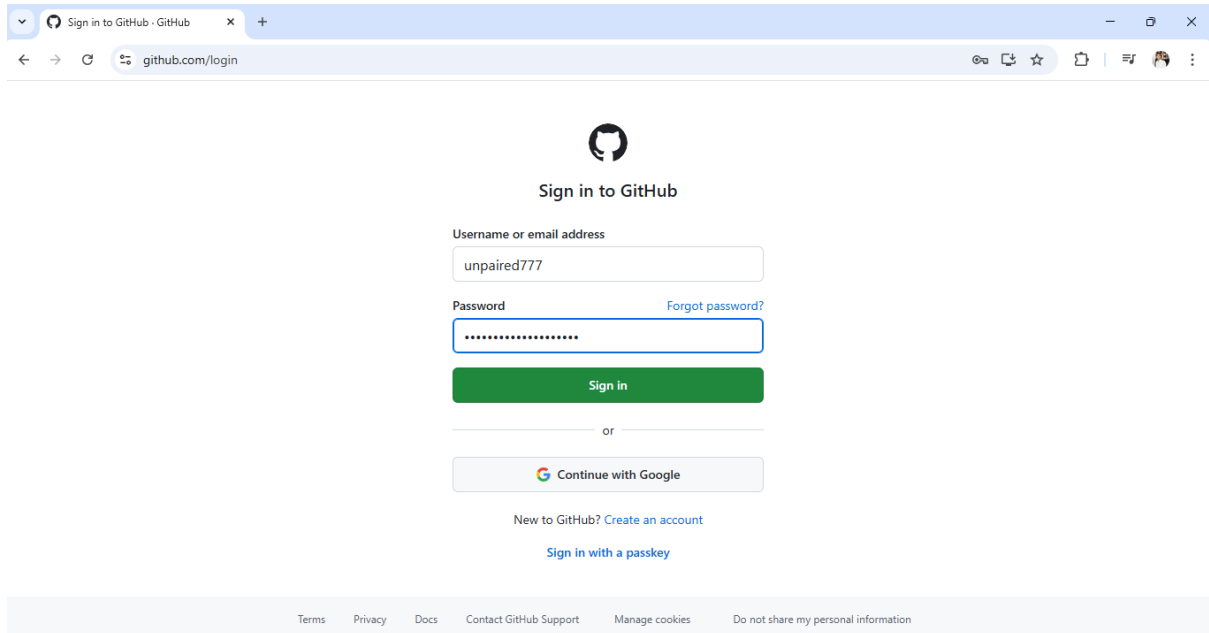


❖ IMPLEMENTATION OF GITHUB'S RESTFUL APIS IN **UIPATH**

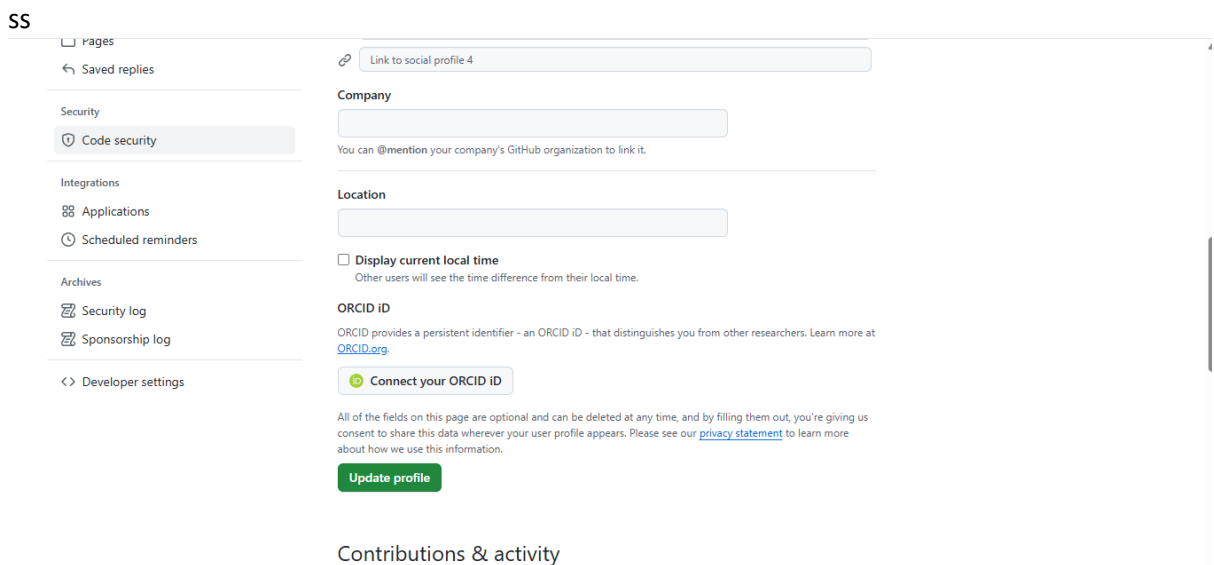
➤ Using GitHub APIs for Demonstration Purposes

➤ Prerequisites

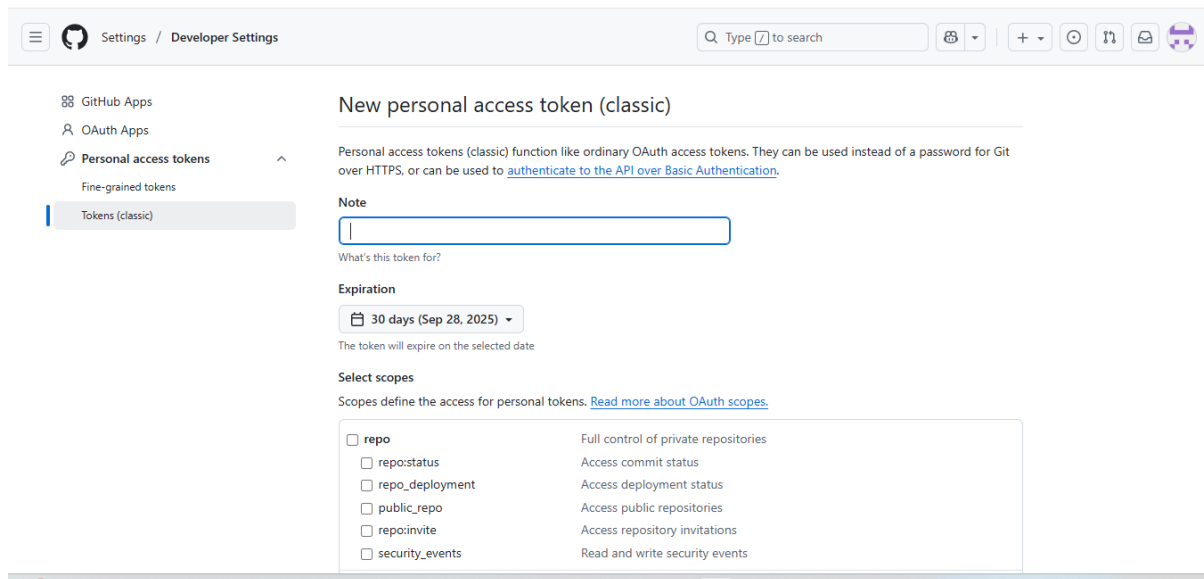
- GitHub **Login** – If you don't have an account, create one.
- Postman – Used for testing APIs.
- **UiPath.WebAPI.Activities** – Activities package for working with APIs in UiPath.



➤ Click on Settings, then go to Developer Settings



➤ Click on Tokens (Classic)



Settings / Developer Settings

Search: Type to search

Personal access tokens

New personal access token (classic)

Personal access tokens (classic) function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to [authenticate to the API over Basic Authentication](#).

Note

What's this token for?

Expiration

30 days (Sep 28, 2025)

The token will expire on the selected date

Select scopes

Scopes define the access for personal tokens. [Read more about OAuth scopes.](#)

<input type="checkbox"/> repo	Full control of private repositories
<input type="checkbox"/> repo:status	Access commit status
<input type="checkbox"/> repo_deployment	Access deployment status
<input type="checkbox"/> public_repo	Access public repositories
<input type="checkbox"/> repo:invite	Access repository invitations
<input type="checkbox"/> security_events	Read and write security events

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

Personal access tokens (classic) function like ordinary OAuth access tokens. They can be used instead of a password for Git over HTTPS, or can be used to [authenticate to the API over Basic Authentication](#).

Note

Github Guide

What's this token for?

Expiration

30 days (Sep 28, 2025)

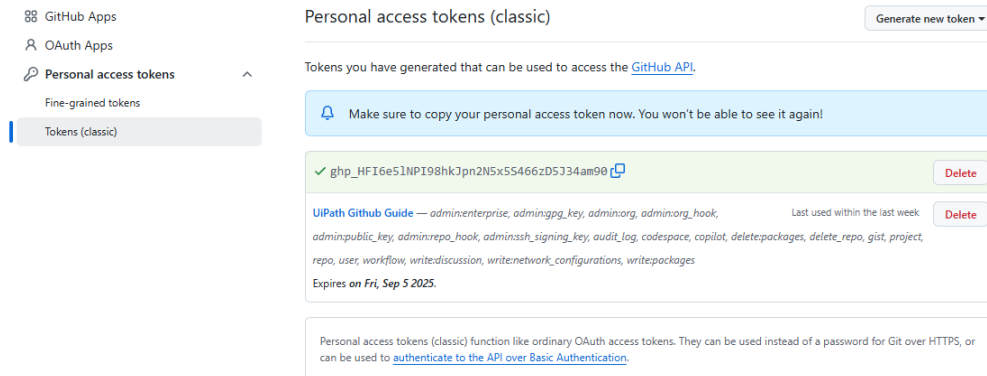
The token will expire on the selected date

Select scopes

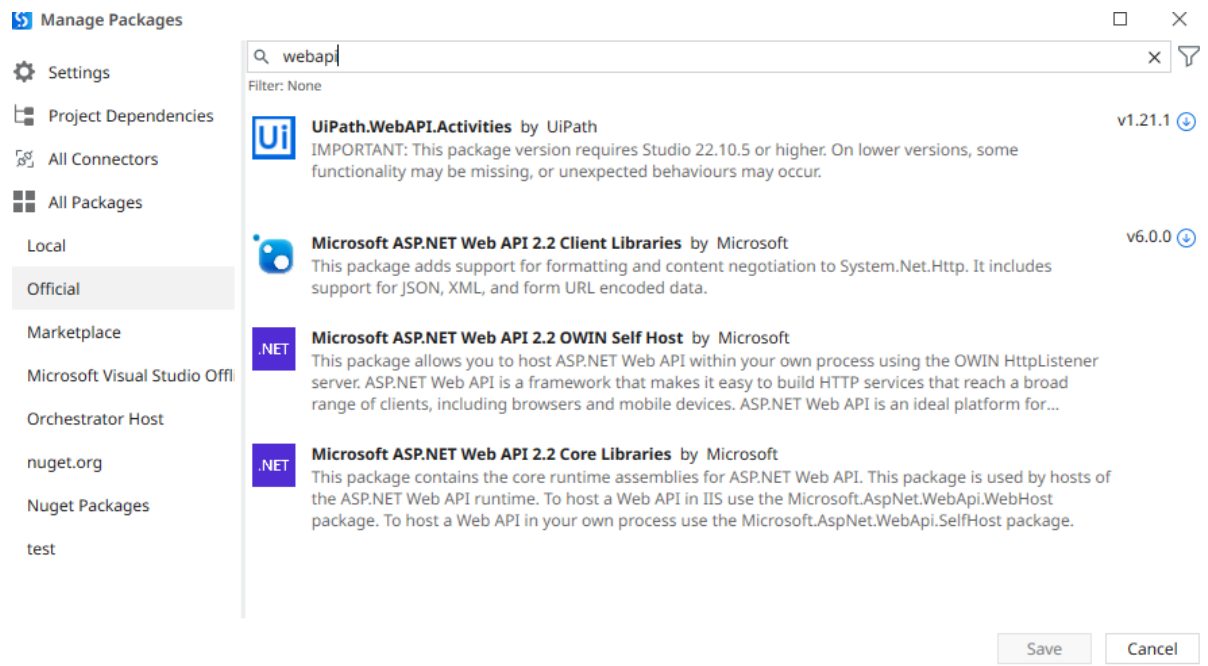
Scopes define the access for personal tokens. [Read more about OAuth scopes.](#)

- | | |
|---|--|
| <input checked="" type="checkbox"/> repo | Full control of private repositories |
| <input checked="" type="checkbox"/> repo:status | Access commit status |
| <input checked="" type="checkbox"/> repo_deployment | Access deployment status |
| <input checked="" type="checkbox"/> public_repo | Access public repositories |
| <input checked="" type="checkbox"/> repo:invite | Access repository invitations |
| <input checked="" type="checkbox"/> security_events | Read and write security events |
| <input checked="" type="checkbox"/> workflow | Update GitHub Action workflows |
| <input checked="" type="checkbox"/> write:packages | Upload packages to GitHub Package Registry |
| <input checked="" type="checkbox"/> read:packages | Download packages from GitHub Package Registry |
| <input checked="" type="checkbox"/> delete:packages | Delete packages from GitHub Package Registry |

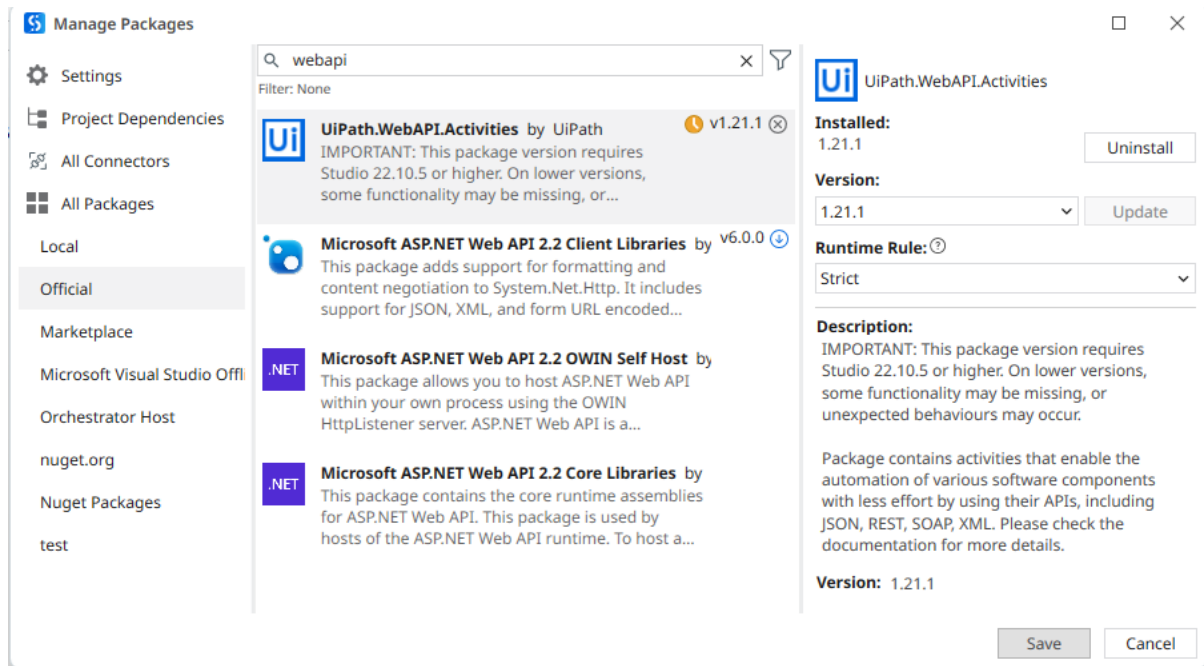
- Click on Generate Token. The token will be created and displayed as shown below.
- Do not use my API token; it will be revoked after creating this document.



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



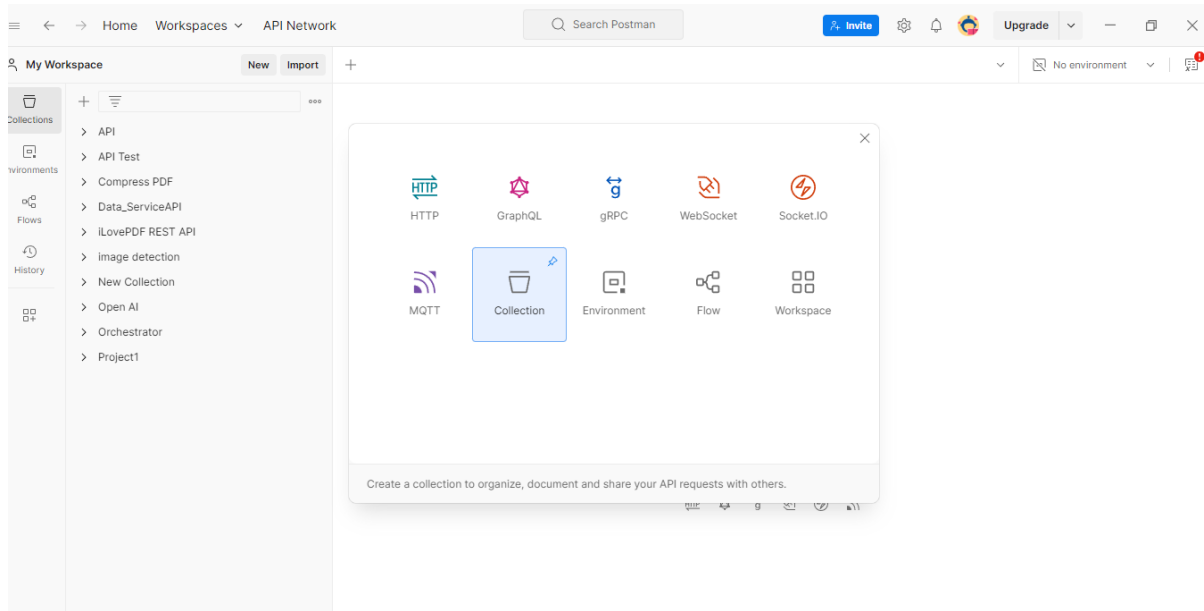
- Click on Install, then click on Save.



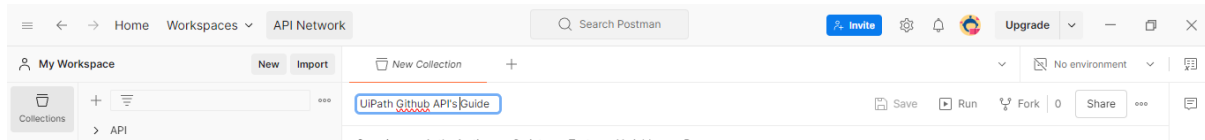
CRUD Operations:

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

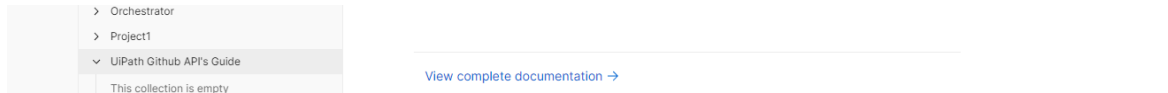
➤ Open Postman, click on New, and select Collection.



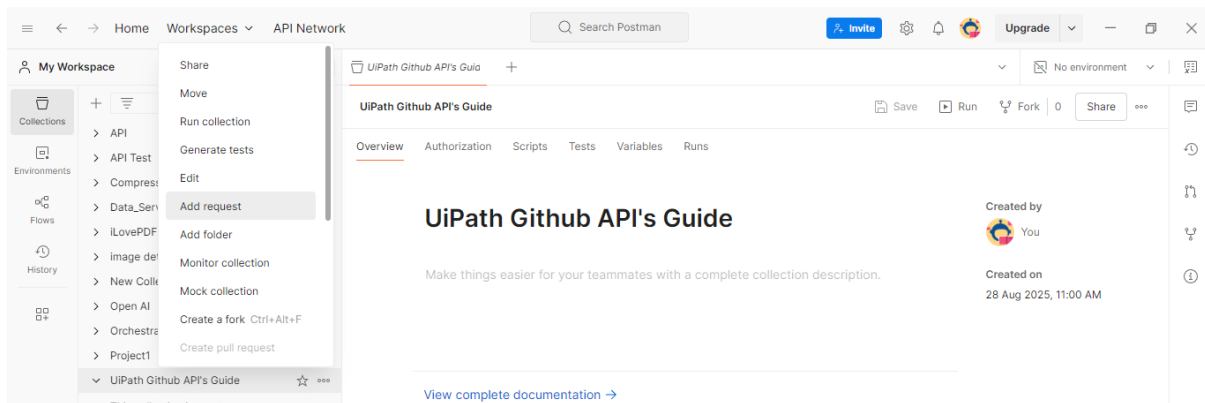
➤ Enter a name for the collection.



- 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 :

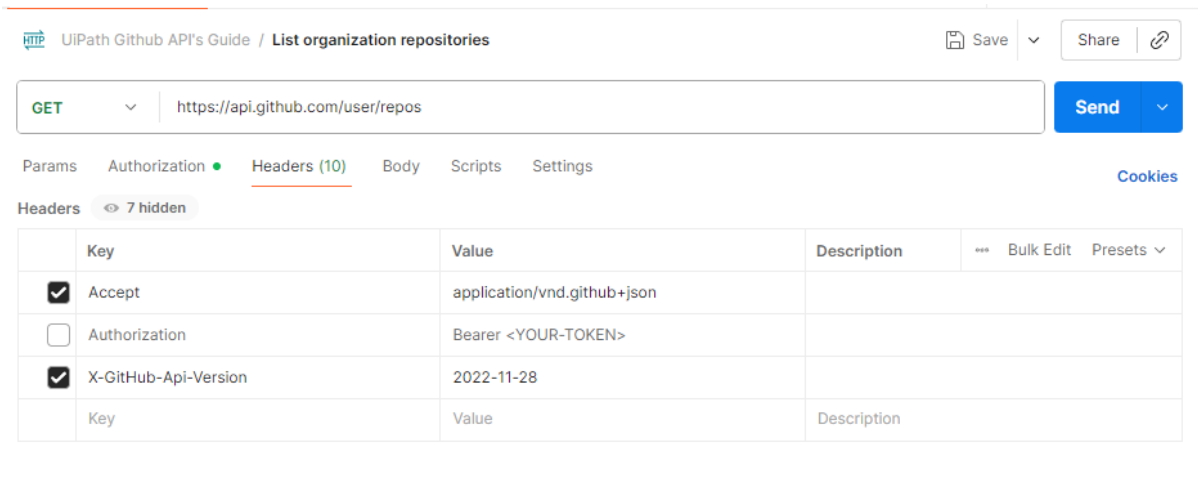
<https://docs.github.com/en/rest/repos/repos?apiVersion=2022-11-28#get-a-repository>

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.



UIPath Github API's Guide / List organization repositories

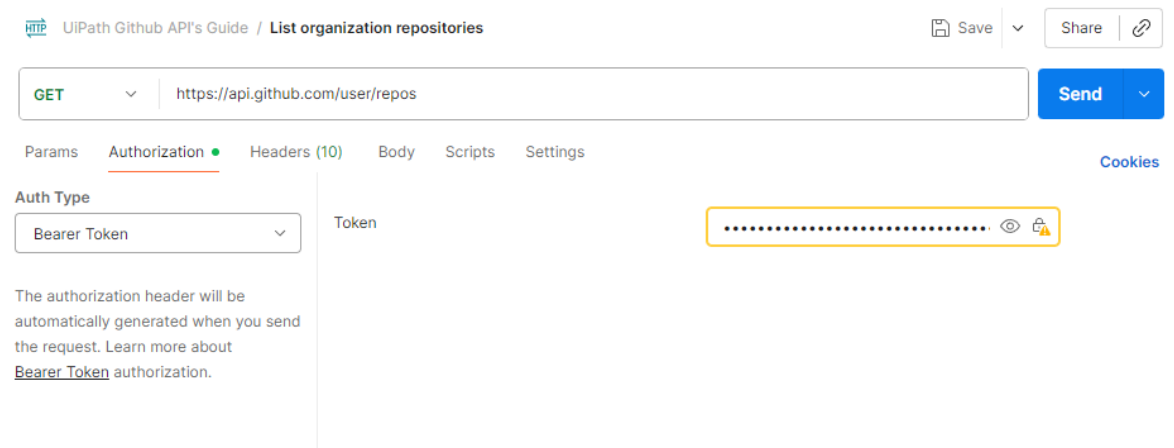
GET ▼ Send ▼

Params Authorization **Headers (10)** Body Scripts Settings Cookies

Headers 7 hidden

	Key	Value	Description	...	Bulk Edit	Presets
<input checked="" type="checkbox"/>	Accept	application/vnd.github+json				
<input type="checkbox"/>	Authorization	Bearer <YOUR-TOKEN>				
<input checked="" type="checkbox"/>	X-GitHub-API-Version	2022-11-28				
	Key	Value	Description			

Now, provide the Bearer Token that we generated earlier



UIPath Github API's Guide / List organization repositories

GET ▼ Send ▼

Params **Authorization** Headers (10) Body Scripts Settings Cookies

Auth Type Bearer Token ▼

Token

The authorization header will be automatically generated when you send the request. Learn more about [Bearer Token](#) authorization.

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



Body Cookies Headers (27) Test Results 200 OK 1.17 s 13.25 KB Save Response

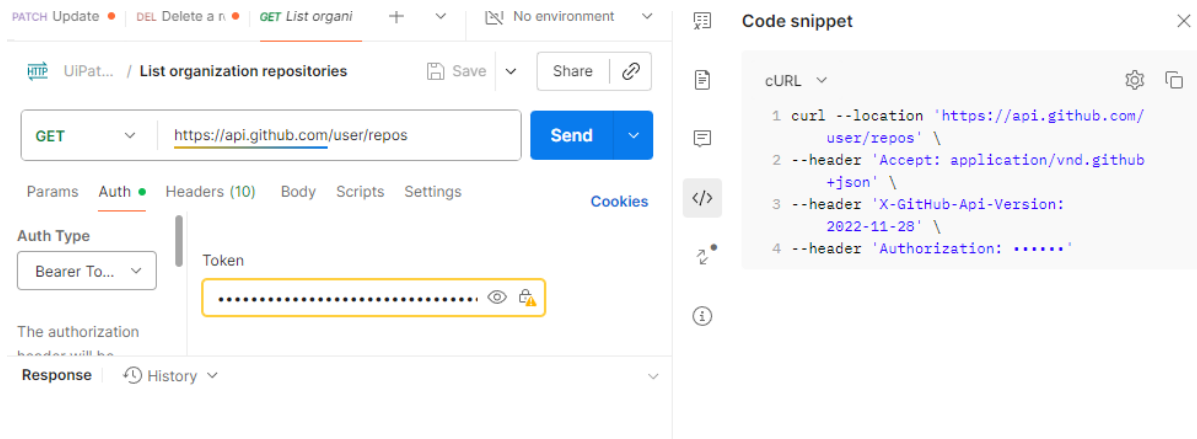
{} JSON Preview Visualize

```
433 {
434   {
435     "id": 677810372,
436     "node_id": "R_kgDOKGaQxA",
437     "name": "AzurePipeline",
438     "full_name": "unpaired777/AzurePipeline",
439     "private": true,
440     "owner": {
441       "id": 677810372,
```

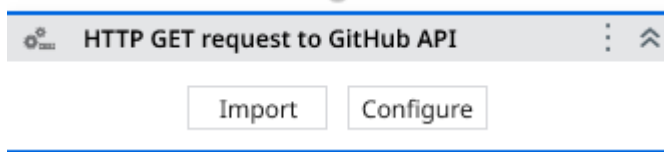
Now that the API is working, we will switch to UiPath and run it from there.

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

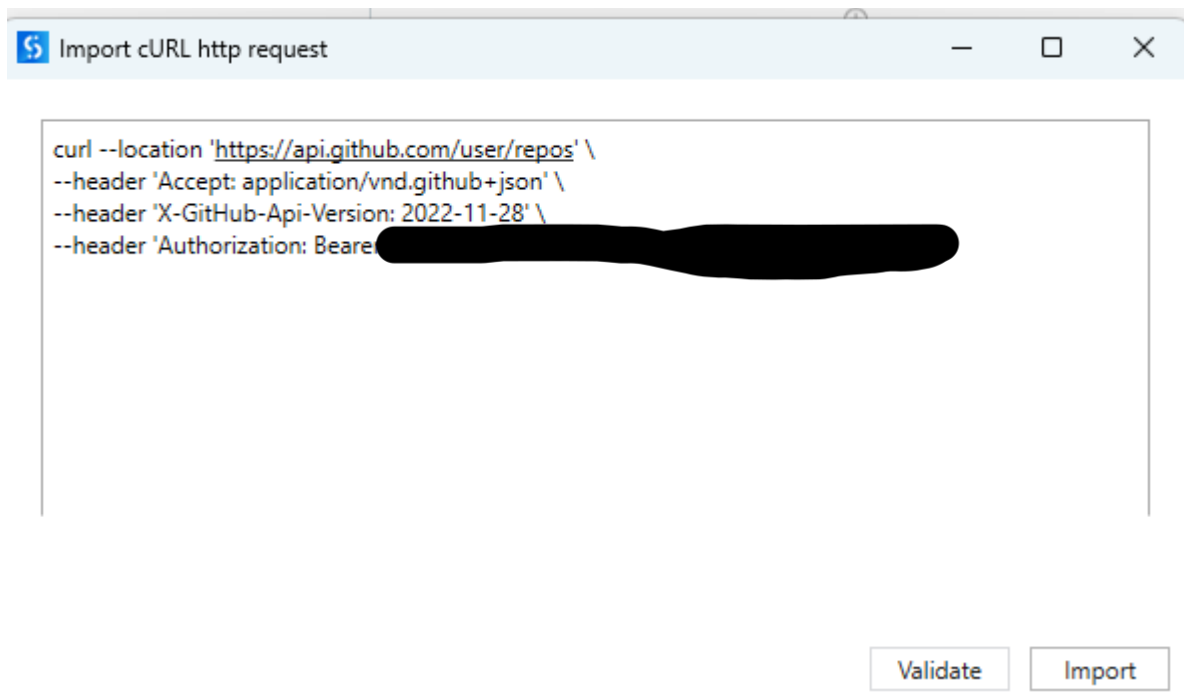
If you don't want to manually configure the parameters, you can copy them directly from Postman by clicking on the `</>` icon and Copy as CURL.



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.

HTTP Request Wizard

Request Builder Response

End point: "https://api.github.com/user/repos"

Preview URL: https://api.github.com/user/repos

Enable SSL certificate verification ☒

Timeout: 6000

Client Certificate Enter a VB Client Certificate Password Enter a VB

Request Method: GET

Accept response as: JSON

Parameters

Name	Value	Type
Accept	"application/vnd.github+json"	HTTPHeader
X-GitHub-API-Version	"2022-11-28"	HTTPHeader
Authorization	"Bearer github_pat_11A3KEQ"	HTTPHeader

Attachments

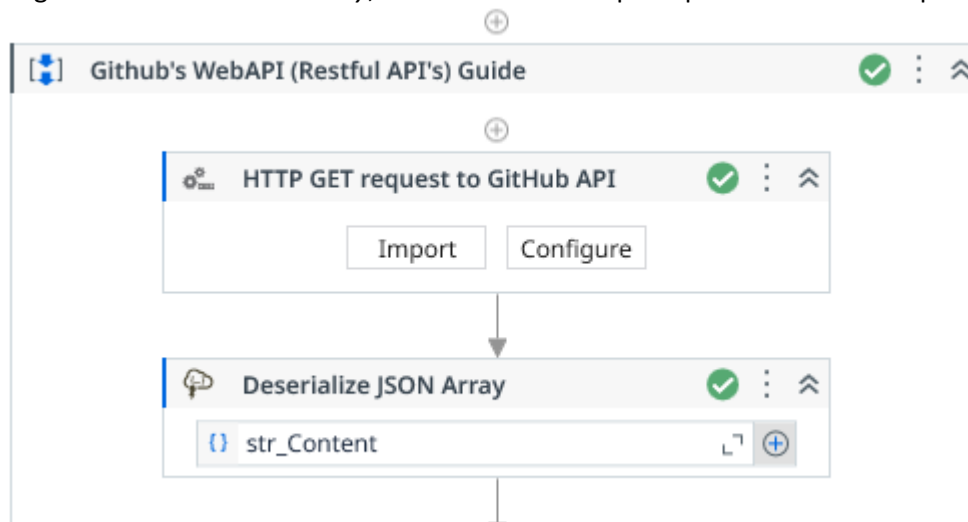
Authentication: None

Preview Ok

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

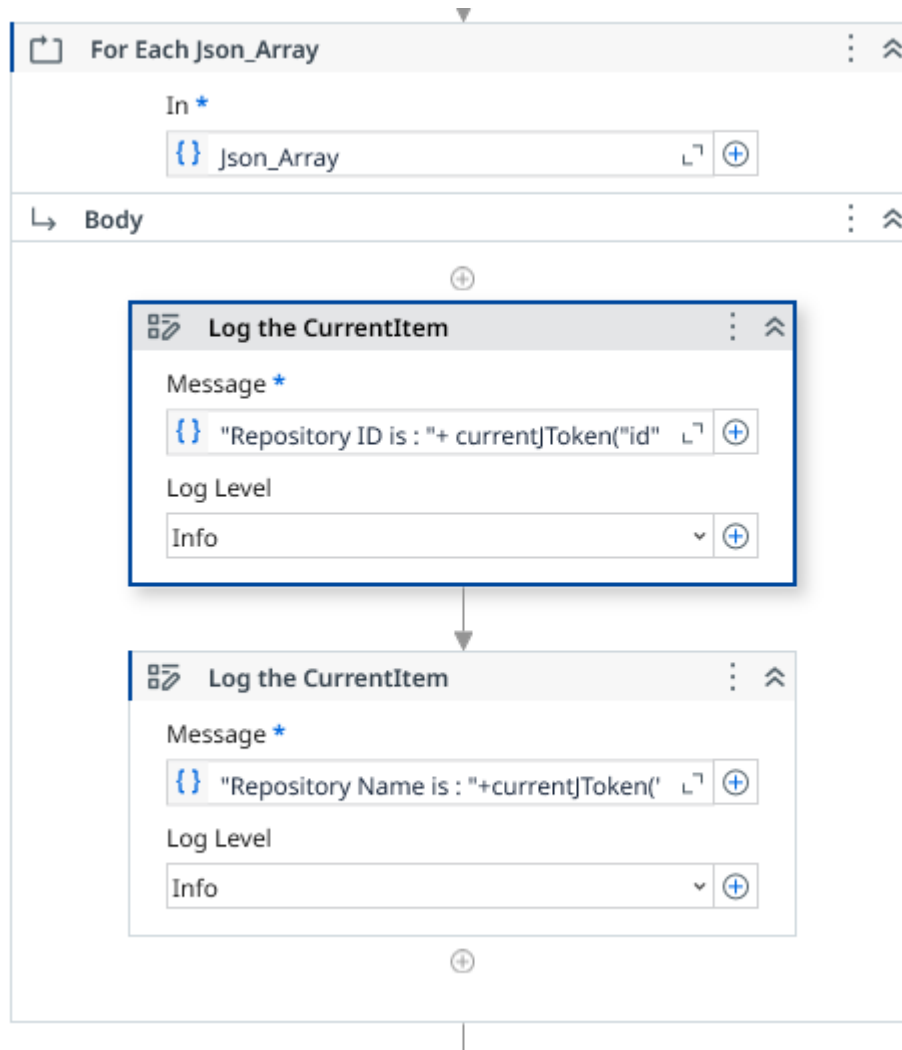
Properties		
ConsumerSecret	The secret used by the OAuth1 au	+
OAuth1Token	The token used by the OAuth1 au	+
OAuth1TokenSecret	The secret used by the OAuth1 au	+
OAuth2		
OAuth2Token	The token used by the OAuth2 au	+
Options		
Attachments	(Collection)	
Body	Enter a VB expression	+
Body Format	application/xml	
Cookies	(Collection)	
File Attachments	Enter a VB expression	+
Filename for response attachment	The filename to be used for the fi	+
Headers	(Collection)	
Parameters	(Collection)	
URL Segments	(Collection)	
Output		
Headers	ResponseHeaders	+
Response attachment	Attachment saved from the response.	+
Response content	str_Content	+
Response status	str_Status_Code	+
Simple Authentication		
Password	The password for the user issuing	+
Secure Password	Enter a VB expression	+
Username	A username for the authenticated	+

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

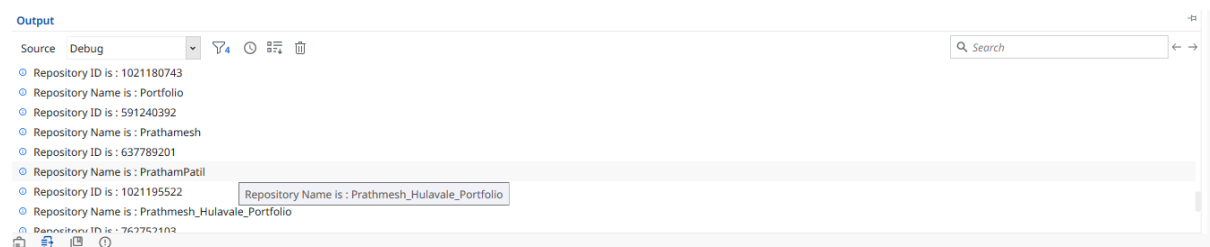


Once deserialized, iterate through the data using a *For Each* activity.

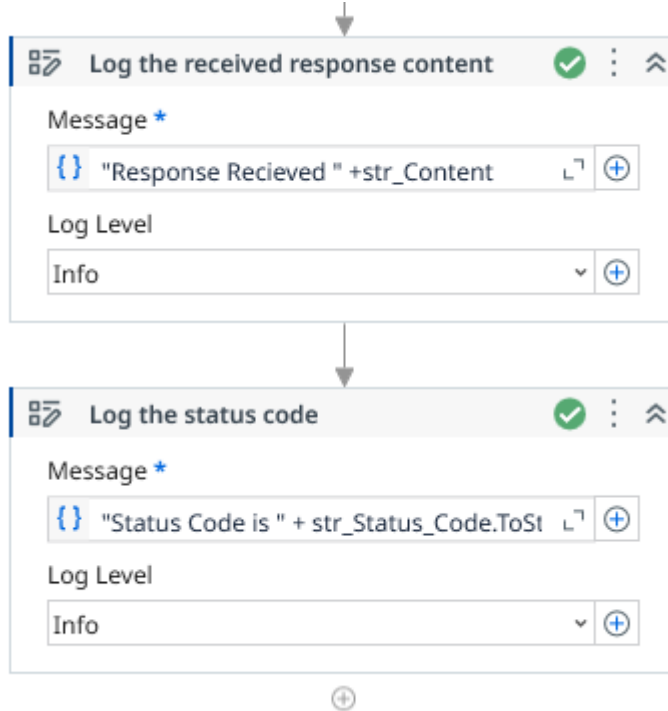
Access the Repository ID and Name with `currentJToken("id").ToString`.



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.

A Comprehensive Guide to Githubs Restful API's in UiPath by [Prathmesh Hulavale](#)

The screenshot shows the 'Headers' tab of the REST Client. The request method is 'POST' and the URL is 'https://api.github.com/user/repos'. The 'Headers' tab is selected, showing a table with the following headers:

Key	Value	Description
<input checked="" type="checkbox"/> Accept	application/vnd.github+json	
<input type="checkbox"/> Authorization	Bearer <YOUR-TOKEN>	
<input checked="" type="checkbox"/> X-GitHub-API-Version	2022-11-28	

Enter the Bearer Token that we copied earlier.

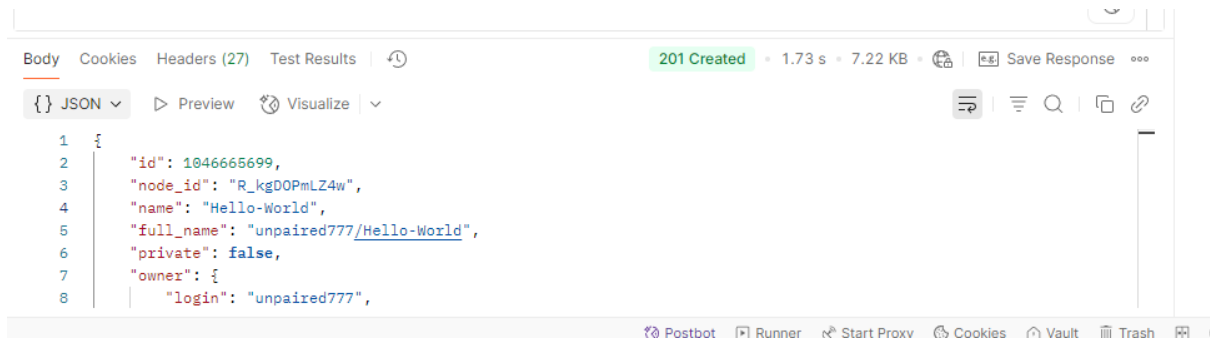
The screenshot shows the 'Authorization' tab of the REST Client. The 'Auth Type' is set to 'Bearer Token'. The 'Token' field is highlighted with a yellow box, indicating where to enter the Bearer Token. Below the token field, there is a note: "The authorization header will be automatically generated when you send the request. Learn more about [Bearer Token](#) authorization."

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

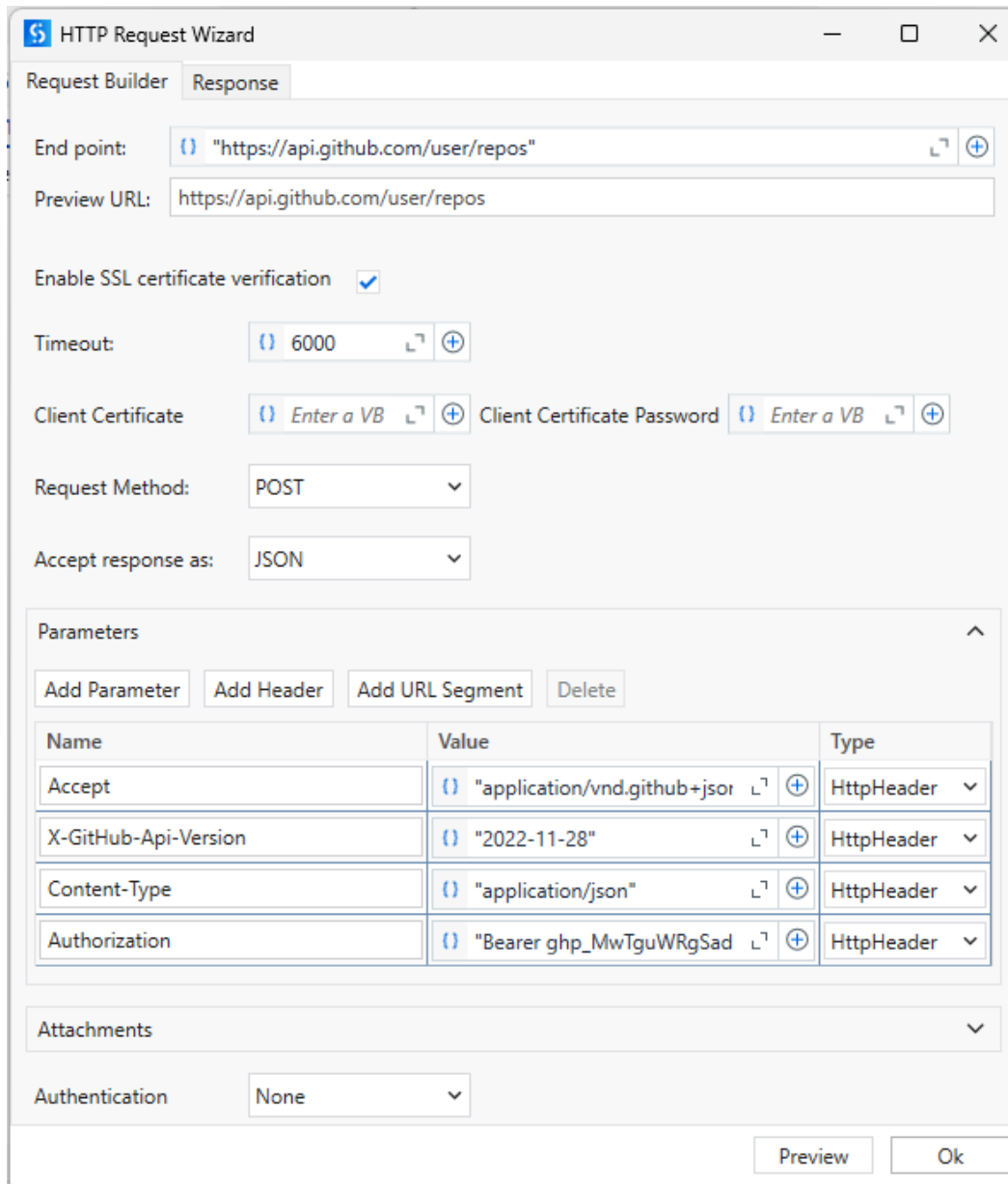
The screenshot shows the 'Body' tab of the REST Client. The 'Body' tab is selected, and the 'Raw' radio button is chosen. The 'JSON' option is selected in the dropdown menu. The request body is a JSON object:

```
1 {
2   "name": "Hello-World",
3   "description": "This is your first repo!",
4   "homepage": "https://github.com",
5   "private": false,
6   "is_template": true
7 }
```

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.

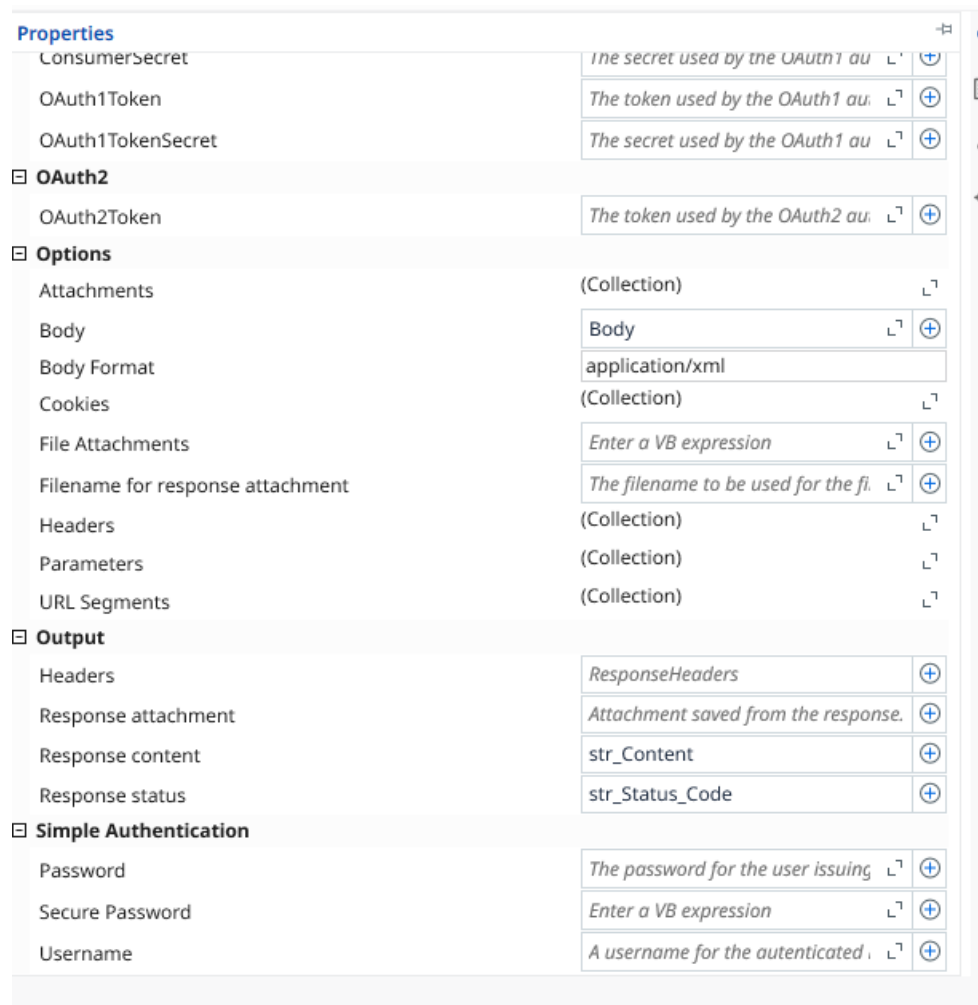
The syntax is as shown below:

```
{
  "name": "Hello-World",
  "description": "This is your first repo!",
  "homepage": "https://github.com",
  "private": false,
  "is_template": true
}
```

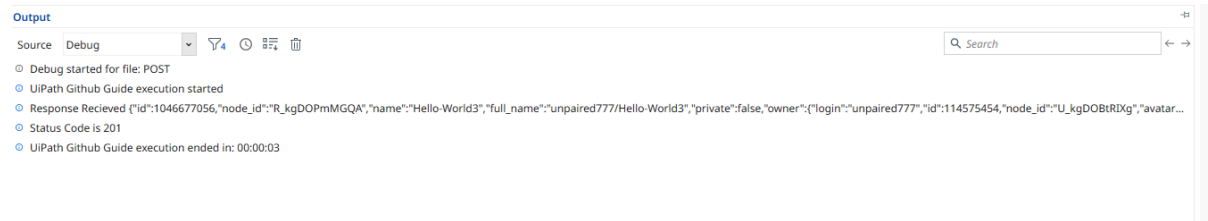


Then, pass the Body variable in the HTTP Request activity.

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



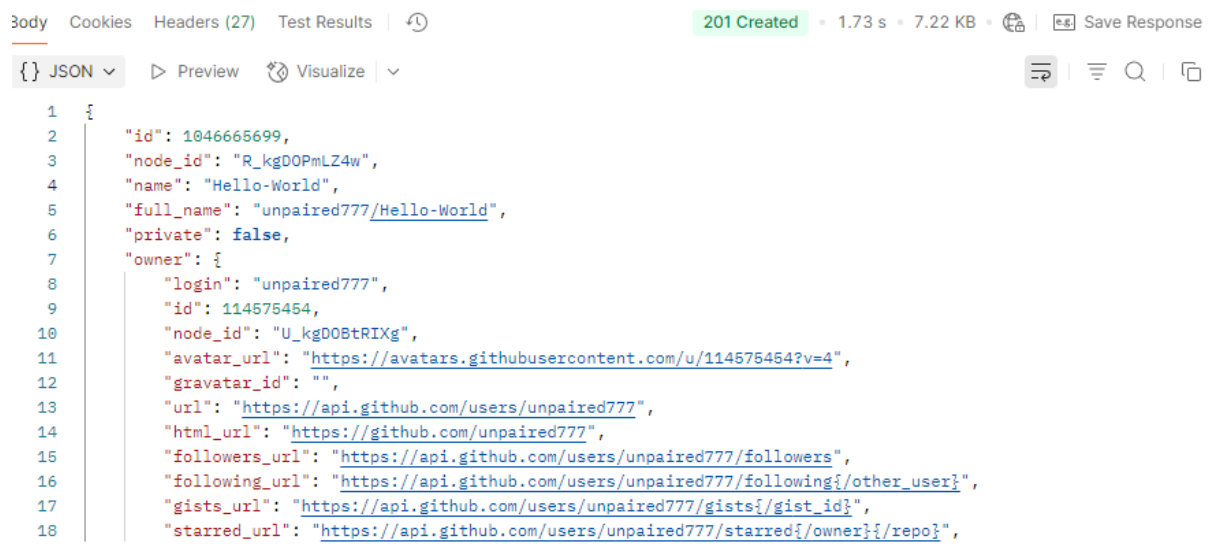
Once configured, run the project and you will get the output as shown below.



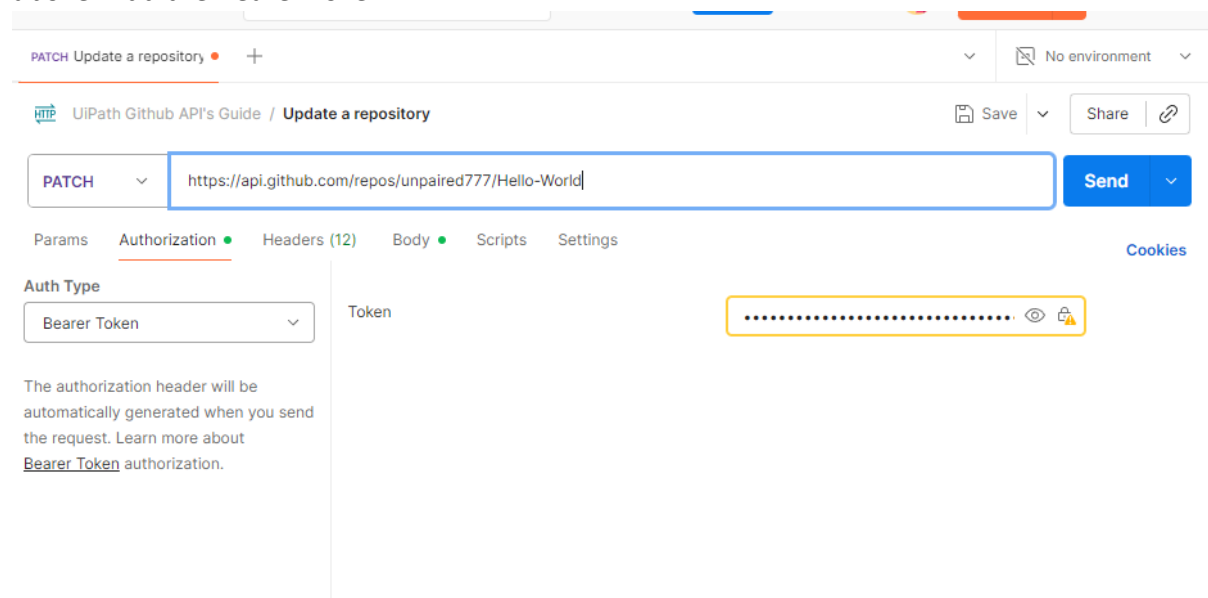
Update the repository using the PATCH method

<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

The screenshot shows the 'Headers' tab in the UiPath REST client. The request method is 'PATCH' and the URL is 'https://api.github.com/repos/unpaired777/Hello-World'. The 'Headers' tab is selected, showing a table with 12 headers. The first three headers are: 'Accept' (checked), 'Authorization' (unchecked), and 'X-GitHub-API-Version' (checked). The 'Accept' header has a value of 'application/vnd.github+json'. The 'Authorization' header has a value of 'Bearer <YOUR-TOKEN>'. The 'X-GitHub-API-Version' header has a value of '2022-11-28'. There are also buttons for 'Bulk Edit' and 'Presets'.

	Key	Value	Description	***	Bulk Edit	Presets
<input checked="" type="checkbox"/>	Accept	application/vnd.github+json				
<input type="checkbox"/>	Authorization	Bearer <YOUR-TOKEN>				
<input checked="" type="checkbox"/>	X-GitHub-API-Version	2022-11-28				
	Key	Value	Description			

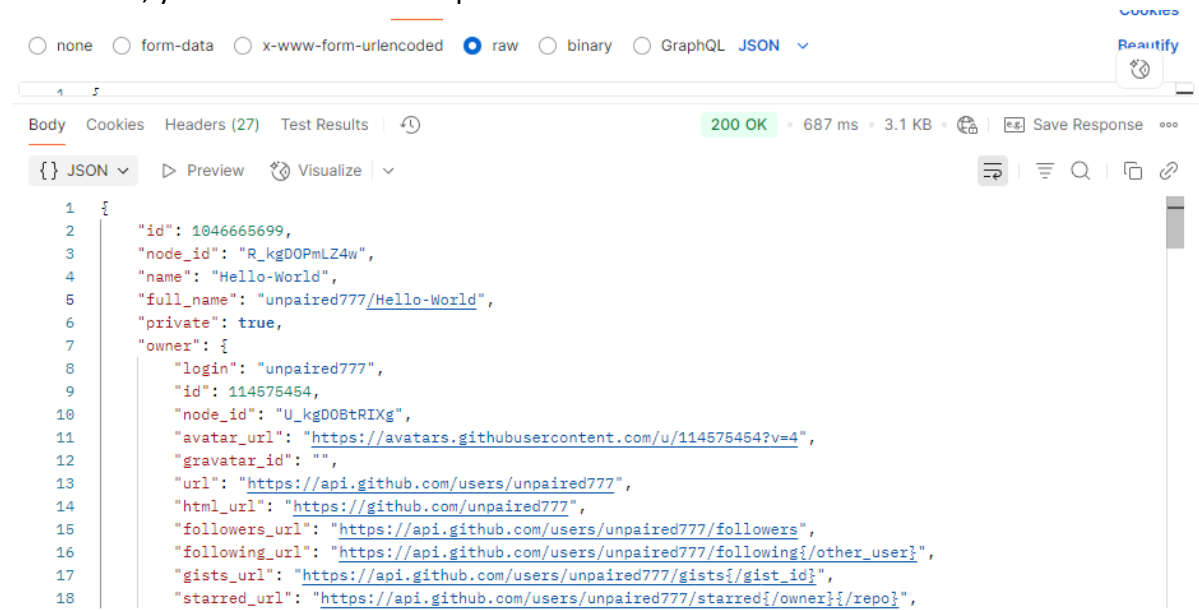
Add the JSON body with the parameters you want to update.

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

The screenshot shows the 'Body' tab in the UiPath REST client. The request method is 'PATCH' and the URL is 'https://api.github.com/repos/unpaired777/Hello-World'. The 'Body' tab is selected, showing a JSON body. The body is a JSON object with the following properties: 'name' (Hello-World), 'description' (This is your first repo!), 'homepage' (https://github.com), and 'private' (true). The 'private' property is highlighted in blue. There are also buttons for 'Cookies' and 'Beautiful'.

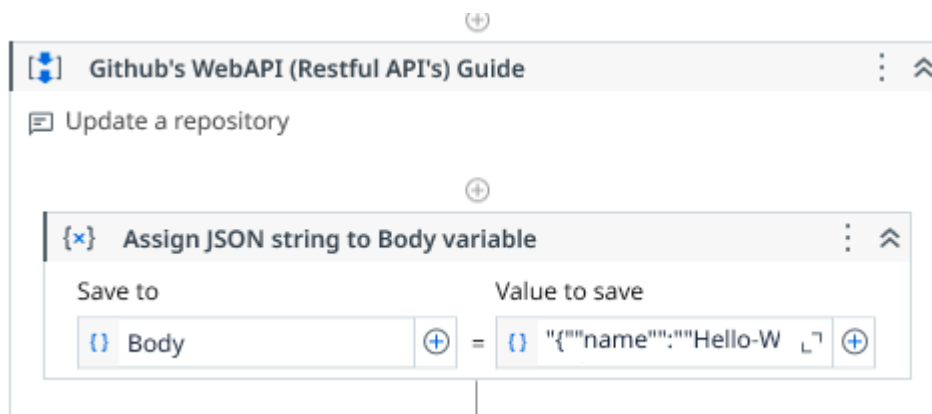
```
1 {
2   "name": "Hello-World",
3   "description": "This is your first repo!",
4   "homepage": "https://github.com",
5   "private": true
6 }
```


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.

HTTP Request Wizard

Request Builder Response

End point: `https://api.github.com/repos/unpaired777/Hello-World`

Preview URL: `https://api.github.com/repos/unpaired777/Hello-World`

Enable SSL certificate verification ☒

Timeout: 6000

Client Certificate: Enter a VB Client Certificate Password: Enter a VB

Request Method: PATCH

Accept response as: JSON

Parameters

Name	Value	Type
Accept	<code>application/vnd.github+json</code>	HTTPHeader
X-GitHub-API-Version	<code>2022-11-28</code>	HTTPHeader
Content-Type	<code>application/json</code>	HTTPHeader
Authorization	<code>Bearer ghp_MwTguWRgSad</code>	HTTPHeader

Attachments

Authentication: None

Preview Ok

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

Properties	
ConsumerSecret	The secret used by the OAuth1 au +
OAuth1Token	The token used by the OAuth1 au +
OAuth1TokenSecret	The secret used by the OAuth1 au +
OAuth2	
OAuth2Token	The token used by the OAuth2 au +
Options	
Attachments	(Collection) +
Body	Body +
Body Format	application/xml
Cookies	(Collection) +
File Attachments	Enter a VB expression +
Filename for response attachment	The filename to be used for the fi +
Headers	(Collection) +
Parameters	(Collection) +
URL Segments	(Collection) +
Output	
Headers	ResponseHeaders +
Response attachment	Attachment saved from the response. +
Response content	str_Content +
Response status	str_Status_Code +
Simple Authentication	
Password	The password for the user issuing +
Secure Password	Enter a VB expression +
Username	A username for the authenticated +

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

The screenshot shows the UiPath Studio interface. On the left, the 'Output' window displays the following log:

- Debug started for file: Patch
- UiPath Github Guide execution started
- Response Recieved ("id":1046665699,"node_id":"R_kgDOPmLZ4w","name":"Hello-World-test","full_name":"unpaired777/Hello-World-test","private":true,"owner":{"login":"unpaired777","id":114575454,"node_id":"U_kgDOBtRiXg"},"avatar_url":"https://avatars.githubusercontent.com/u/114575454?v=4","gravatar_id":"","url":"https://api.github.com/users/unpaired777","html_url":"https://github.com/unpaired777","followers_url":"https://api.github.com/users/unpaired777/followers","following_url":"https://api.github.com/users/unpaired777/following{/other_user}","gists_url":"https://api.github.com/users/unpaired777/gists{/gist_id}","starred_url":"https://api.github.com/users/unpaired777/starred{/owner}/{/repo}","subscriptions_url":"https://api.github.com/users/unpaired777/subscriptions","a...
- Status Code is 200
- UiPath Github Guide execution ended in: 00:00:02

In the center, a 'Message Details' dialog box is open, displaying the JSON response:

```
{
  "message": "Response Recieved ({\"id\":1046665699,\"node_id\": \"\\\"R_kgDOPmLZ4w\\\"\", \"name\\\":\\\"Hello-World-test\\\", \"full_name\\\": \"\\\"unpaired777/Hello-World-test\\\", \"private\\\":true, \"owner\\\":{\\\"login\\\":\\\"unpaired777\\\", \"id\\\":114575454, \"node_id\\\":\\\"U_kgDOBtRiXg\\\", \"avatar_url\\\":\\\"https://avatars.githubusercontent.com/u/114575454?v=4\\\", \"gravatar_id\\\":\\\"\\\", \"url\\\":\\\"https://api.github.com/users/unpaired777\\\", \"html_url\\\":\\\"https://github.com/unpaired777\\\", \"followers_url\\\":\\\"https://api.github.com/users/unpaired777/followers\\\", \"following_url\\\":\\\"https://api.github.com/users/unpaired777/following{/other_user}\\\", \"gists_url\\\":\\\"https://api.github.com/users/unpaired777/gists{/gist_id}\\\", \"starred_url\\\":\\\"https://api.github.com/users/unpaired777/starred{/owner}/{/repo}\\\", \"subscriptions_url\\\":\\\"https://api.github.com/users/unpaired777/subscriptions\\\", \"a..."
```

At the bottom of the dialog box, there are buttons for 'Copy to Clipboard' and 'Cancel'.

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.

The screenshot shows the UiPath REST Client interface. At the top, there are tabs for different HTTP methods: PATCH (Update a repository), DEL (Delete a repository), and a plus sign to add more. The 'DEL Delete a repository' tab is selected. Below the tabs, the URL is set to 'https://api.github.com/repos/unpaired777/Hello-World-test'. The method is set to 'DELETE'. There are buttons for 'Save', 'Share', and 'Send'. Below the URL bar, there are tabs for 'Params', 'Authorization', 'Headers (10)', 'Body', 'Scripts', and 'Settings'. The 'Authorization' tab is selected. Under 'Auth Type', 'Bearer Token' is selected. A text field for the token is shown with a masked value '.....'. Below the token field, there is a note: 'The authorization header will be automatically generated when you send the request. Learn more about [Bearer Token](#) authorization.'

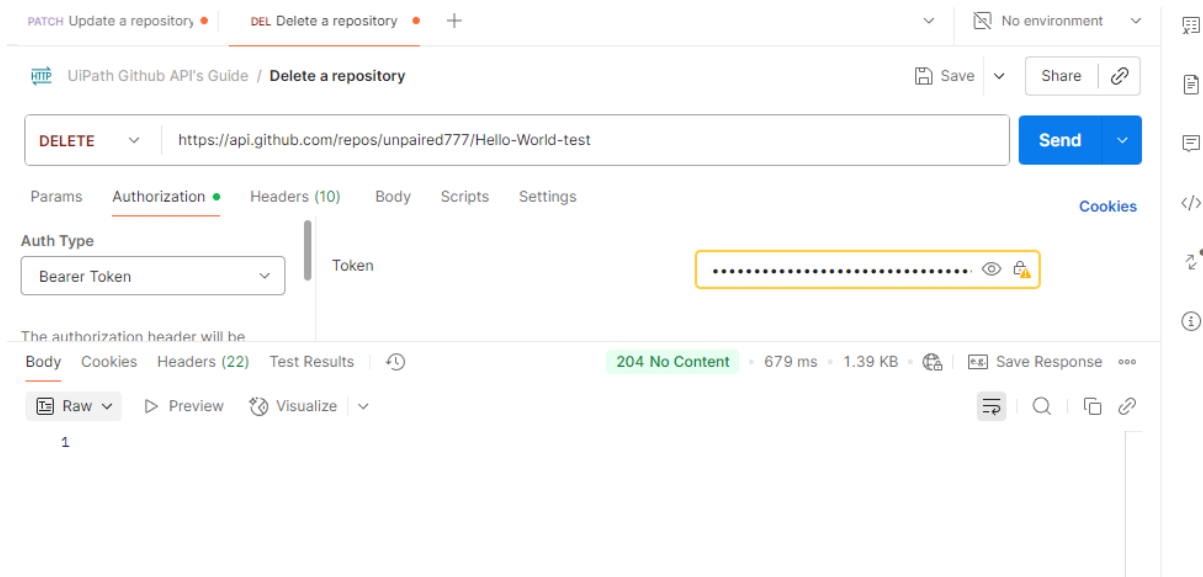
Configure the required headers.

The screenshot shows the UiPath REST Client interface with the 'Headers (10)' tab selected. The URL is 'https://api.github.com/repos/unpaired777/Hello-World-test' and the method is 'DELETE'. Below the tabs, there is a 'Headers' section with a button to '7 hidden'. A table of headers is displayed:

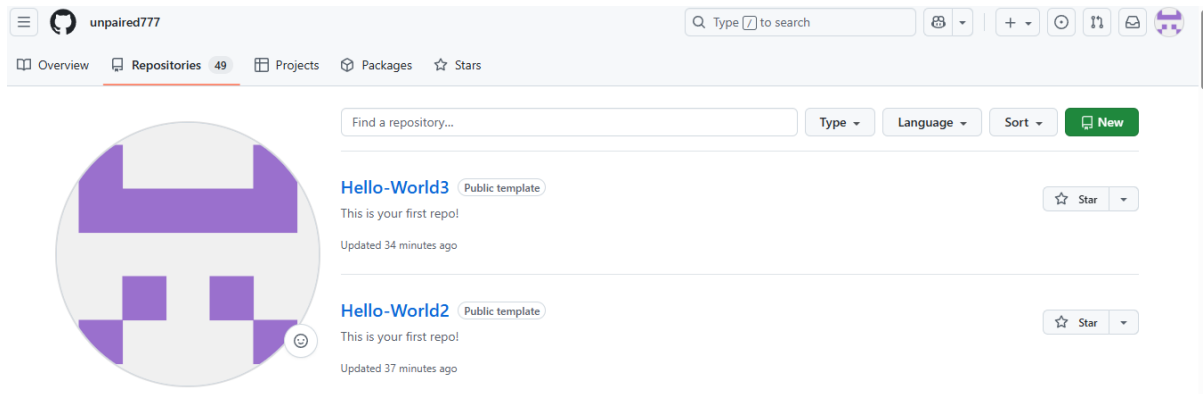
	Key	Value	Description	
<input checked="" type="checkbox"/>	Accept	application/vnd.github+json		
<input type="checkbox"/>	Authorization	Bearer <YOUR-TOKEN>		
<input checked="" type="checkbox"/>	X-GitHub-API-Version	2022-11-28		
	Key	Value	Description	

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

A Comprehensive Guide to Githubs Restful API's in UiPath by [Prathmesh Hulavale](#)



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.

HTTP Request Wizard

Request Builder Response

End point: `https://api.github.com/repos/unpaired777/Hello-World3`

Preview URL: `https://api.github.com/repos/unpaired777/Hello-World3`

Enable SSL certificate verification ☒

Timeout: 6000

Client Certificate: Enter a VB Client Certificate Password: Enter a VB

Request Method: DELETE

Accept response as: JSON

Parameters

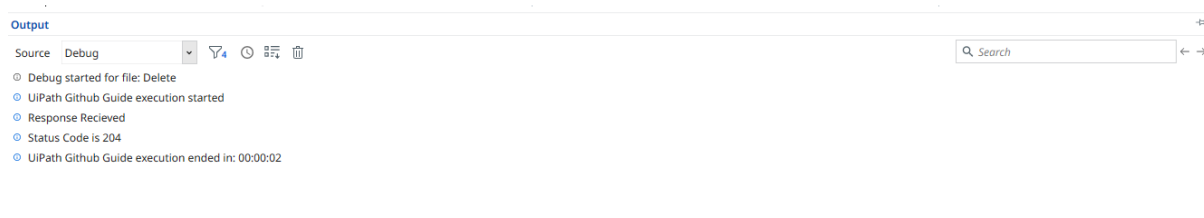
Name	Value	Type
Accept	application/vnd.github+json	HTTPHeader
X-GitHub-API-Version	2022-11-28	HTTPHeader
Authorization	Bearer ghp_MwTguWRgSad	HTTPHeader

Attachments

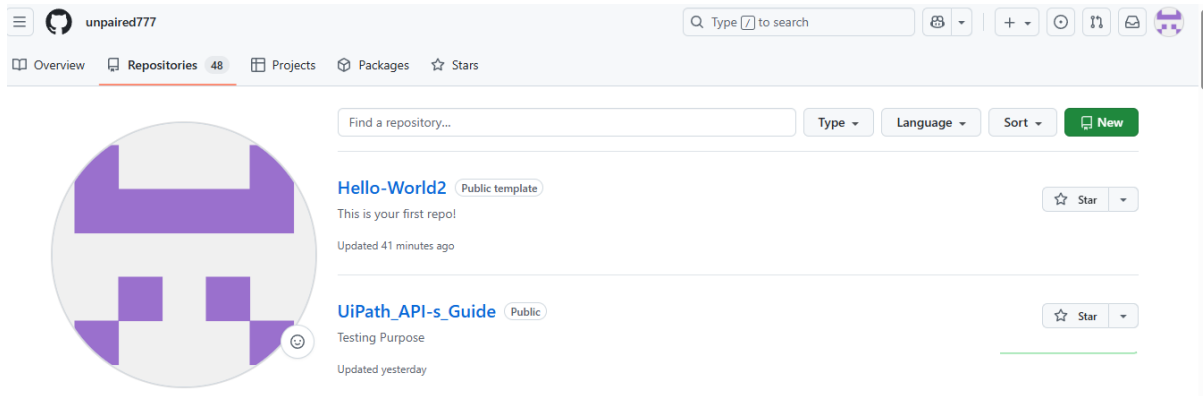
Authentication: None

Preview Ok

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](#)