

Pare de Apertar Parafuso
e vá além do Xcode

Daniel Bonates

Head de Mobile no Peixe Urbano / Groupon Latam

Pai babão de 3, marido, músico & maker

Developer desde ~1994 😊



@DanielBonates



@bonates



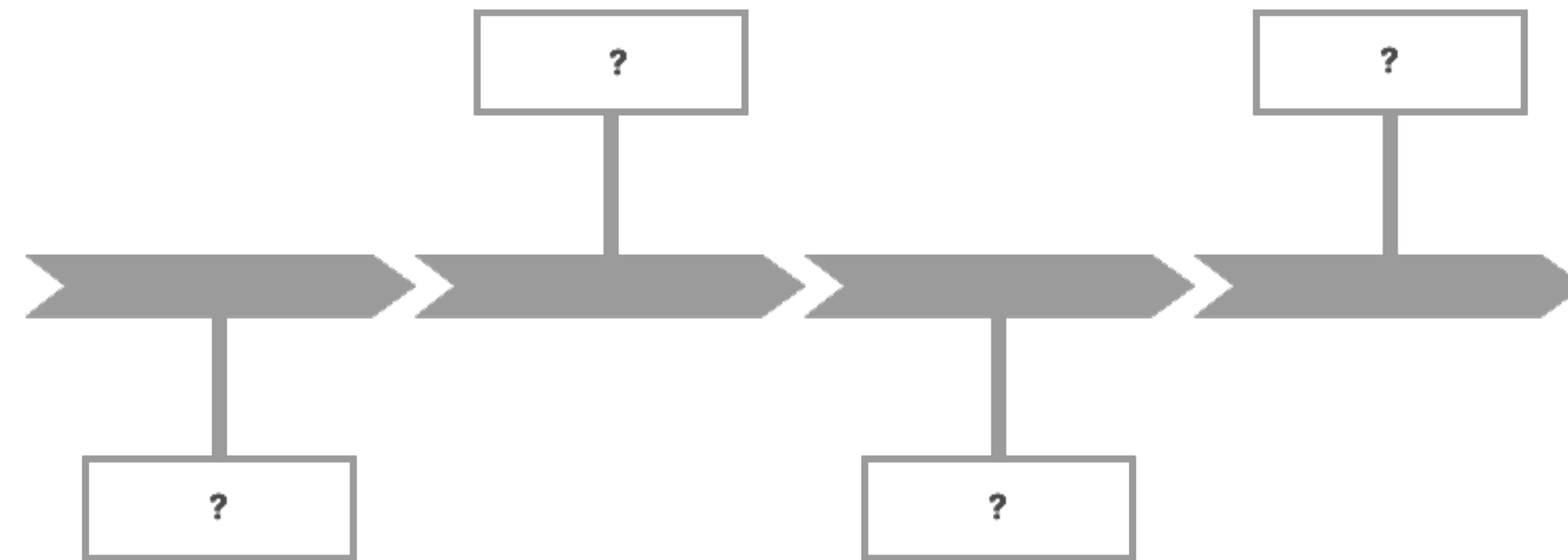
@dbonates



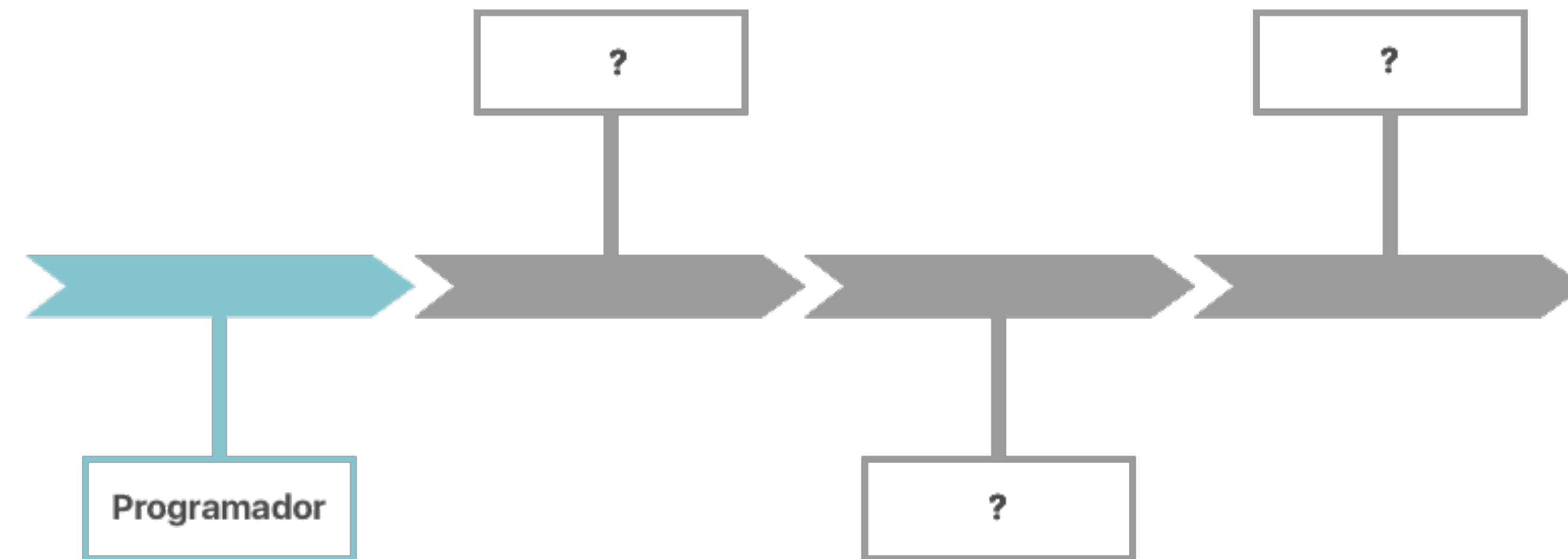
Parte 1

The last talk

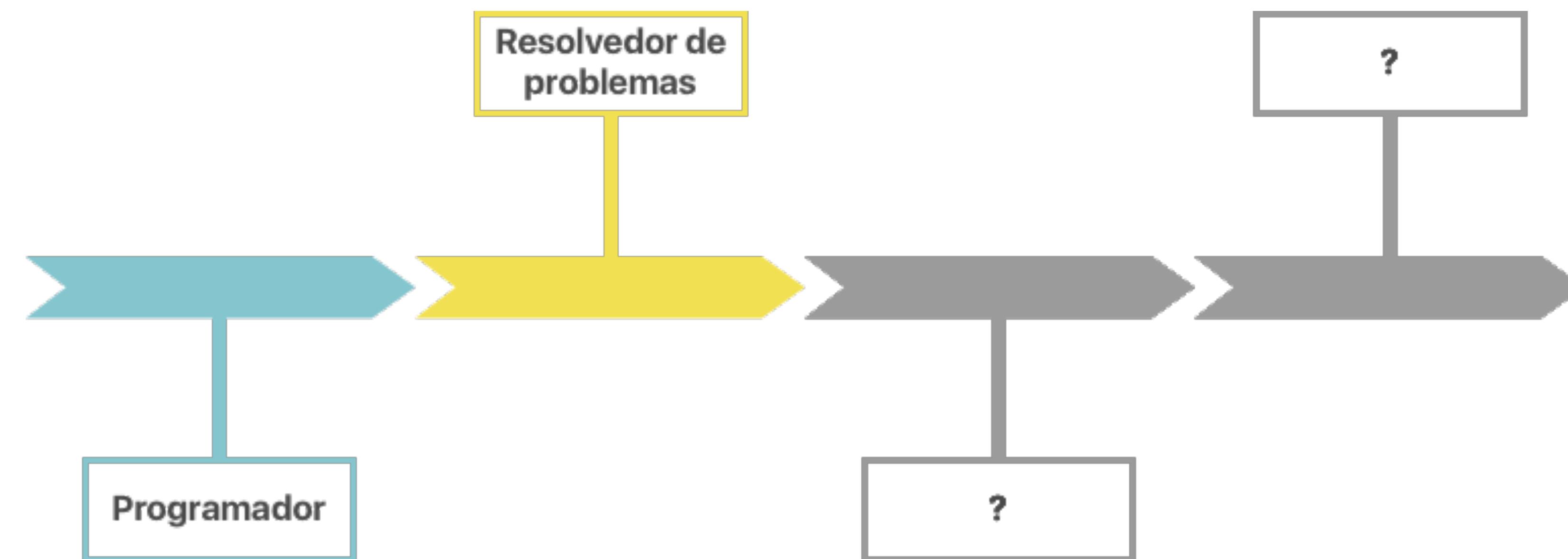
Fases da vida dev



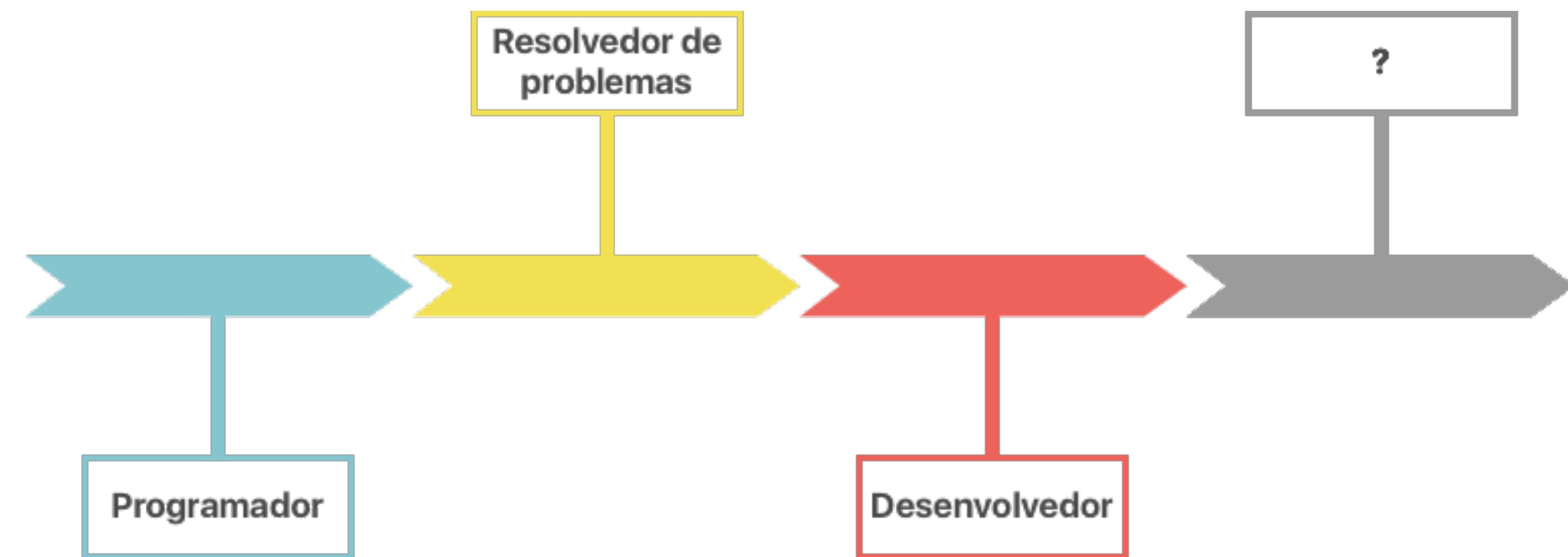
Fases da vida dev



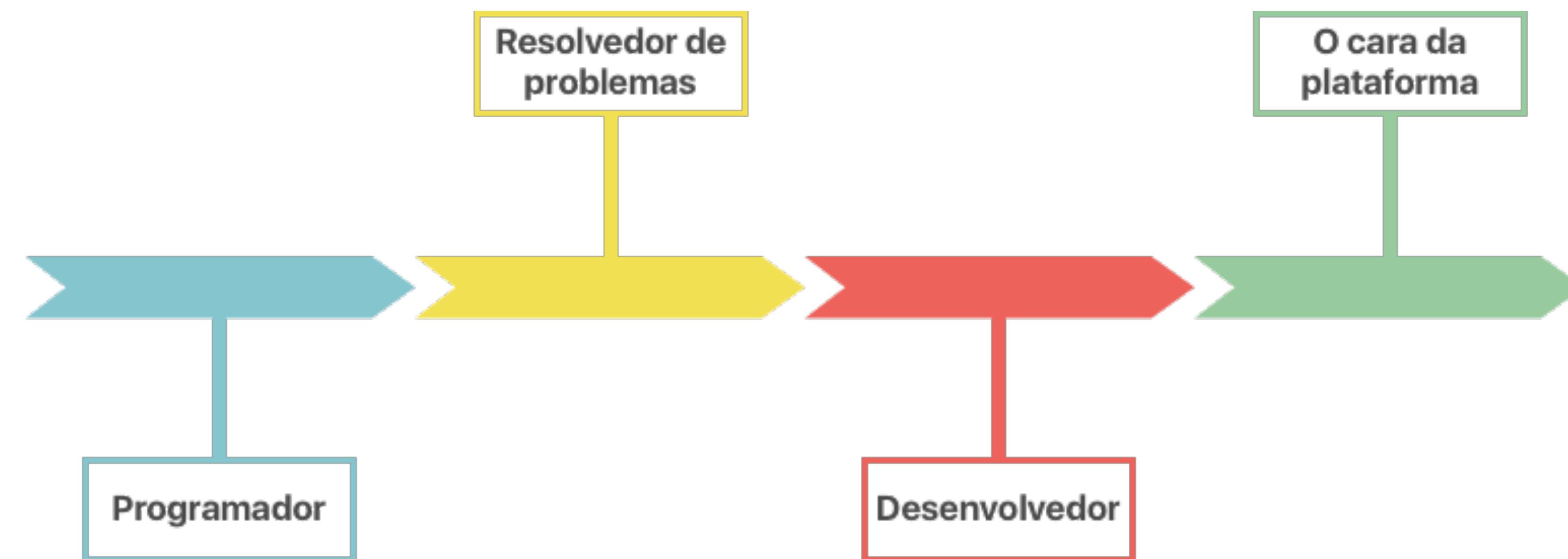
Fases da vida dev



Fases da vida dev



Fases da vida dev



Os 3 Clientes

- Usuário
- Owner
- Time dev
- Os 3 papéis sempre vão determinar o resultado do produto

Parte 2

Era tudo mato



Na verdade, pantano! _(ツ)_/

Desafios

- Migrar código legado
- Implementar arquiteturas
- Modularização
- Manter o roadmap e a evolução do app

Parte 3

A era da provação 🔥

Desafio +



Desafio ++



Latam

Desafio +++



Desafio +++



5 países

Parte 4

Demos e casos reais

Como resolver problemas com seu app,
rapidamente e sem passar pelo Xcode

Desafio 1 - backend

O app não
responde,
loading eterno

Desafio 1 - backend

O app não
responde,
loading eterno



Charles Proxy

<https://www.charlesproxy.com>

Charles Proxy

Checando endpoint



Charles Proxy

Checando endpoint



**"Charles" Would Like to Add
VPN Configurations**

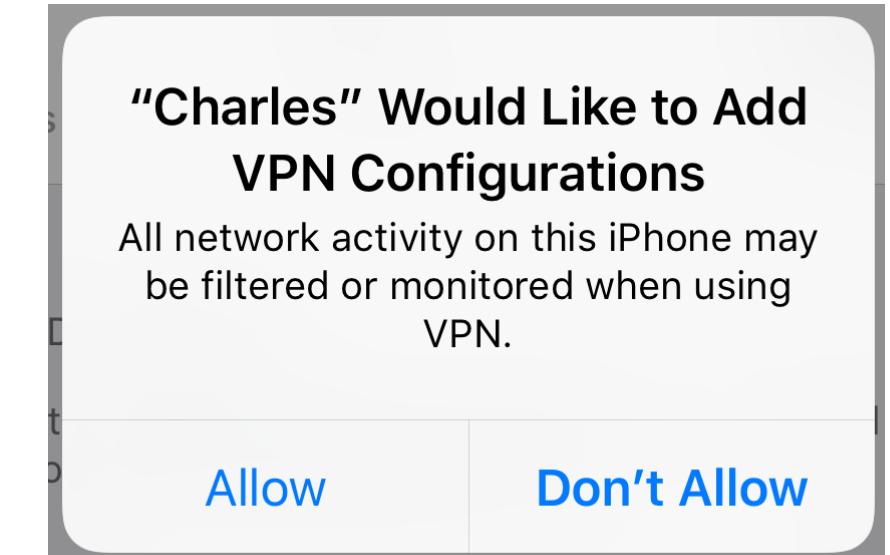
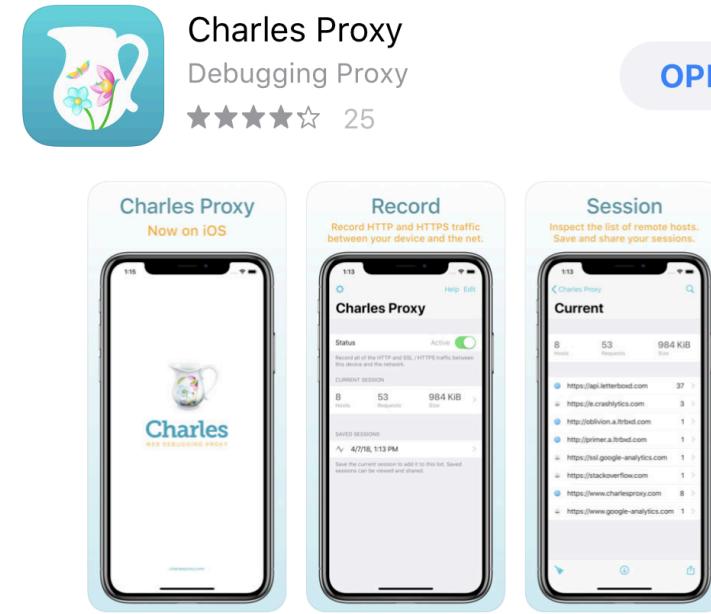
All network activity on this iPhone may
be filtered or monitored when using
VPN.

Allow

Don't Allow

Charles Proxy

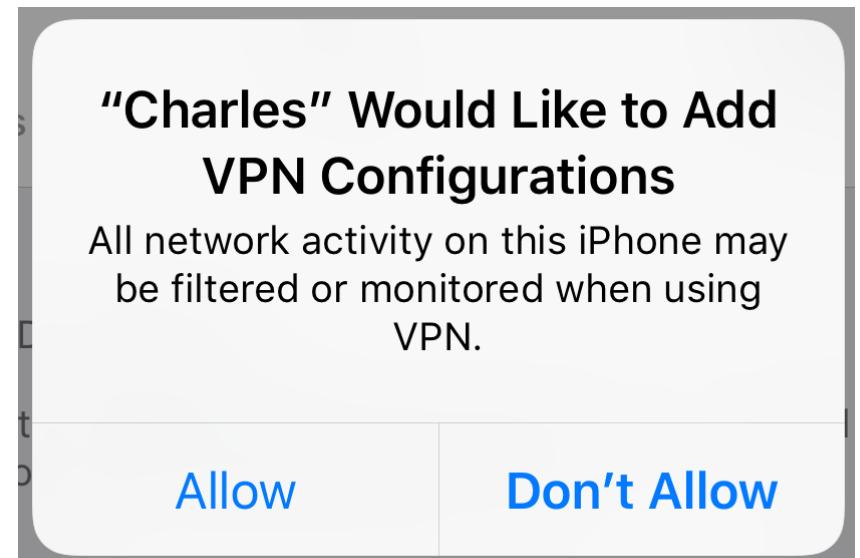
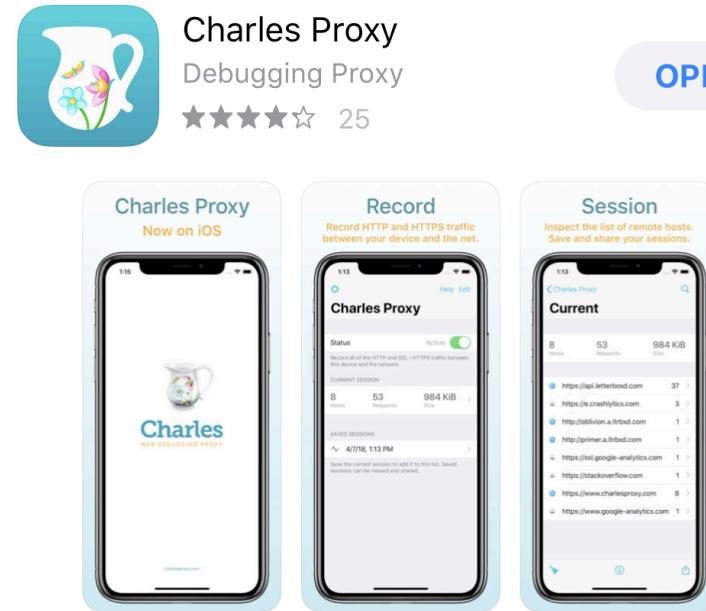
Checando endpoint



The image shows the Charles Proxy iOS application. At the top, there is a gear icon, 'Help' and 'Edit' links, and the title 'Charles Proxy'. Below this is a 'Status' section with a green 'Active' toggle switch. A descriptive text box says 'Record all of the HTTP and SSL / HTTPS traffic between this device and the network.' Underneath is a 'CURRENT SESSION' section showing '1 Host', '1 Request', and a '20 KiB > Size' button. At the bottom is a 'SAVED SESSIONS' section with the text 'Save the current session to add it to this list. Saved sessions can be viewed and shared.'

Charles Proxy

Checando endpoint



The Charles Proxy application window. At the top, there are 'Help' and 'Edit' buttons. Below that is the title 'Charles Proxy'. On the left, a 'Status' section shows 'Active' with a green toggle switch. A note says 'Record all of the HTTP and SSL / HTTPS traffic between this device and the network.' In the center, 'CURRENT SESSION' shows 1 Host, 1 Request, and a total Size of 20 KiB. To the right is a 'SAVED SESSIONS' section with a note about saving the current session. At the bottom, there is a note about CA CERTIFICATE status.

SSL Proxying

Enabled

Include 0 >

Exclude 0 >

Add host names to the Include list to enable SSL Proxying for those hosts.

The Exclude list excludes host names matched by the Include list; such as if you've used a wildcard in Include and need to exclude specific hosts matched by that wildcard.

You may need to force-close and re-open an app in order for its requests to be visible after changing SSL Proxying settings.

CA CERTIFICATE

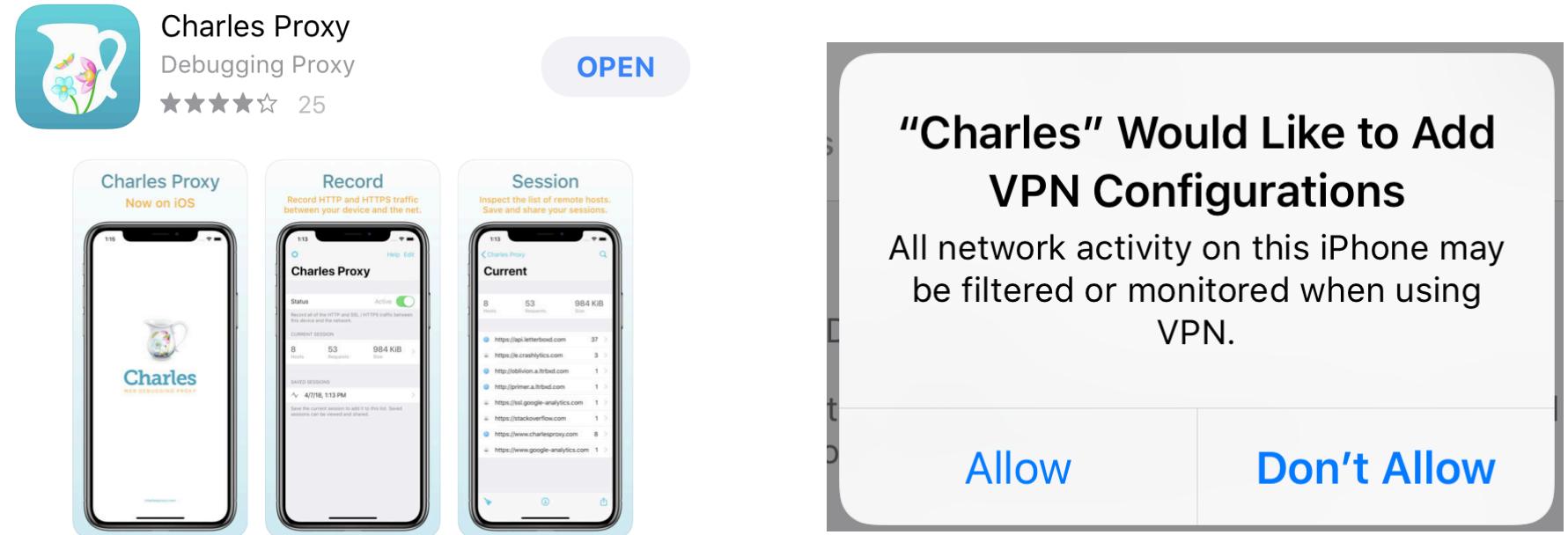
Certificate Status Not trusted

[Install SSL Certificate](#)

Charles Proxy

Checando endpoint

The Charles Proxy mobile application interface. At the top, there's a navigation bar with a gear icon, "Help", and "Edit". Below it is the main title "Charles Proxy". A "Status" section shows "Active" with a green toggle switch. A note says "Record all of the HTTP and SSL / HTTPS traffic between this device and the network." Under "CURRENT SESSION", it shows 1 Host, 1 Request, and a total size of 20 KiB. A "Size" button with a right arrow is next to the size. At the bottom, a "SAVED SESSIONS" section says "Save the current session to add it to this list. Saved sessions can be viewed and shared."



Response Body

```
{  
    "total": 16695,  
    "searchDetails": {  
        "searchParameters": {}  
    },  
    "results": [  
        {  
            "title": "Colchester Half Maratho  
n",  
            "slug": "colchester-half-marathon  
",  
            "eventUrl": "https://www.colchest  
erhalfmarathon.co.uk/",  
            "id": 17829,  
            "description": "<p>The Griffin Ch  
apman Colchester Half Marathon has become  
established as one of the biggest and bes  
t races in the region. Organised by a gro  
up of volunteers from Colchester Colne Ro  
und Table, alongside some dedicated indiv  
iduals from the Colchester community, th  
e team that bring you the race work throu  
ghout the year to ensure you have a great
```

SSL Proxying

Enabled



Include

0 >

Exclude

0 >

Add host names to the Include list to enable SSL Proxying for those hosts.

The Exclude list excludes host names matched by the Include list; such as if you've used a wildcard in Include and need to exclude specific hosts matched by that wildcard.

You may need to force-close and re-open an app in order for its requests to be visible after changing SSL Proxying settings.

CA CERTIFICATE

Certificate Status

Not trusted

[Install SSL Certificate](#)

Desafio 2 - backend

**Testar variações de
resposta em um
endpoint.**

Desafio 2 - backend

**Testar variações de
resposta em um
endpoint.**



Charles Proxy

<https://www.charlesproxy.com>

Charles Proxy Mapear endpoint para um arquivo local

The screenshot shows the Charles Proxy application interface. The left sidebar displays a tree structure of network requests. Under the domain `https://bonates.com/nsbrazil19`, the file `validation.json` is selected, highlighted with a blue background.

The main pane shows the details of this request:

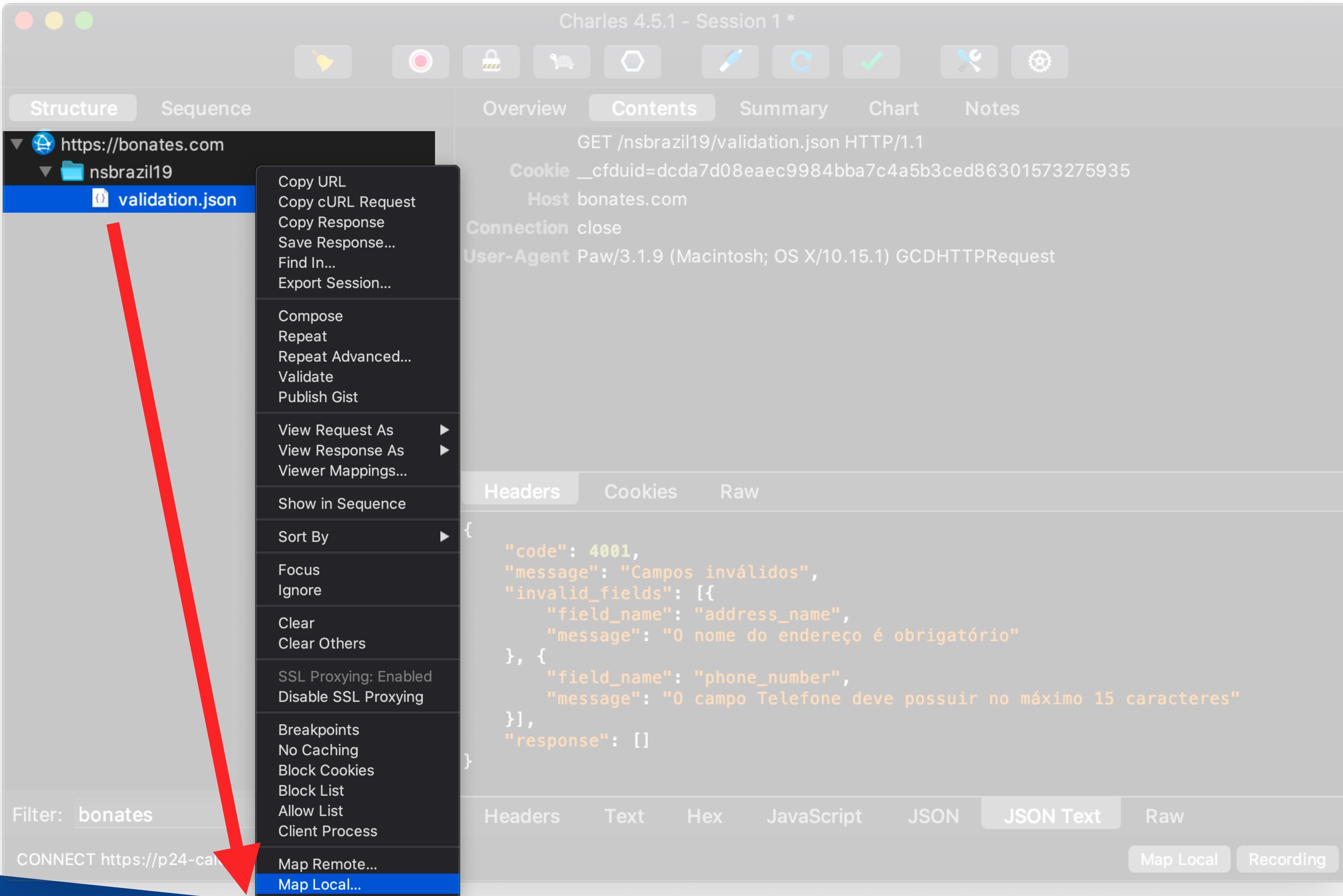
- Method:** GET /nsbrazil19/validation.json HTTP/1.1
- Cookie:** __cfduid=dcda7d08eaec9984bba7c4a5b3ced86301573275935
- Host:** bonates.com
- Connection:** close
- User-Agent:** Paw/3.1.9 (Macintosh; OS X/10.15.1) GCDHTTPRequest

The response body is displayed in JSON format:

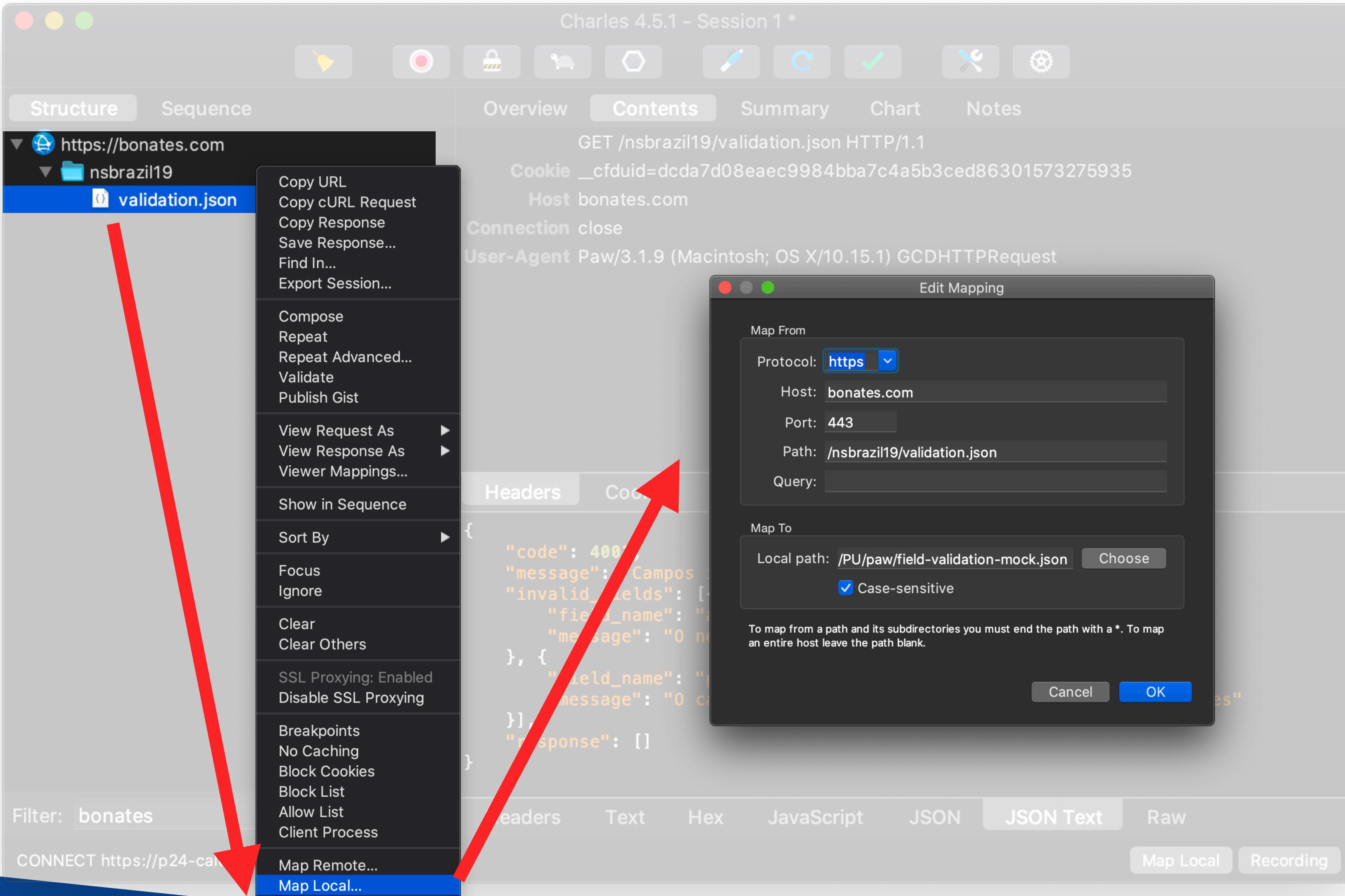
```
{  
    "code": 4001,  
    "message": "Campos inválidos",  
    "invalid_fields": [  
        {"field_name": "address_name",  
         "message": "O nome do endereço é obrigatório"},  
        {"field_name": "phone_number",  
         "message": "O campo Telefone deve possuir no máximo 15 caracteres"}],  
    "response": []}
```

At the bottom of the Charles interface, there is a filter bar with the text "bonates" and several view tabs: Headers, Text, Hex, JavaScript, JSON, **JSON Text** (which is currently selected), and Raw.

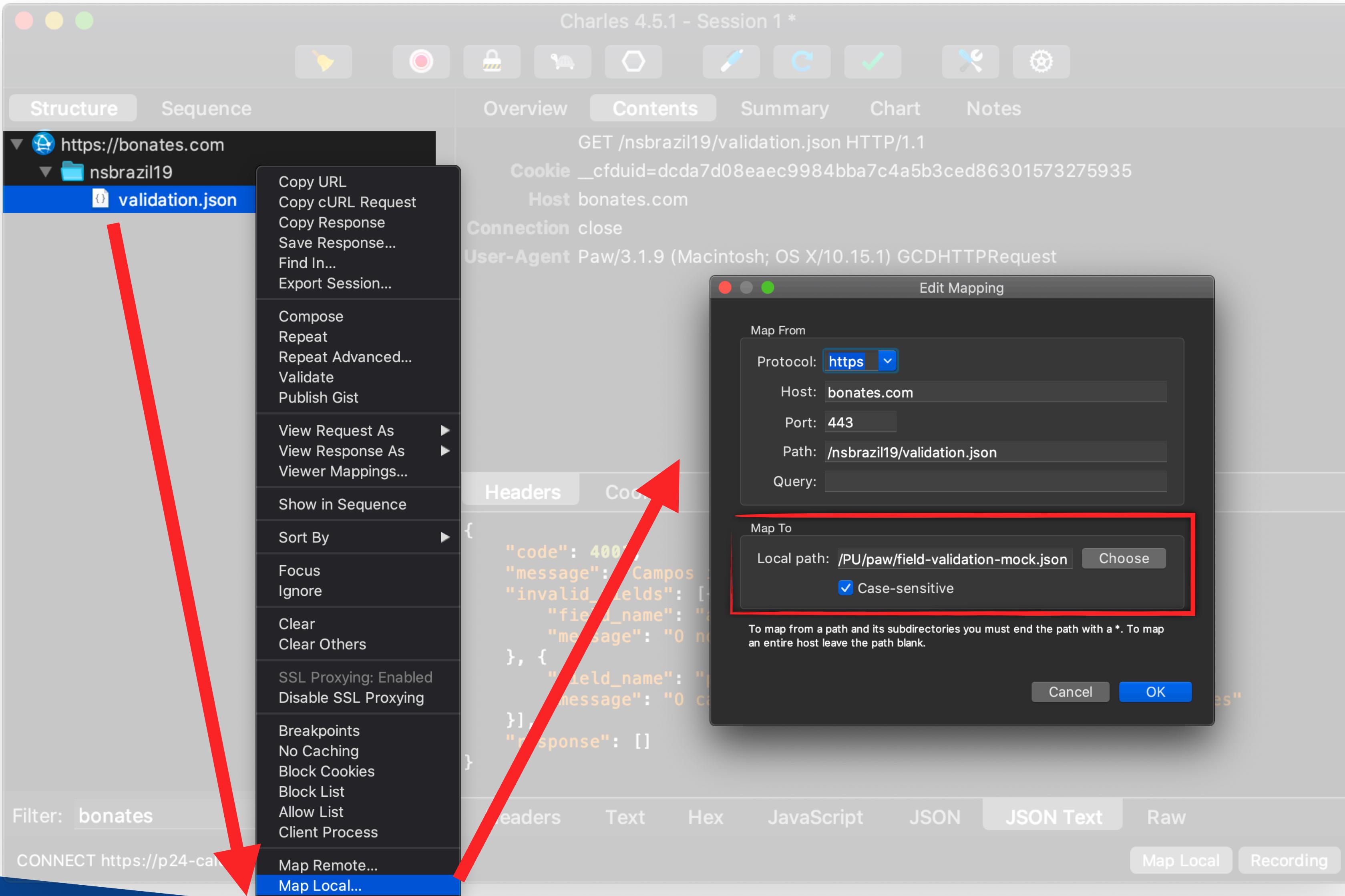
Charles Proxy Mapear endpoint para um arquivo local



Charles Proxy Mapear endpoint para um arquivo local



Charles Proxy Mapear endpoint para um arquivo local



Desafio 3 - backend & API

**Selecionar Produtos na
tabBar não retorna
nenhuma oferta**

Desafio 3 - backend & API

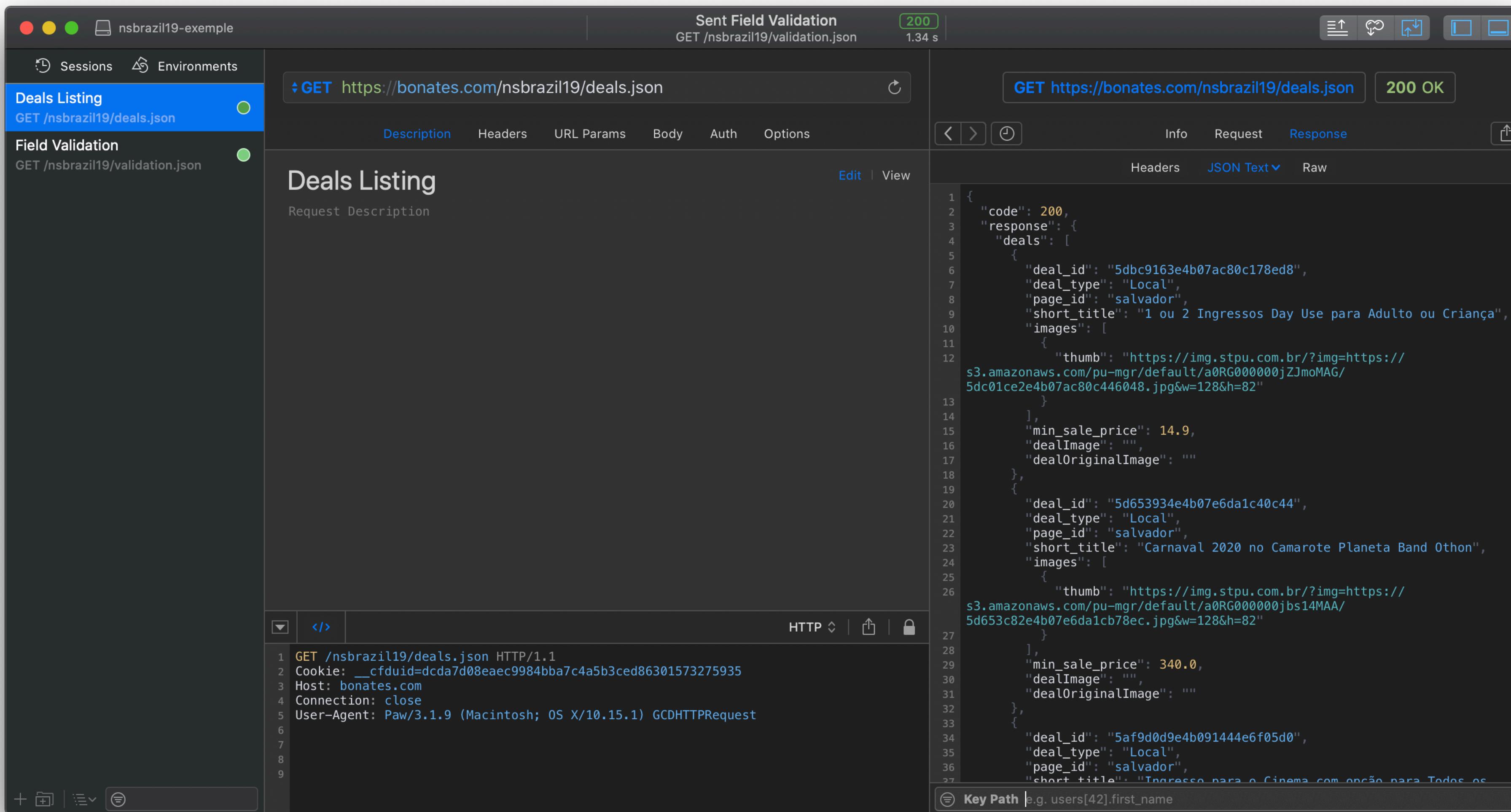
**Selecionar Produtos na
tabBar não retorna
nenhuma oferta**



Paw

<https://paw.cloud>

Paw Investigando resposta da API



Paw Investigando resposta da API

The screenshot shows the Paw application interface with two main panels. The left panel displays a session titled "Deals Listing" with a GET request to "https://bonates.com/nsbrazil19/deals.json". The right panel shows the response to a "Sent Field Validation" request with status code 200 OK. The response body is a JSON array of deals, each containing fields like deal_id, deal_type, page_id, short_title, and images.

Request (Left Panel):

```
1 GET /nsbrazil19/deals.json HTTP/1.1
2 Cookie: __cfduid=dcda7d08eaec9984bba7c4a5b3ced86301573275935
3 Host: bonates.com
4 Connection: close
5 User-Agent: Paw/3.1.9 (Macintosh; OS X/10.15.1) GCDHTTPRequest
```

Response (Right Panel):

```
1 {
2   "code": 200,
3   "response": {
4     "deals": [
5       {
6         "deal_id": "5dbc9163e4b07ac80c178ed8",
7         "deal_type": "Local",
8         "page_id": "salvador",
9         "short_title": "1 ou 2 Ingressos Day Use para Adulto ou Crian\u00e7a",
10        "images": [
11          {
12            "thumb": "https://img.stpu.com.br/?img=https://
s3.amazonaws.com/pu-mgr/default/a0RG000000jZJmoMAG/
5dc01ce2e4b07ac80c446048.jpg&w=128&h=82"
13          }
14        ],
15        "min_sale_price": 14.9,
16        "dealImage": "",
17        "dealOriginalImage": ""
18      },
19      {
20        "deal_id": "5d653934e4b07e6da1c40c44",
21        "deal_type": "Local",
22        "page_id": "salvador",
23        "short_title": "Carnaval 2020 no Camarote Planeta Band Othon",
24        "images": [
25          {
26            "thumb": "https://img.stpu.com.br/?img=https://
s3.amazonaws.com/pu-mgr/default/a0RG000000jbs14MAA/
5d653c82e4b07e6da1cb78ec.jpg&w=128&h=82"
27          }
28        ],
29        "min_sale_price": 340.0,
30        "dealImage": "",
31        "dealOriginalImage": ""
32      },
33      {
34        "deal_id": "5af9d0d9e4b091444e6f05d0",
35        "deal_type": "Local",
36        "page_id": "salvador",
37        "short_title": "Ingresso para o Cinema com op\u00e7\u00e3o para Todos os"
38      }
39    ]
40  }
41 }
```

Key Path: e.g. users[42].first_name

Paw Investigando resposta da API

The screenshot shows the Paw application interface with two main panels. The left panel displays a session titled 'Deals Listing' (GET /nsbrazil19/deals.json) and a validation request ('Field Validation' - GET /nsbrazil19/validation.json). The right panel shows the response to the deals listing request, which is a JSON object containing multiple deals. A red arrow points from the 'Key Path' input field at the bottom to the 'deal_type' field in the JSON response.

Key Path response.deals.*.deal_type

```
1 {  
2   "code": 200,  
3   "response": {  
4     "deals": [  
5       {  
6         "deal_id": "5dbc9163e4b07ac80c178ed8",  
7         "deal_type": "Local",  
8         "page_id": "salvador",  
9         "short_title": "1 ou 2 Ingressos Day Use para Adulto ou Crian\u00e7a",  
10        "images": [  
11          {  
12            "thumb": "https://img.stpu.com.br/?img=https://  
s3.amazonaws.com/pu-mgr/default/a0RG000000jZJmoMAG/  
5dc01ce2e4b07ac80c446048.jpg&w=128&h=82"  
13          }  
14        ],  
15        "min_sale_price": 14.9,  
16        "dealImage": "",  
17        "dealOriginalImage": ""  
18      },  
19      {  
20        "deal_id": "5d653934e4b07e6da1c40c44",  
21        "deal_type": "Local",  
22        "page_id": "salvador",  
23        "short_title": "Carnaval 2020 no Camarote Planeta Band Othon",  
24        "images": [  
25          {  
26            "thumb": "https://img.stpu.com.br/?img=https://  
s3.amazonaws.com/pu-mgr/default/a0RG000000jbs14MAA/  
5d653c82e4b07e6da1cb78ec.jpg&w=128&h=82"  
27          }  
28        ],  
29        "min_sale_price": 340.0,  
30        "dealImage": "",  
31        "dealOriginalImage": ""  
32      },  
33      {  
34        "deal_id": "5af9d0d9e4b091444e6f05d0",  
35        "deal_type": "Local",  
36        "page_id": "salvador",  
37      }  
38    ]  
39  }  
40}
```

Key Path e.g. users[42].first_name

Paw Investigando resposta da API

The screenshot shows the Paw application interface with two main panels and a bottom navigation bar.

Left Panel: Shows a session named "nsbrazil19-exemple" with two items: "Deals Listing" (selected) and "Field Validation".

Top Center: A request titled "Sent Field Validation" (GET /nsbrazil19/validation.json) is shown with a status of 200 OK and a duration of 1.34 s.

Bottom Center: A request titled "Deals Listing" (GET /nsbrazil19/deals.json) is shown with a status of 200 OK.

Bottom Navigation: Includes tabs for "Description", "Headers", "URL Params", "Body", "Auth", and "Options".

Bottom Bar: Displays the key path "response.deals.*.deal_type" and a red box highlighting the "Key Path" input field at the bottom right.

Right Panel: Shows the JSON response for the "Deals Listing" request. The JSON structure is as follows:

```
1 {  
2   "response": {  
3     "deals": [  
4       {  
5         "deal_type": "Local"  
6       },  
7       {  
8         "deal_type": "Local"  
9       },  
10      {  
11        "deal_type": "Local"  
12      },  
13      {  
14        "deal_type": "Local"  
15      },  
16      {  
17        "deal_type": "Local"  
18      },  
19      {  
20        "deal_type": "Local"  
21      },  
22      {  
23        "deal_type": "Local"  
24      },  
25      {  
26        "deal_type": "Local"  
27      },  
28      {  
29        "deal_type": "Local"  
30      },  
31      {  
32        "deal_type": "Local"  
33      }  
34    ]  
35  }  
36 }
```

A red arrow points from the "Key Path" input field in the bottom navigation bar to the "deal_type" field in the JSON response.

Desafio 4 - Produto

Melhorando o report
com imagens

Desafio 4 - Produto

Melhorando o report
com imagens



<https://www.ffmpeg.org/>

brew install ffmpeg

FFMpeg

Fazendo mágica no tamanho dos videos



= 13MB

The screenshot shows the PeixePay mobile application. At the top right, there are icons for signal strength, time (09:41), and battery level (12%). The main header says "Olá, Daniel Florianópolis". Below this is a promotional card for "GUACAMOLE Cocina Mexicana" featuring "Guacamole". A blue banner displays the "peixe pay" logo with a QR code and a balance of "Saldo R\$ 76,25 >". Below the banner are four circular icons: "% Descontos", "Cashback", "Fidelidade", and "Usar Agora". The section "Lugares próximos a você" lists "Churrascaria 100Tenario" (Restaurante • \$\$\$\$\$) and "O Açougueiro" (Restaurante • \$\$\$\$\$). The bottom navigation bar includes icons for "Início", "Explorar", "Pagar" (highlighted in blue), "Carteira", and "Conta".

FFMpeg

Fazendo mágica no tamanho dos videos

🔗 link para o script no GitHub

```
# Compress video files while keep their quality
# Usage: compress video_file
# requires: ffmpeg
# tip: put this function on your ~/.profile file
compress() {
    sourcefile=$(basename "$1")
    filename="${sourcefile%.*}"
    ffmpeg -i ${sourcefile} -c:v libx264 -crf 24 -b:v 1M -c:a aac -strict -2 "${filename}"_compressed.mp4
}
```

FFMpeg

Fazendo mágica no tamanho dos videos

🔗 link para o script no GitHub

```
# Compress video files while keep their quality
# Usage: compress video_file
# requires: ffmpeg
# tip: put this function on your ~/.profile file
compress() {
    sourcefile=$(basename "$1")
    filename="${sourcefile%.*}"
    ffmpeg -i ${sourcefile} -c:v libx264 -crf 24 -b:v 1M -c:a aac -strict -2 "${filename}"_compressed.mp4
}
```

13MB

ppay-scan-demo.mov

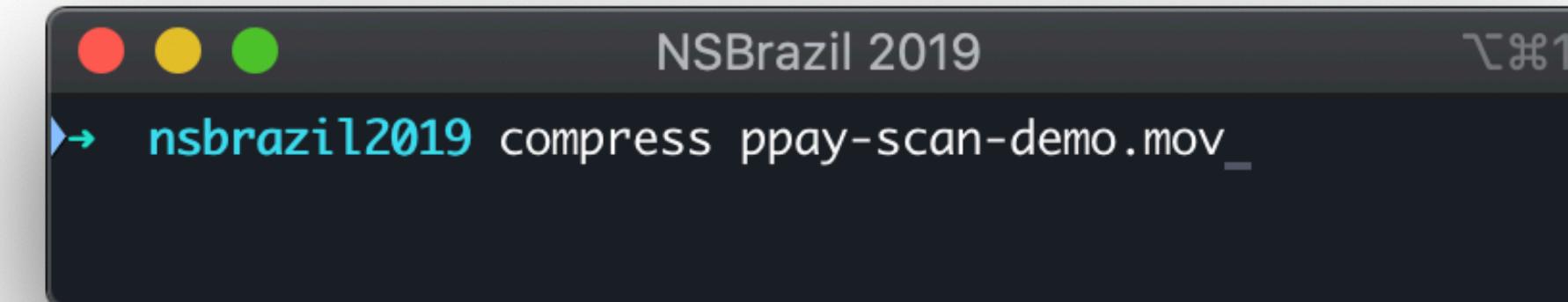
FFMpeg

Fazendo mágica no tamanho dos videos

🔗 link para o script no GitHub

```
# Compress video files while keep their quality
# Usage: compress video_file
# requires: ffmpeg
# tip: put this function on your ~/.profile file
compress() {
    sourcefile=$(basename "$1")
    filename="${sourcefile%.*}"
    ffmpeg -i ${sourcefile} -c:v libx264 -crf 24 -b:v 1M -c:a aac -strict -2 "${filename}"_compressed.mp4
}
```

13MB →



ppay-scan-demo.mov

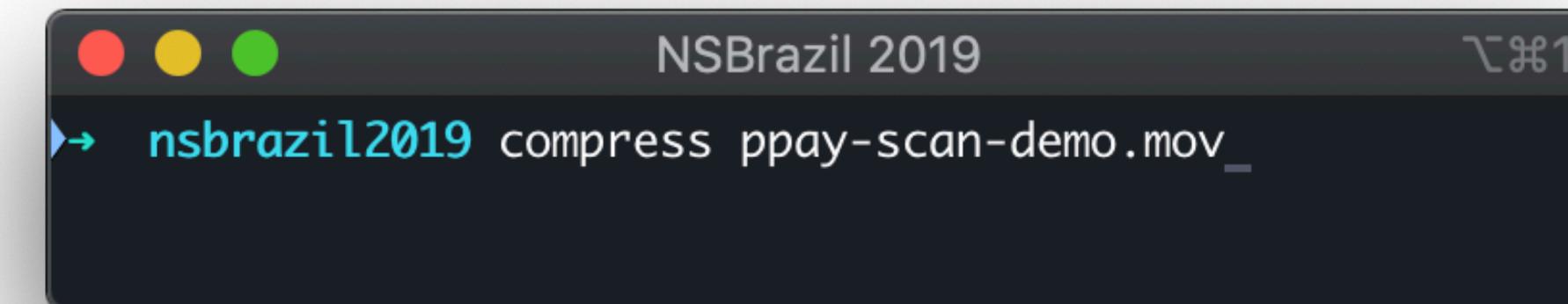
FFMpeg

Fazendo mágica no tamanho dos videos

🔗 link para o script no GitHub

```
# Compress video files while keep their quality
# Usage: compress video_file
# requires: ffmpeg
# tip: put this function on your ~/.profile file
compress() {
    sourcefile=$(basename "$1")
    filename="${sourcefile%.*}"
    ffmpeg -i ${sourcefile} -c:v libx264 -crf 24 -b:v 1M -c:a aac -strict -2 "${filename}"_compressed.mp4
}
```

13MB →



ppay-scan-demo.mov

→ 1.2 MB

ppay-scan-demo_compressed.mp4

FFMpeg

Demos e provas em Gifs

🔗 link para o script no GitHub

```
# Convert video to gif file.
# Usage: video2gif video_file (scale) (fps)
# requires: ffmpeg
# tip: put this function on your ~/.profile file
video2gif() {
    sourcefile=$(basename "$1")
    filename="${sourcefile%.*}"
    ffmpeg -y -i "${1}" -vf fps=${3:-10},scale=${2:-320}:-1:flags=lanczos,
    palettegen "${filename}.png"
    ffmpeg -i "${1}" -i "${filename}.png" -filter_complex "fps=${3:-10},scale=$
    {2:-320}:-1:flags=lanczos[x];[x][1:v]paletteuse" "${filename}".gif
    rm "${filename}.png"
}
```

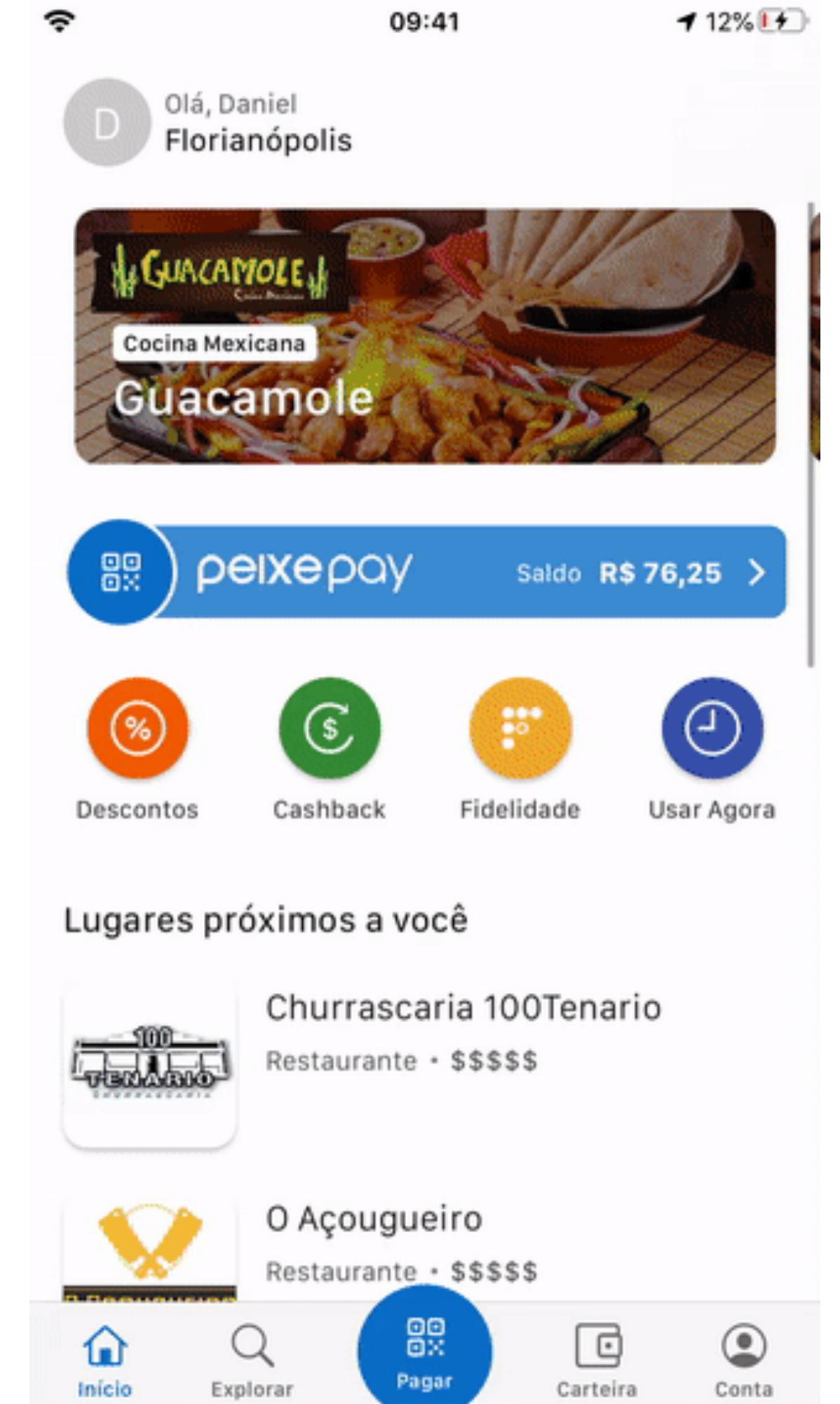
FFMpeg

Demos e provas em Gifs

🔗 link para o script no GitHub

```
# Convert video to gif file.  
# Usage: video2gif video_file (scale) (fps)  
# requires: ffmpeg  
# tip: put this function on your ~/.profile file  
video2gif() {  
    sourcefile=$(basename "$1")  
    filename="${sourcefile%.*}"  
    ffmpeg -y -i "${1}" -vf fps=${3:-10},scale=${2:-320}:-1:flags=lanczos,  
    palettegen "${filename}.png"  
    ffmpeg -i "${1}" -i "${filename}.png" -filter_complex "fps=${3:-10},scale=${2:-320}:-1:flags=lanczos[x];[x][1:v]paletteuse" "${filename}.gif"  
    rm "${filename}.png"  
}
```

1.9 MB
ppay-scan-demo_compressed.gif



Desafio 5 - Find a bug

**Usando o Git para
encontrar a origem
de um bug**

Desafio 5 - Find a bug

**Usando o Git para
encontrar a origem
de um bug**

git bisect



Desafio 5 - Find a bug

git bisect

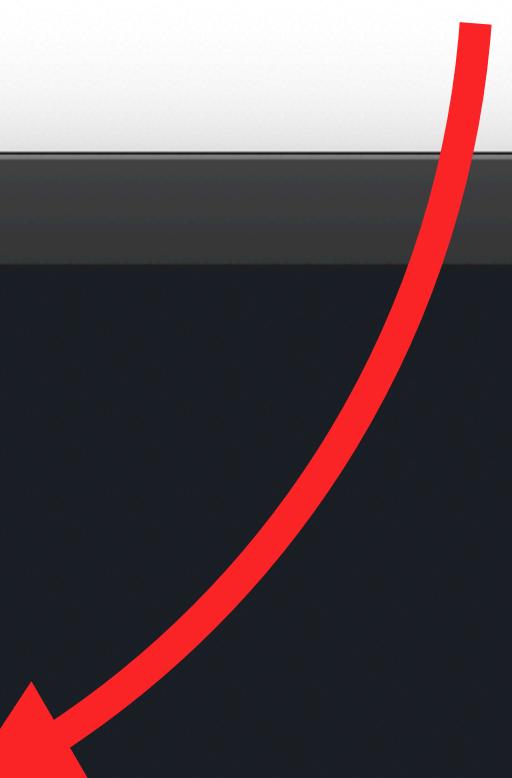


Uso básico

```
git bisect start  
git bisect bad HEAD  
git bisect good cb79160
```

Git bisect

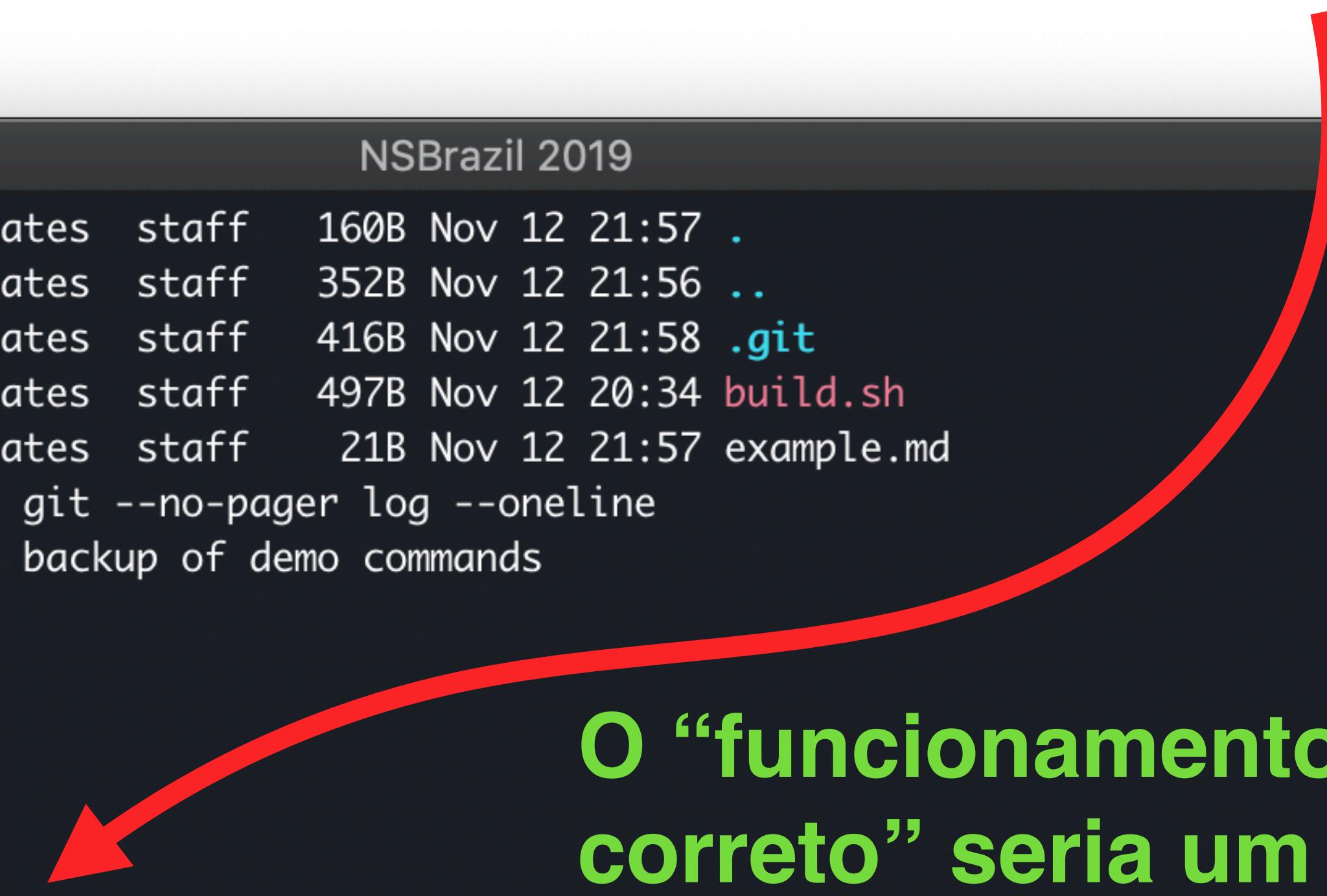
Esses são os arquivos do projeto



```
git-demo git:(master) l
total 16
drwxr-xr-x  5 danielbonates  staff  160B Nov 12 21:57 .
drwxr-xr-x 11 danielbonates  staff  352B Nov 12 21:56 ..
drwxr-xr-x 13 danielbonates  staff  416B Nov 12 21:58 .git
-rwxr-xr-x@  1 danielbonates  staff  497B Nov 12 20:34 build.sh
-rw-r--r--  1 danielbonates  staff   21B Nov 12 21:57 example.md
git-demo git:(master)
```

Git bisect

Listando os últimos commits

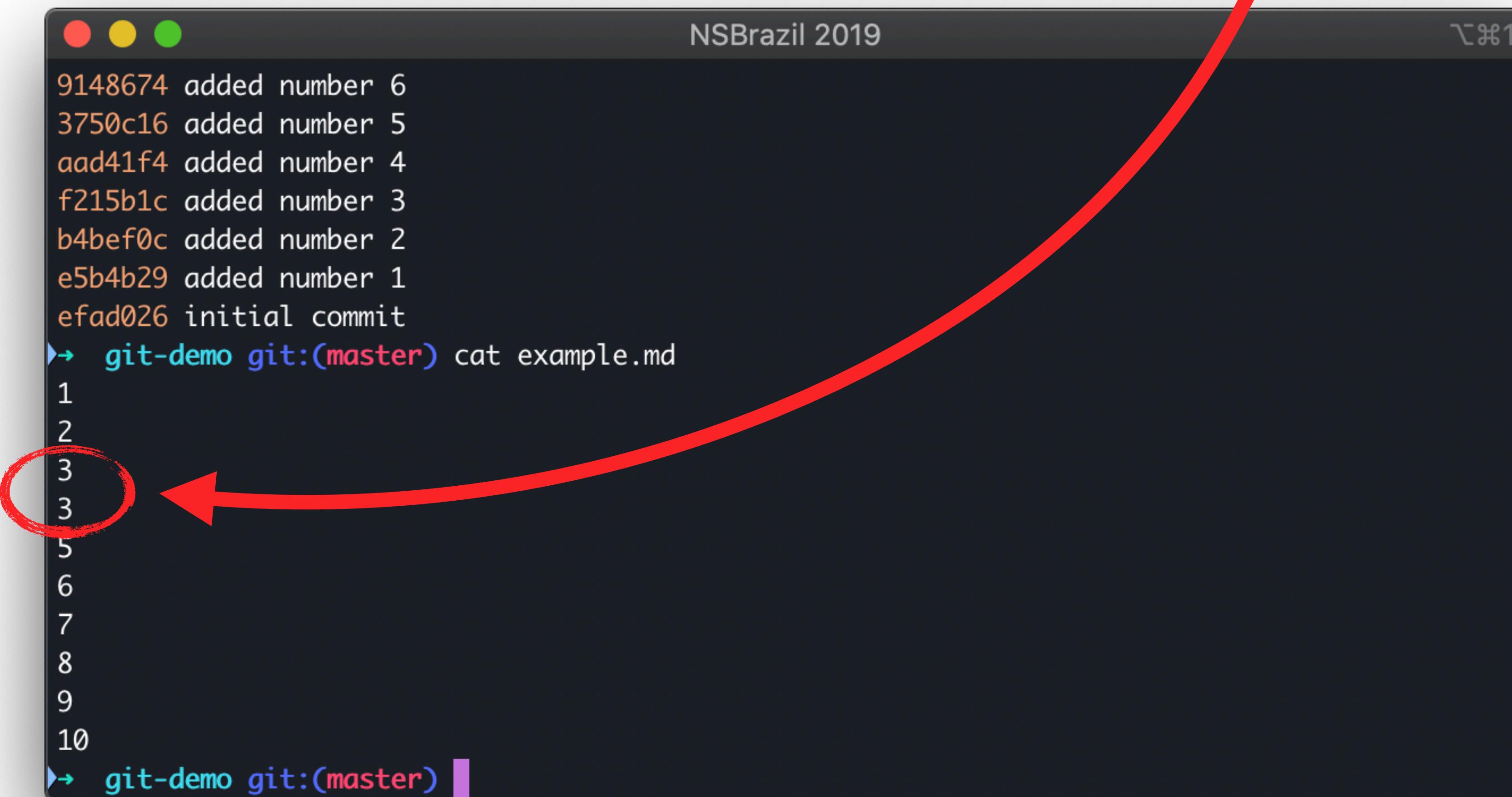


```
drwxr-xr-x  5 danielbonates  staff  160B Nov 12 21:57 .
drwxr-xr-x 11 danielbonates  staff  352B Nov 12 21:56 ..
drwxr-xr-x 13 danielbonates  staff  416B Nov 12 21:58 .git
-rw-rxr-x@  1 danielbonates  staff  497B Nov 12 20:34 build.sh
-rw-r--r--  1 danielbonates  staff   21B Nov 12 21:57 example.md
→ git-demo git:(master) git --no-pager log --oneline
17c7315 (HEAD -> master) backup of demo commands
069d1fb added number 10
8063830 added number 9
99533d5 added number 8
e30105f added number 7
9148674 added number 6
3750c16 added number 5
aad41f4 added number 4
f215b1c added number 3
b4bef0c added number 2
e5b4b29 added number 1
efad026 initial commit
→ git-demo git:(master)
```

O “funcionamento correto” seria um arquivo com números sequenciais de 1 a 10.

Git bisect

Examinando o arquivo **example.md**, encontramos um bug: o conteúdo repete o **3**.



```
NSBrazil 2019
```

```
9148674 added number 6
3750c16 added number 5
aad41f4 added number 4
f215b1c added number 3
b4bef0c added number 2
e5b4b29 added number 1
efad026 initial commit
git-demo git:(master) cat example.md
1
2
3
3
5
6
7
8
9
10
git-demo git:(master)
```

Git bisect

Examinando o arquivo `example.md`, encontramos um bug: o conteúdo repete o 3. Pense nisso como uma funcionalidade “quebrada”.

```
NSBrazil 2019
```

```
9148674 added number 6
3750c16 added number 5
aad41f4 added number 4
f215b1c added number 3
b4bef0c added number 2
e5b4b29 added number 1
efad026 initial commit
→ git-demo git:(master) cat example.md
1
2
3
3
5
6
7
8
9
10
→ git-demo git:(master)
```

Vamos descobrir qual commit introduziu o erro e examina-lo?

Git bisect



NSBrazil 2019

```
3750c16 added number 5
aad41f4 added number 4
f215b1c added number 3
b4bef0c added number 2
e5b4b29 added number 1
efad026 initial commit
→ git-demo git:(master) cat example.md
1
2
3
3
5
6
7
8
9
10
→ git-demo git:(master) git bisect start ←
→ git-demo git:(master)
```

**Passo 1:
iniciar a caça
ao bug!**

Git bisect

```
aad41f4 added number 4  
f215b1c added number 3  
b4bef0c added number 2  
e5b4b29 added number 1  
efad026 initial commit  
→ git-demo git:(master) cat example.md  
1  
2  
3  
3  
5  
6  
7  
8  
9  
10  
→ git-demo git:(master) git bisect start  
→ git-demo git:(master) git bisect bad HEAD
```

Passo 2:
Dizer pro git, qual
commit é possível
reproduzir o erro

Git bisect

```
b4bef0c added number 2  
e5b4b29 added number 1  
efad026 initial commit  
→ git-demo git:(master) cat example.md  
1  
2  
3  
3  
5  
6  
7  
8  
9  
10  
→ git-demo git:(master) git bisect start  
→ git-demo git:(master) git bisect bad HEAD  
→ git-demo git:(master) git bisect good e5b4b29  
Bisecting: 4 revisions left to test after this (roughly 2 steps)
```

Passo 3:
Dizer pro git,
onde o erro não
existe ainda.

Git bisect

A partir daí, o git vai te mover na timeline de commits, buscando o commit assassino!

```
5
6
7
8
9
10
→ git-demo git:(master) git bisect start
→ git-demo git:(master) git bisect bad HEAD
→ git-demo git:(master) git bisect good e5b4b29
Bisection: 4 revisions left to test after this (roughly 2 steps)
[91486742273521fe85016488c7162e6deeb68521] added number 6
→ git-demo git:(9148674) cat example.md
1
2
3
3
5
6
→ git-demo git:(9148674)
```

Estimativa de quantos passos ainda restam para encontrar o bug

Teste o código e verifique se o erro está presente nesse commit. Nesse caso, ainda sim 😊

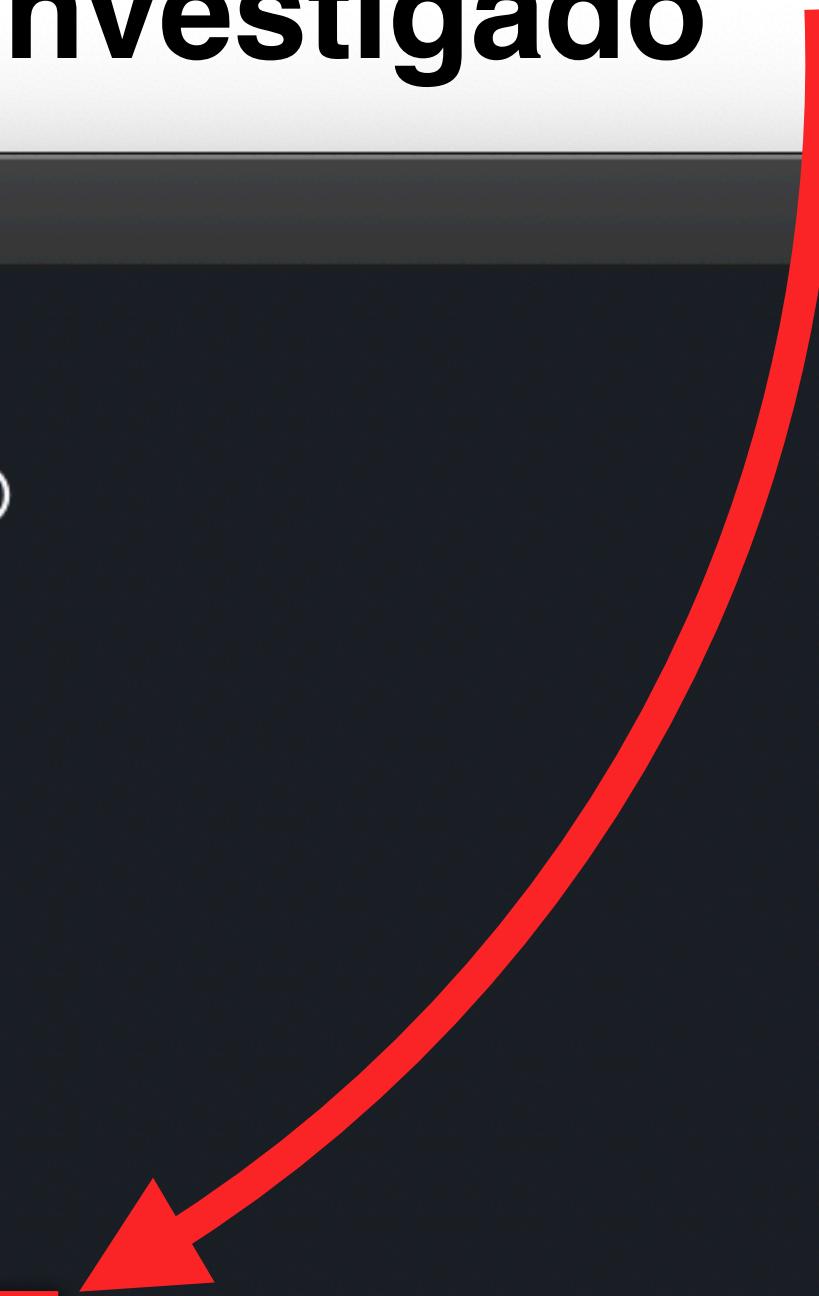
Git bisect

Testamos o commit (1) verificamos que o erro existe (2), marcamos esse passo como **bad** (3).

```
7
8
9
10
→ git-demo git:(master) git bisect start
→ git-demo git:(master) git bisect bad HEAD
→ git-demo git:(master) git bisect good e5b4b29
Bisecting: 4 revisions left to test after this (roughly 2 steps)
[91486742273521fe85016488c7162e6deeb68521] added number 6
→ git-demo git:(9148674) cat example.md
1
2
3
3
5
6
→ git-demo git:(9148674) git bisect bad
Bisecting: 2 revisions left to test after this (roughly 1 step)
```

Git bisect

O Git vai seguir a busca e te mover pro próximo commit a ser investigado



```
git-demo git:(master) git bisect bad HEAD
git-demo git:(master) git bisect good e5b4b29
Bisecting: 4 revisions left to test after this (roughly 2 steps)
[91486742273521fe85016488c7162e6deeb68521] added number 6
git-demo git:(9148674) cat example.md
1
2
3
3
5
6
git-demo git:(9148674) git bisect bad
Bisecting: 2 revisions left to test after this (roughly 1 step)
[f215b1c79aa23aed36bfa7c1de6ac704d55105b4] added number 3
git-demo git:(f215b1c) cat example.md
1
2
3
git-demo git:(f215b1c)
```

Git bisect

Nesse commit, ao testar o código (1) verificamos que o erro não ocorre (2), marcamos ele como **good** (3)!

```
Bisecting: 4 revisions left to test after this (roughly 2 steps)
[91486742273521fe85016488c7162e6deeb68521] added number 6
↳ git-demo git:(9148674) cat example.md
1
2
3
3
5
6

↳ git-demo git:(9148674) git bisect bad
Bisecting: 2 revisions left to test after this (roughly 1 step)
[f215b1c79aa23aed36bfa7c1de6ac704d55105b4] added number 3
↳ git-demo git:(f215b1c) cat example.md
1
2
3
3
5
6

git-demo git:(f215b1c) git bisect good
Bisecting: 0 revisions left to test after this (roughly 0 steps)
[8f6825329b775f12e72f40a6185ee42c497b0a57] added number 4
```

The screenshot shows a terminal window titled "NSBrazil 2019" demonstrating the Git bisect command. The process starts with 4 revisions left to test. It finds a bad commit ([f215b1c]) and marks it as bad. Then, it finds a good commit ([8f6825329b775f12e72f40a6185ee42c497b0a57]) and marks it as good, which completes the bisection process.

Git bisect

Pronto! Praticamente apenas digitando bad e good, chegamos no commit com problema. Nele podemos conferir com mais detalhes as mudanças que introduziram o bug.



```
commit 8f6825329b775f12e72f40a6185ee42c497b0a57 (HEAD)
Author: Daniel Bonates <daniel@bonates.com>
Date:   Tue Nov 12 23:35:16 2019 -0300

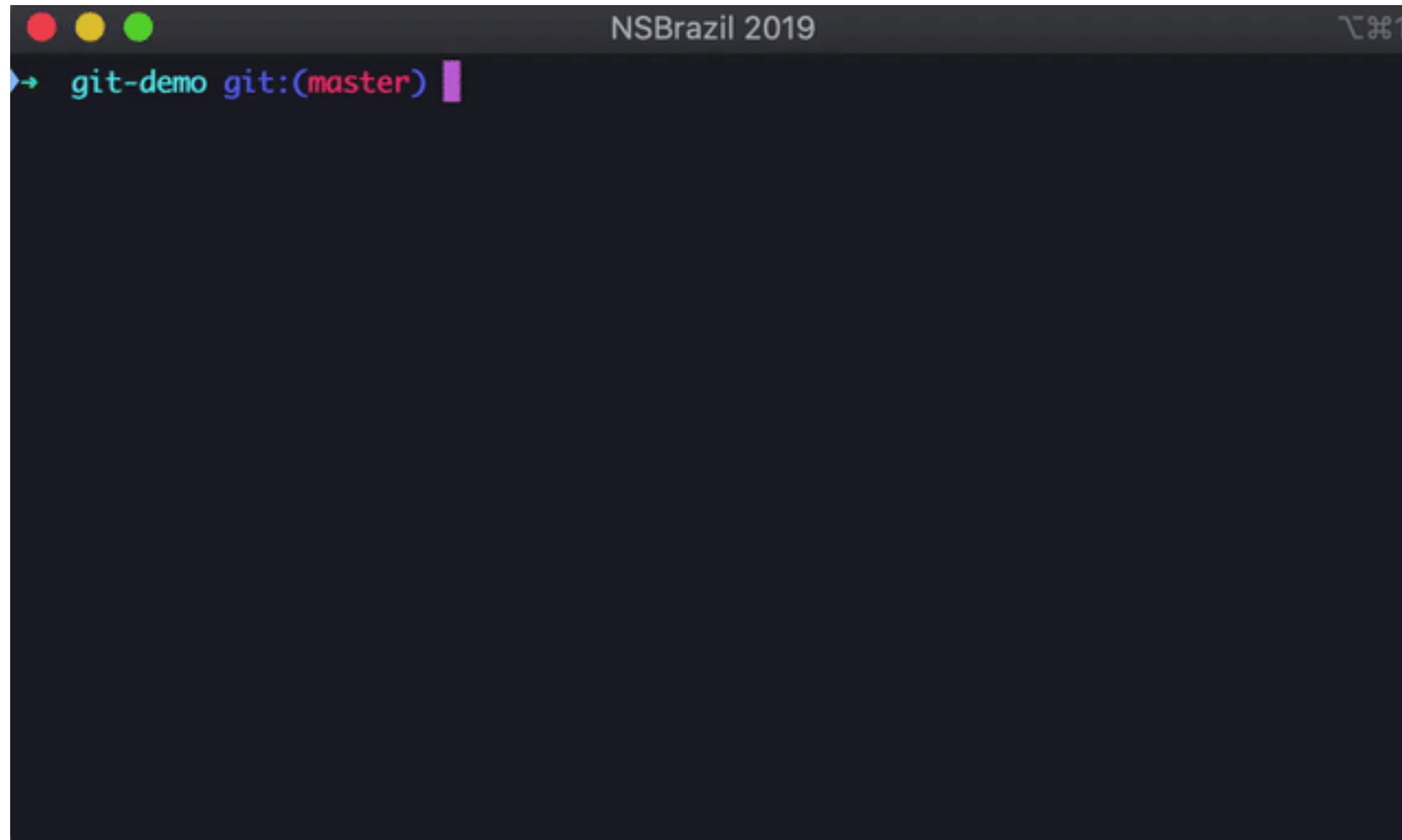
    added number 4

diff --git a/example.md b/example.md
index 01e79c3..7d8164b 100644
--- a/example.md
+++ b/example.md
@@ -1,3 +1,4 @@
1
2
3
+3
(END)
```

O comando
git show
pode cair bem aqui!

Git bisect

Demo do fluxo completo



visualizar no browser



Thank you!



@DanielBonates



@bonates



@dbonates



#vem-pro-peixe