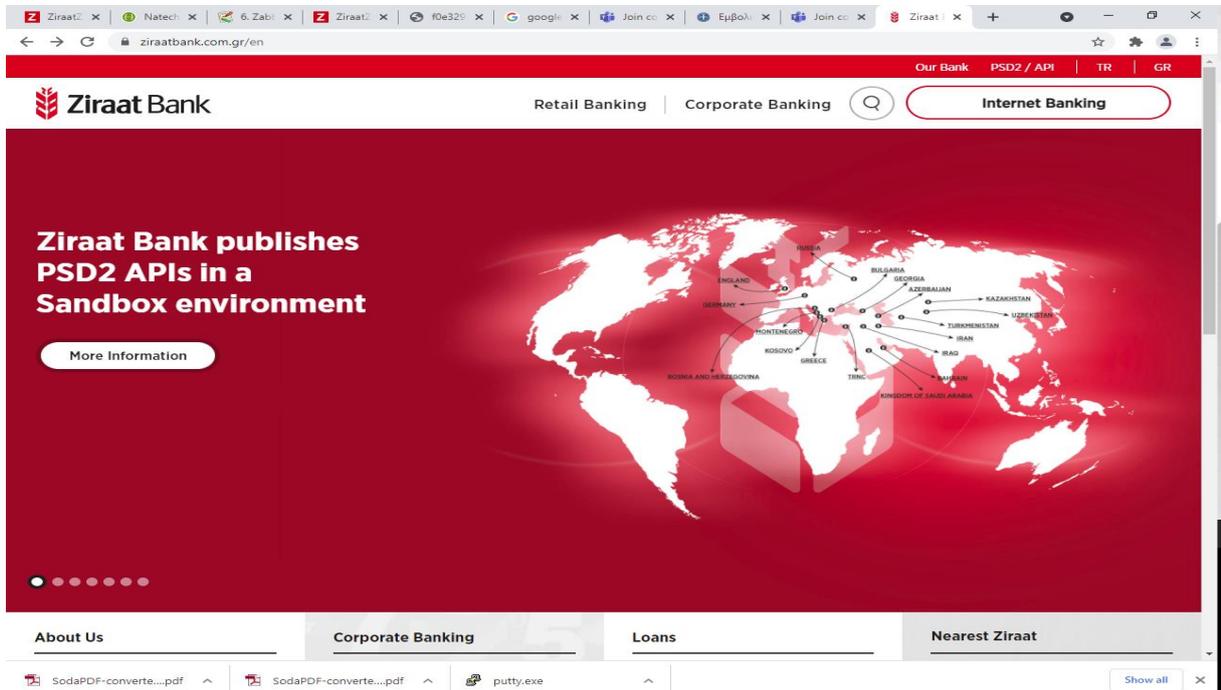


API monitoring procedure from Ziraat bank website

From the bank's website <https://www.ziraatbank.com.gr/> initially the user selects PSD2 → API



Ziraat Bank publishes PSD2 APIs in a Sandbox environment

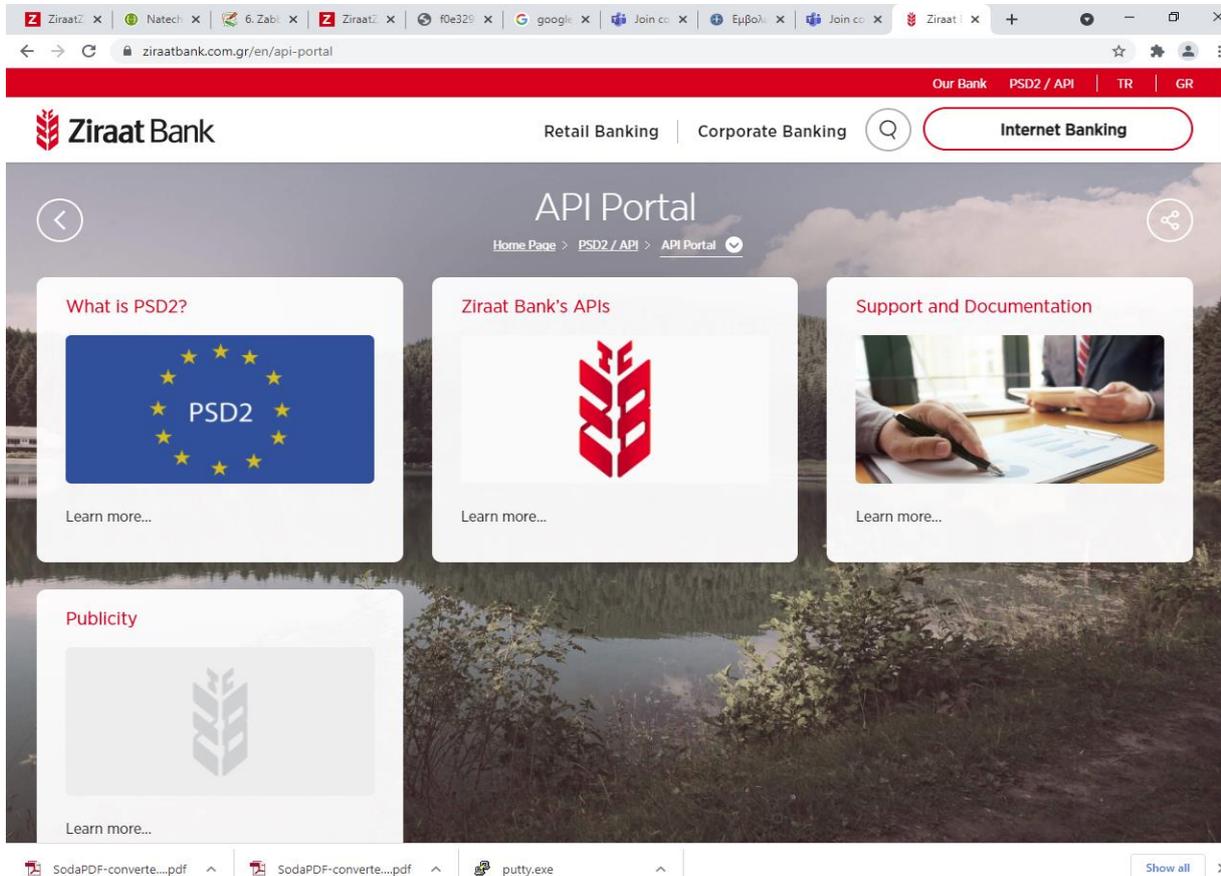
More Information

Our Bank PSD2 / API TR GR

Retail Banking Corporate Banking Internet Banking

About Us Corporate Banking Loans Nearest Ziraat

Then the user selects → Ziraat Bank's APIs



API Portal

Home Page > PSD2 / API > API Portal

What is PSD2?

Ziraat Bank's APIs

Support and Documentation

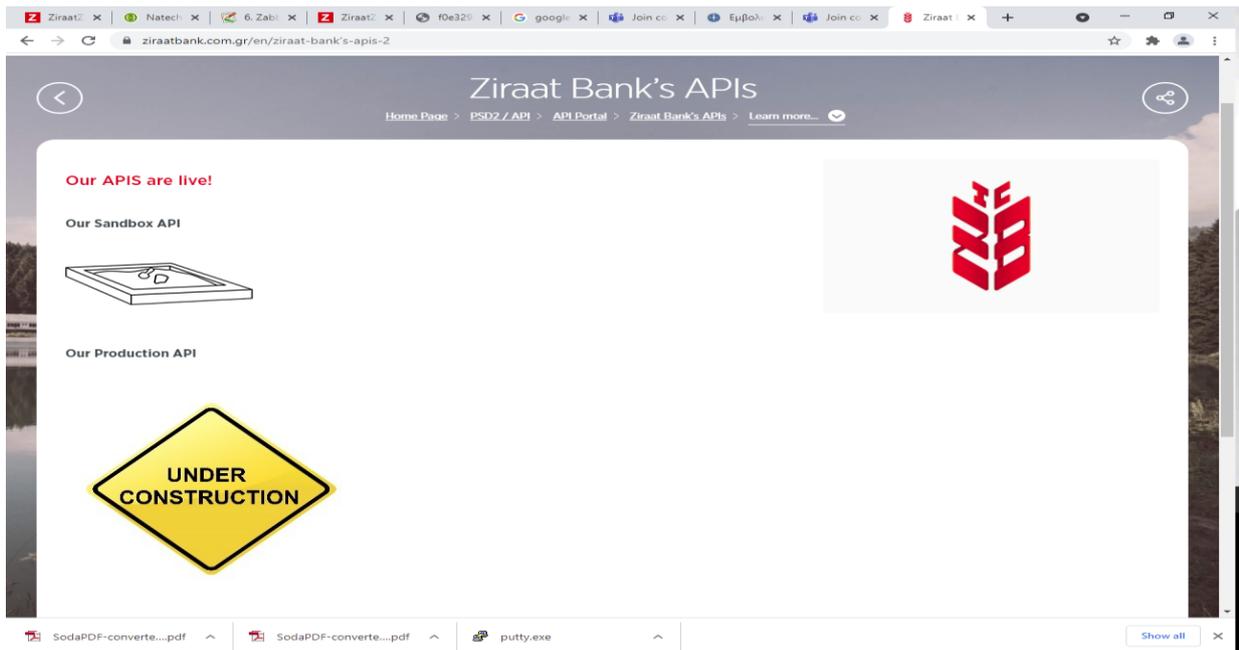
Publicity

Learn more... Learn more... Learn more... Learn more...

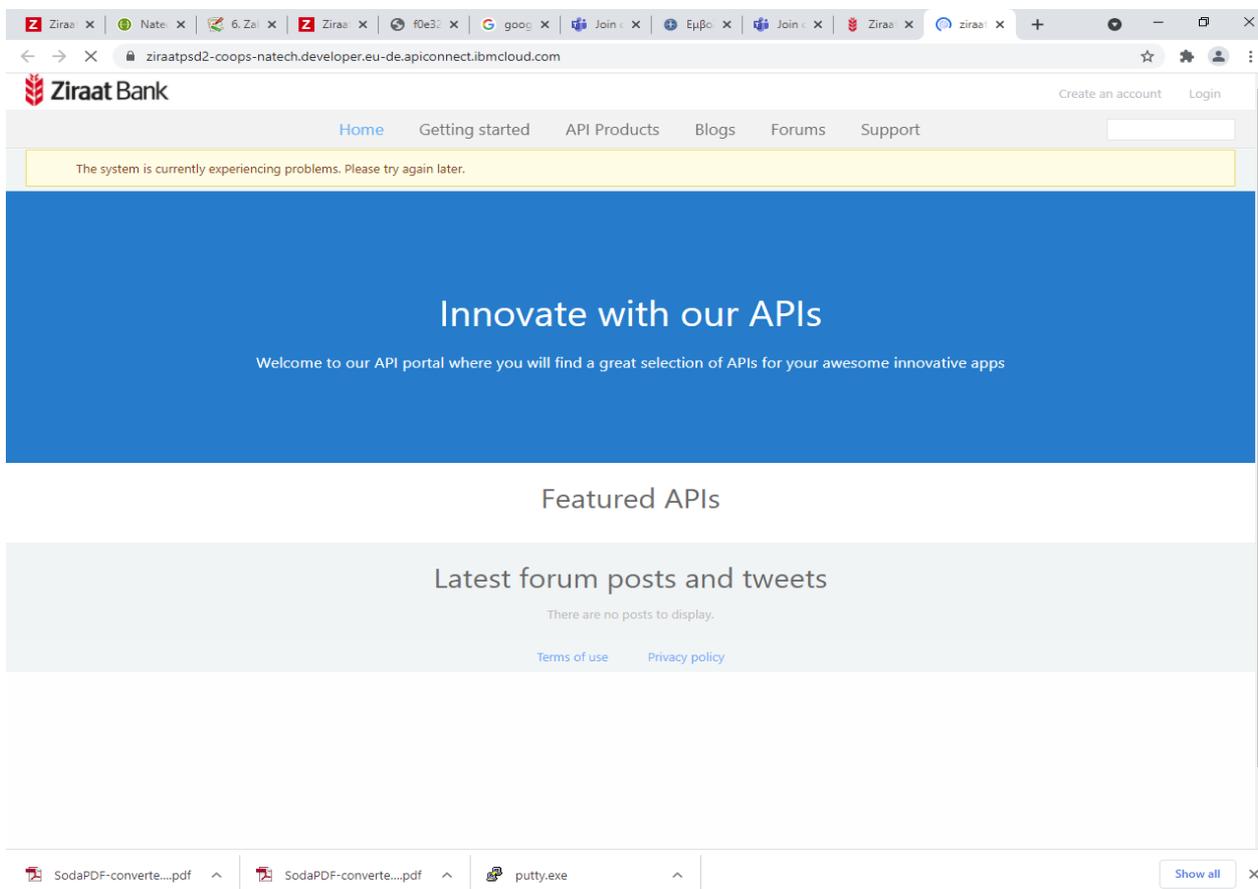
Our Bank PSD2 / API TR GR

Retail Banking Corporate Banking Internet Banking

Then the user selects → Ziraat Bank's APIs



And then the user is directed to the following page where the API's are monitored :
(<https://ziraatpsd2-coops-natech.developer.eu-de.apiconnect.ibmcloud.com/>)



To access the API Products each user must create a User Account via the Create Account option located at the top right of the page. The user has to fill in his personal details in all the fields marked with * and then press the button at the bottom of the page that says Create New Account.

Create new account [Log in](#) [Request new password](#)

First name *
Enter your first name.

Last name *
Enter your last name.

Developer organization *
Enter your developer organization.

E-mail address *
A valid e-mail address. All e-mails from the system will be sent to this address. Your e-mail address will also be your username.

Password Requirements

- Password must contain characters of at least 3 different types (lowercase, uppercase, digit or punctuation).
- Password must be at least 8 characters in length.

Password * Password quality: _____

Confirm password *
Provide a password for the new account in both fields.

CAPTCHA
This question is for testing whether or not you are a human visitor and to prevent automated spam submissions.
r N 2 W 3

After selecting Create New Account the following message appears: " You have been sent an account activation email. You need to click on the link in it to activate your account before you can login."

You have been sent an account activation email. You need to click on the link in it to activate your account before you can login.

Innovate with our APIs

Welcome to our API portal where you will find a great selection of APIs for your awesome innovative apps

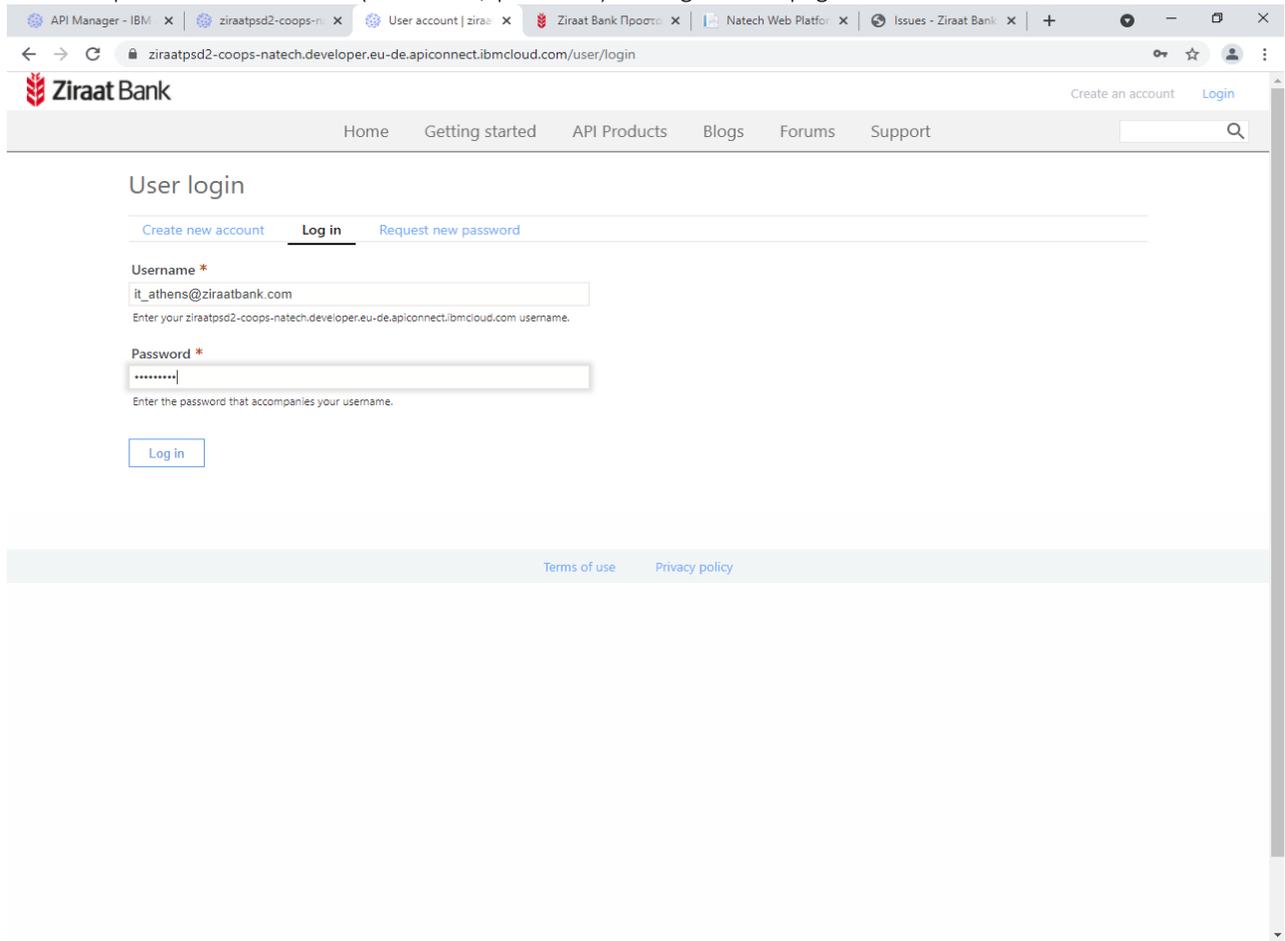
Featured APIs

Latest forum posts and tweets

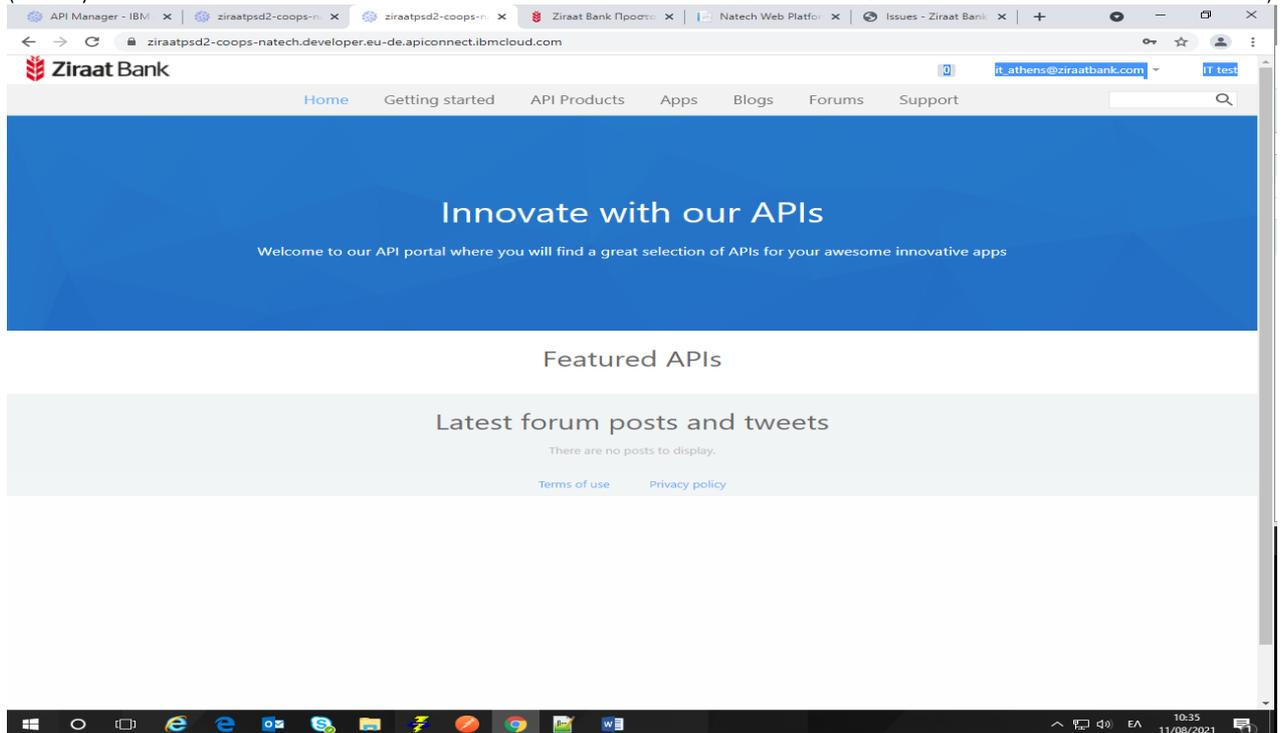
There are no posts to display.

[Terms of use](#) [Privacy policy](#)

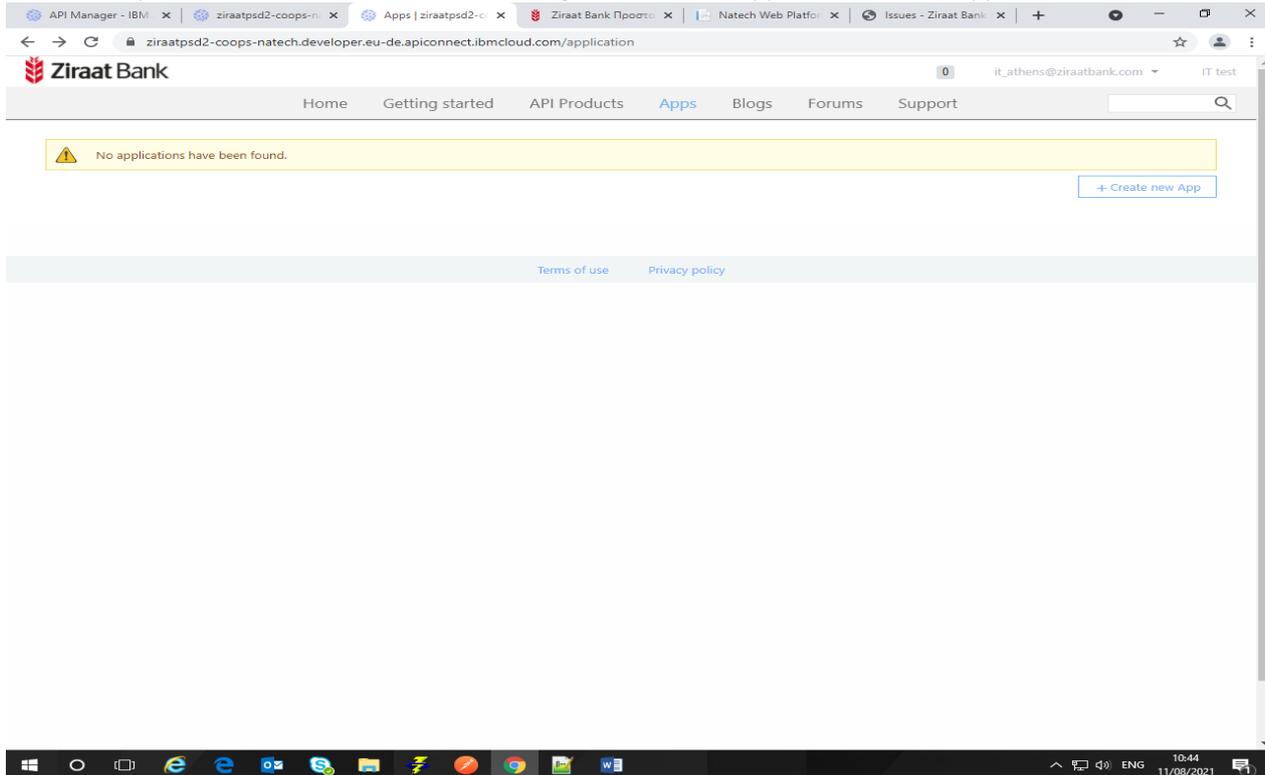
Enter the passwords we created (username / password) and login to the page.



We notice that after the successful log in in the upper right position of the page are written the name of the company that the user registered during the registration together with his username / email and the number of notifications (initially it is 0).

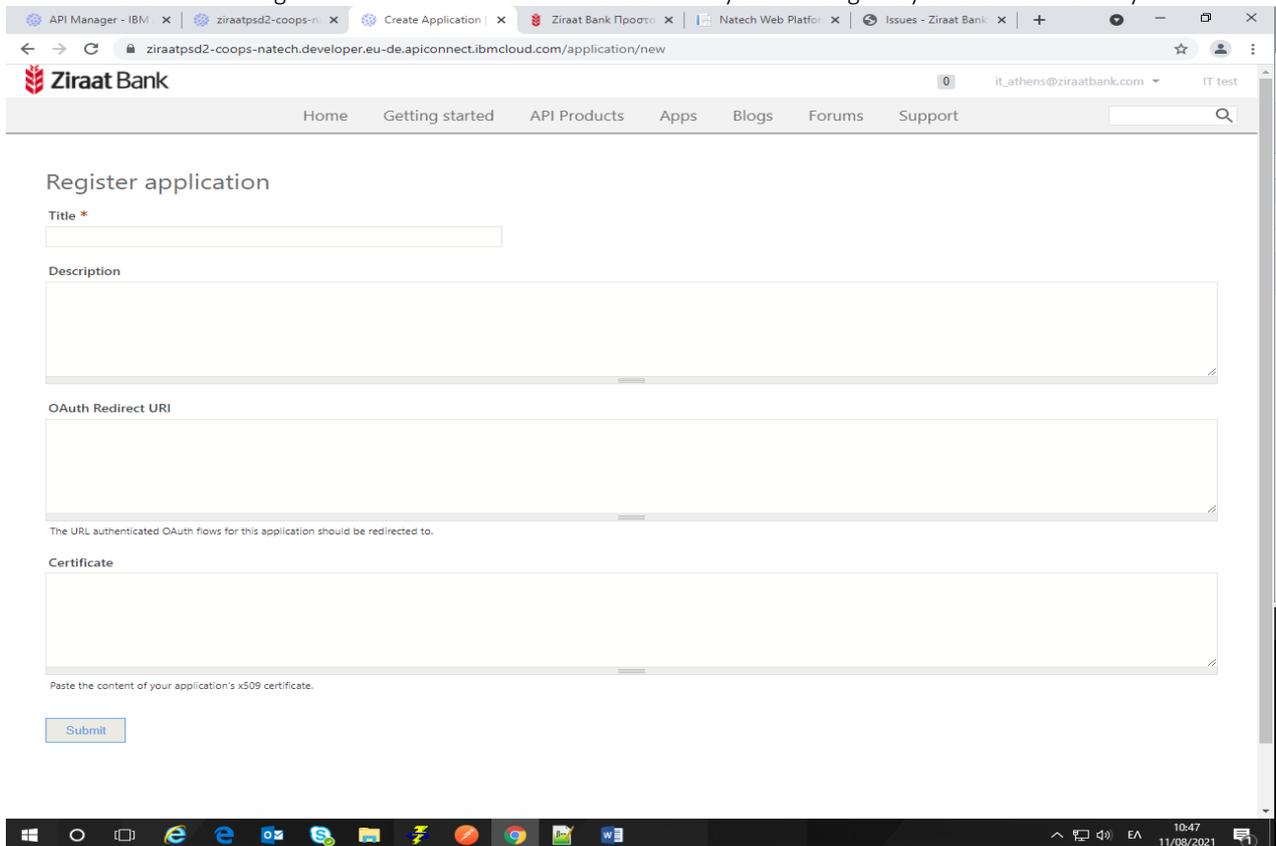


The next step is for the user to create a client through the selection Apps → Create New App.

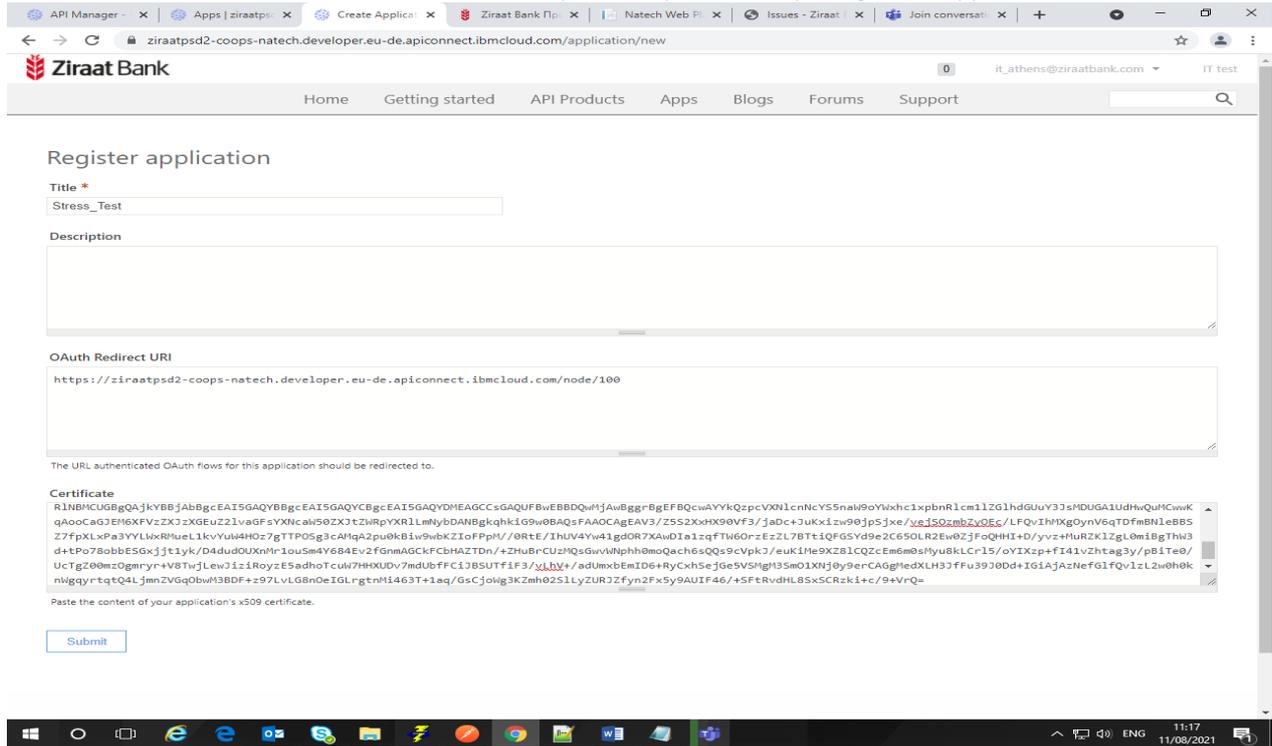


By selecting the Create New App option the user is asked to state the following information:

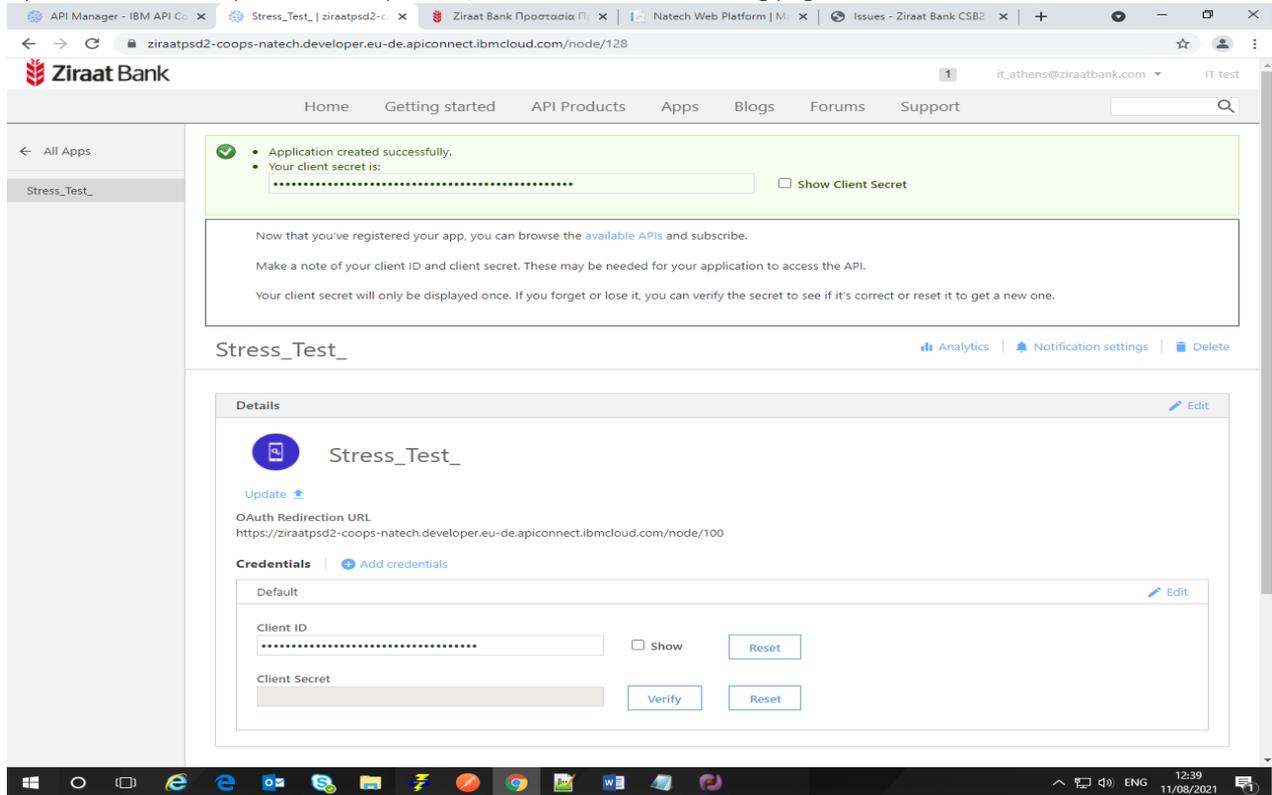
- Title → Name for the application created.
- Description → Short Description.
- Oath Redirect URI → Web address entry for redirecting authorization code.
- Certificate → Registration of a certified certificate either by EBA or Bog or by a certified authority.



After all the fields are filled in, select submit to complete the process of opening a new app.

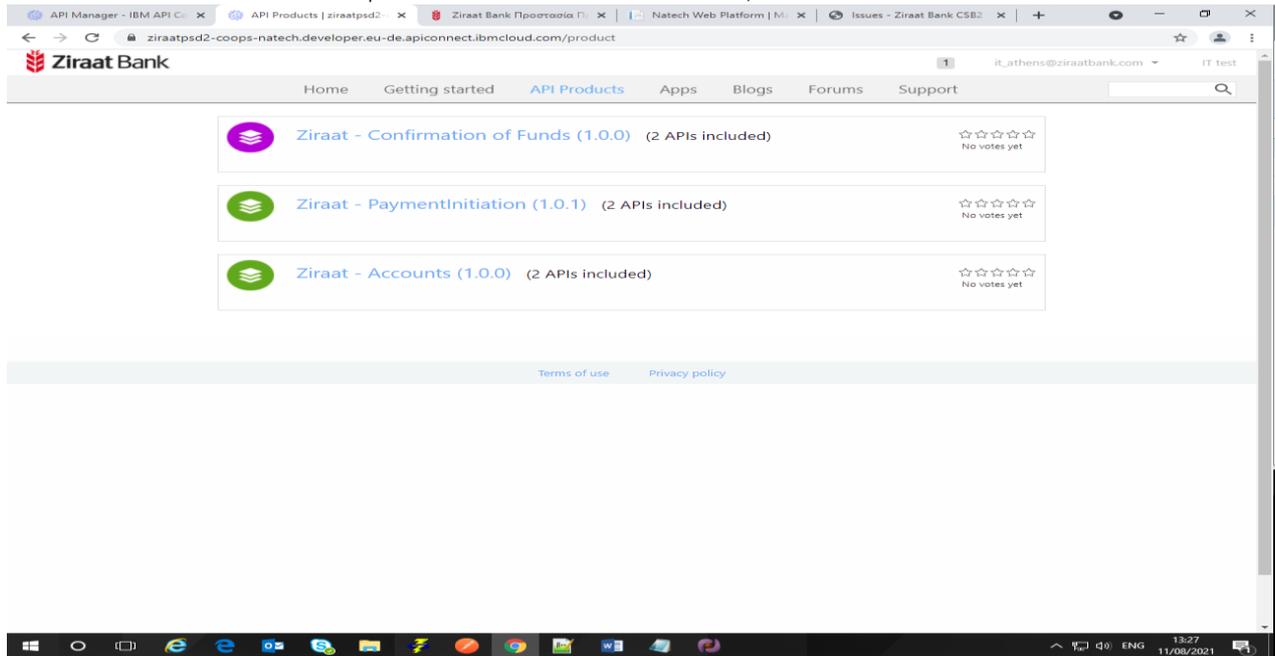


Upon successful completion of the process, the user sees the following page:

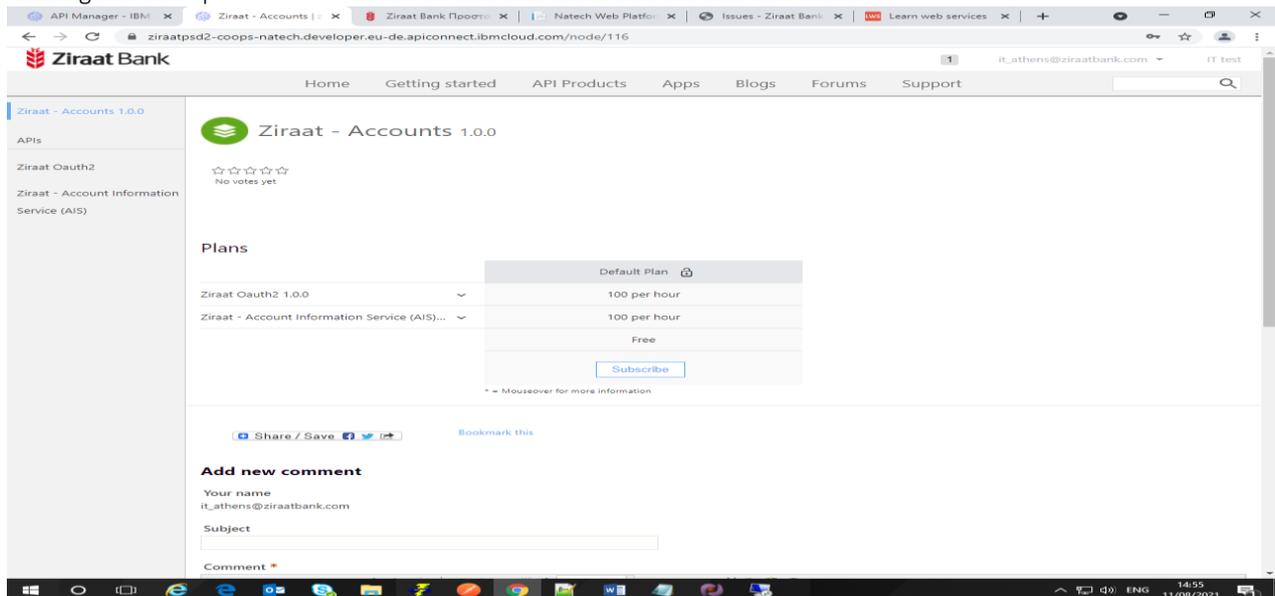


From the above page the only thing the user has to keep is the Client ID. The Client Secret is not used in our case because we will do authorization through Tokens. At this point the user has created the app and is now ready to proceed to the next step which is creating the API Products.

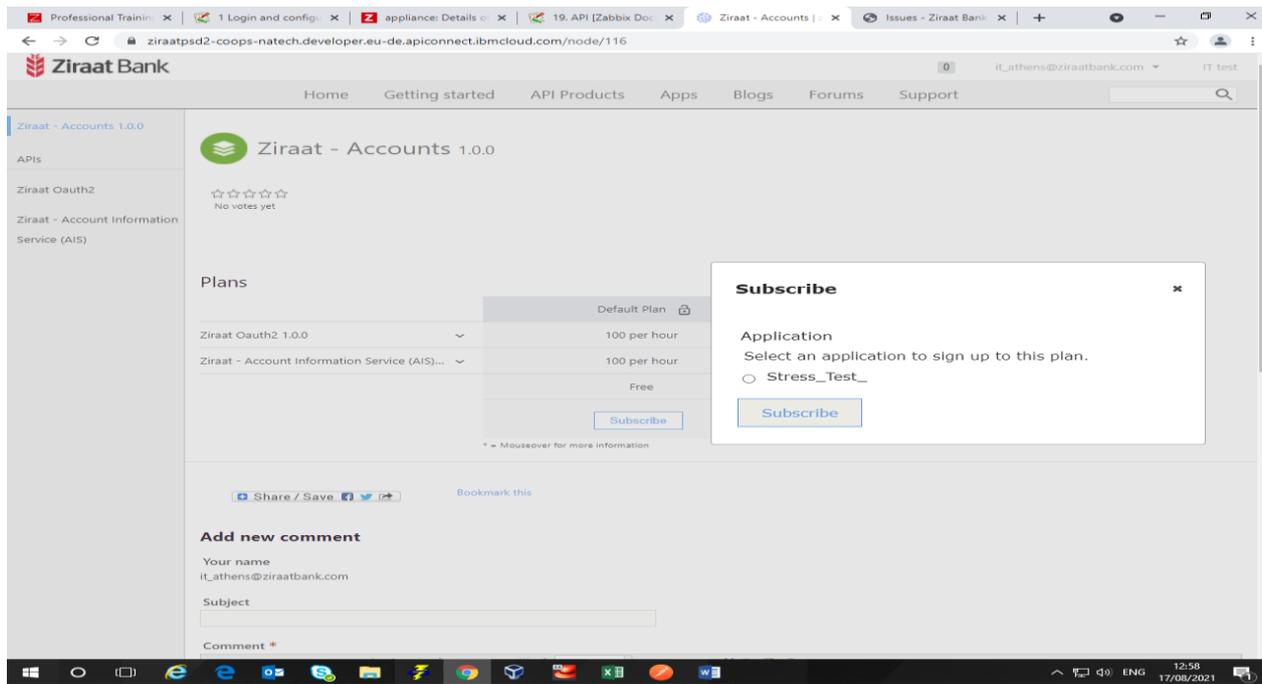
The user clicks the API Products option as shown in the screen below, in which there are all available APIs to watch.



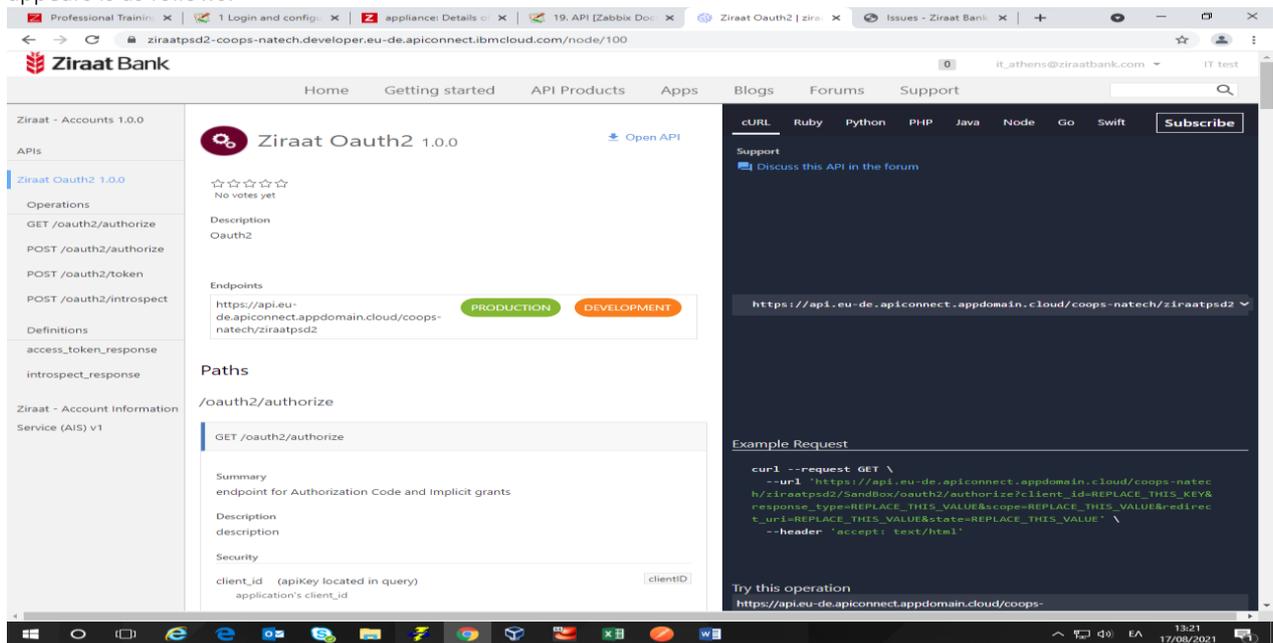
The next step the user needs to do is connect all the APIs they want to monitor to the APP they created in the previous step. Each of the API Products illustrated above consists of 2 individual APIs. One for the authentication and Token generation process and one for all calls and tasks that the user can make.



Therefore, the user has selected the API that he wants to connect, then click the Subscribe option. Then you are asked to select the APP that has already been created in order to complete its connection by clicking subscribe as shown in the image below.



Upon successful completion of the connection, the memory is displayed: 'Successfully subscribed to this plan.'. The process is repeated for all the APIs that have been created. Then in order to start the authentication process we start again from the original API. From the API page that has been selected, right-click on Ziraat Oauth2. The screen that appears is as follows:



Then select → GET / oauth2 / authorize and fill in the required fields on the right side of the screen as shown in the image below:

client ID: It is already preset according to the APP created at the beginning.

accept: It remains as the default and no selection is required.

response_type: There we select code.

scope: Accounts Transactions FundsConfirmation (So as to have the same authorization code for everything).

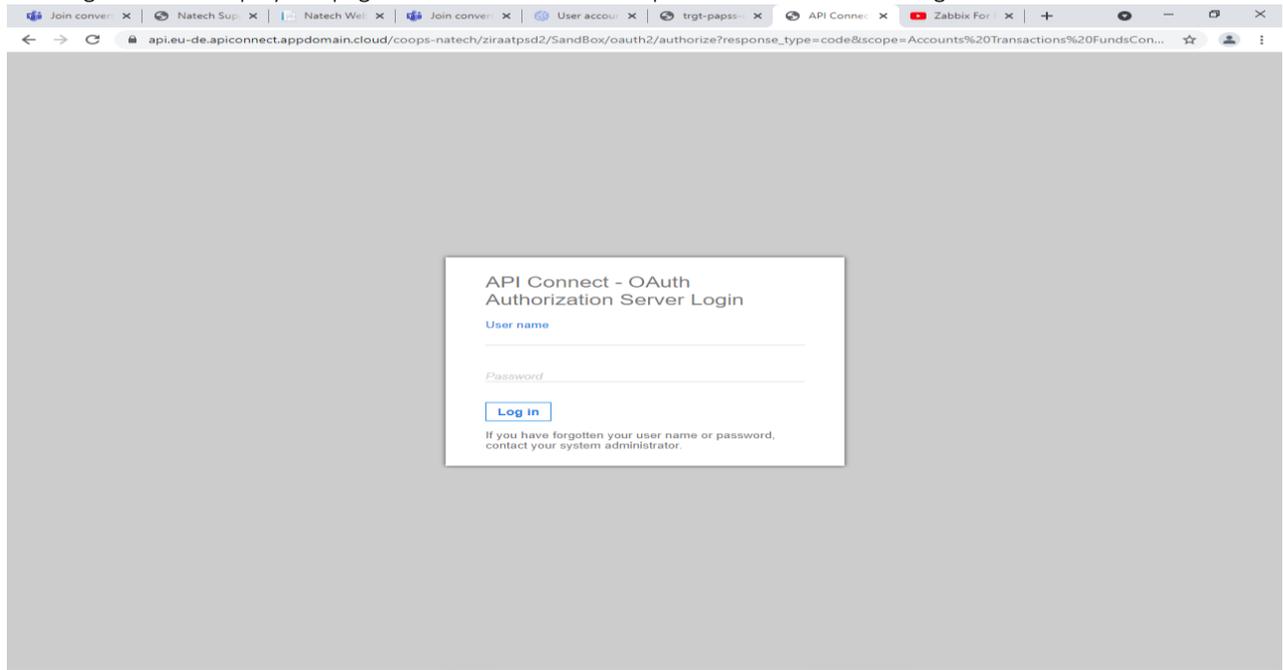
Redirect uri: <https://ziraatpsd2-coops-natech.developer.eu-de.apiconnect.ibmcloud.com/node/100> (for our example / The uri is declared when creating the original APP).

state: Just put OK.

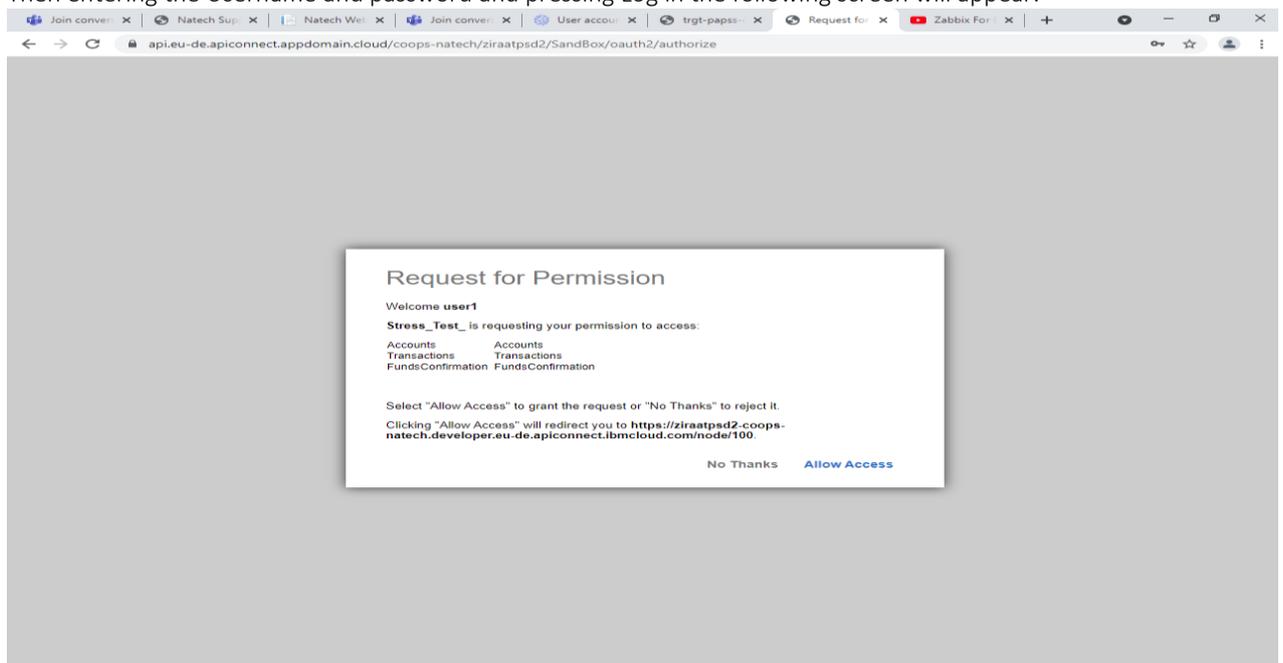
Then, after all the necessary fields are filled in, click on the Call Operation option. When the execution of all the above elements is finished, the following screen with the answer is displayed:

We check if an error has occurred at the bottom of the screen (in the above case it does not, so everything has worked smoothly) and then select the entire URL as shown above and copy-paste in the browser directly.

Pressing enter will display the page for the user to enter his personal information to log in.



Then entering the Username and password and pressing Log in the following screen will appear:



This requires the user's consent to connect and Allow Access must be selected.

Then from the following screen select POST / oauth2 / Token and fill in the required fields:

Grant_type: authorization_code.

Client_id: Has already been stated while creating the APP.

Code: It is selected by the browser directly from the command line starting after the point that states code = and up to &.

Redirect_uri: Has already been stated while creating the APP.

Scope: The same as stated in the GET Authorize process (Accounts Transactions FundsConfirmation).

Refresh_token: access_token.

Filling in all the required fields as in the screen below we select after Call Operation.

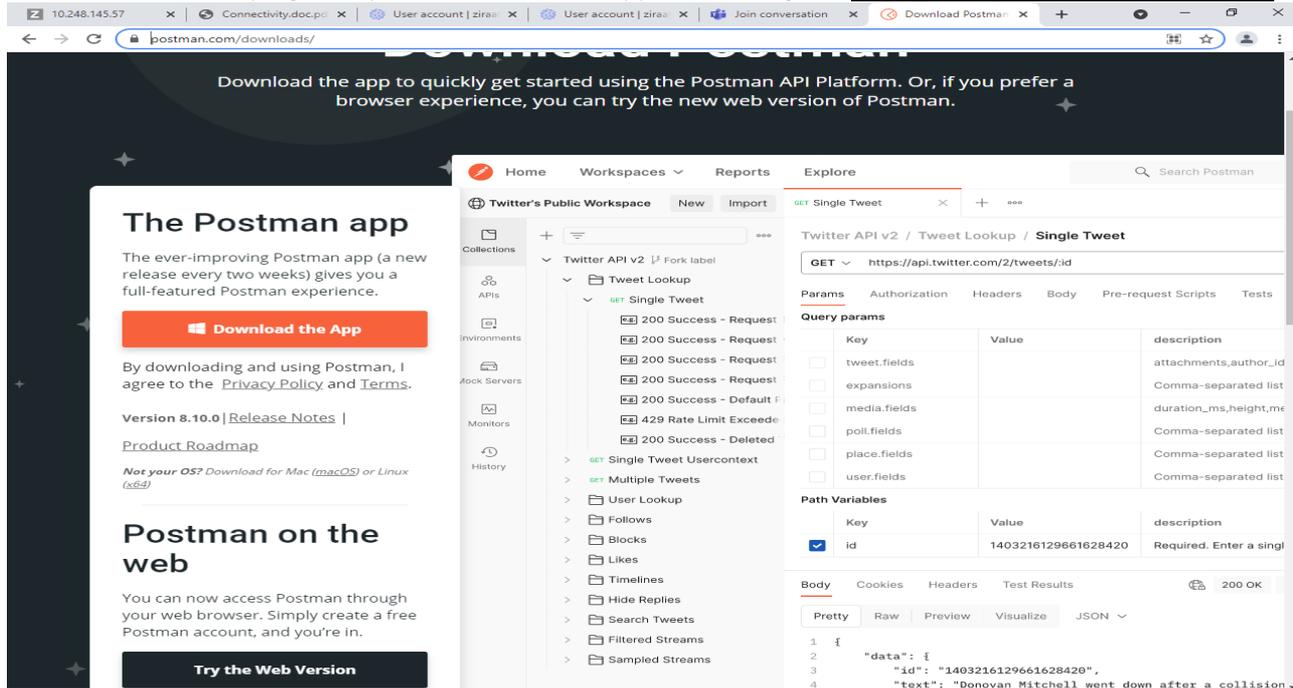
The screenshot shows the Ziraat Bank API documentation for the `POST /oauth2/token` endpoint. The left sidebar lists various API endpoints, with `POST /oauth2/token` highlighted. The main content area displays the endpoint details, including a table of parameters and their types. A code block shows the required `grant_type` enum values. The right sidebar shows the 'Call operation' interface with a cURL tab selected, displaying the request URL, headers, and parameters.

If everything is OK then the following screen will appear with the successful result of the previous action. The access Token that we are interested in and that we have to select and copy is the one that appears selected in blue as in the screen below.

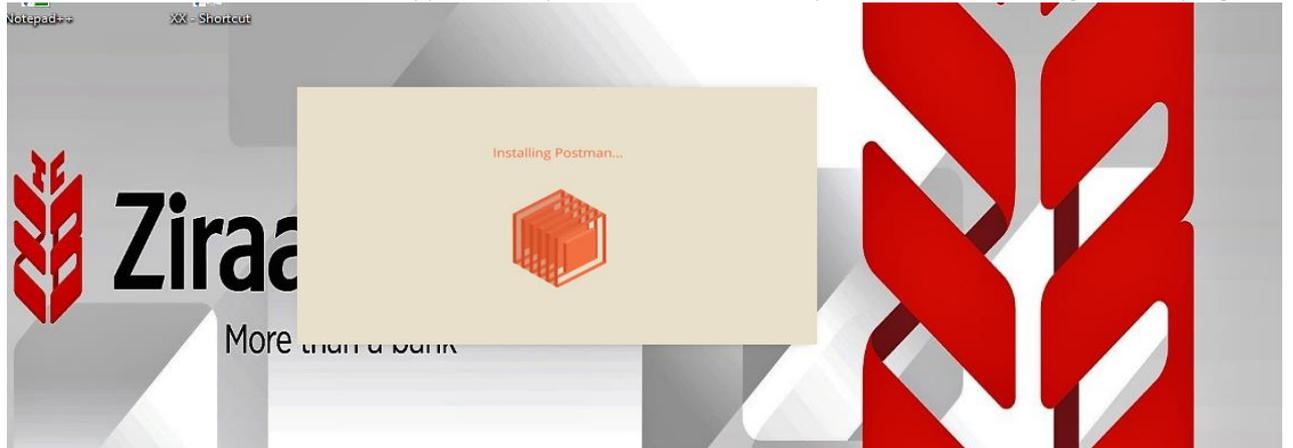
The screenshot shows the Ziraat Bank API documentation for the `POST /oauth2/token` endpoint. The left sidebar lists various API endpoints, with `POST /oauth2/token` highlighted. The main content area displays the endpoint details. The right sidebar shows the 'Call operation' interface with a 'Response' tab selected, displaying the 200 success status and the JSON response body. The `access_token` field in the response is highlighted in blue.

The user has received a token and has access to the bank files so all the processes required to be done from here are over. The next step is to install and configure Postman to make API calls.

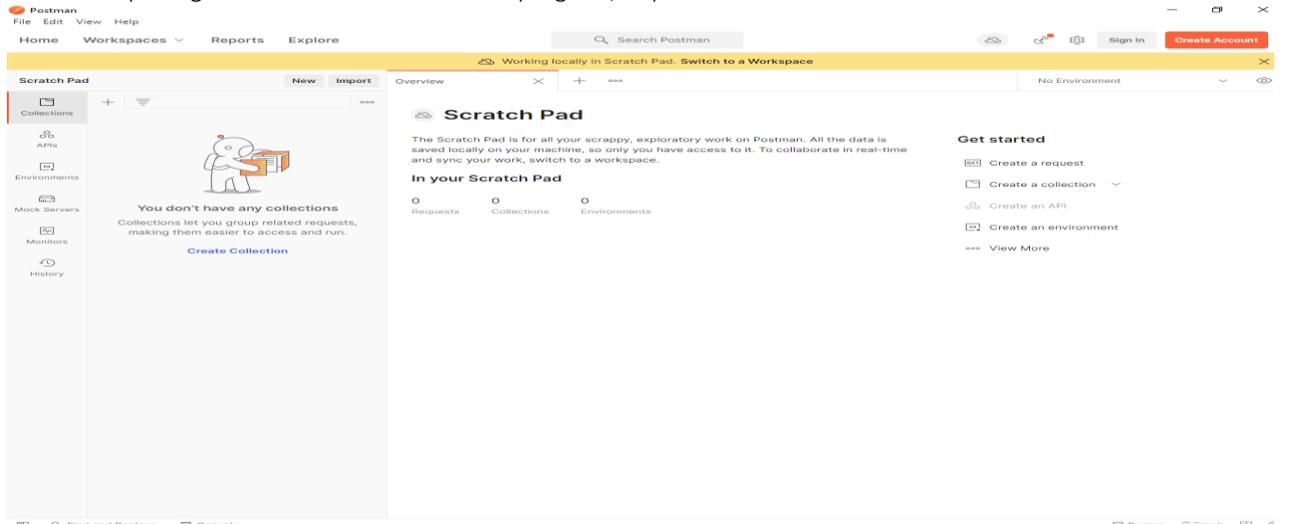
To install the Postman program, open the browser and copy the following link: <https://www.postman.com/downloads/>.



Then select Download the App and proceed with the process of installing the program.



After completing the installation of the program, open the Postman as shown in the screen below.

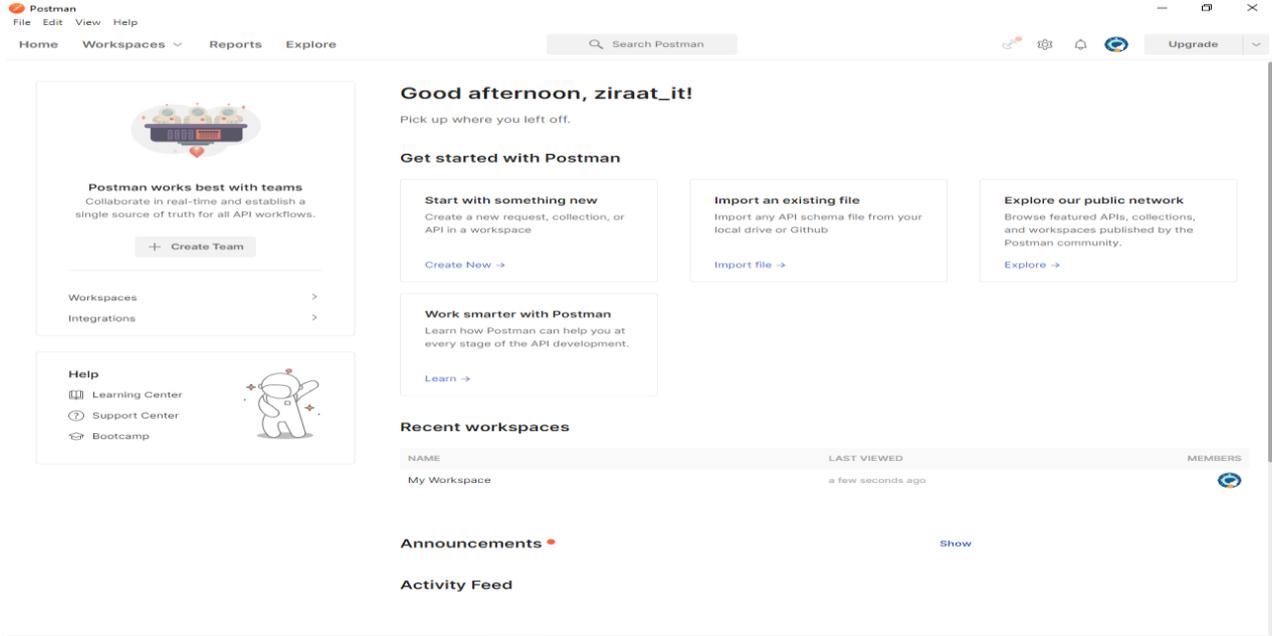


In the upper left screen the user selects Sign in and enters the following:

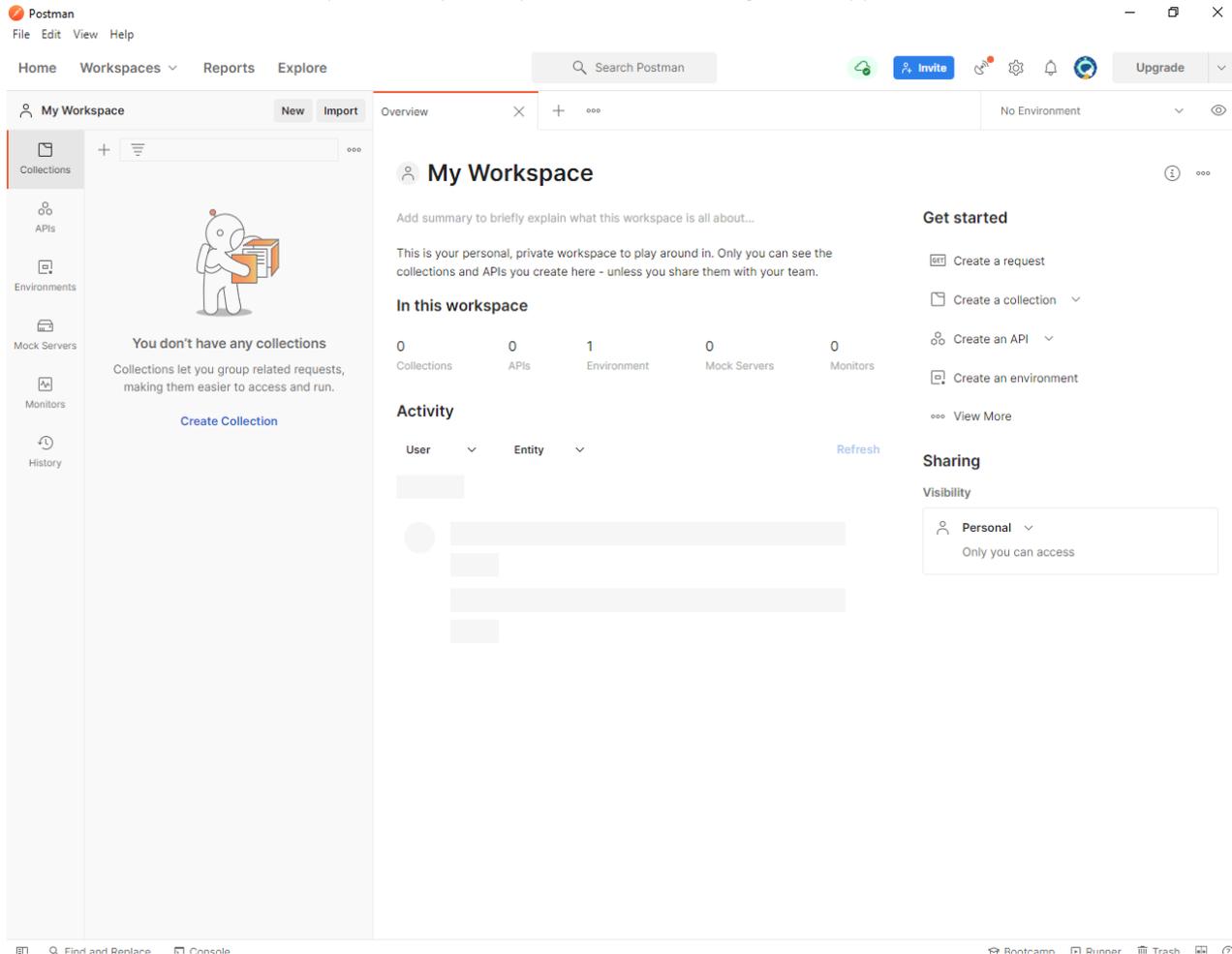
Username: itathens

Password: Zb123456@*

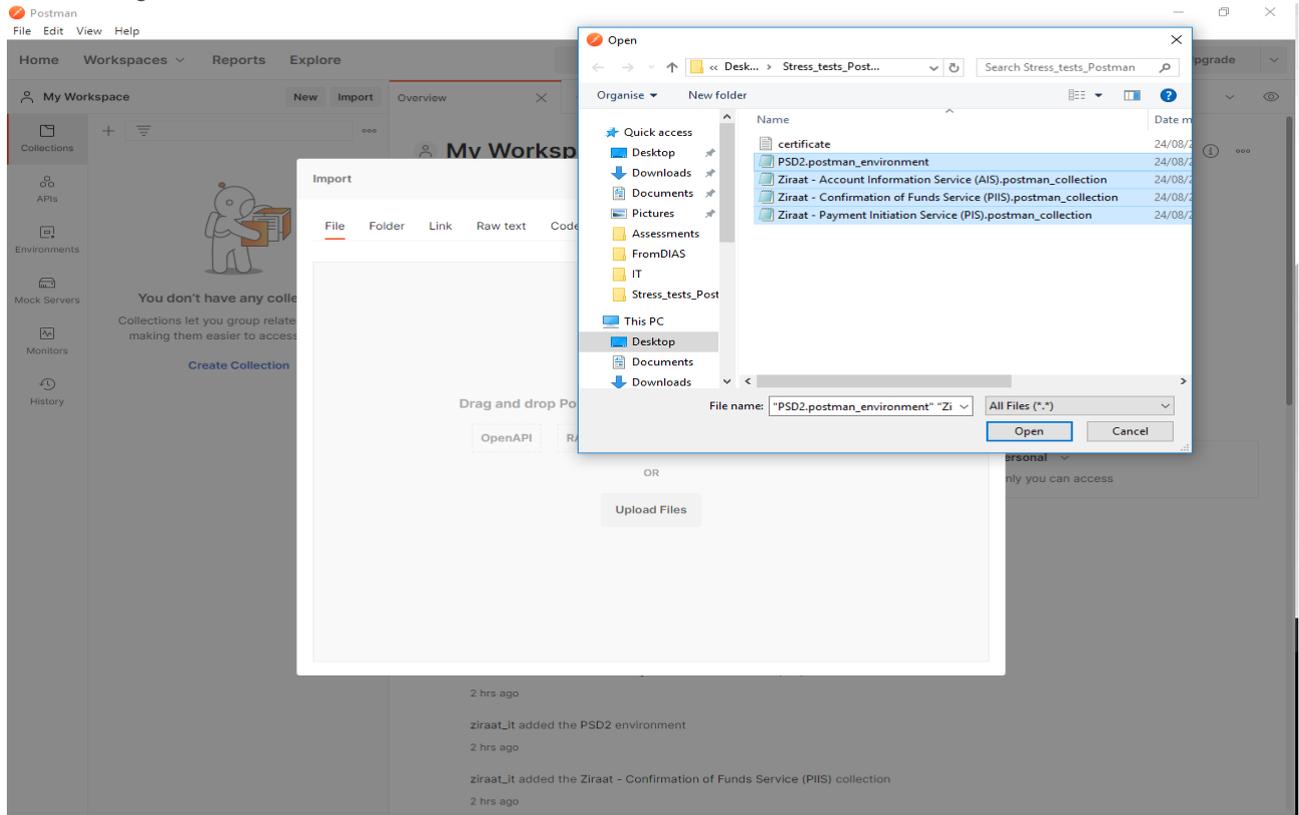
After completing Log In the following screen will appear:



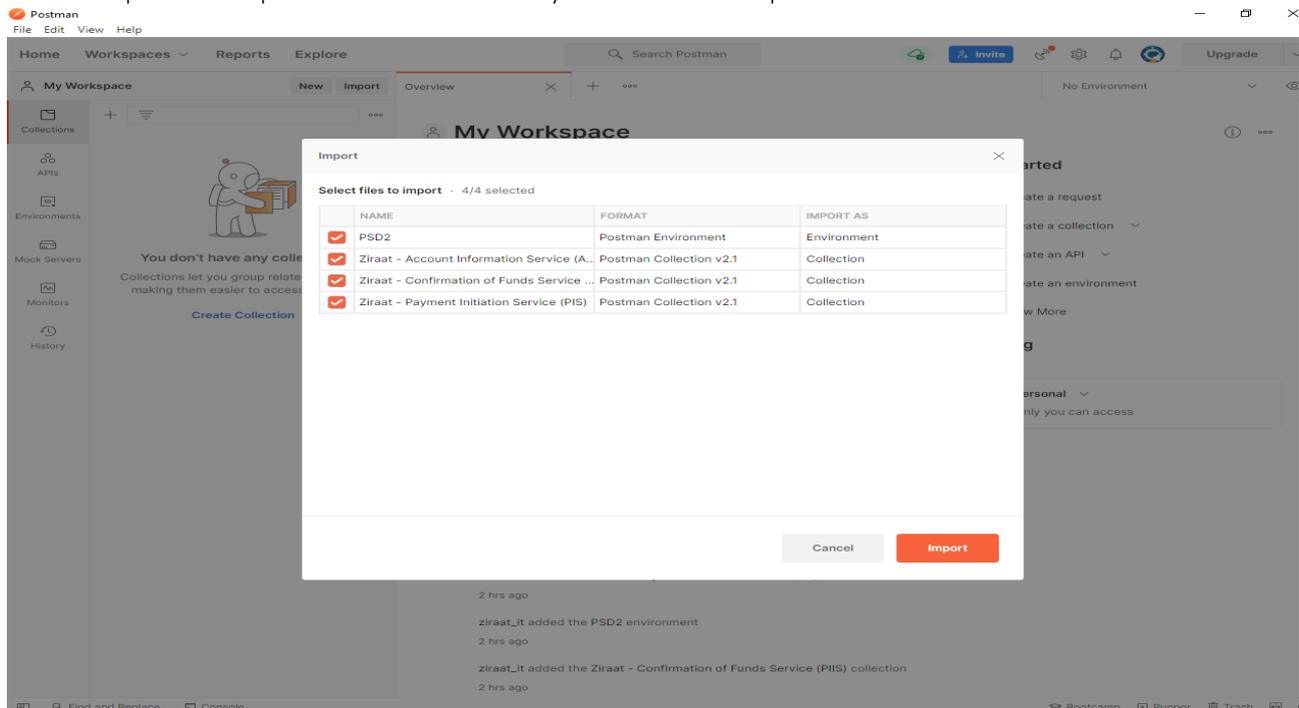
Then the user selects →Workspaces→ My workspace and the following screen appears:



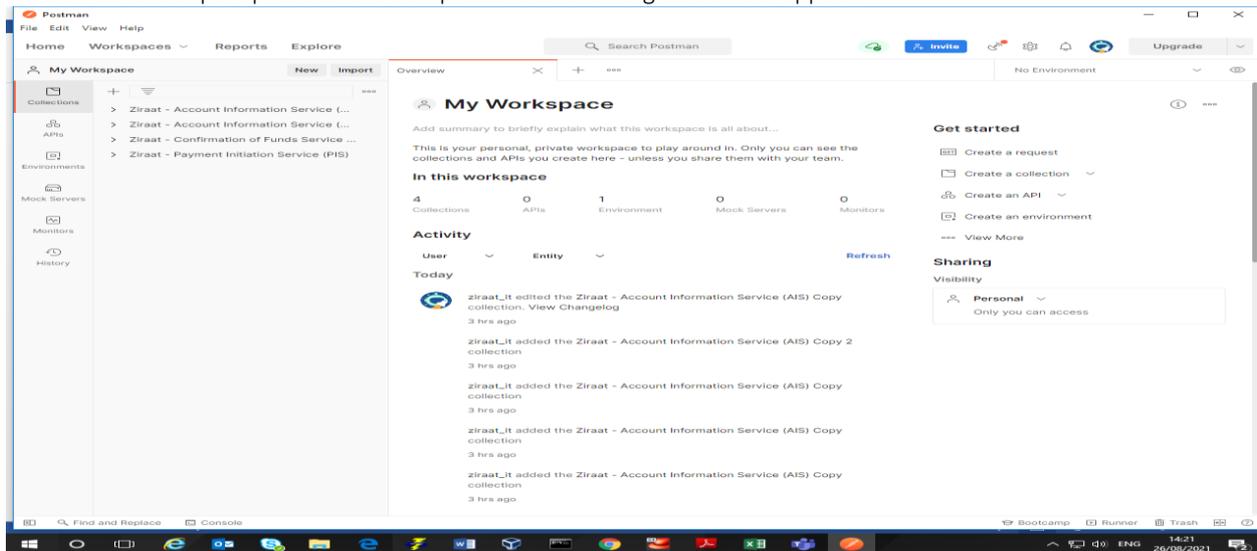
From the Import option the users selects the API call files which are ready together with the environment as shown in the following screen.



Once the upload is complete and the files are ready the user selects Import.



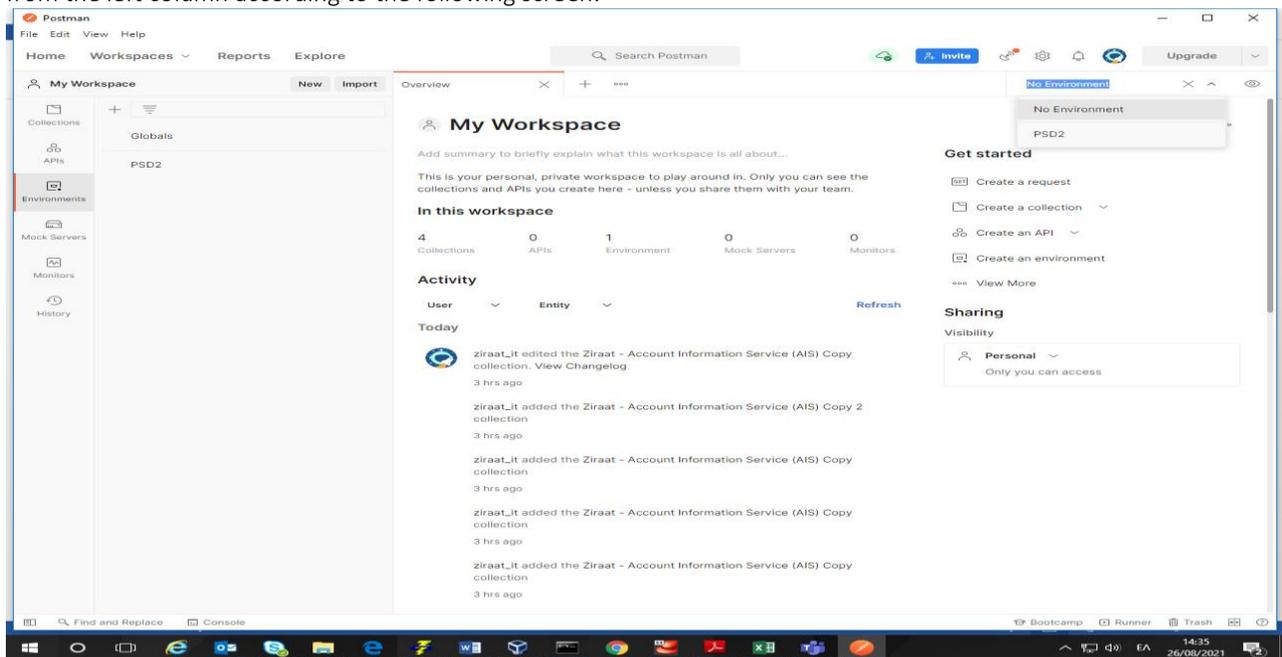
As soon as the import procedure is completed the following screen will appear:



At this point the 3 API calls we want to test and a user interface to enter variables are loaded. These are the following:

- Ziraat- Account Information Services.
- Ziraat- Confirmation of Pay.
- Ziraat- Payment Initiation Services.
- Environment (PSD2).

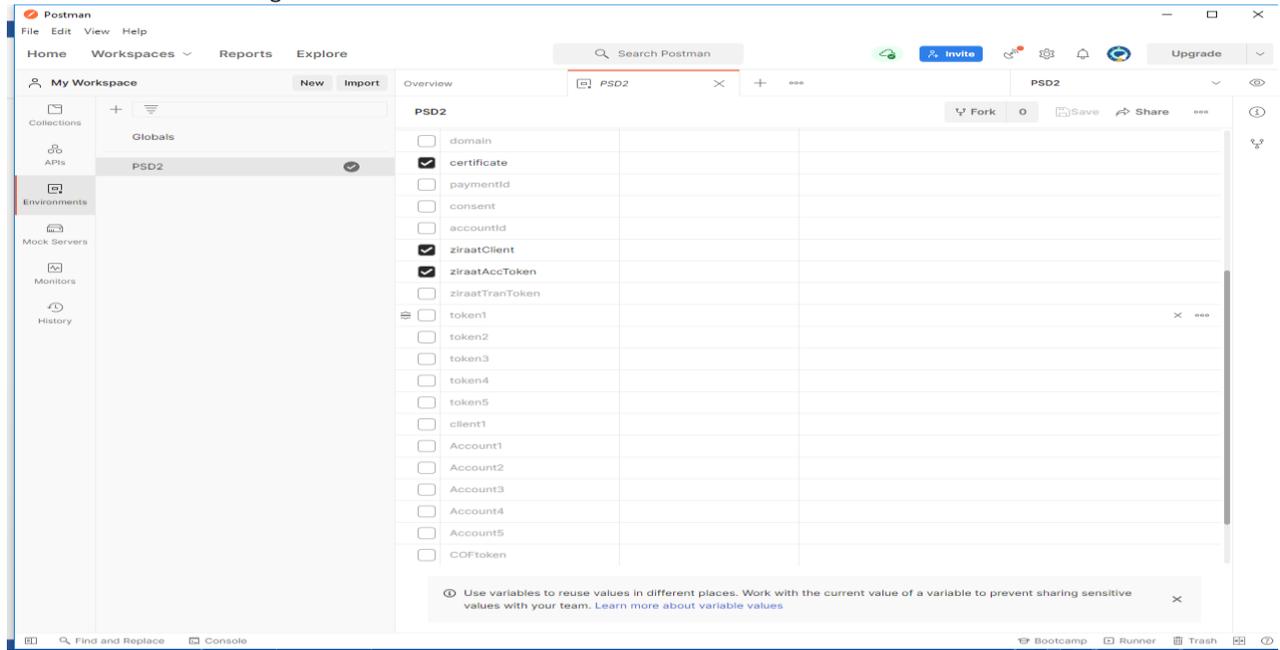
The next step is to enter the variables in the PSD2 environment. As a result, the user selects the Environments option from the left column according to the following screen:



Then, in the upper right corner as shown in the screen above, the user must select from the drop down menu the option PSD2 which is the interface for entering the required variables. The data of the variables required for registration are the following:

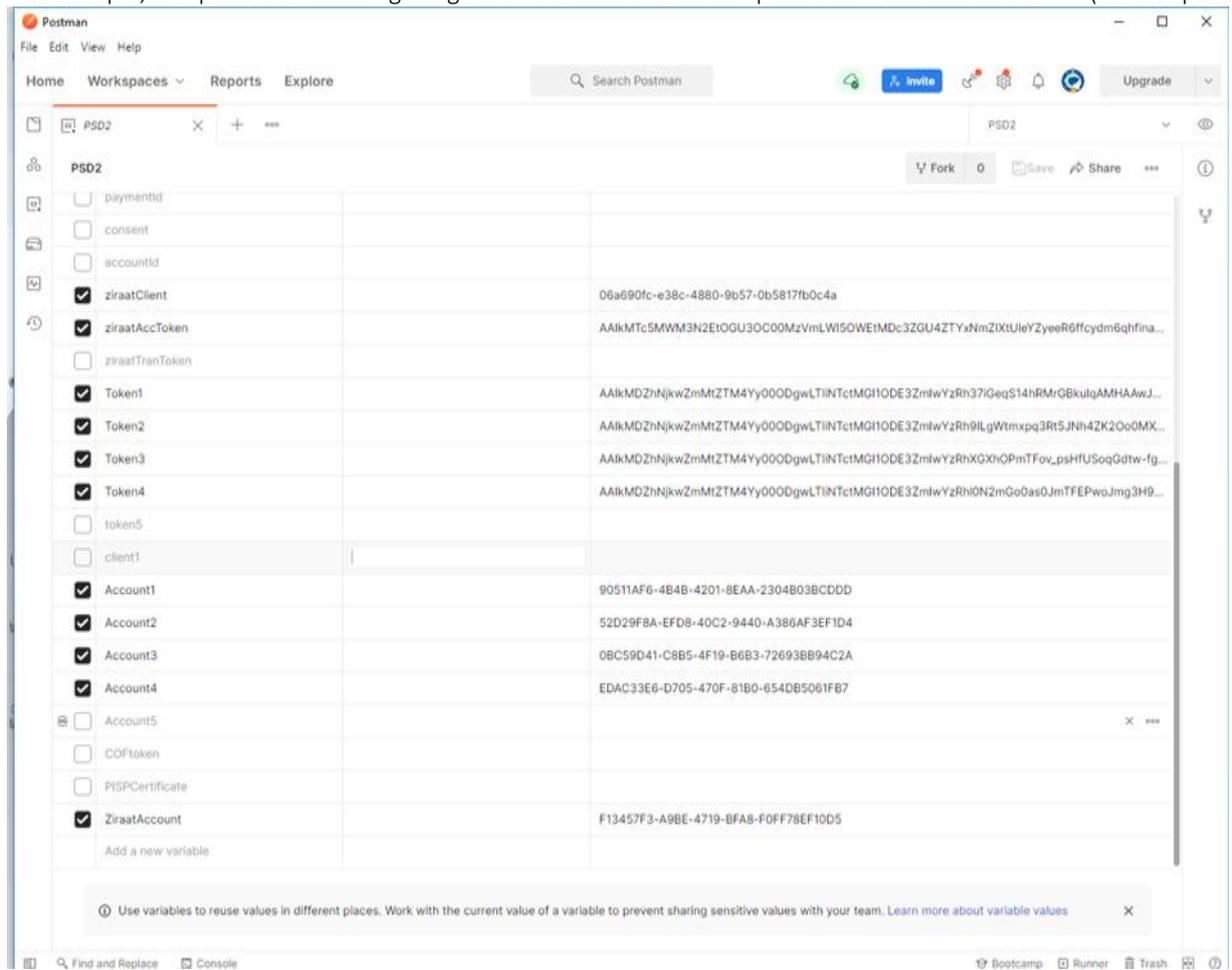
- Certificate
- ZiraatClient
- ZiraatAccToken
- ZiraatAccount

As shown in the following screen:

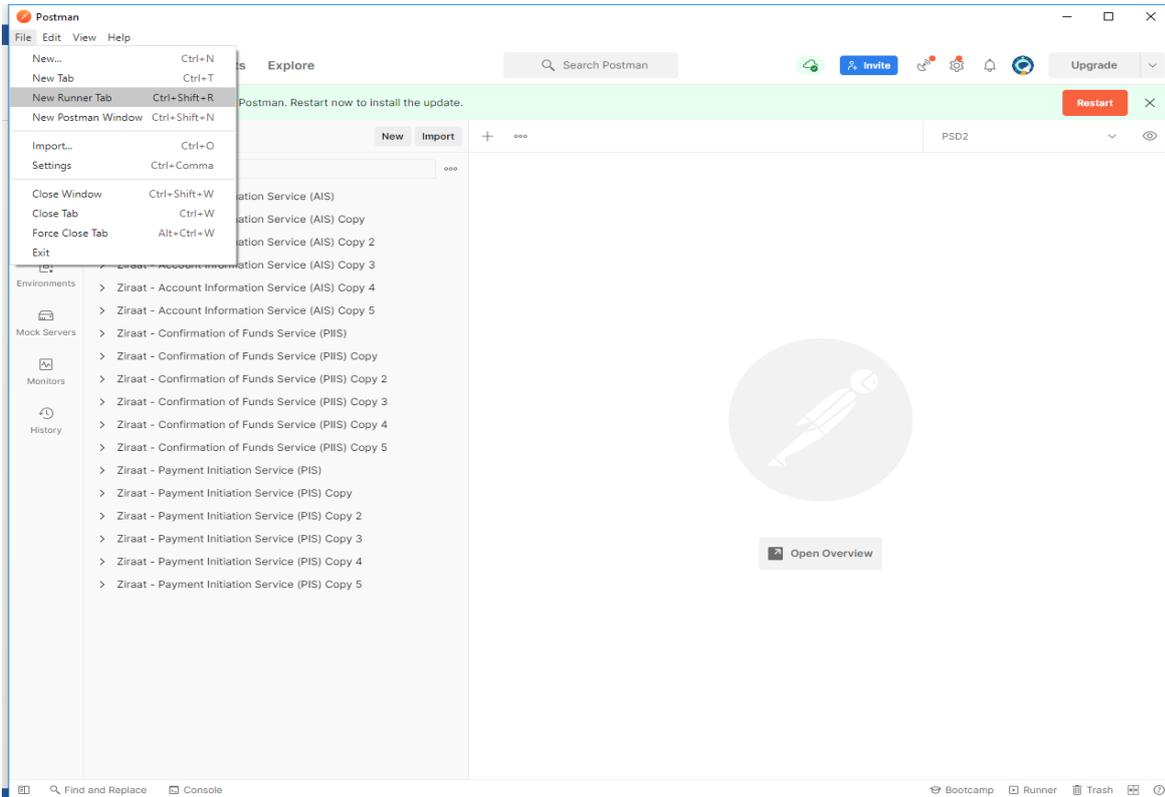


This information is provided by the Portal during the process of opening a new App.

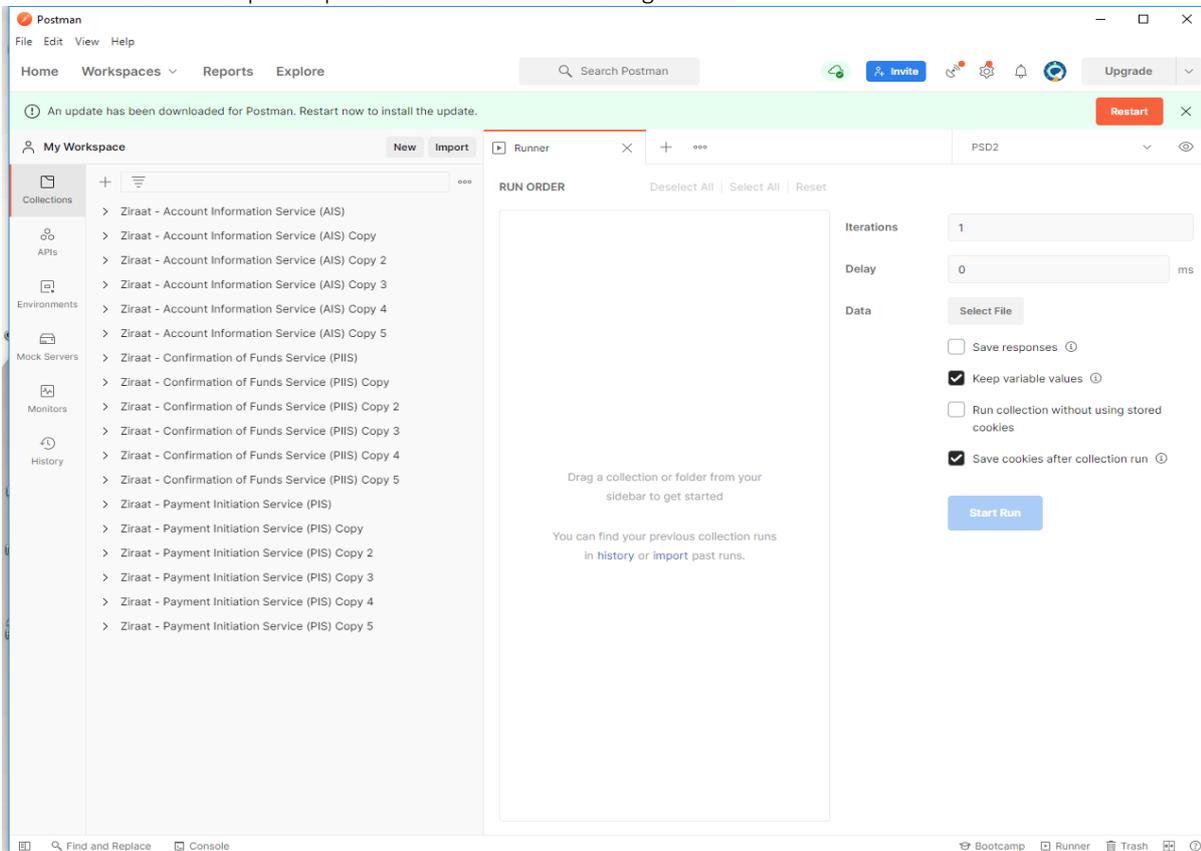
For example, we quote the following image with the above fields completed to make calls to the API (for test period).



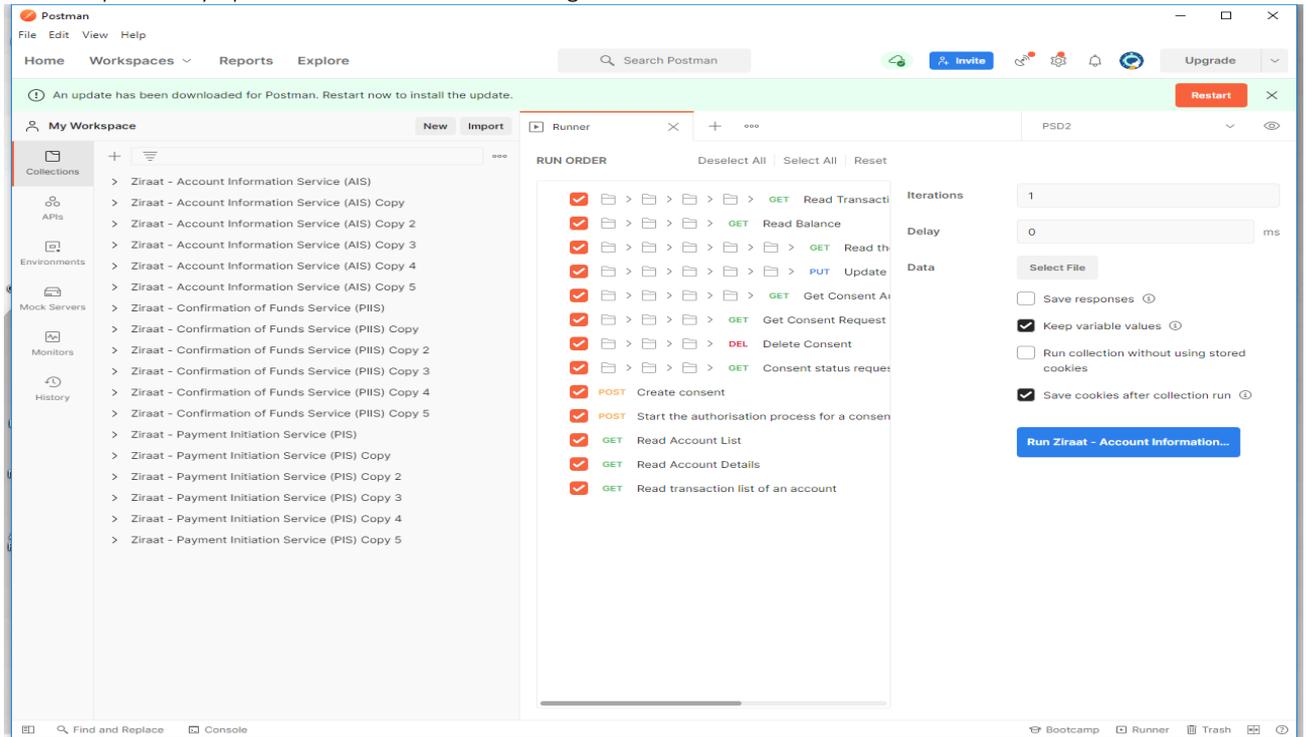
The next step is for the user in the Postman application to create the process for making the calls. From the Postman application the user selects File→New Runner Tab as shown in the screen below:



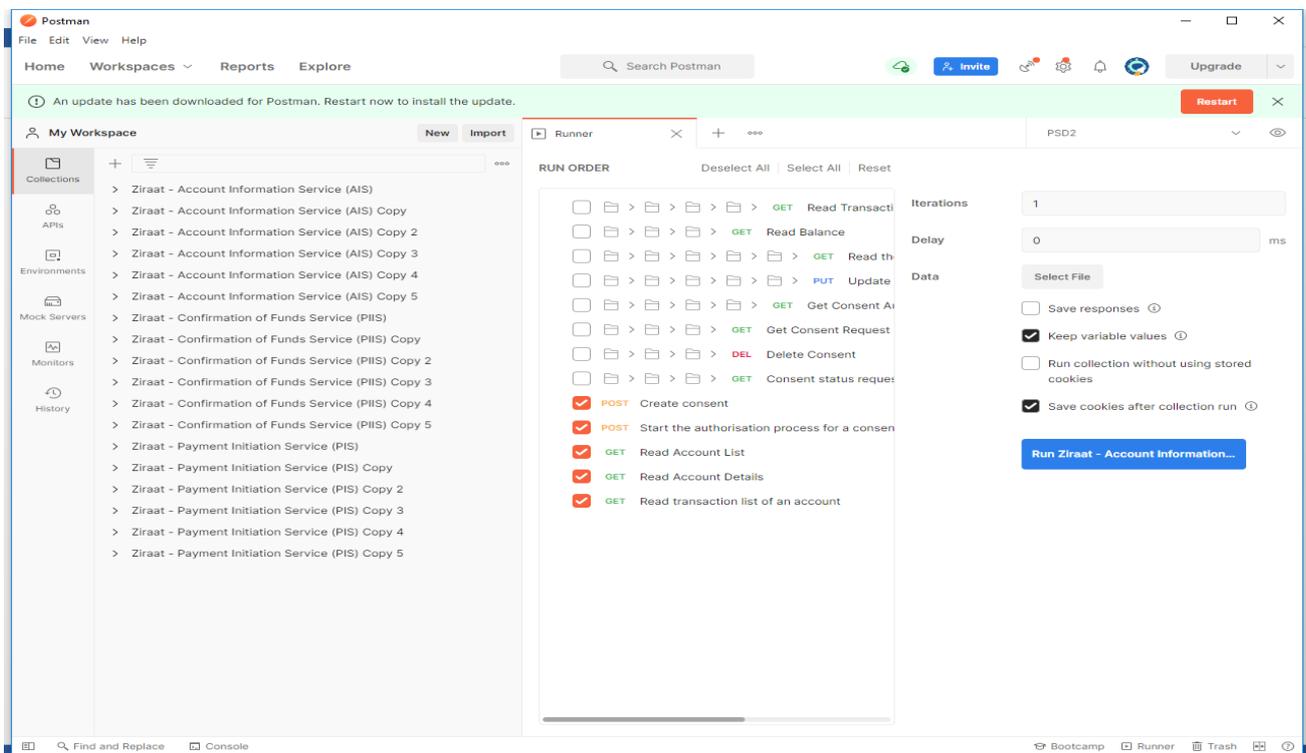
And then the Runner option opens as shown in the following screen:



Then the user with drag n 'drop selects the call (AIS) Account Information service and releases it next to the Runner that was previously opened as shown in the following screen:



Then for this call the user leaves the first 5 fields selected as shown in the screen below:



The user then selects the blue button to make the call → Run Ziraat-Account Information service. The same procedure is repeated for the next calls that the User wants to make.