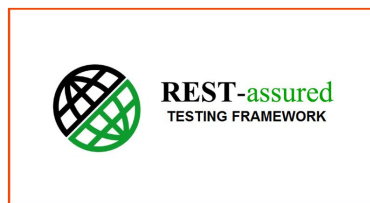
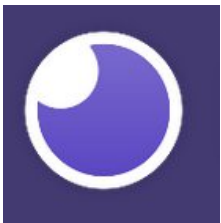
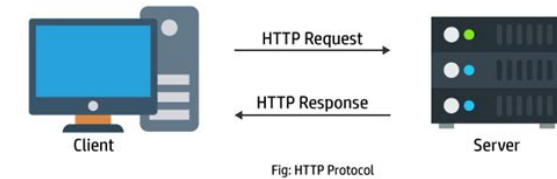


Fundamentos de API

Problema

- Automatizar sem conhecer a base api
- O que ocorre no dia a dia?



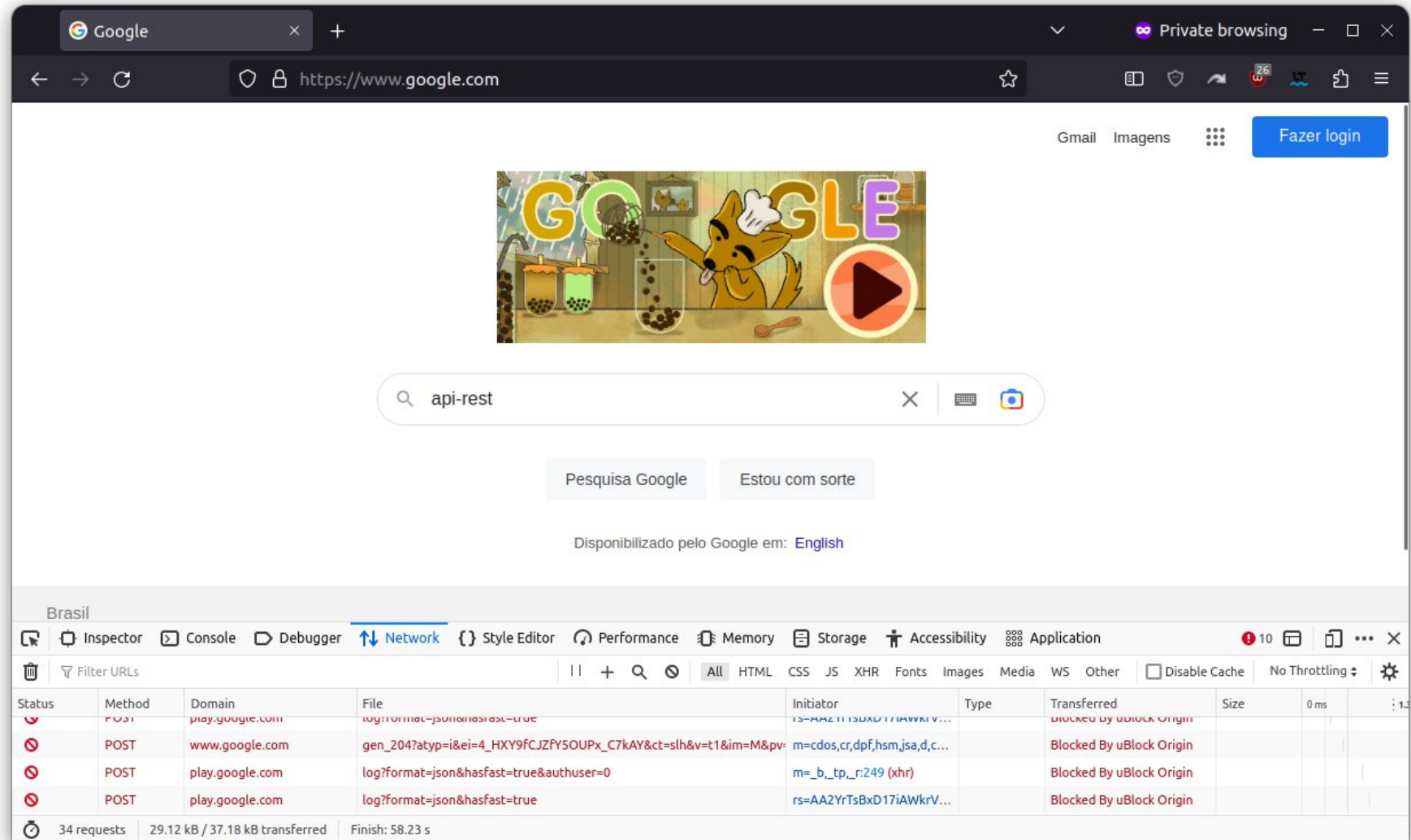
QA



Desenvolvedor



Navegador



Resultado pesquisa

The image shows a Google search for "api-rest" in a private browser window. The search results page is visible, showing approximately 444,000,000 results. The Network tab in the developer tools is open, displaying a list of requests. A red box highlights the first request, which is a GET request to the Google search results page. The details for this request are shown on the right side of the developer tools.

Network Tab Details:

Status	Method	Domain	File	Initiator	Type	Transferred	Size
200	GET	www.google.com	search?q=api-rest&source=hp&ei=4_HXY9fCJZF5OUPx_C7k	document	html	128.13 kB	527.11 kB
Blocked	POST	www.google.com	gen_204?atyp=i&ei=4_HXY9fCJZF5OUPx_C7k	m=cdos,cr,dp...		Blocked By u...	
Blocked	POST	play.google.com	log?hasfast=true&authuser=0&format=json	rs=AA2YrTsB...		Blocked By u...	
Blocked	POST	play.google.com	log?format=json&hasfast=true	m=_b_tp_r...		Blocked By u...	
Blocked	POST	play.google.com	log?hasfast=true&authuser=0&format=json	m=n73qwf,w...		Blocked By u...	
200	GET	www.google.com	tia.png	img	img	cached	384 B
200	GET	www.google.com	celebrating-bubble-tea-675365183710983	img	png	7.17 kB	6.51...
200	GET	www.gstatic.com	tia.png	img	img	cached	272 B
200	GET	www.google.com	celebrating-bubble-tea-675365183710983	img	png	3.35 kB	2.69...
200	GET	fonts.gstatic.com	4UaGrENHsxJlGDuGo1OIL3Owp4.woff2	search:29 (fo...	woff2	22.31 kB	21.4...
200	GET	www.gstatic.com	loading_24.gif	img	gif	5.27 kB	4.47...
Blocked	GET	id.google.com	AFEi1d-elpLl-iYGNK78jID5heAZmQR4hIKM	search:29 (img)		Blocked By u...	
200	GET	www.google.com	nav_logo321.webp	search:7 (img)	webp	5.84 kB	5.19...

Request Details (GET https://www.google.com/search?q=api-rest&source=hp&ei=4_HXY9fCJZF5OUPx_C7k):

- Status: 200 OK
- Version: HTTP/3
- Transferred: 128.13 kB (527.71 kB size)
- Referrer Policy: origin
- Request Priority: Highest

Response Headers (883 B):

- alt-svc: h3=":443"; ma=2592000, h3-29=":443"; ma=2592000
- cache-control: private, max-age=0

Objetivo: melhorar visão sobre:

Abordar

- Conceitos HTTP
 - Verbos
 - Url
 - Body envio / retorno
 - Status Code
- Swagger
- Requisição postman

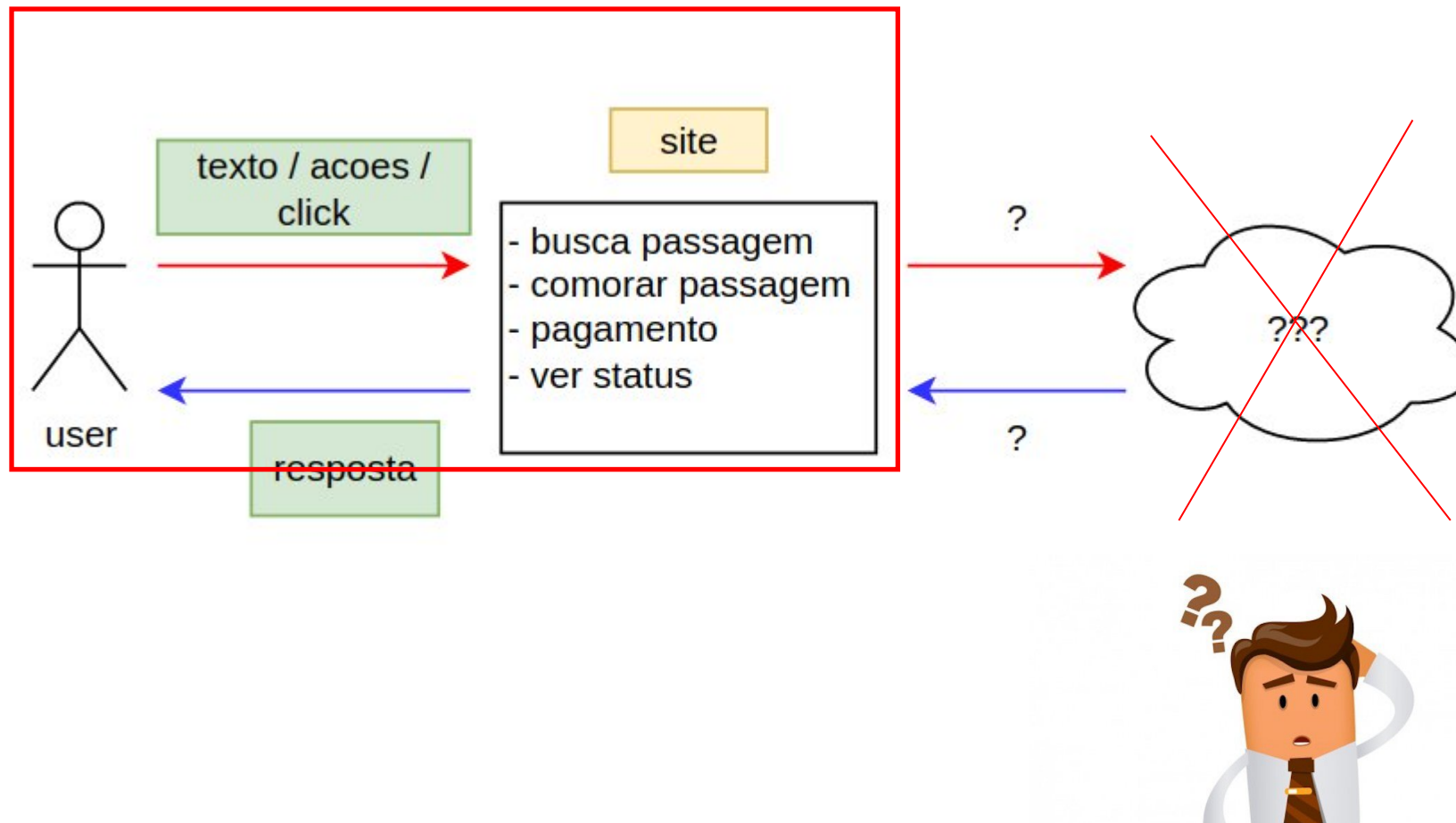


Desejo QA - Futuro

- Automação
 - Linguagem programação
 - Library rest
- Conhecer api, ver swagger, documentacao

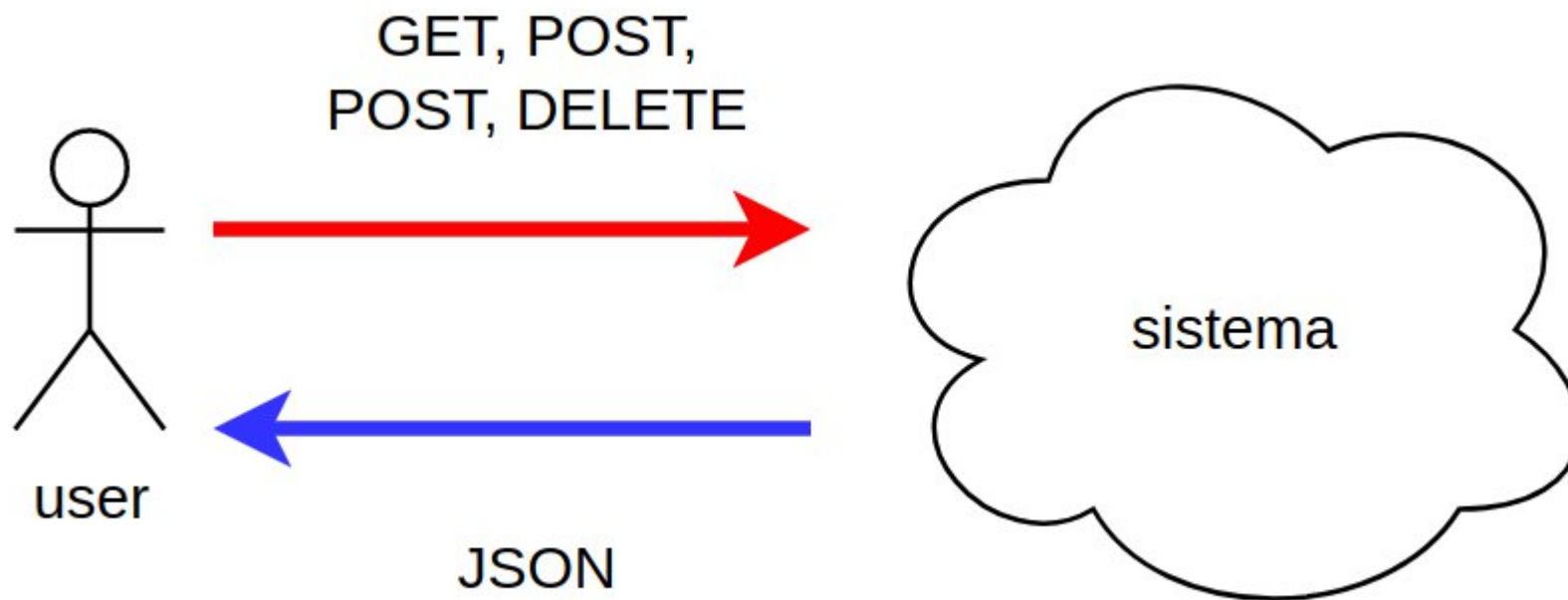


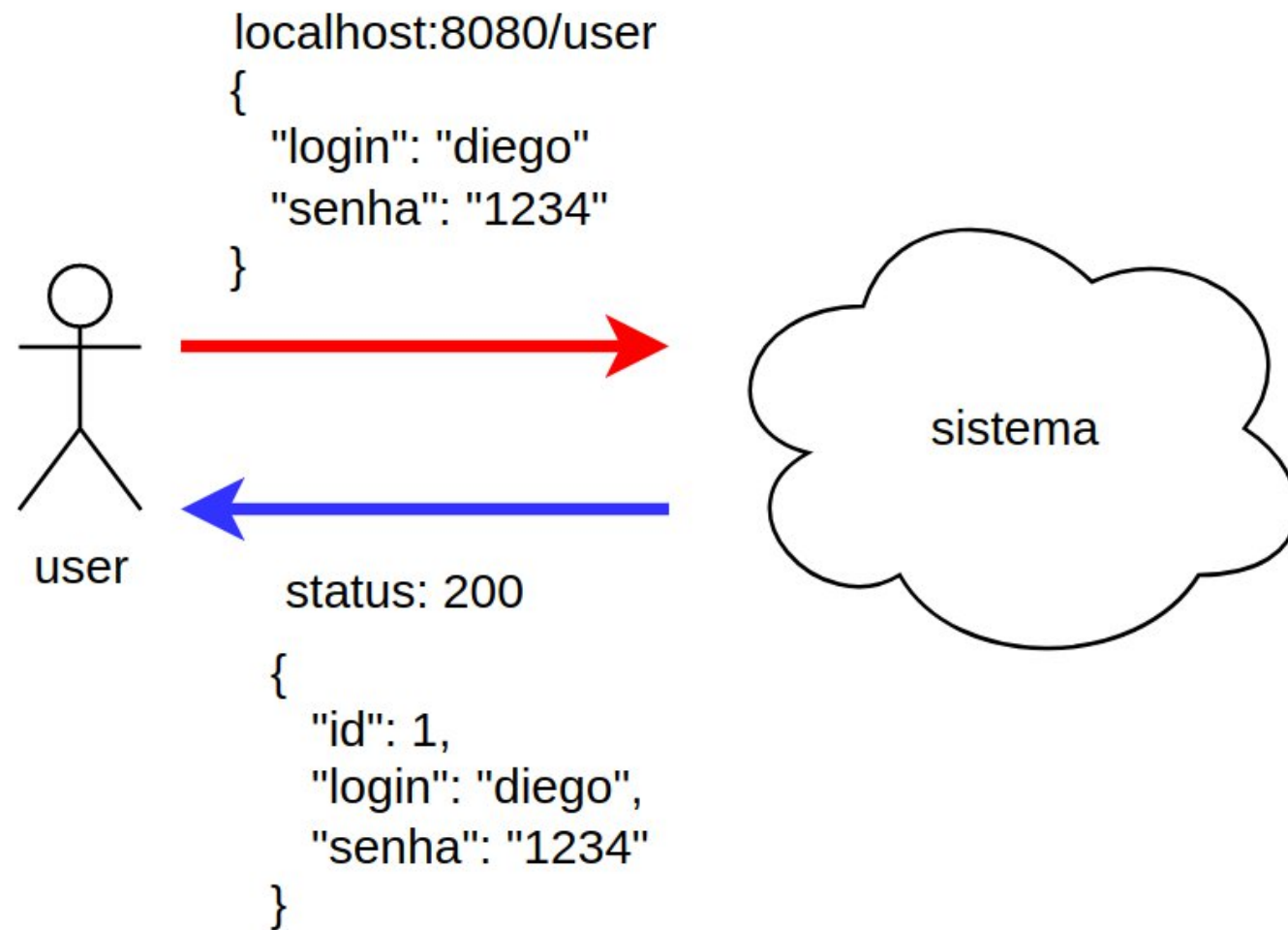
Inicio - visao usuario



Conceitos HTTP

Realidade





Itens contidos em uma requisição1

The screenshot displays a REST client interface with a POST request to `http://localhost:8081/api/v1/license`. The request body is a JSON object with the following fields: `name` (Antonio), `secondName` (null), `age` (10), and `uf` (SP). The response is a 201 Created status with a response time of 7 ms and a body size of 248 B. The response body is a JSON object with the following fields: `id` (15), `name` (Antonio), `secondName` (null), `age` (10), `uf` (SP), and `status` (DENY).

1 POST

2 `http://localhost:8081/api/v1/license`

3

```
1 {
2   "name": "Antonio",
3   "secondName": null,
4   "age": 10,
5   "uf": "SP"
6 }
```

4 201 Created 7 ms 248 B Save Response

5

```
1 {
2   "id": 15,
3   "name": "Antonio",
4   "secondName": null,
5   "age": 10,
6   "uf": "SP",
7   "status": "DENY"
8 }
```

Itens contidos em uma requisição2

usuários / {id} / Buscar usuário por ID


GET {{baseUrl}}/usuarios/{_id} Send

Params Authorization Headers (7) Body Pre-request Script Tests Settings Cookies

Headers 6 hidden

	KEY	VALUE	DESCRIPTION	...	Bulk Edit	Presets
<input checked="" type="checkbox"/>	Accept	application/json				
	Key	Value	Description			

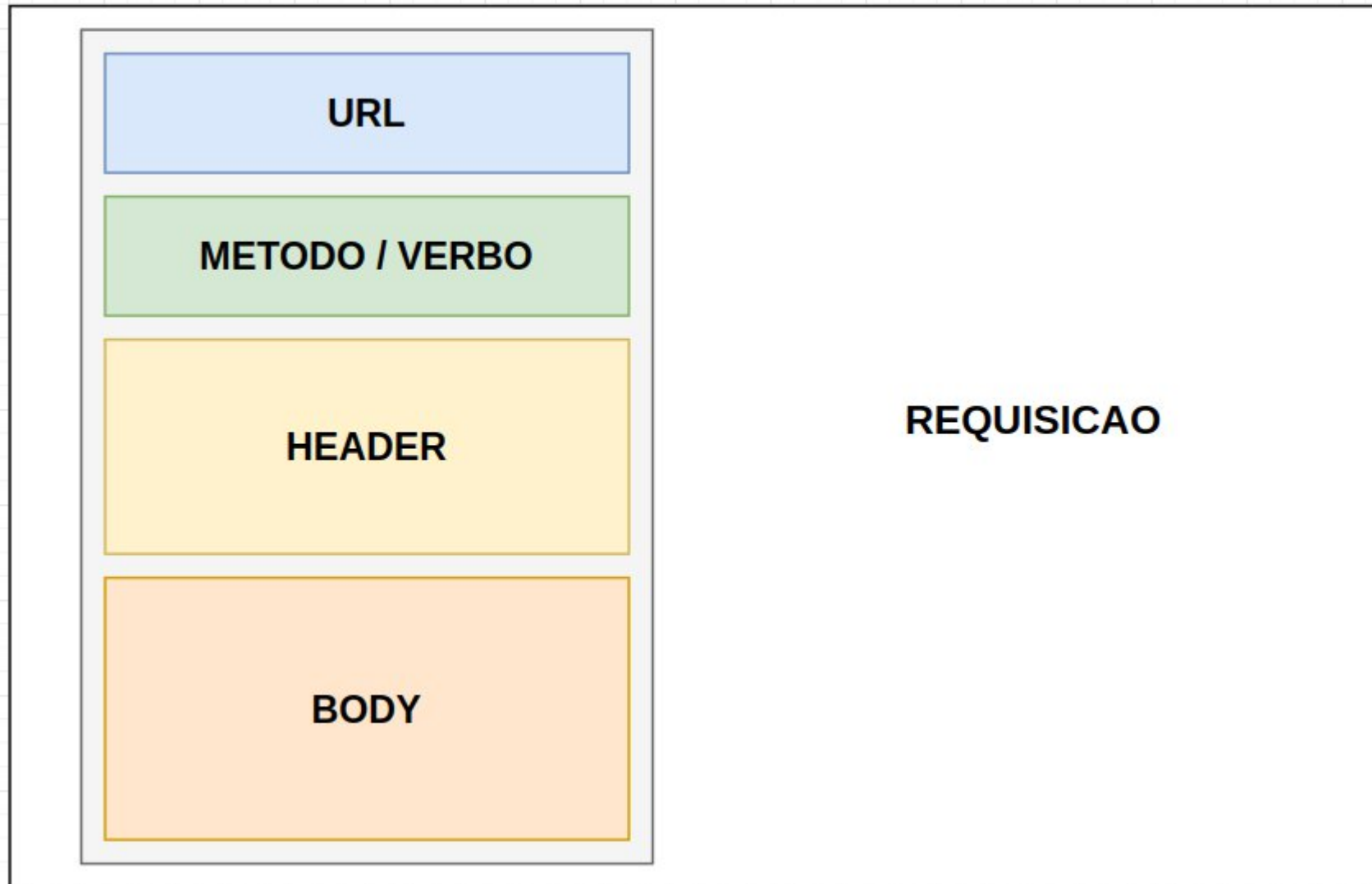
Response

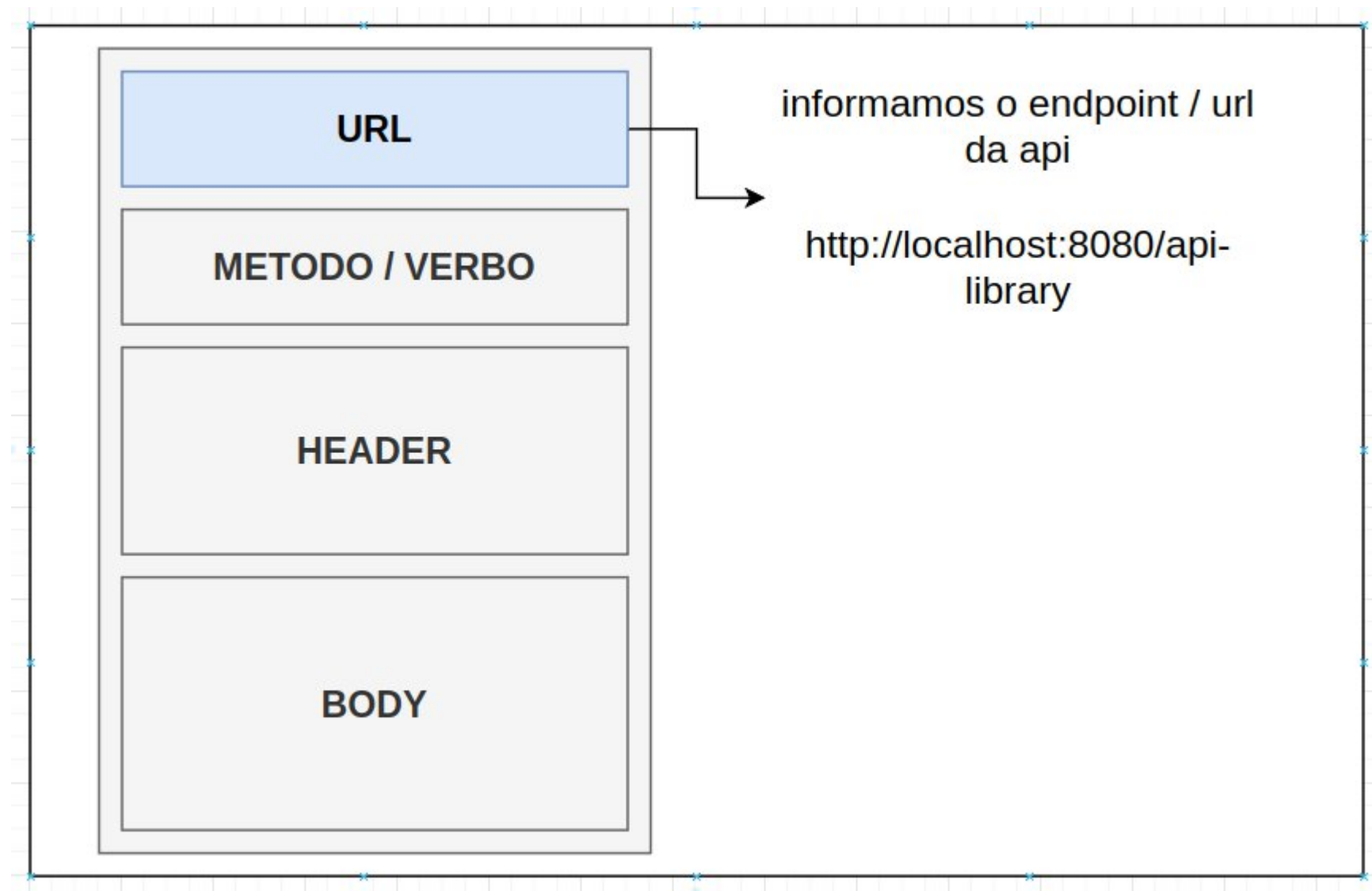


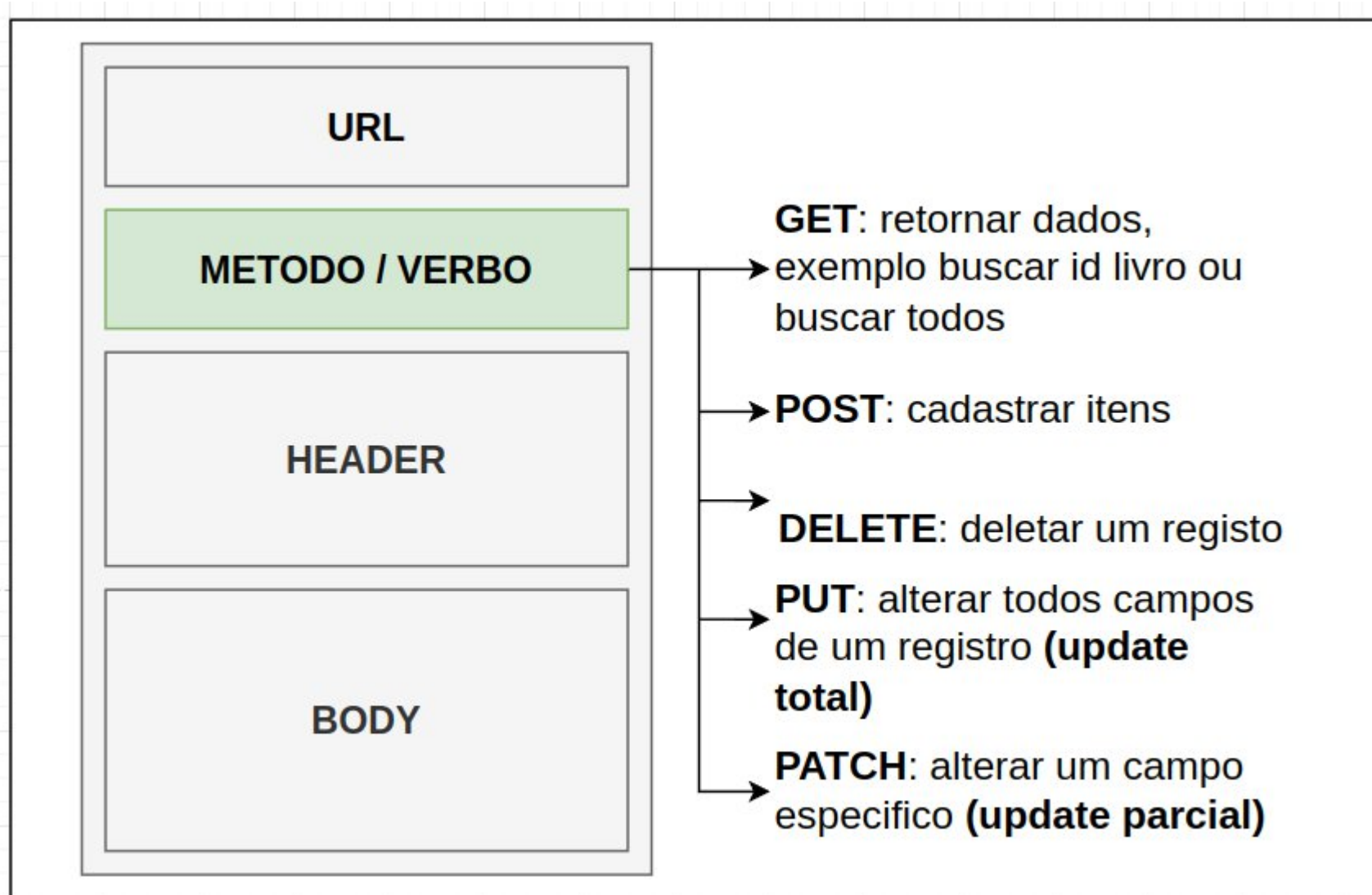
Click Send to get a response

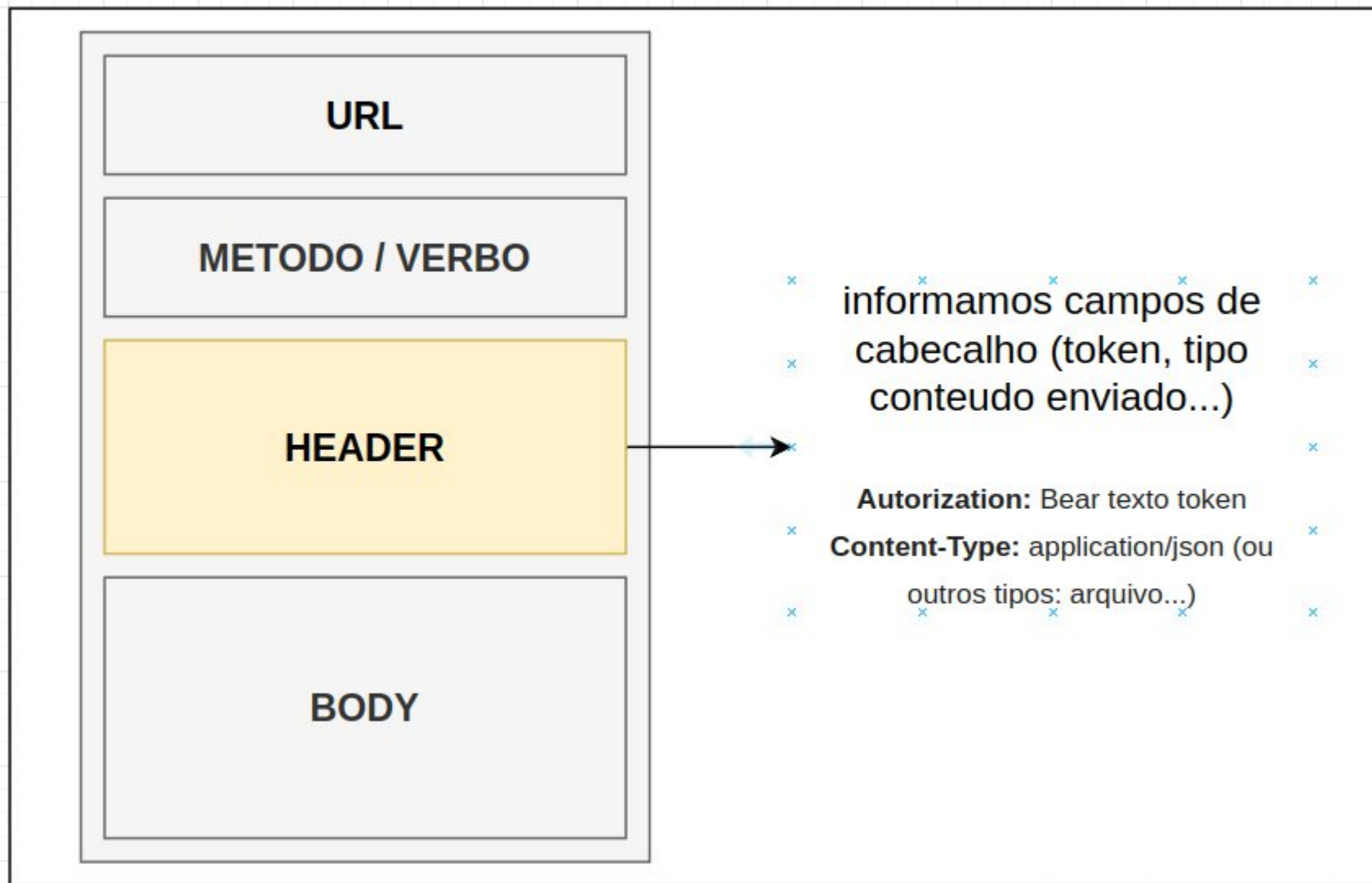
Runner Trash

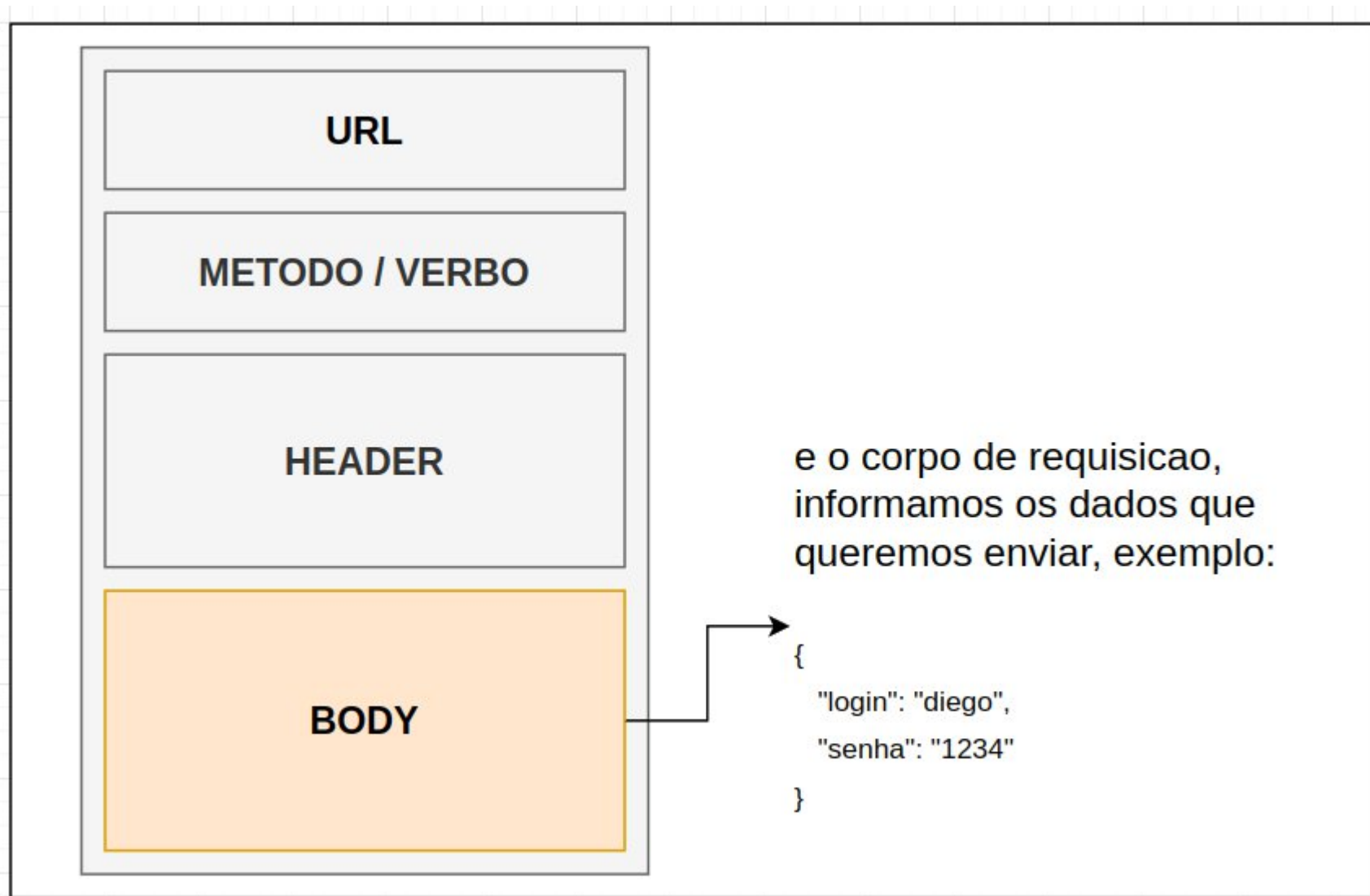
Itens contidos em requisicao http











Códigos HTTP - response

GET

{{baseUrl}}/usuarios/:_id

Send

Params

Authorization

Headers (7)

Body

Pre-request Script

Tests

Settings

Cookies

Type

Inherit ...

The authorization header will be automatically generated when you send the request.
[Learn more about authorization](#)

This request is using No Auth from collection [ServeRest](#).

Body

Cookies

Headers (13)

Test Results

Pretty

Raw

Preview

Visualize

JSON

1

2

3

4

5

6

7

"nome": "Fulano da Silva",

"email": "fulano@qa.com",

"password": "teste",

"administrador": "true",

"_id": "0uxuPY0cbmQhpEz1"

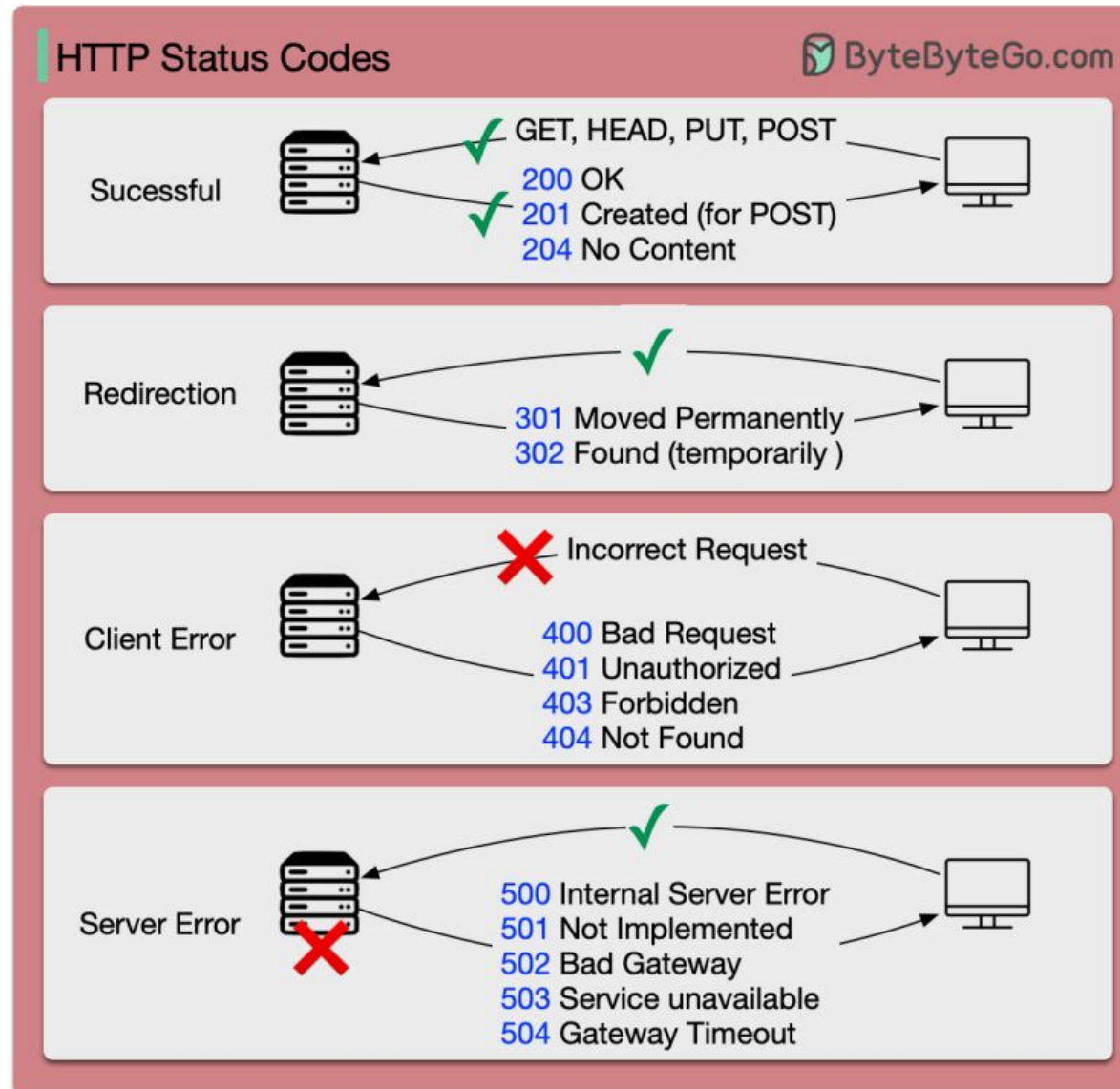
200 OK

21 ms

630 B

Save Response

Código HTTP - response (em ingles)



Código HTTP - response (em portugues)

Codigo	Descricao
200: OK	sucesso (GET, PUT)
201: Created	item foi criado (POST)
204: No Content	nao retorna dados, porem houve sucesso (PUT)
400: Bad Request	campos ou item invalido
401: Unauthorized	dados login invalidos (login, senha... invalida
403: Forbidden	acesso ao item nao permitido para usuario
404: Not Found	requisicao invalida
405: Method Not Allowed	uso verbo / metodo http incorreto
500: Internal Server Error	erro interno no servidor
503: Service Unavailable	item indisponvel
504: Gateway Timeout	timeout na requisicao

Codigo	Descricao
2XX	Sucesso
3XX	Redirecionamento
4XX	Erro no cliente
5XX	Erro no servidor, indisponivel / sistema fora

Conceitos aplicados na automação

```

@Slf4j
@ActiveProfiles("integration")
@SpringBootTest(classes = LicenseDriveApiApplication.class, webEnvironment = SpringBootTest.WebEnvironment.DEFINED_PORT)
class LicenceIntegrationTest {

    3 usages
    private static final String URL_API = "http://localhost:8081/api/v1/license";

    @Test
    void mustDennyCreateLicenceSP() {
        var licenseDto = crateLicenseDT0Valid( age: 10, uf: "SP"); 6
        log.info("massa -> ", licenseDto.toString());

        5 RestAssured.|
            given(). //PASSAR PARAMETROS
                contentType( s: "application/json"). 1
                body(licenseDto). 2
            3 when().
                post(URL_API). 4 TODO POST, URL DA APLICACAO
            then()
                7 .assertThat(). //>>> ASSERT
                    statusCode( i: 201). //status http code response
                    body( s: "name", Matchers.equalTo( operand: "treinamento")). //campos retornados
                    8 body( s: "age", Matchers.equalTo( operand: 10)).
                    body( s: "status", Matchers.equalTo( operand: "DENY"));
    }
}

```

- 1: config (application/json)
- 2: body envio
- 3: metodo POST
- 4: URL_API
- 5: lib rest assurance
- 6: massa / dto -> envio no body
- 7: status code 201
- 8: body retorno

Swagger

Swagger

OpenAPI definition

v0 OAS3

v3/api-docs

Servers

http://localhost:8081 - Generated server url

license-controller			^
GET	/api/v1/license	Get all licenses	▼
PUT	/api/v1/license	Update license drive	▼
POST	/api/v1/license	Create licence drive	▼
GET	/api/v1/license/{id}	Get license by id	▼
DELETE	/api/v1/license/{id}	Get license by id	▼

Schemas

LicenseResponseDto >

LicenseDto >