2022-07-20

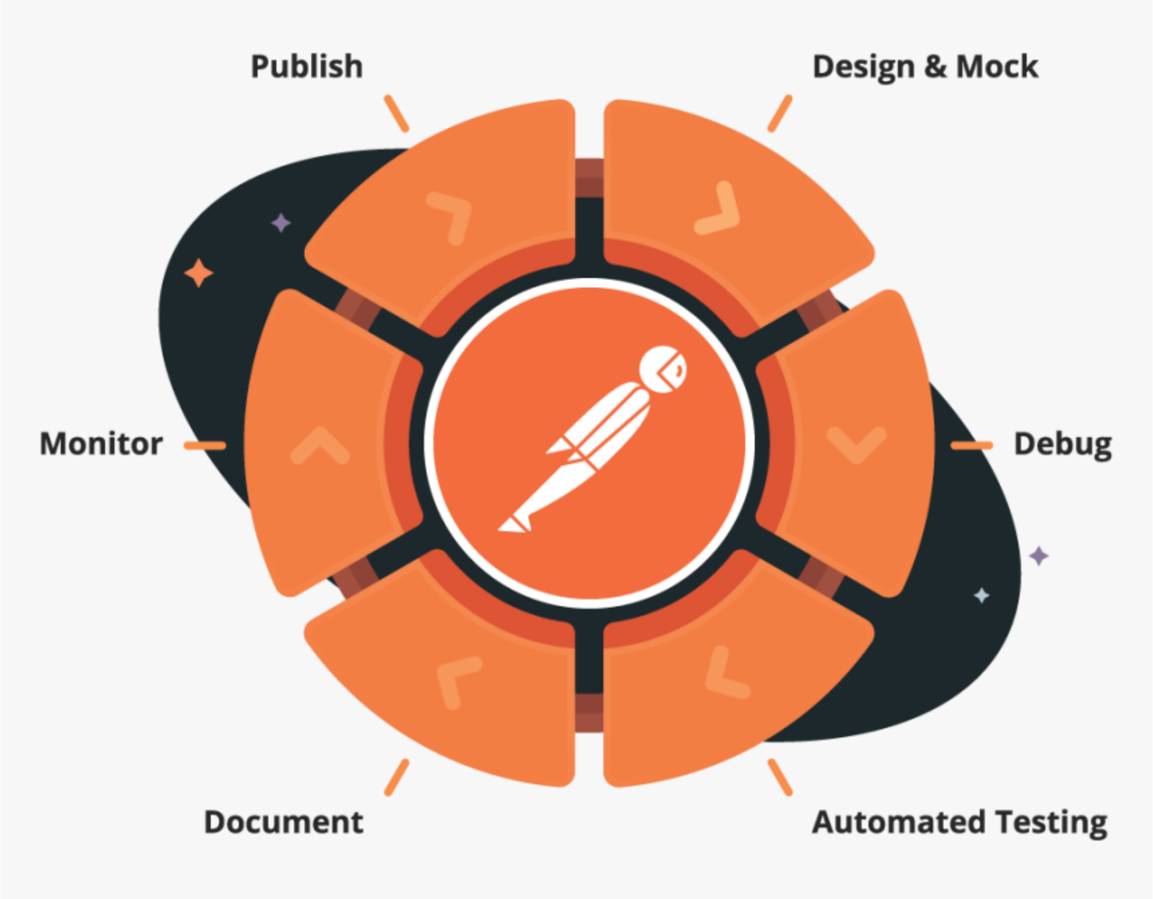
Postman 📮

> Postman is an API platform for building and using APIs. Postman simplifies each step of the API lifecycle and streamlines collaboration."

http://www.marceleichner.de / https://www.qr-code-generator.com/

Features

- Make Request(s)
- Test
- Publish, Share & Collaborate with your Team or the Public
- Documentation
- Monitor your API Status
- Mock not yet created APIs based on API Definitions



Create Requests

Build collections of requests that read, create, delete data in an API no matter if it’s a GraphQL, REST or even gRPC API.

- GET/POST/PUT/DELETE/HEAD
- Query Parameters
- set Headers (including Cookies)
- Form, JSON Bodies
- upload files
- organize those requests in nested folders
- add description to parameters and variables for easy re-use

Flexibility

Create a collection once, use in different environments, for different user(s) and use-cases.

- variables on different levels:
  - collections
  - environment(s)
  - global
- re-use the variables anywhere (`{{variableName}}`)

More: Defining Variables

Random Variables 🔀

Postman uses Faker to provide a whole bunch of different randomly created variables that can be used especially in create request.

Think of:

```
{
    "username": "{{$randomFirstName}}-{{$randomLastName}}",
    "password": "{{$randomPassword}}"
}
```

Creating a new randomly created user each time and uses this user for subsequent requests.

More about Dynamic Variables

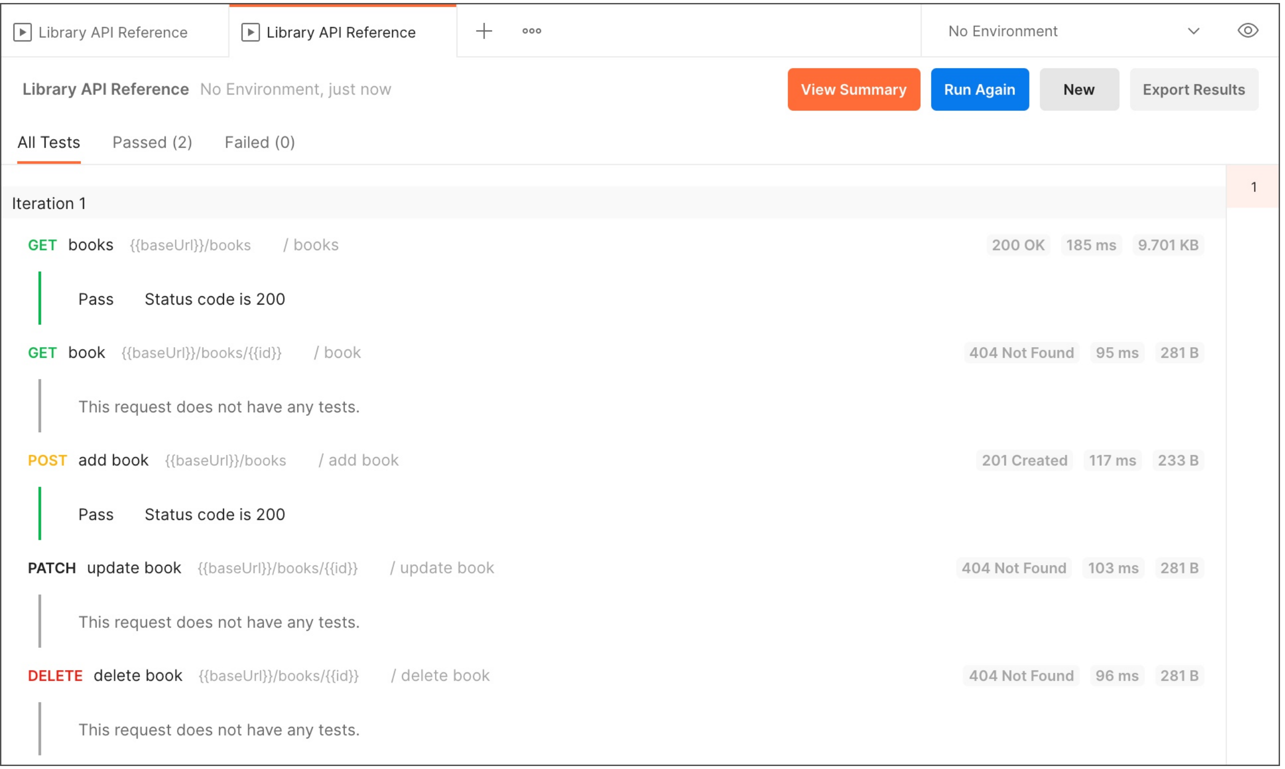
Tests

Each requests runs Javascript Code when it’s done in order to be able to test the results. This makes it easy to add simple (and even complex) assumptions to a single request or even folders or whole collections.

Some Examples:

- valide response bodies agains certain schema(s)
- check for presence or values of header(s)
- re-use response data for later request(s)

More Test & Scripting: https://learning.postman.com/docs/writing-scripts/script-references/test-examples/



Library API Reference No Environment, just now

Iteration 1

```
GET books {{baseUrl}}/books / books                          200 OK         185 ms  9.701 KB
    Pass   Status code is 200
GET book {{baseUrl}}/books/{{id}} / book                     404 Not Found  95 ms   281 B
    This request does not have any tests.
POST add book {{baseUrl}}/books / add book                   201 Created    117 ms  233 B
    Pass   Status code is 200
PATCH update book {{baseUrl}}/books/{{id}} / update book     404 Not Found  103 ms  281 B
    This request does not have any tests.
DELETE delete book {{baseUrl}}/books/{{id}} / delete book    404 Not Found  96 ms   281 B
    This request does not have any tests.
```

🏃 Run Collection

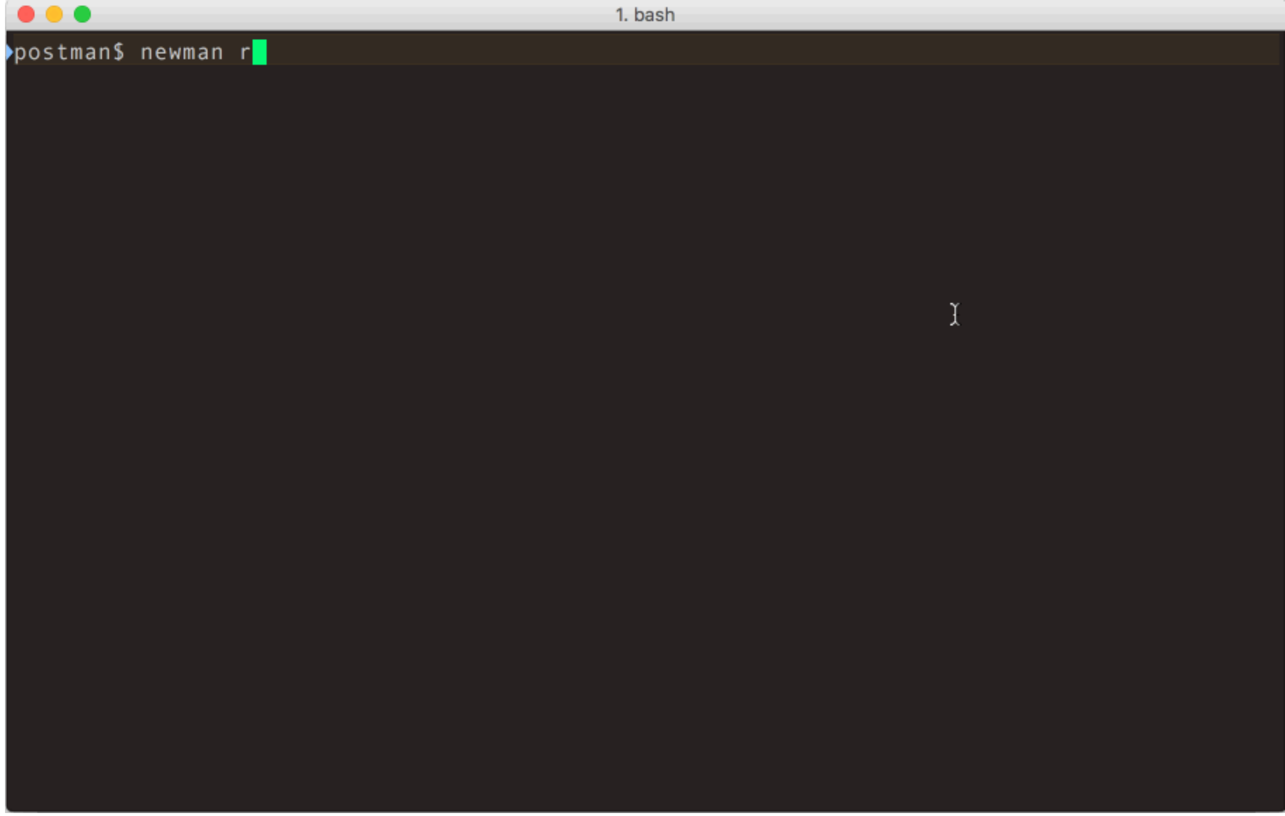
A collection can be run alltogether and all requests and tests are executed sequentially and result in a report:

Automation 🤖

newman is a command line tool written in nodejs which can run collections and execute it's tests:

```
npx newman run <collection-json-filename>
```

More about newman



```
postman$ newman r
```

Demo Time 🎈

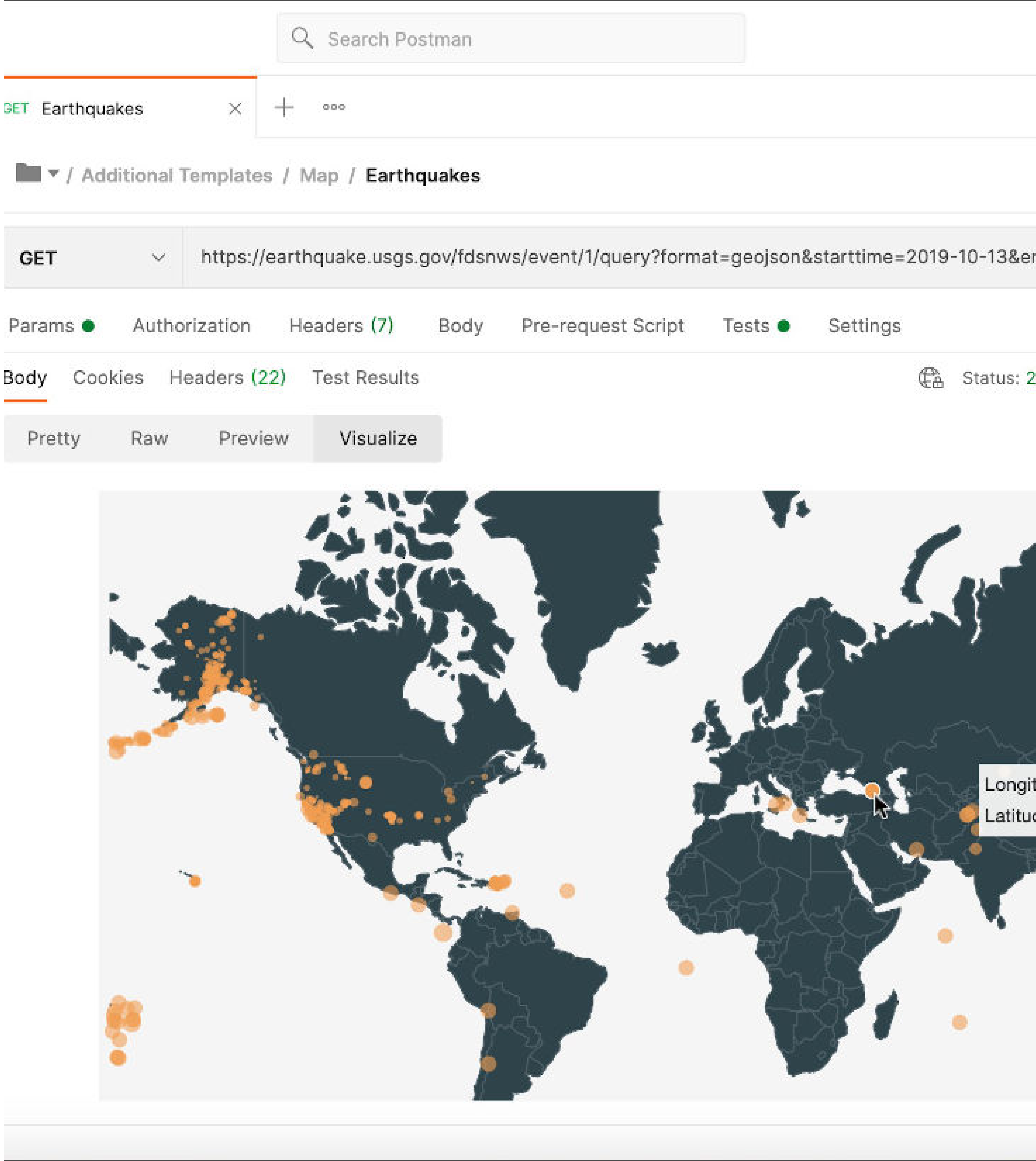
- Show simple GET request(s)
- Show GraphQL Request
- Show Test
- Show Collection Run
- Show NewMan
- Show Visualization
- Show Monitoring

Outlook

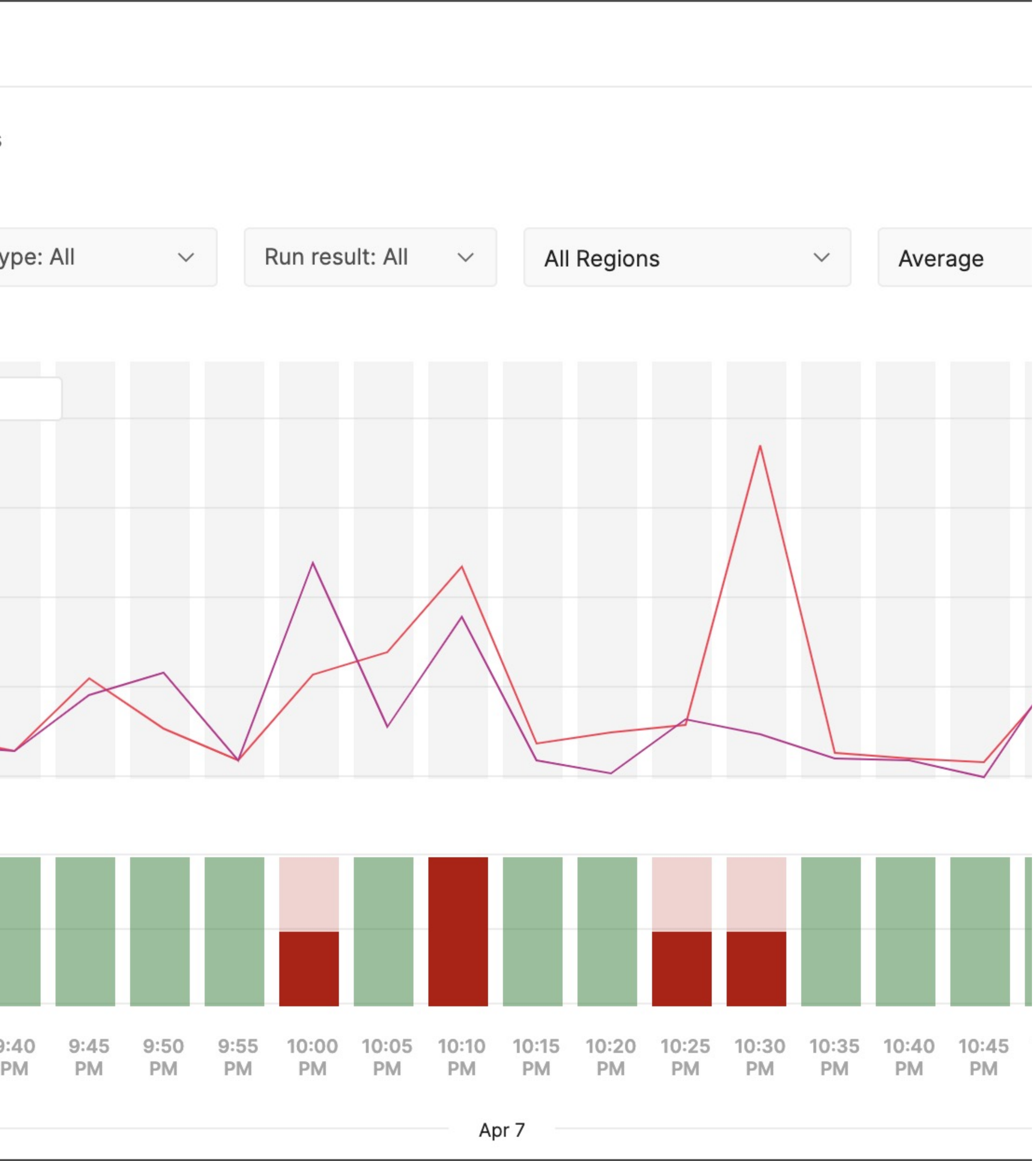
Visualization 📈

Show data from an API in (interactive) visualisations like tables, charts, maps etc.

More about Visualization



GET https://earthquake.usgs.gov/fdsnws/event/1/query?format=geojson&starttime=2019-10-13&er



ype: All

Run result: All

All Regions

Average

Monitoring 📺

Run collections every n-minute/hour and record the results of it

More about Monitoring

Others

- Sharing
  - Share API Definitions, Documentations, Monitors with the public
  - checkout Bitly API on Postman Explorer
- Mocking
  - Create API definitions and start using them without having a server
- Flows
  - Visually program and connect multiple API requests and process results

Try It! It’s free: http://postman.com

Resources 🧳

- Postman API testing by example
- Official Documentation
- Automation tricks with newman

Thanks for listening!