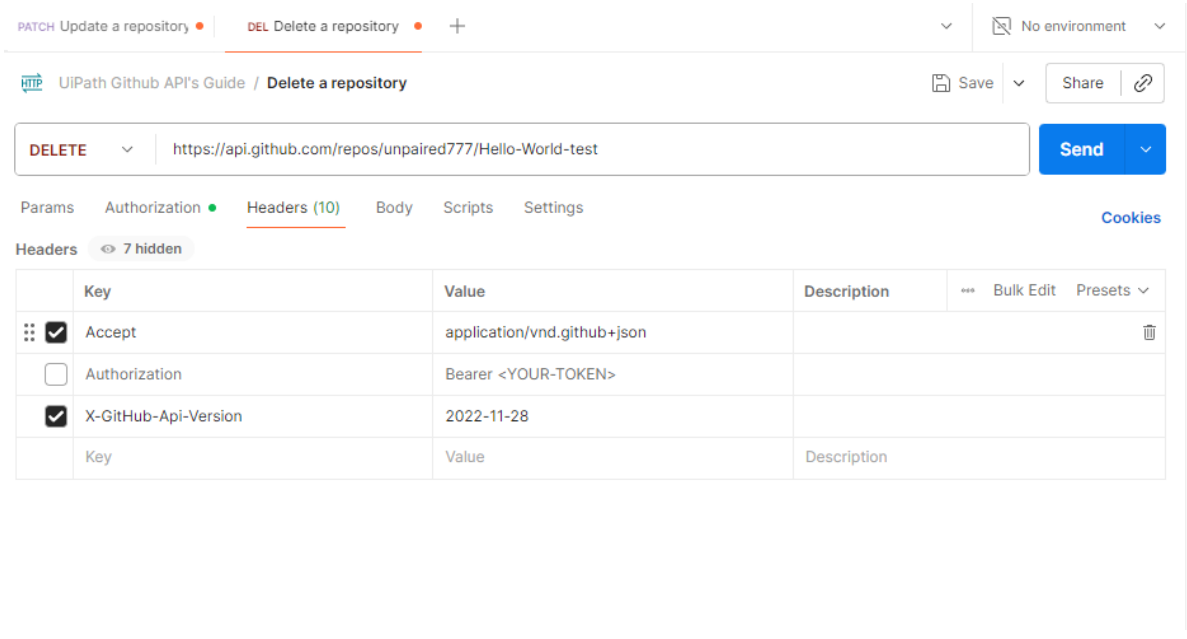
Delete the repository using the DELETE method.

https://docs.github.com/en/rest/repos/repos?apiVersion=2022-11-28#delete-a-repository

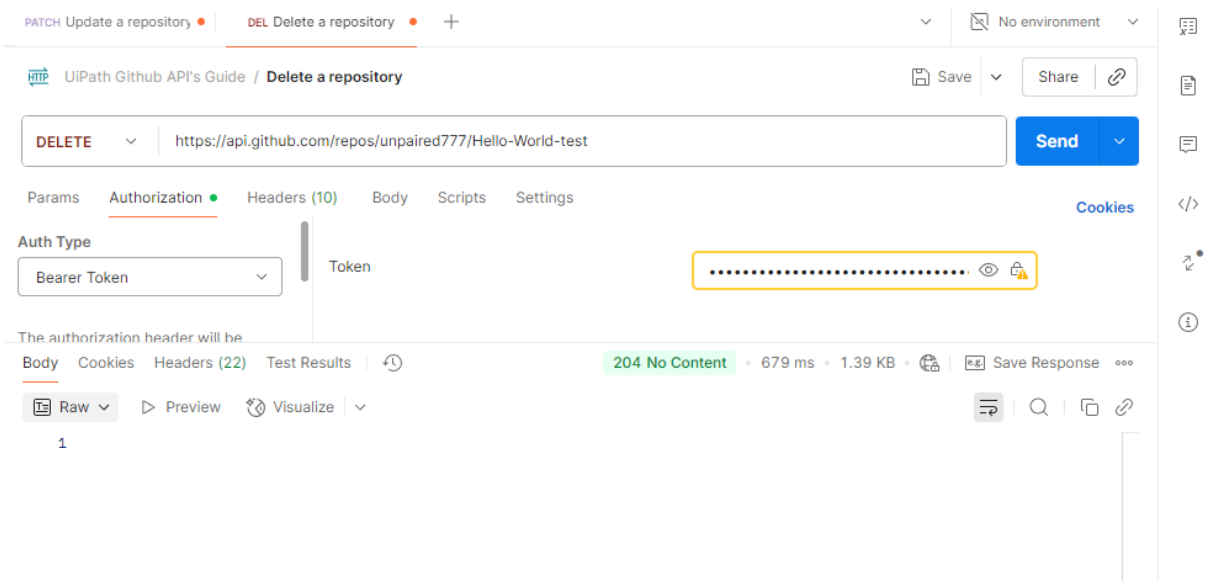
Configure the Base URL and Endpoint using the reference link above.



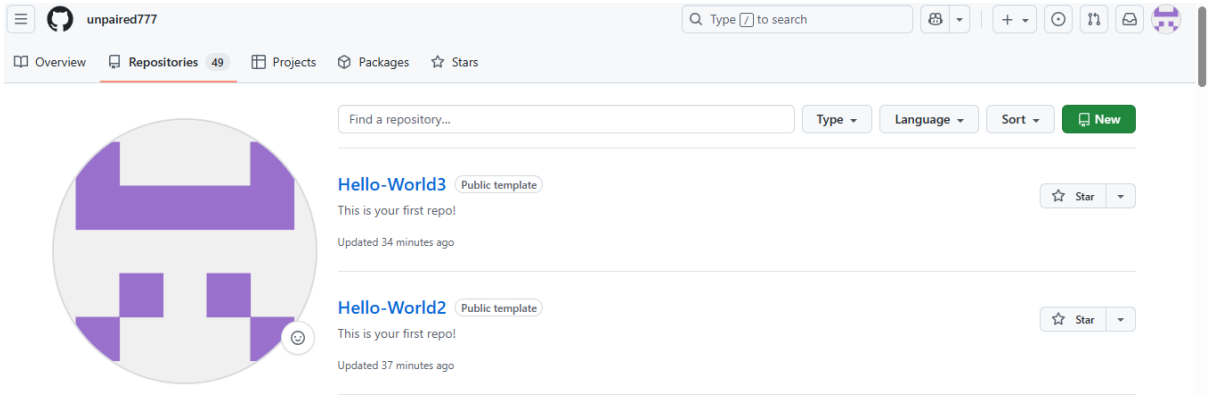
Configure the required headers.



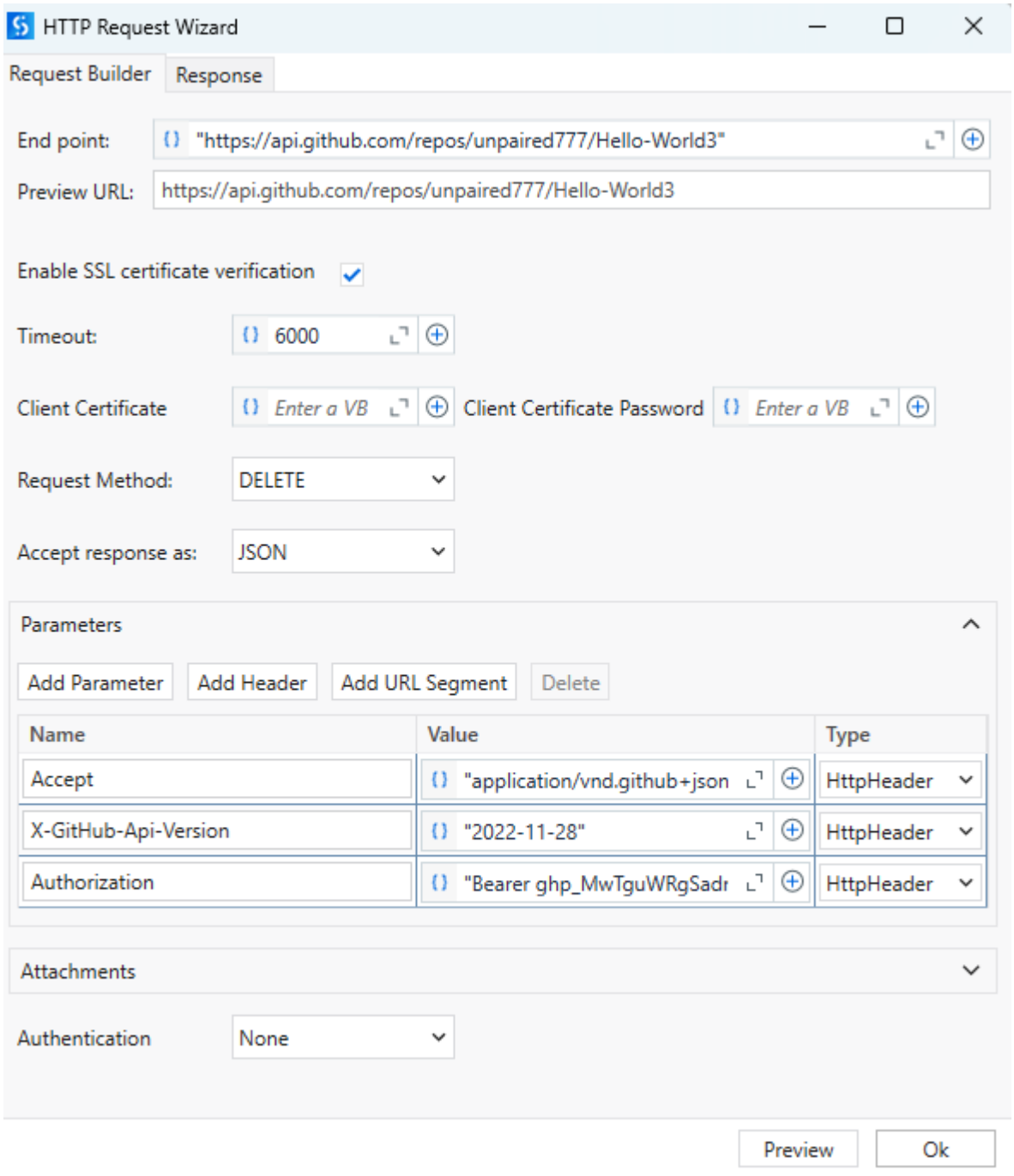
Click on *Send*, and you will receive a 204 No Content response.



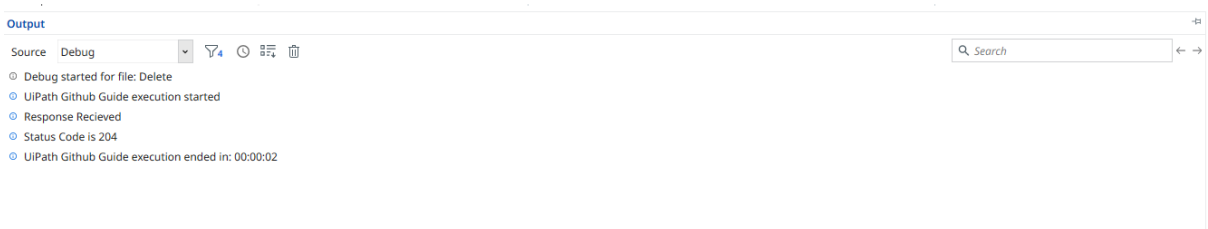
As shown below, we will delete this repository using UiPath.



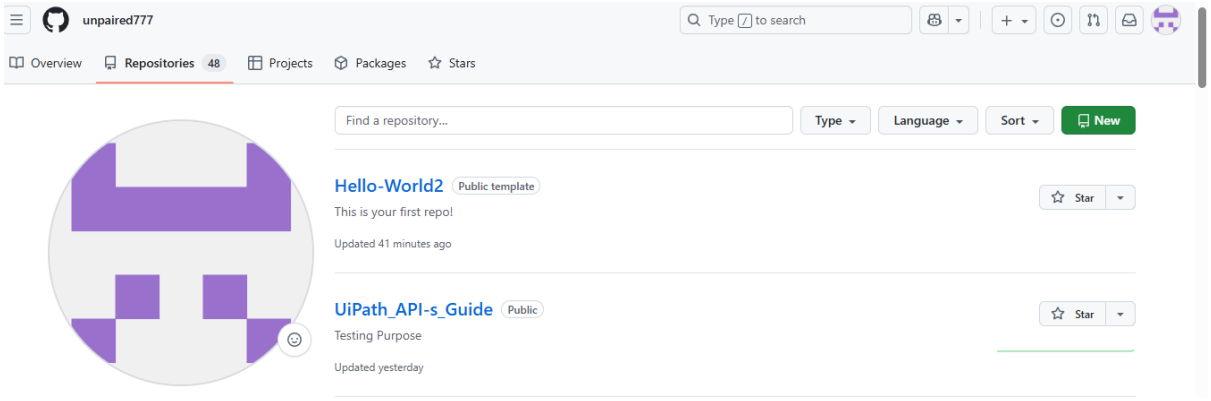
Drag the *HTTP Request* activity and configure it as shown below, or use the reference URL above.



You will receive the response as shown below.



You can verify that the repository has been deleted.



Thanks for going through my document!

Portfolio Website: Prathamesh Hulavale