# **ZAP Scanning Report**

Generated with <sup>₹</sup>ZAP on qui. 8 ago. 2024, at 10:47:37

ZAP Version: 2.15.0

ZAP is supported by the Crash Override Open Source Fellowship

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### **About this report**

#### **Report parameters**

#### **Contexts**

No contexts were selected, so all contexts were included by default.

#### **Sites**

The following sites were included:

https://i8z10k6wma.execute-api.us-east-1.amazonaws.com

(If no sites were selected, all sites were included by default.)

An included site must also be within one of the included contexts for its data to be included in the report.

#### **Risk levels**

Included: Alto, Médio, Baixo, Informativo

Excluded: None

#### **Confidence levels**

Included: User Confirmed, Alto, Médio, Baixo

Excluded: User Confirmed, Alto, Médio, Baixo, Falso Positivo

### **Summaries**

#### Alert counts by risk and confidence

This table shows the number of alerts for each level of risk and confidence included in the report.

(The percentages in brackets represent the count as a percentage of the total number of alerts included in the report, rounded to one decimal place.)

|      |             |           | C       | onfidence |         |         |
|------|-------------|-----------|---------|-----------|---------|---------|
|      |             | User      |         |           |         |         |
|      |             | Confirmed | Alto    | Médio     | Baixo   | Total   |
|      | Alto        | 0         | 0       | 0         | 0       | 0       |
|      |             | (0,0%)    | (0,0%)  | (0,0%)    | (0,0%)  | (0,0%)  |
|      | Médio       | 0         | 1       | 2         | 0       | 3       |
|      |             | (0,0%)    | (10,0%) | (20,0%)   | (0,0%)  | (30,0%) |
|      | Baixo       | 0         | 2       | 2         | 1       | 5       |
| Risk |             | (0,0%)    | (20,0%) | (20,0%)   | (10,0%) | (50,0%) |
|      | Informativo | 0         | 0       | 1         | 1       | 2       |
|      |             | (0,0%)    | (0,0%)  | (10,0%)   | (10,0%) | (20,0%) |
|      | Total       | 0         | 3       | 5         | 2       | 10      |
|      |             | (0,0%)    | (30,0%) | (50,0%)   | (20,0%) | (100%)  |
|      |             |           |         |           |         |         |

#### Alert counts by site and risk

This table shows, for each site for which one or more alerts were raised, the number of alerts raised at each risk level.

Alerts with a confidence level of "False Positive" have been excluded from these counts.

(The numbers in brackets are the number of alerts raised for the site at or above that risk level.)

|     |                       | Risk     |            |            |             |
|-----|-----------------------|----------|------------|------------|-------------|
|     |                       |          |            |            | Informativo |
|     |                       | Alto     | Médio      | Baixo      | (>= Informa |
|     |                       | (= Alto) | (>= Médio) | (>= Baixo) | tivo)       |
|     | https://i8z10k6wma.   | 0        | 3          | 5          | 2           |
| Sit | e execute-api.us-east | (0)      | (3)        | (8)        | (10)        |
|     | -1.amazonaws.com      |          |            |            |             |

#### Alert counts by alert type

This table shows the number of alerts of each alert type, together with the alert type's risk level.

(The percentages in brackets represent each count as a percentage, rounded to one decimal place, of the total number of alerts included in this report.)

| Allowh house  | Diale         | Carret  |
|---|---------------|---------|
| Alert type  Content Security Policy (CSP) Header Not          | Risk<br>Médio | Count 1 |
| <u>Content Security Policy (CSP) Header Not</u><br><u>Set</u> | Medio         | (10,0%) |
| <u>3et</u>  |               | (10,0%) |
| Erro de Formato de String                                     | <br>Médio     | 1       |
| <u>Erro de Formato de Stimaj</u>                              | riculo        | (10,0%) |
|   |               | (10,0%) |
| Missing Anti-clickjacking Header                              | Médio         | 1       |
| <u>—————————————————————————————————————</u>                  |               | (10,0%) |
|   |               |         |
| <u>Fraqueza de script entre sites (persistente na</u>         | Baixo         | 1       |
| <u>resposta JSON)</u>   |               | (10,0%) |
|   |               |         |
| O servidor vaza informações por meio dos                      | Baixo         | 9       |
| campos de cabeçalho de resposta HTTP "X-                      |               | (90,0%) |
| Powered-By"   |               |         |
|   |               |         |
| Server Leaks Version Information via                          | Baixo         | 1       |
| "Server" HTTP Response Header Field                           |               | (10,0%) |
|   |               |         |
| Strict-Transport-Security Header Not Set                      | Baixo         | 12      |
|   |               |         |
|   |               |         |

Total

10

| Alert type                            | Risk        | Count          |
|---------------------------------------|-------------|----------------|
|                                       |             | (120,0%)       |
| X-Content-Type-Options Header Missing | Baixo       | 6 (60,0%)      |
| Re-examine Cache-control Directives   | Informativo | 6 (60,0%)      |
| <u>User Agent Fuzzer</u>              | Informativo | 42<br>(420,0%) |
| Total                                 |             | 10             |

### **Alerts**

#### Risk=Médio, Confidence=Alto (1)

https://i8z10k6wma.execute-api.us-east-1.amazonaws.com (1)

#### **Content Security Policy (CSP) Header Not Set (1)**

- ▶ PUT https://i8z10k6wma.execute-api.us-east-
- 1.amazonaws.com/lanchonete/payment/toggle

#### Risk=Médio, Confidence=Médio (2)

https://i8z10k6wma.execute-api.us-east-1.amazonaws.com (2)

#### Erro de Formato de String (1)

- ▼ POST https://i8z10k6wma.execute-api.us-east-
- 1.amazonaws.com/lanchonete/categories

Alert tags

OWASP 2017 A01

- CWE-134
- OWASP 2021 A03

### Alert description

Um erro de Formato de String ocorre quando o dado enviado de uma string de entrada é avaliado como um comando pelo aplicativo.

#### Other info

Possível Erro de Formato de String. O script fechou a conexão devido a um erro de formato de string da Microsoft

#### Request

▼ Request line and header section (338 bytes)

```
POST https://i8z10k6wma.execute-
api.us-east-
1.amazonaws.com/lanchonete/categorie
s HTTP/1.1
host: i8z10k6wma.execute-api.us-
east-1.amazonaws.com
user-agent: Mozilla/5.0 (Windows NT
10.0; Win64; x64; rv:125.0)
Gecko/20100101 Firefox/125.0
pragma: no-cache
cache-control: no-cache
content-type: application/json
content-length: 283
```

#### ▼ Request body (283 bytes)

```
{
    "name": "xpto5",
    "slug": "ZAP
%1!s%2!s%3!s%4!s%5!s%6!s%7!s%8!s%9!s
%10!s%11!s%12!s%13!s%14!s%15!s%16!s%
17!s%18!s%19!s%20!s%21!n%22!n%23!n%2
4!n%25!n%26!n%27!n%28!n%29!n%30!n%31
!n%32!n%33!n%34!n%35!n%36!n%37!n%38!
n%39!n%40!n\n",
    "description": "
```

{{\$randomLoremSentence}}"
}

#### Response

▼ Status line and header section (266 bytes)

HTTP/1.1 500 Internal Server Error Date: Thu, 08 Aug 2024 13:46:38 GMT Content-Type: application/json;

charset=utf-8

Content-Length: 52

Connection: keep-alive

apigw-requestid: cMTZ0jaKIAMEbEw=

X-Powered-By: Express

etag: W/"34-

rlKccw1E+/fV8niQk4oFitDfPro"

▼ Response body (52 bytes)

{"statusCode":500,"message":"Interna
l server error"}

#### **Parameter**

slug

#### **Attack**

ZAP

%1!s%2!s%3!s%4!s%5!s%6!s%7!s%8!s%9!s
%10!s%11!s%12!s%13!s%14!s%15!s%16!s%
17!s%18!s%19!s%20!s%21!n%22!n%23!n%2
4!n%25!n%26!n%27!n%28!n%29!n%30!n%31
!n%32!n%33!n%34!n%35!n%36!n%37!n%38!
n%39!n%40!n

#### **Solution**

Reescreva o programa de plano de fundo utilizando o apagamento apropriado das bad character strings. Isso irá requerer uma recompilação do executável do plano de fundo.

Missing Anti-clickjacking Header (1)

- ▼ PUT https://i8z10k6wma.execute-api.us-east-
- 1.amazonaws.com/lanchonete/payment/toggle

#### **Alert tags**

- WSTG-v42-CLNT-09
- OWASP 2021 A05
- OWASP 2017 A06
- CWE-1021

## Alert description

The response does not include either Content-Security-Policy with 'frame-ancestors' directive or X-Frame-Options to protect against 'ClickJacking' attacks.

#### Request

▼ Request line and header section (288 bytes)

PUT https://i8z10k6wma.executeapi.us-east-

1.amazonaws.com/lanchonete/payment/t

oggle HTTP/1.1

host: i8z10k6wma.execute-api.us-

east-1.amazonaws.com

user-agent: Mozilla/5.0 (Windows NT

10.0; Win64; x64; rv:125.0) Gecko/20100101 Firefox/125.0

pragma: no-cache

cache-control: no-cache

▼ Request body (0 bytes)

#### Response

▼ Status line and header section (214 bytes)

HTTP/1.1 200 OK

Date: Thu, 08 Aug 2024 13:43:20 GMT

Content-Type: text/html;

charset=utf-8

Content-Length: 33

Connection: keep-alive server: Werkzeug/2.2.2

Python/3.10.14

apigw-requestid: cMS64jHoIAMEVRw=

▼ Response body (33 bytes)

Now the payments will be canceled

**Parameter** 

x-frame-options

Solution

Modern Web browsers support the Content-Security-Policy and X-Frame-Options HTTP headers. Ensure one of them is set on all web pages returned by your site/app.

If you expect the page to be framed only by pages on your server (e.g. it's part of a FRAMESET) then you'll want to use SAMEORIGIN, otherwise if you never expect the page to be framed, you should use DENY. Alternatively consider implementing Content Security Policy's "frame-ancestors" directive.

#### Risk=Baixo, Confidence=Alto (2)

https://i8z10k6wma.execute-api.us-east-1.amazonaws.com (2)

#### <u>Server Leaks Version Information via "Server" HTTP</u> <u>Response Header Field</u> (1)

- ▼ PUT https://i8z10k6wma.execute-api.us-east-
- 1.amazonaws.com/lanchonete/payment/toggle

Alert tags

- OWASP 2021 A05
- OWASP 2017 A06
- <u>WSTG-v42-INFO-02</u>
- CWE-200

### Alert description

The web/application server is leaking version information via the "Server" HTTP response header. Access to such information may facilitate attackers identifying other vulnerabilities your web/application server is subject to.

#### Request

▼ Request line and header section (288 bytes)

PUT https://i8z10k6wma.executeapi.us-east-

1.amazonaws.com/lanchonete/payment/t

oggle HTTP/1.1

host: i8z10k6wma.execute-api.us-

east-1.amazonaws.com

user-agent: Mozilla/5.0 (Windows NT

10.0; Win64; x64; rv:125.0)
Gecko/20100101 Firefox/125.0

pragma: no-cache

cache-control: no-cache

▼ Request body (0 bytes)

#### Response

▼ Status line and header section (214 bytes)

HTTP/1.1 200 OK

Date: Thu, 08 Aug 2024 13:43:20 GMT

Content-Type: text/html;

charset=utf-8

Content-Length: 33

Connection: keep-alive server: Werkzeug/2.2.2

Python/3.10.14

apigw-requestid: cMS64jHoIAMEVRw=

▼ Response body (33 bytes)

Now the payments will be canceled

#### **Evidence**

Werkzeug/2.2.2 Python/3.10.14

#### Solution

Ensure that your web server, application server, load balancer, etc. is configured to suppress the "Server" header or provide generic details.

#### **Strict-Transport-Security Header Not Set** (1)

▼ POST https://i8z10k6wma.execute-api.us-east-

1.amazonaws.com/lanchonete/auth

#### Alert tags

- OWASP 2021 A05
- OWASP 2017 A06
- CWE-319

## Alert description

HTTP Strict Transport Security (HSTS) is a web security policy mechanism whereby a web server declares that complying user agents (such as a web browser) are to interact with it using only secure HTTPS connections (i.e. HTTP layered over TLS/SSL). HSTS is an IETF standards track protocol and is specified in RFC 6797.

#### Request

▼ Request line and header section (331 bytes)

POST https://i8z10k6wma.execute-

api.us-east-

1.amazonaws.com/lanchonete/auth

HTTP/1.1

host: i8z10k6wma.execute-api.us-east-

1.amazonaws.com

user-agent: Mozilla/5.0 (Windows NT

10.0; Win64; x64; rv:125.0) Gecko/20100101 Firefox/125.0

pragma: no-cache

cache-control: no-cache

content-type: application/json

content-length: 28

```
▼ Request body (28 bytes)
```

```
{
    "cpf": "12345678913"
}
```

#### Response

▼ Status line and header section (177 bytes)

```
HTTP/1.1 200 OK
```

Date: Thu, 08 Aug 2024 13:43:15 GMT

Content-Type: text/plain;

charset=utf-8

Content-Length: 485
Connection: keep-alive

Apigw-Requestid: cMS5vgiUIAMEVVA=

▼ Response body (485 bytes)

```
{
  "access token":
```

"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9
.eyJkYXRhIjp7Il9pZCI6IjY2YjRjYTA4NTY3
M2Q0MmMzNjQxMjY1YSIsIm5hbWUiOiJNb25hI
EJydWVuIiwiZW1haWwiOiJMYXVyZWw1MUBnbW
FpbC5jb20iLCJjcGYiOiIxMjM0NTY30DkxMyI
sInBob25lIjoiNjAxLTI4OS05NjI5IiwiYWRk
cmVzcyI6IjIzNCBadWxhdWYgUmlkZ2VzIiwiY
3JlYXRlZEF0IjoiMjAyNC0wOC0wOFQxMzozNz
oxMi43MjZaIiwidXBkYXRlZEF0IjoiMjAyNC0
wOC0wOFQxMzozNzoxMi43MjZaIiwiX192Ijow
fSwiaWF0IjoxNzIzMTI0NTk1LCJleHAiOjE3M
jMxMjgxOTV9.OkmooDT8790iEmuk3lKsWAXHj
FCt9NRx5RbKdpcNojI"
}

#### Solution

Ensure that your web server, application server, load balancer, etc. is configured to enforce Strict-Transport-Security.

#### Risk=Baixo, Confidence=Médio (2)

https://i8z10k6wma.execute-api.us-east-1.amazonaws.com (2)

### O servidor vaza informações por meio dos campos de cabeçalho de resposta HTTP "X-Powered-By" (1)

- ▼ POST https://i8z10k6wma.execute-api.us-east-
- 1.amazonaws.com/lanchonete/customers

#### Alert tags

- OWASP 2021 A01
- OWASP 2017 A03
- WSTG-v42-INFO-08
- CWE-200

## Alert description

O servidor da web/aplicativo está vazando informações por meio de um ou mais cabeçalhos de resposta HTTP "X-Powered-By". O acesso a essas informações pode facilitar que os invasores identifiquem outras estruturas/componentes dos quais seu aplicativo da web depende e as vulnerabilidades às quais esses componentes podem estar sujeitos.

#### Request

▼ Request line and header section (337 bytes)

POST https://i8z10k6wma.executeapi.us-east-

1.amazonaws.com/lanchonete/customers
HTTP/1.1

host: i8z10k6wma.execute-api.us-

east-1.amazonaws.com

user-agent: Mozilla/5.0 (Windows NT

10.0; Win64; x64; rv:125.0) Gecko/20100101 Firefox/125.0

pragma: no-cache

cache-control: no-cache

content-type: application/json
content-length: 178

▼ Request body (178 bytes)

{
 "name": "{{\$randomFullName}}",
 "email": "{{\$randomEmail}}",
 "phone": "
 {{\$randomPhoneNumber}}",
 "address": "
 {{\$randomStreetAddress}}",
 "cpf": "12345678913"

#### Response

▼ Status line and header section (256 bytes)

HTTP/1.1 400 Bad Request

Date: Thu, 08 Aug 2024 13:43:19 GMT

Content-Type: application/json;

charset=utf-8

}

Content-Length: 77

Connection: keep-alive

apigw-requestid: cMS6sgJNIAMEbqQ=

X-Powered-By: Express

etag: W/"4d-

ST/RBgnauwvfnfsKLs3871WfM+4"

▼ Response body (77 bytes)

{"message":["Email must be an
email"],"error":"Bad
Request","statusCode":400}

#### **Evidence**

X-Powered-By: Express

#### Solution

Certifique-se de que seu servidor web, servidor de aplicativos, balanceador de carga, etc. esteja configurado para suprimir cabeçalhos "X-Powered-By".

#### X-Content-Type-Options Header Missing (1)

- ▼ POST https://i8z10k6wma.execute-api.us-east-
- 1.amazonaws.com/lanchonete/auth

#### Alert tags

- CWE-693
- OWASP 2021 A05
- OWASP 2017 A06

### Alert description

The Anti-MIME-Sniffing header X-Content-Type-Options was not set to 'nosniff'. This allows older versions of Internet Explorer and Chrome to perform MIME-sniffing on the response body, potentially causing the response body to be interpreted and displayed as a content type other than the declared content type. Current (early 2014) and legacy versions of Firefox will use the declared content type (if one is set), rather than performing MIME-sniffing.

#### Other info

This issue still applies to error type pages (401, 403, 500, etc.) as those pages are often still affected by injection issues, in which case there is still concern for browsers sniffing pages away from their actual content type.

At "High" threshold this scan rule will not alert on client or server error responses.

#### Request

▼ Request line and header section (331 bytes)

POST https://i8z10k6wma.executeapi.us-east-

1.amazonaws.com/lanchonete/auth
HTTP/1.1

host: i8z10k6wma.execute-api.us-east-

1.amazonaws.com

user-agent: Mozilla/5.0 (Windows NT

10.0; Win64; x64; rv:125.0)
Gecko/20100101 Firefox/125.0

pragma: no-cache

cache-control: no-cache

content-type: application/json

content-length: 28

▼ Request body (28 bytes)

```
{
    "cpf": "12345678913"
}
```

#### Response

▼ Status line and header section (177 bytes)

HTTP/1.1 200 OK

Date: Thu, 08 Aug 2024 13:43:15 GMT

Content-Type: text/plain;

charset=utf-8

Content-Length: 485
Connection: keep-alive

Apigw-Requestid: cMS5vgiUIAMEVVA=

▼ Response body (485 bytes)

```
{
   "access_token":
```

"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9
.eyJkYXRhIjp7Il9pZCI6IjY2YjRjYTA4NTY3
M2Q0MmMzNjQxMjY1YSIsIm5hbWUiOiJNb25hI
EJydWVuIiwiZW1haWwiOiJMYXVyZWw1MUBnbW
FpbC5jb20iLCJjcGYiOiIxMjM0NTY30DkxMyI
sInBob25lIjoiNjAxLTI4OS05NjI5IiwiYWRk
cmVzcyI6IjIzNCBadWxhdWYgUmlkZ2VzIiwiY
3JlYXRlZEF0IjoiMjAyNC0wOC0wOFQxMzozNz
oxMi43MjZaIiwidXBkYXRlZEF0IjoiMjAyNC0
wOC0wOFQxMzozNzoxMi43MjZaIiwiX192Ijow
fSwiaWF0IjoxNzIzMTI0NTk1LCJleHAiOjE3M
jMxMjgxOTV9.OkmooDT8790iEmuk31KsWAXHj



FCt9NRx5RbKdpcNojI"

#### **Parameter**

x-content-type-options

#### **Solution**

Ensure that the application/web server sets the Content-Type header appropriately, and that it sets the X-Content-Type-Options header to 'nosniff' for all web pages.

If possible, ensure that the end user uses a standards-compliant and modern web browser that does not perform MIME-sniffing at all, or that can be directed by the web application/web server to not perform MIME-sniffing.

#### Risk=Baixo, Confidence=Baixo (1)

https://i8z10k6wma.execute-api.us-east-1.amazonaws.com (1)

### <u>Fraqueza de script entre sites (persistente na resposta JSON)</u> (1)

▼ GET https://i8z10k6wma.execute-api.us-east-

1.amazonaws.com/lanchonete/categories

#### Alert tags

- CWE-79
- WSTG-v42-INPV-02
- OWASP 2021 A03
- OWASP 2017 A07

## Alert description

Um ataque XSS foi encontrado em uma resposta JSON, isso pode deixar os consumidores de conteúdo vulneráveis a ataques se eles não manipularem os dados (resposta) de forma adequada.

#### Other info

Gerado com BAIXA confiança, pois o Tipo de conteúdo não é HTML

#### Request

▼ Request line and header section (284 bytes)

GET https://i8z10k6wma.executeapi.us-east-

1.amazonaws.com/lanchonete/categories
HTTP/1.1

host: i8z10k6wma.execute-api.us-east-

1.amazonaws.com

user-agent: Mozilla/5.0 (Windows NT

10.0; Win64; x64; rv:125.0) Gecko/20100101 Firefox/125.0

pragma: no-cache

cache-control: no-cache

▼ Request body (0 bytes)

#### Response

▼ Status line and header section (252 bytes)

HTTP/1.1 200 OK

Date: Thu, 08 Aug 2024 13:44:39 GMT Content-Type: application/json;

charset=utf-8

Content-Length: 10894 Connection: keep-alive

apigw-requestid: cMTHOioOoAMEVSQ=

X-Powered-By: Express

etag: W/"2a8e-

OhCkmiD0FrvAz+mnyTQI3KnrrTU"

► Response body (10894 bytes)

**Parameter** 

slug

**Attack** 

<script>alert(1);</script>

Solution

Fase: Arquitetura e Design.

Use uma biblioteca verificada ou framework que não permita que essa vulnerabilidade ocorra, ou forneça construções/implementações que tornem essa vulnerabilidade mais fácil de evitar.

Exemplos de bibliotecas e frameworks que facilitam a geração de saída codificada adequadamente incluem a biblioteca Anti-XSS da Microsoft, o módulo de codificação OWASP ESAPI e o Apache Wicket.

Fases: Implementação | Arquitetura e Design.

Compreenda o contexto no qual seus dados serão usados e a codificação que será esperada. Isso é especialmente importante ao transmitir dados entre componentes diferentes ou ao gerar saídas que podem conter várias codificações ao mesmo tempo, como páginas da web ou mensagens de email com várias partes. Estude todos os protocolos de comunicação e representações de dados esperados para determinar as estratégias de codificação necessárias.

Para quaisquer dados que serão enviados para outra página da web, especialmente quaisquer dados recebidos de entradas externas, use a codificação apropriada em todos os caracteres não alfanuméricos.

Consulte a Página de Dicas de Prevenção de XSS para obter mais

detalhes sobre os tipos de codificação e escape que são necessários.

Fase: Arquitetura e Design.

Para todas as verificações de segurança realizadas no lado do cliente, certifiquese de que essas verificações sejam duplicadas no lado do servidor, a fim de evitar a CWE-602. Invasores podem ignorar as verificações do lado do cliente, modificando os valores após a realização das verificações ou alterando o cliente para remover as verificações do lado do cliente completamente. Em seguida, esses valores modificados poderiam ser enviados ao servidor.

Se disponível, use mecanismos estruturados que impõem automaticamente a separação entre dados e código. Esses mecanismos podem ser capazes de fornecer citação, codificação e validação relevantes automaticamente, em vez de depender do desenvolvedor para fornecer esse recurso em cada ponto onde a saída é gerada.

Fase: Implementação.

Para cada página web gerada, use e especifique uma codificação de caracteres, como ISO-8859-1 ou UTF-8. Quando uma codificação não é especificada, o navegador pode escolher uma codificação diferente, tentando adivinhar por eliminação qual codificação está realmente sendo usada pela página da web. Isso pode fazer com que o navegador da web trate certas sequências como especiais, abrindo o cliente para ataques XSS

sutis. Consulte a CWE-116 para obter mais informações sobre mitigações relacionadas à codificação/escape.

Para ajudar a mitigar os ataques XSS contra cookie de sessão do usuário, defina o cookie de sessão como HttpOnly. Em navegadores que suportam o recurso HttpOnly (como versões mais recentes do Internet Explorer e Firefox), esse atributo pode impedir que o cookie de sessão do usuário seja acessível a scripts malintencionados do lado do cliente que usam document.cookie. Esta não é uma solução completa, já que HttpOnly não é compatível com todos os navegadores. Mais importante ainda, XMLHTTPRequest e outras poderosas tecnologias de navegadores fornecem acesso de leitura a cabeçalhos HTTP, incluindo o cabeçalho Set-Cookie no qual o sinalizador HttpOnly é definido.

Presuma que toda a entrada de dados é maliciosa. Use uma estratégia de validação de entrada "aceita como boa", ou seja, use uma lista de permissões de entradas aceitáveis que estejam estritamente em conformidade com as especificações. Rejeite quaisquer entradas que não estejam estritamente de acordo com as especificações ou transforme-as em algo que esteja. Não confie exclusivamente na procura de entradas maliciosas ou malformadas (ou seja, não confie em uma lista de negação). No entanto, as listas de negação podem ser úteis para detectar ataques em potencial ou determinar quais entradas estão tão malformadas que devem ser rejeitadas imediatamente.

Ao executar a validação de entradas de dados, considere todas as propriedades potencialmente relevantes, incluindo comprimento, tipo de entrada, a gama completa de valores aceitáveis, entradas ausentes ou extras, sintaxe, consistência entre campos relacionados e conformidade com as regras de negócios. Como um exemplo de lógica de regra de negócios, "barco" pode ser sintaticamente válido porque contém apenas caracteres alfanuméricos, mas não é válido se você estiver esperando cores como "vermelho" ou "azul".

Certifique-se de realizar a validação de entrada em interfaces bem definidas dentro do aplicativo. Isso ajudará a proteger o aplicativo, mesmo se um componente for reutilizado ou movido para outro lugar.

#### Risk=Informativo, Confidence=Médio (1)

https://i8z10k6wma.execute-api.us-east-1.amazonaws.com (1)

#### **User Agent Fuzzer (1)**

- ▼ POST https://i8z10k6wma.execute-api.us-east-
- 1.amazonaws.com/lanchonete/customers/delete

#### **Alert tags**

### Alert description

Check for differences in response based on fuzzed User Agent (eg. mobile sites, access as a Search Engine Crawler). Compares the response statuscode and the hashcode of the response body with the original response.

#### Request

▼ Request line and header section (313) bytes)

POST https://i8z10k6wma.executeapi.us-east-1.amazonaws.com/lanchonete/customers /delete HTTP/1.1 host: i8z10k6wma.execute-api.useast-1.amazonaws.com user-agent: Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 6.1) pragma: no-cache cache-control: no-cache

content-type: application/json

content-length: 28

#### ▼ Request body (28 bytes)

```
{
    "cpf": "12345678913"
}
```

#### Response

▼ Status line and header section (183 bytes)

HTTP/1.1 404 Not Found

Date: Thu, 08 Aug 2024 13:46:56 GMT

Content-Type: text/plain;

charset=utf-8

Content-Length: 45

Connection: keep-alive

Apigw-Requestid: cMTcngfxIAMEVsg=

▼ Response body (45 bytes)

{"error": "User not found or already deleted"}

#### **Parameter**

Cabeçalho do Agente de Usuário

Attack

Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 6.1)

#### Risk=Informativo, Confidence=Baixo (1)

https://i8z10k6wma.execute-api.us-east-1.amazonaws.com (1)

#### Re-examine Cache-control Directives (1)

- ▼ POST https://i8z10k6wma.execute-api.us-east-
- 1.amazonaws.com/lanchonete/auth

#### Alert tags

- WSTG-v42-ATHN-06
- CWE-525

#### **Alert** description

The cache-control header has not been set properly or is missing, allowing the browser and proxies to cache content. For static assets like css, js, or image files this might be intended, however, the resources should be reviewed to ensure that no sensitive content will be cached.

#### Request

▼ Request line and header section (331 bytes)

POST https://i8z10k6wma.executeapi.us-east-1.amazonaws.com/lanchonete/auth

HTTP/1.1

1.amazonaws.com

user-agent: Mozilla/5.0 (Windows NT

host: i8z10k6wma.execute-api.us-east-

10.0; Win64; x64; rv:125.0) Gecko/20100101 Firefox/125.0

pragma: no-cache

cache-control: no-cache

content-type: application/json

content-length: 28

```
▼ Request body (28 bytes)
```

```
{
    "cpf": "12345678913"
}
```

#### Response

▼ Status line and header section (177 bytes)

```
HTTP/1.1 200 OK
```

Date: Thu, 08 Aug 2024 13:43:15 GMT

Content-Type: text/plain;

charset=utf-8

Content-Length: 485
Connection: keep-alive

Apigw-Requestid: cMS5vgiUIAMEVVA=

▼ Response body (485 bytes)

```
{
    "access token":
```

"eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9
.eyJkYXRhIjp7Il9pZCI6IjY2YjRjYTA4NTY3
M2Q0MmMzNjQxMjY1YSIsIm5hbWUiOiJNb25hI
EJydWVuIiwiZW1haWwiOiJMYXVyZWw1MUBnbW
FpbC5jb20iLCJjcGYiOiIxMjM0NTY30DkxMyI
sInBob25lIjoiNjAxLTI4OS05NjI5IiwiYWRk
cmVzcyI6IjIzNCBadWxhdWYgUmlkZ2VzIiwiY
3JlYXRlZEF0IjoiMjAyNC0wOC0wOFQxMzozNz
oxMi43MjZaIiwidXBkYXRlZEF0IjoiMjAyNC0
wOC0wOFQxMzozNzoxMi43MjZaIiwiX192Ijow
fSwiaWF0IjoxNzIzMTI0NTk1LCJleHAiOjE3M
jMxMjgxOTV9.OkmooDT8790iEmuk3lKsWAXHj
FCt9NRx5RbKdpcNojI"
}

**Parameter** 

cache-control



For secure content, ensure the cachecontrol HTTP header is set with "nocache, no-store, must-revalidate". If an asset should be cached consider setting the directives "public, max-age, immutable".

### **Appendix**

#### **Alert types**

This section contains additional information on the types of alerts in the report.

#### **Content Security Policy (CSP) Header Not Set**

Source

raised by a passive scanner (<u>Content Security</u> <u>Policy (CSP) Header Not Set</u>)

**CWE ID** 

693

**WASC ID** 

15

Reference

 https://developer.mozilla.org/en-US/docs/Web/Security/CSP/Introducing\_Conte
 nt\_Security\_Policy

https://cheatsheetseries.owasp.org/cheatsheets/ s/Content Security Policy Cheat Sheet.html

- https://www.w3.org/TR/CSP/
- https://w3c.github.io/webappsec-csp/
- https://web.dev/articles/csp



https://caniuse.com/#feat=contentsecuritypoli
cy

https://content-security-policy.com/

#### Erro de Formato de String

Source raised by an active scanner (<u>Erro de Formato</u>

de String)

**CWE ID** <u>134</u>

WASC ID 6

Reference • <a href="https://owasp.org/www-">https://owasp.org/www-</a>

community/attacks/Format\_string\_attack

#### **Missing Anti-clickjacking Header**

**Source** raised by a passive scanner (<u>Anti-clickjacking</u>

<u>Header</u>)

**CWE ID** 1021

WASC ID 15

Reference <u>https://developer.mozilla.org/en-</u>

US/docs/Web/HTTP/Headers/X-Frame-Options

#### Fraqueza de script entre sites (persistente na resposta JSON)

**Source** raised by an active scanner (<u>Cross Site</u>

Scripting (Persistente))

**CWE ID** <u>79</u>

WASC ID 8



https://owasp.org/wwwcommunity/attacks/xss/

https://cwe.mitre.org/data/definitions/79.html

## O servidor vaza informações por meio dos campos de cabeçalho de resposta HTTP "X-Powered-By"

Source

raised by a passive scanner (<u>O servidor vaza</u> <u>informações por meio dos campos de</u> <u>cabeçalho de resposta HTTP "X-Powered-By"</u>)

**CWE ID** 

200

**WASC ID** 

13

Reference

- https://owasp.org/www-project-web-security-testing-guide/v42/4 Web Application Security Testing/01-Information Gathering/08-Fingerprint Web Application Framework
- https://www.troyhunt.com/2012/02/shhh-dont-let-your-response-headers.html

### Server Leaks Version Information via "Server" HTTP Response Header Field

**Source** 

raised by a passive scanner (<u>HTTP Server</u> Response Header)

**CWE ID** 

200

**WASC ID** 

13

Reference

https://httpd.apache.org/docs/current/mod/core.html#servertokens



- https://learn.microsoft.com/en-us/previousversions/msp-n-p/ff648552(v=pandp.10)
- https://www.troyhunt.com/shhh-dont-letyour-response-headers/

#### **Strict-Transport-Security Header Not Set**

t.html

raised by a passive scanner (<u>Strict-Transport-Security Header</u>)

**CWE ID** <u>319</u>

WASC ID 15

Reference

https://cheatsheetseries.owasp.org/cheatsheet
s/HTTP Strict Transport Security Cheat Shee

https://owasp.org/wwwcommunity/Security Headers

https://en.wikipedia.org/wiki/HTTP\_Strict\_Transport\_Security

https://caniuse.com/stricttransportsecurity

https://datatracker.ietf.org/doc/html/rfc6797

#### X-Content-Type-Options Header Missing

raised by a passive scanner (X-Content-Type-

**Options Header Missing**)

**CWE ID** 693

WASC ID 15



 https://learn.microsoft.com/en-us/previousversions/windows/internet-explorer/iedeveloper/compatibility/gg622941(v=vs.85)

https://owasp.org/wwwcommunity/Security\_Headers

#### **Re-examine Cache-control Directives**

raised by a passive scanner (<u>Re-examine</u>

<u>Cache-control Directives</u>)

**CWE ID** 525

WASC ID 13

Reference

https://cheatsheetseries.owasp.org/cheatsheet s/Session Management Cheat Sheet.html#we b-content-caching

- https://developer.mozilla.org/en US/docs/Web/HTTP/Headers/Cache-Control
- https://grayduck.mn/2021/09/13/cachecontrol-recommendations/

#### **User Agent Fuzzer**

raised by an active scanner (<u>User Agent Fuzzer</u>)

Reference <a href="https://owasp.org/wstg">https://owasp.org/wstg</a>