

UNIVERSIDAD DEL VALLE DE GUATEMALA

Facultad de Ingeniería



## Laboratorio 5: Conexión a APIs Externas

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Programación de Plataformas Móviles - Sección 11

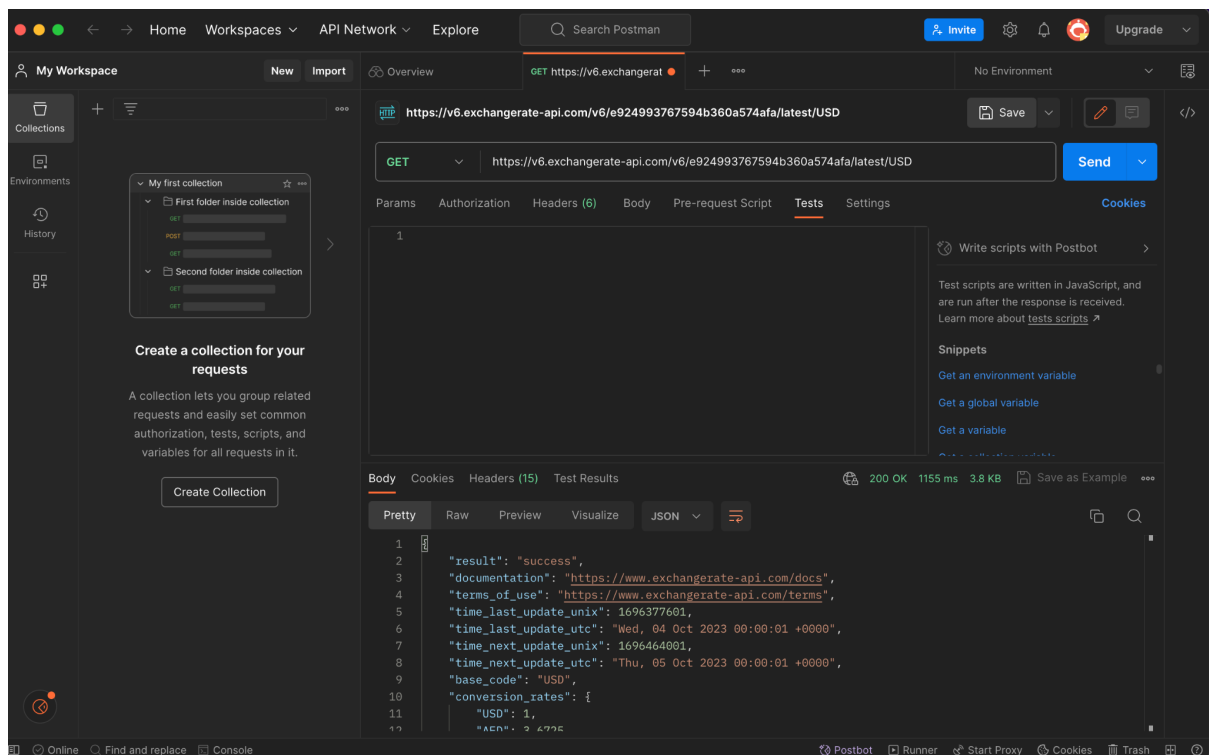
Ing. Moisés González

3 de octubre de 2023

## API externa Utilizada:

La API utilizada fue ExchangeRate en la que se pueden realizar conversiones de tasas de cambio. Se aplicó la API al momento de realizar la conversión de la divisa principal, siendo de dólares, hacia quetzales y euros. Además, se muestra la última hora y fecha en la que la tasa de cambio fue actualizada. Esta API tiene una serie de requisitos que deben tomarse en cuenta. Primero, se observa que la API no requiere de autorización para implementarse. Adicionalmente, solo se tienen 1500 requests por mes en el plan gratis. El formato del request es: GET <https://v6.exchangerate-api.com/v6/YOUR-API-KEY/latest/USD>

## Postman:



Overview GET https://v6.exchangerate... No Environment

https://v6.exchangerate-api.com/v6/e924993767594b360a574afa/latest/USD

GET https://v6.exchangerate-api.com/v6/e924993767594b360a574afa/latest/USD

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

```
1 pm.environment.get("variable_key");
2
3 var template = `
4 <style type="text/css">
5   .tftable {font-size:14px;color:#333333;width:100%;border-width: 1px;
6     border-color: #87ceeb;border-collapse: collapse;}
7   .tftable th {font-size:18px;background-color:#87ceeb;border-width:
8     1px;padding: 8px;border-style: solid;border-color: #87ceeb;
9     text-align:left;}
10  .tftable tr {background-color:#ffffff;}
11  .tftable td {font-size:14px;border-width: 1px;padding: 8px;
12    border-style: solid;border-color: #87ceeb;}
13  .tftable tr:hover {background-color:#e0ffff;}
14 `
15
```

Write scripts with Postbot

Test scripts are written in JavaScript, and are run after the response is received. Learn more about [tests scripts](#)

Snippets

- Get an environment variable
- Get a global variable
- Get a variable

Body Cookies Headers (15) Test Results

200 OK 1155 ms 3.8 KB Save as Example

Pretty Raw Preview Visualize View more actions

Currency	Conversion Rate
0	[object Object]
1	[object Object]
2	[object Object]
3	[object Object]
4	[object Object]

Overview GET https://v6.exchangerate... No Environment

https://v6.exchangerate-api.com/v6/e924993767594b360a574afa/latest/USD

GET https://v6.exchangerate-api.com/v6/e924993767594b360a574afa/latest/USD

Params Authorization Headers (6) Body Pre-request Script Tests Settings Cookies

```
1 pm.test("Response status code is 200", function () {
2   pm.response.to.have.status(200);
3 });
4
5 pm.test("Response is an object", function () {
6   pm.expect(pm.response.json()).to.be.an('object');
7 });
8
9 pm.test("Response has result property", function () {
10  pm.expect(pm.response.json()).to.have.property('result');
11 });
12
13 pm.test("Response has documentation property", function () {
14  pm.expect(pm.response.json()).to.have.property('documentation');
15 });
16
17 pm.test("Response has terms_of_use property", function () {
18  pm.expect(pm.response.json()).to.have.property('terms_of_use');
19 });
20
```

Write scripts with Postbot

Test scripts are written in JavaScript, and are run after the response is received. Learn more about [tests scripts](#)

Snippets

- Get an environment variable
- Get a global variable
- Get a variable
- Get a collection variable
- Set an environment variable
- Set a global variable

Body Cookies Headers (15) Test Results (11/11)

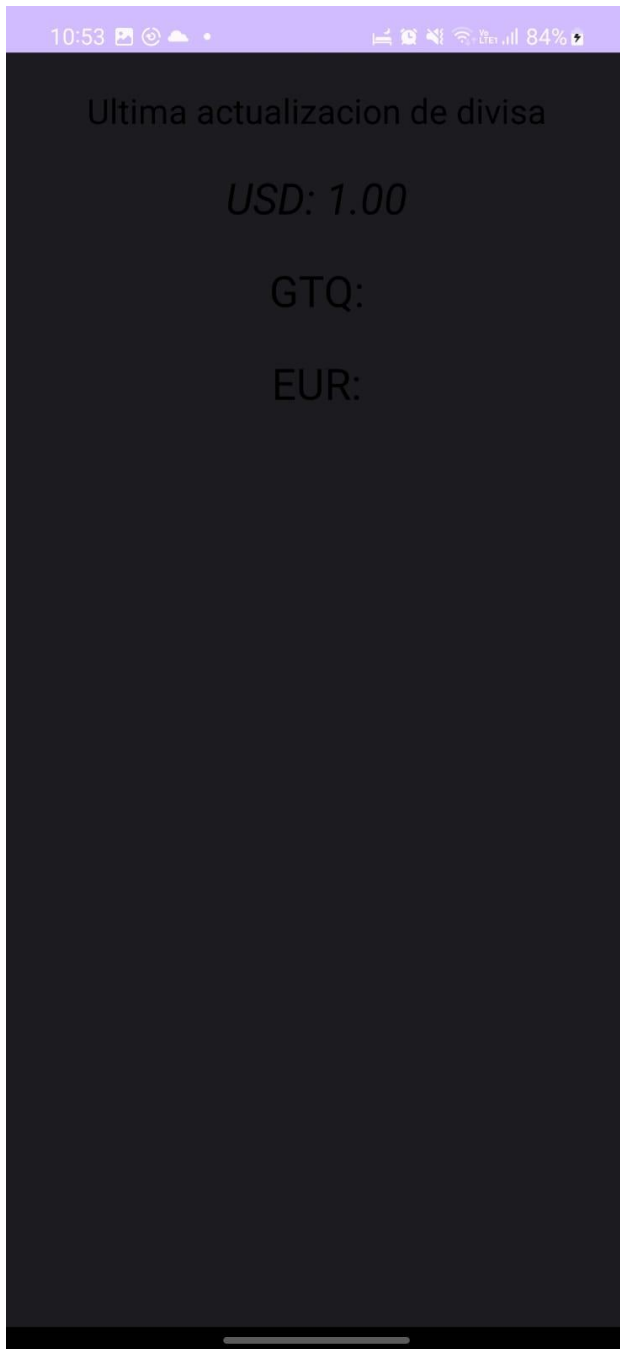
Status: 200 OK Time: 1155 ms Size: 3.8 KB Save as Example

Pretty Raw Preview Visualize

```
{
  "result": "success",
  "documentation": "https://www.exchangerate-api.com/docs",
  "terms_of_use": "https://www.exchangerate-api.com/terms",
  "time_last_update_unix": 1696377601,
  "time_last_update_utc": "Wed, 04 Oct 2023 00:00:01 +0000",
  "time_next_update_unix": 1696464001,
  "time_next_update_utc": "Thu, 05 Oct 2023 00:00:01 +0000",
  "base_code": "USD",
  "conversion_rates": {
    "USD": 1,
    "AED": 3.6725,
    "AFN": 77.8326,
    "ALL": 101.4102,
    "AMD": 410.9050,
    "ANG": 1.7900,
    "AOA": 834.6167,
    "ARS": 350.0300,
    "AUD": 1.5862,
    "AWG": 1.7900,
    "AZN": 1.7007,
    "BAM": 1.8681,
    "BBD": 2.0000,
    "BDT": 110.2882,
    "BGN": 1.8682,
    "BHD": 0.3760,
    "BIF": 2828.5109,
    "BMD": 1.0000,
    "BND": 1.3739,
    "BOB": 6.9417,
    "BRL": 5.0820,
    "BSD": 1.0000,
    "BTN": 83.2513,
    "BWP": 13.7484,
    "BYN": 3.2989,
    "BZD": 2.0000,
    "CAD": 1.3708,
    "CDF": 2460.2872,
    "CHF": 0.9212,
    "CLP": 909.0986,
    "CNY": 7.3112,
    "COP": 4174.5184,
    "CRC": 536.7180,
    "CUP": 24.0000,
    "CVE": 105.3214,
    "CZK": 23.4124,
    "DJF": 177.7210,
    "DKK": 7.1261,
    "DOP": 57.0652,
    "DZD": 137.9832,
    "EGP": 30.9109,
    "ERN": 15.0000,
    "ETB": 55.6146,
    "EUR": 0.9551,
    "FJD": 2.2830,
    "FKP": 0.8280,
    "FOK": 7.1259,
    "GBP": 0.8280,
    "GEL": 2.6790,
    "GGP": 0.8280,
    "GHS": 11.7545,
    "GIP": 0.8280,
    "GMD": 65.5749,
    "GNF": 8588.7926,
    "GTQ": 7.8769,
    "GYD": 209.4809,
    "HKD": 7.8323,
    "HNL": 24.7538,
    "HRK": 7.1967,
    "HTG": 133.9892,
    "HUF": 371.4572,
    "IDR": 15597.4118,
    "ILS": 3.8441,
    "IMP": 0.8280,
    "INR": 83.2470,
    "IQD": 1310.1617,
    "IRR": 42094.5366,
    "ISK": 139.7140,
    "JEP": 0.8280,
    "JMD": 154.8964,
    "JOD": 0.7090,
    "JPY": 149.1831,
    "KES": 148.4385,
    "KGS": 88.4404,
    "KHR": 4122.5834,
    "KID": 1.5865,
    "KMP": 469.9111,
    "KRW": 1360.9021,
    "KWD": 0.3093,
    "KYD": 0.8333,
    "KZT": 477.1112,
    "LAK": 20548.0107,
    "LBP": 15000.0000,
    "LKR": 323.4720,
    "LRD": 189.9547,
    "LSL": 19.3218,
    "LYD": 4.8898,
    "MAD": 10.3297,
    "MDL": 18.2600,
    "MGA": 4533.6415,
    "MKD": 58.4023,
    "MMK": 2107.7863,
    "MNT": 3485.1266,
    "MOP": 8.0675,
    "MRU": 38.0493,
    "MUR": 44.5360,
    "MVR": 15.4447,
    "MWK": 1142.6007,
    "MXN": 17.9716,
    "MYR": 4.7230,
    "MZN": 63.8816,
    "NAD": 19.3218,
    "NGN": 768.7475,
    "NIO": 36.7042,
    "NOK": 10.9524,
    "NPR": 133.2021,
    "NZD": 1.6932,
    "OMR": 0.3845,
    "PAB": 1.0000,
    "PEN": 3.8005,
    "PGK": 0.8280,
    "PHP": 56.0661,
    "PKR": 277.7598,
    "PLN": 39.9611,
    "PYG": 7767.3597,
    "QAR": 3.6733,
    "RON": 4.7736,
    "RSD": 108.0000,
    "RUB": 87.9563,
    "RWF": 1094.0000,
    "SAR": 3.7500,
    "SBD": 7.1000,
    "SCR": 16.7845,
    "SDG": 450.0000,
    "SEK": 10.4657,
    "SGD": 1.3446,
    "SHP": 0.8280,
    "SLL": 19.3600,
    "SOS": 226.6400,
    "SRD": 36.0000,
    "STD": 20.4800,
    "SVC": 8.0000,
    "SZL": 14.9600,
    "THB": 36.5664,
    "TJS": 9.1453,
    "TMT": 3.7603,
    "TND": 3.1126,
    "TOP": 2.3548,
    "TRY": 27.0676,
    "TTD": 2.1356,
    "TWD": 31.2160,
    "TZS": 2054.0000,
    "UAH": 36.0000,
    "UGX": 3546.0000,
    "USD": 1.0000,
    "UYU": 39.8369,
    "UZS": 124.0000,
    "VND": 23.3347,
    "VUV": 118.2000,
    "WST": 2.4567,
    "XAF": 655.9572,
    "XCD": 2.6656,
    "XDR": 0.6848,
    "XOF": 655.9572,
    "XPF": 109.3600,
    "YER": 226.6400,
    "ZAR": 13.7560,
    "ZMW": 20.3591,
    "ZWL": 3.5000
  }
}
```

Se realizaron los tests de visualizar respuesta y verificar respuesta.

El programa fue probado por medio de un emulador fisico.



## Referencias.

*ExchangeRate-API - Exchange Rates API documentation.* (s. f.).

<https://www.exchangerate-api.com/docs/overview>