Safra

Hackathon
APIs

Guia para as APIs simuladas

APIs

Consulta dados da conta
GET /open-banking/v1/accounts/{accountId}

Consulta saldo
GET /open-banking/v1/accounts/{accountId}/balances

Consulta extrato
GET /open-banking/v1/accounts/{accountId}/transactions

Baseadas nas especificações do
Open Banking United Kingdom.

Documentação:

https://openbanking.atlassian.net/wiki/spaces/DZ/pages/16385802/Specifications

Faz transferência
GET /accounts/v1/accounts/{accountId}/transfers

Lista Morning Calls
GET /media/v1/youtube

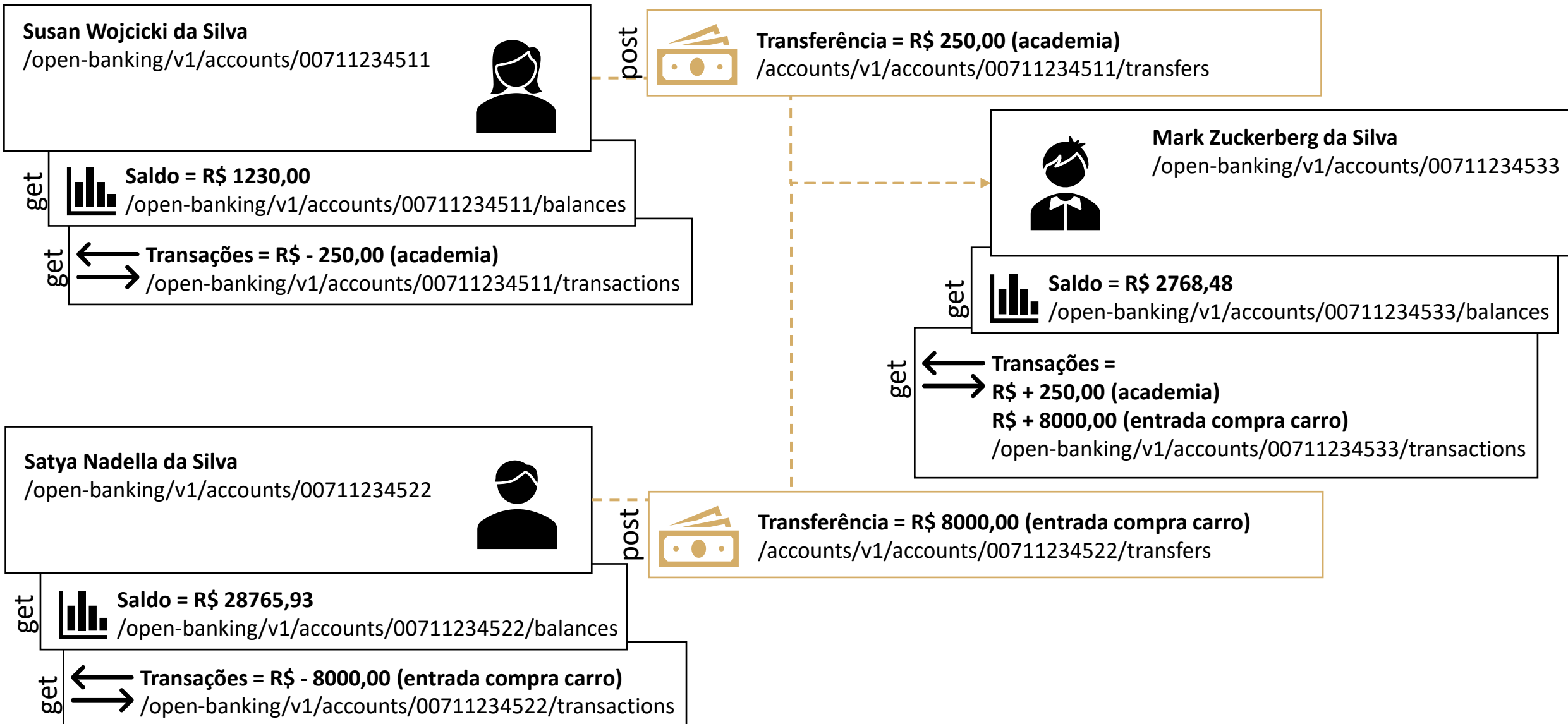**Contato para abertura de contas (Opt In)**
POST /accounts/v1/optin

Modelagem interna inspirada no **Open Banking United Kingdom**.

Funcionalidades não previstas no **Open Banking**.

Funcionalidades simuladas

Safra

Susan Wojcicki da Silva
/open-banking/v1/accounts/00711234511

post — **Transferência = R$ 250,00 (academia)**
/accounts/v1/accounts/00711234511/transfers

get — **Saldo = R$ 1230,00**
/open-banking/v1/accounts/00711234511/balances

get — **Transações = R$ - 250,00 (academia)**
/open-banking/v1/accounts/00711234511/transactions

Mark Zuckerberg da Silva
/open-banking/v1/accounts/00711234533

get — **Saldo = R$ 2768,48**
/open-banking/v1/accounts/00711234533/balances

get — **Transações =**
R$ + 250,00 (academia)
R$ + 8000,00 (entrada compra carro)
/open-banking/v1/accounts/00711234533/transactions

Satya Nadella da Silva
/open-banking/v1/accounts/00711234522

post — **Transferência = R$ 8000,00 (entrada compra carro)**
/accounts/v1/accounts/00711234522/transfers

get — **Saldo = R$ 28765,93**
/open-banking/v1/accounts/00711234522/balances

get — **Transações = R$ - 8000,00 (entrada compra carro)**
/open-banking/v1/accounts/00711234522/transactions

Funcionalidades simuladas

Funcionalidades simuladas – Exemplos (Conta)

Susan Wojcicki da Silva
/open-banking/v1/accounts/00711234511

GET
https://af3tqle6wgdocsdirzlfrq7w5m.apigatew
ay.sa-saopaulo-1.oci.customer-oci.com/fiap-
sandbox**/open-**
banking/v1/accounts/00711234511

```
{
    "Data": {
        "Account": [
            {
                "AccountId": "00711234511",
                "Currency": "BRL",
                "Nickname": "Susan",
                "Account": {
                    "SchemeName": "SortCodeAccountNumber",
                    "Identification": "12345678901211",
                    "Name": "Susan Wojcicki da Silva",
                    "SecondaryIdentification": "12332111"
                }
            }
        ]
    },
    "Links": {
        "Self": "/accounts/00711234511"
    }
}
```

Funcionalidades simuladas – Exemplos (Saldo)

Safra

Susan Wojcicki da Silva
/open-banking/v1/accounts/00711234511

get

Saldo = R$ 1230,00
/open-banking/v1/accounts/00711234511/balances

GET
https://af3tqle6wgdocsdirzlfrq7w5m.apigateway.s
a-saopaulo-1.oci.customer-oci.com/fiap-
sandbox**/open-
banking/v1/accounts/00711234511/balances**

```
{
    "Data": {
        "Balance": [
            {
                "AccountId": "00711234511",
                "Amount": {
                    "Amount": "1230.00",
                    "Currency": "BRL"
                },
                "CreditDebitIndicator": "Credit",
                "Type": "InterimAvailable",
                "DateTime": "2020-06-23T10:43:07-03:00",
                "CreditLine": [
                    {
                        "Included": true,
                        "Amount": {
                            "Amount": "100000.00",
                            "Currency": "BRL"
                        },
                        "Type": "Pre-Agreed"
                    }
                ]
            }
        ]
    },
    "Links": {
        "Self": "/accounts/00711234511/balances/"
    }
}
```

Funcionalidades simuladas – Exemplos (Extrato)

Safra

Susan Wojcicki da Silva
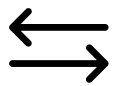/open-banking/v1/accounts/00711234511

get

Saldo = R$ 1230,00
/open-banking/v1/accounts/00711234511/balances

get

Transações = R$ - 250,00 (academia)
/open-banking/v1/accounts/00711234511/transactions

GET
https://af3tqle6wgdocsdirzlfrq7w5m.apigateway.sa-saopaulo-1.oci.customer-oci.com/fiap-sandbox**/open-banking/v1/accounts/00711234511/transactions**

```
{
  "data": {
    "transaction": [
      {
        "accountId": "00711234511",
        "transactionId": "999911",
        "amount": {
          "amount": "250.00",
          "currency": "BRL"
        },
        "creditDebitIndicator": "Debit",
        "status": "Booked",
        "bookingDateTime": "2020-04-05T10:43:07-03:00",
        "valueDateTime": "2020-04-05T10:45:22-03:00",
        "transactionInformation": "Mensalidade Academia",
        "bankTransactionCode": {
          "code": "ReceivedCreditTransfer",
          "subCode": "DomesticCreditTransfer"
        },
        "proprietaryBankTransactionCode": {
          "code": "Transfer",
          "issuer": "BancoSafra"
        },
        "balance": {
          "amount": {
            "amount": "1230.00",
            "currency": "BRL"
          },
          "creditDebitIndicator": "Credit",
          "type": "InterimBooked"
        }
      }
    ]
  },
  "links": {
    "self": "/accounts/00711234511/transactions"
  }
}
```

Funcionalidades simuladas – Exemplos (Transferências)

Safra

POST

Transferência = R$ 250,00 (academia)
/accounts/v1/accounts/00711234511/transfers

POST
https://af3tqle6wgdocsdirzlfrq7w5m.apigateway.s
a-saopaulo-1.oci.customer-oci.com/fiap-
sandbox**/accounts/v1/accounts/00711234511/tr
ansfers**

```
{
    "Amount": {
        "Amount": "250.00",
        "Currency": "BRL"
    },
    "DestinyAccount": {
        "Bank": "422",
        "Agency": "0071",
        "Id": "1234533",
        "Cpf": "12345678933",
        "Name": "Mark Zuckerberg da Silva",
        "Goal":"Credit"
    },
    "Type": "TEF",
    "TransactionInformation": "Mensalidade Academia"
}
```

```
{
    "Data": {
        "AccountId": "00711234511",
        "Bank": "422",
        "Agency": "0071",
        "AccountNumber": "1234511",
        "Amount": {
            "Amount": "250.00",
            "Currency": "BRL"
        },
        "DestinyAccount": {
            "Bank": "422",
            "Agency": "0071",
            "Number": "1234533",
            "Cpf": "12345678933",
            "Name": "Mark Zuckerberg da Silva",
            "Goal": "Credit"
        }
        "Type": "TEF",
        "Status": "Booked",
        "BookingDateTime": "2020-04-05T10:43:07-03:00",
        "ValueDateTime": "2020-04-05T10:45:22-03:00",
        "TransactionInformation": "Mensalidade Academia"
    }
}
```
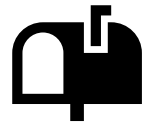
Funcionalidades simuladas – Exemplos (Morning Calls)

Morning calls
GET /media/v1/youtube**?fromData**=2020-07-09&**toData**=2020-07-14&**playlist**=morningCalls&**channel=safra**

```json
{
    "data": [
        {
            "id": "_V8f_Su9_RA",
            "channel": "safra",
            "playlist": "morningCalls",
            "data": "2020-07-14",
            "title": "Morning Call Safra - 14/07/2020",
            "description": "Veja no Morning Call desta terça-
feira, 14 de julho, como o Ibovespa perdeu ontem os 100 mil pontos, após passar a maior parte do pregão acima desse nível."
            "links": [
                {
                    "href": "https://www.youtube.com/watch?v=_V8f_Su9_RA",
                    "rel": "youtube",
                    "title": "Link Youtube do Morning Call"
                },
                {
                    "href": "https://objectstorage.sa-saopaulo-
1.oraclecloud.com/p/KkvwgXxVpb3LtpopVhGJ7VgeKbp23imgFbBrImW4W_Q/n/gr618lalrmiy/b/morningcalls/o/Morning%20Call%20Safra%20-%2014_07_2020.m4a",
                    "rel": "audioFile",
                    "title": "Arquivo .m4a de audio do Morning Call"
                },
        },
                {
                    "href": "https://objectstorage.sa-saopaulo-1.oraclecloud.com/p/A4foEVfocaZE-
enp7tmLdButDRwCxamcryNOCte3P1Q/n/gr618lalrmiy/b/morningcalls/o/Morning%20Call%20Safra%20-%2014_07_2020.mp4",
                    "rel": "videoFile",
                    "title": "Arquivo .mp4 do Morning Call"
                }
            ]
        },
        ...
    ]
}
```

Funcionalidades simuladas – Exemplos (Opt In)

Safra

post

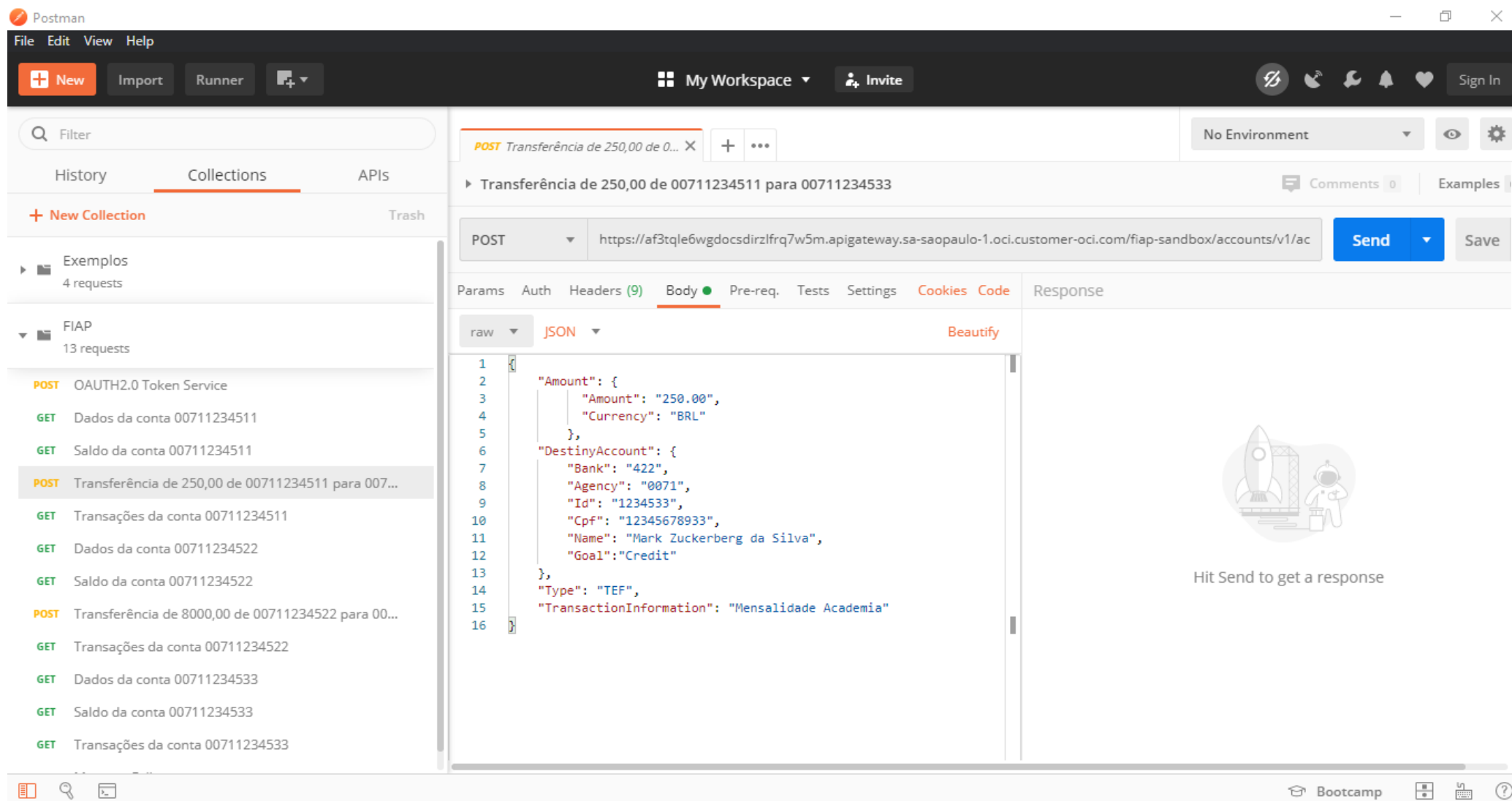**Contato para abertura de conta (Opt In)**
/accounts/v1/optin

POST
https://af3tqle6wgdocsdirzlfrq7w5m.apigateway.s
a-saopaulo-1.oci.customer-oci.com/fiap-
sandbox**/accounts/v1/optin**

```
{
    "Name": "Eric Evans Silva",
    "Email": "eric.evans@ddd.com",
    "Phone": "+5511911111111"
}
```

Funcionalidades simuladas – Postman Collection

Safra

FIAP.postman_collection.json (disponível no mesmo diretório desta apresentação)

Autenticação (OAUTH2.0 Client Credentials)

Safra

Endereço do servidor de autenticação

POST https://idcs-902a944ff6854c5fbe94750e48d66be5.identity.oraclecloud.com/oauth2/v1/token

Cada time receberá seu cliente_id e cliente_secret

client_id:client_secret
abc123xxx:xyz456yyy

Converter para Base 64

YWJjMTIzeHh4Onh5ejQ1Nnl5eQ==

Header:

```
'Authorization: Basic YWJjMTIzeHh4Onh5ejQ1Nnl5eQ=='
```

Body:

```
grant_type=client_credentials&scope=urn:opc:resource:consumer::all
```

Response:
```
{

    "access_token": "eyJ4NXQj***EuwHBw",
    "token_type": "Bearer",
    "expires_in": 3600

}
```

Token expira em 3600 segundos!

Endereço do servidor

GET https://af3tqle6wgdocsdirzlfrq7w5m.apigateway.sa-saopaulo-1.oci.customer-oci.com/fiap-sandbox

+ Concatenar os recursos (paths)

/open-banking/v1/accounts/00711234511/transactions

/open-banking/v1/accounts/00711234511

/open-banking/v1/accounts/00711234511/balances

/media/v1/youtube?fromData=2020-07-09&toData=2020-07-14&playlist=morningCalls&channel=safra

...

+ Acrescentar header com o token gerado

Header:

```
'Authorization: Bearer eyJ4NXQj***EuwHBw'
```