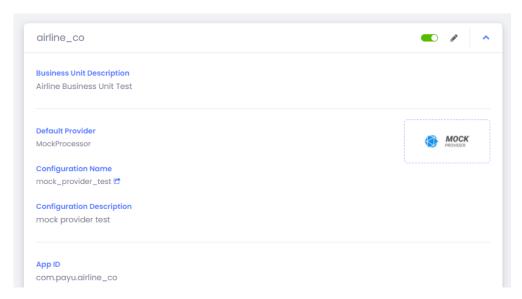
### Sales Engineer Technical test

### 1. CREATE A CONTROL PAYMENTSOS ACCOUNT

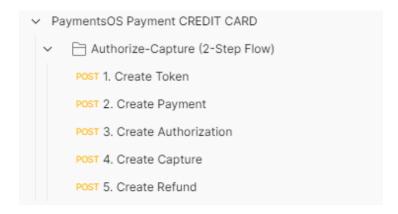
In this section I create a business unit, AirlineCo, and associate a payments provider MockUp.

**App Account ID:** 98b5ca97-bbd1-46a8-9514-edab7b5e4f1b



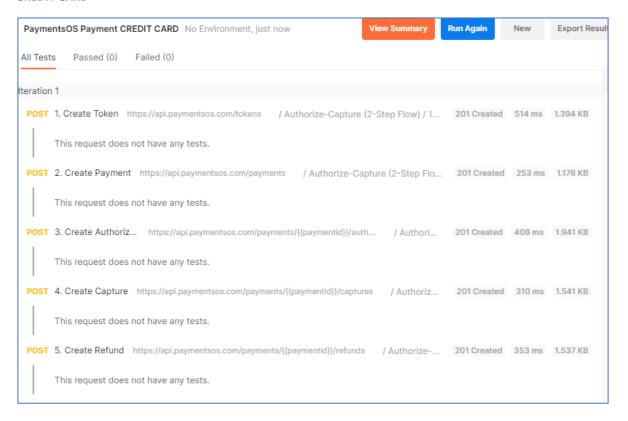
# 2. COMPLETE A PAYMENT FLOW WITH THE FOLLOWING API CALLS (DO NOT USE THE BODY BUILDER TOOL ON THIS POINT):

In this section, I create a payment flow for a credit card payment with a 2 step flow. Request and responses described to:

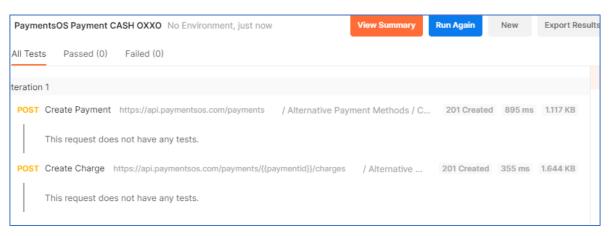


### **TEST ON POSTMAN**

### **CREDIT CARD**



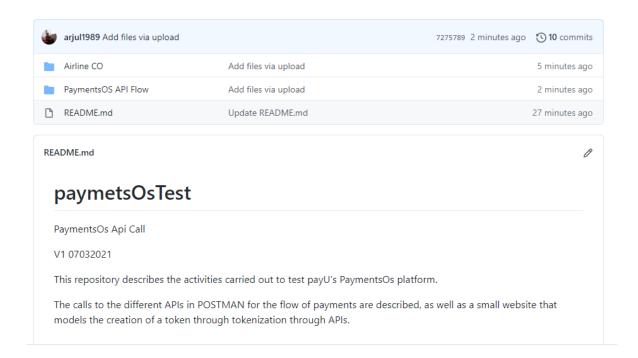
### **C**ASH



• SEND BACK YOUR SECURE FIELDS CODE, ALL REQUESTS, AND ALL RESPONSES. FOR THIS POINT, YOU HAVE TO USE GITHUB AND SHARE WITH US THE GITHUB LINK TO REVIEW THE SOURCE CODE.

All request and responses have been submitted to a github public repository.

https://github.com/JulesSetUp/paymetsOsTest



### **AIRLINECO FOLDER:**

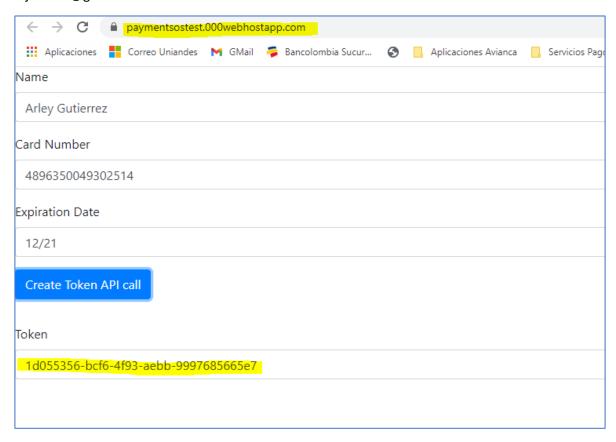
Contains the generation files of a small website that generates a token by calling APIs

### **PAYMENTSOS API FLOW:**

It contains the .json files exported from POSTMAN, both the calls to the APIs and the generated results.

TO TEST THE SECURE FIELDS, FORM FEATURE, PLEASE UPLOAD THE SECURE FIELDS FORM CODE IN A
PUBLIC HOSTING AND SHARE THE URL WITH US.

To test the token, generate function, I created a website that use the API calls for this, instead Secure Field Form feature.



The site has been deployed at this URL: https://paymentsostest.000webhostapp.com/

• KEEPING IN MIND YOUR EXPERIENCE WITH THIS TECHNICAL ASSESSMENT, PLEASE SHARE WITH US WHAT IS THE DEFINITION OF TOKENIZATION, AUTHORIZE, CAPTURE, CHARGE, VOID, AND REFUND.

**TOKENIZATION:** Tokenize, in payment flows, refers to converting payment data into a code that can be safely transferable.

This prevents some companies from having to implement very robust security methods or architecture models for PCI compliance.

Also, by summarizing the data in a single piece of information (token) it reduces errors and improves the integration of payment systems.

**AUTHORIZE AND CAPTURE:** When a payment is executed it can be of two methods, one is where it is first authorized and then the capture is made.

For example, Uber makes an AUTHORIZATION when placing an order, the money is withheld from the credit card and once the service is finished, the CAPTURE is made.

**CHARGE:** Contrary to the authorization and capture model, Charging is making the due directly to the payer's card.

For example, Rappi at the time of a purchase does not authorize, but instead makes an immediate charge to the TC. If the service is canceled, Rappi cannot make a **VOID**, but must make a **REFUND**.

**VOID:** When a transaction is canceled, without having made a charge, a **VOID** is executed. The transaction can be canceled, for example when the bank rejects the payment or when the Uber user cancels the service before it is provided. There must be (in most cases) a prior authorization.

**REFUND:** When the funds are already debited and leave the payer's accounts towards the merchant (aggregator or gateway model), the money can only be returned through a Refund.

The **REFUND** is a new bank transaction, its movements are registered, and it can be for a different value than the one paid.

Rappi, for example, sometimes makes partial refunds for purchases or the airlines compensate TC for canceled flights through Refund.

 AND FINALLY, SHARE WITH US YOUR MERCHANT ONBOARDING, INTEGRATION AND DOCUMENTATION EXPERIENCE NOTES ON A FILE ON THE SAME GITHUB RESOURCE.

This document will be uploaded at Github site <a href="https://github.com/JulesSetUp/paymetsOsTest">https://github.com/JulesSetUp/paymetsOsTest</a>

### **PLUS POINTS**

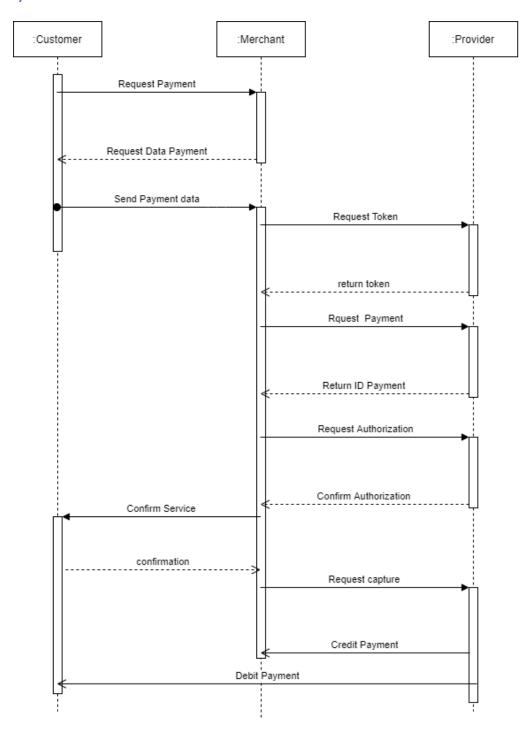
 ADD THE BILLING INFORMATION (EMAIL, LINE1, CITY, COUNTRY, PHONE) TO THE SECURE FIELDS FORM.

The billing information has been added to the Creation Payment step with credit card

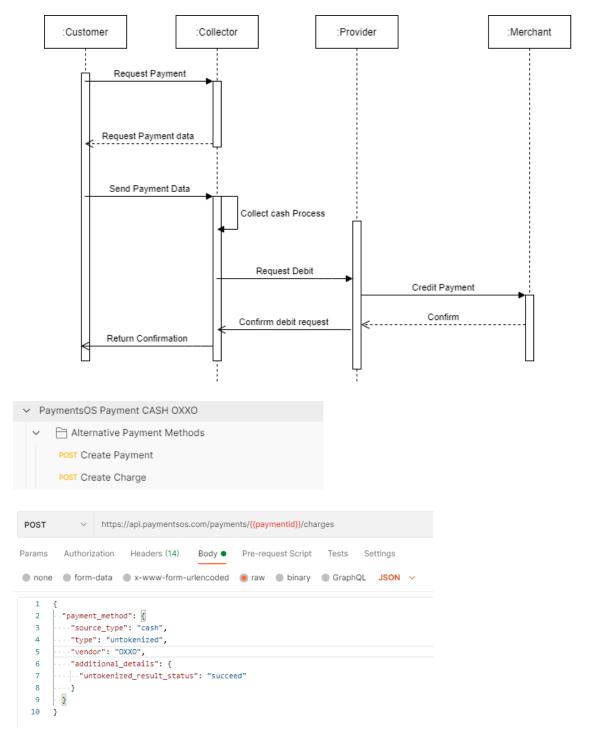
```
POST
            https://api.paymentsos.com/payments
Params Authorization Headers (14) Body Pre-request Script Tests Settings
none form-data x-www-form-urlencoded raw binary GraphQL JSON
        "amount": 1500,
        "currency": "COP",
        "billing_address": {
            . "email": "arjul1989@gmail.com",
            "line1": "calle 146 # 12",
            · "city": "Bogota",
             · "country": "COL",
         ....."phone": 3173350000
  10
       -},
        "order": {
  11
         ··"id": "Ticket123456"
  12
```

• CREATE A POSTMAN COLLECTION AND A SEQUENCE DIAGRAM (TWO ACTORS, MERCHANT AND PAYU) EXPLAINING THE FLOWS FOR THE FOLLOWING SCENARIO: PAYU HAS A MERCHANT IN MEXICO THAT WANTS TO INTEGRATE CREDIT CARDS TO PROCESS WITHOUT CVV(SECURITY CODE) AND CASH PAYMENTS (OXXO).

# CREDITCARD PAYMENT 2 STEP FLOW SEQUENCE DIAGRAM (HAPPY PATH WITHOUT VOID OR REFUND PROCESS)



### **CASH PAYMENTS SEQUENCE DIAGRAM (OXXO STORE)**



 Send the URL of the postman collection with folders one for Cash and the other for credit cards.

The collection has been charged at <a href="https://github.com/JulesSetUp/paymetsOsTest">https://github.com/JulesSetUp/paymetsOsTest</a>