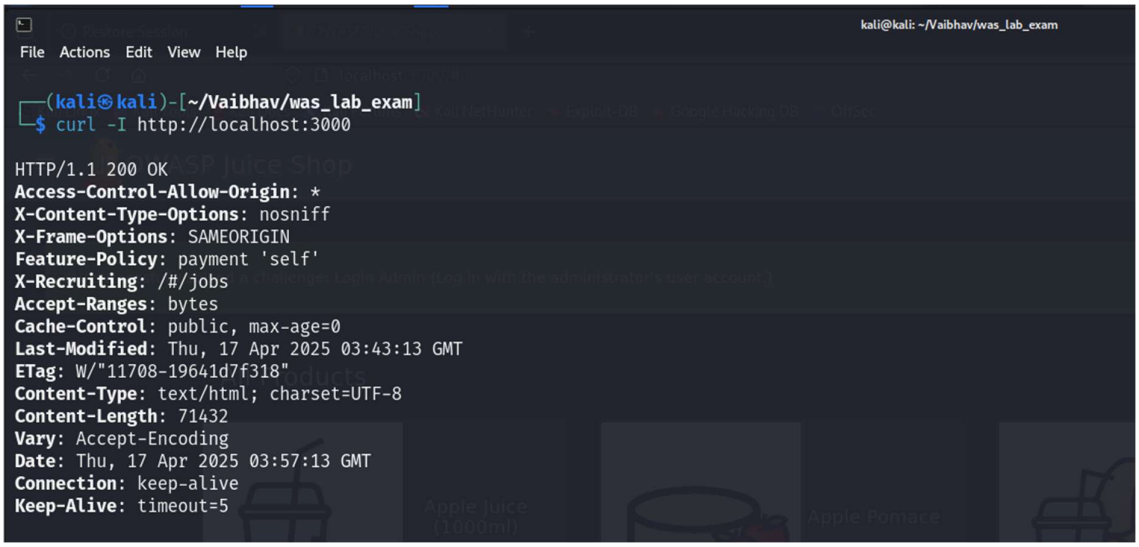
WAS LAB INTERNAL

1. Any application you can work on , 5 information gathering on that application

<u>1)Banner Grabbing:</u>

Command: curl -I http://localhost:3000

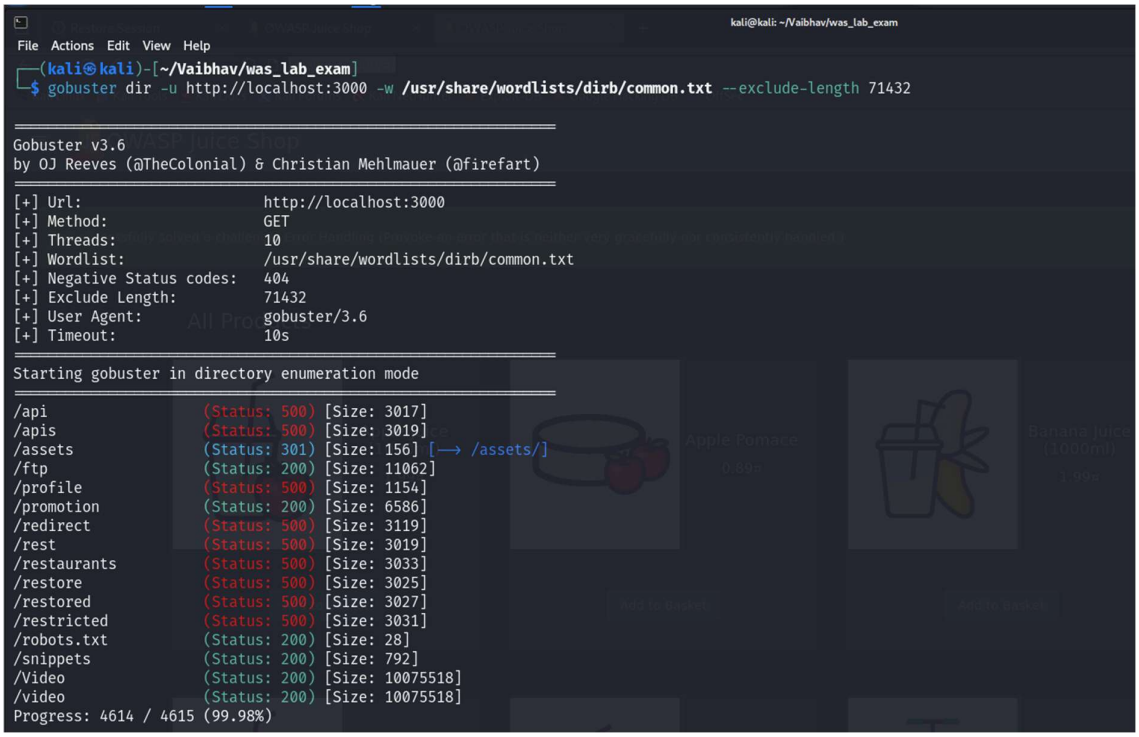
To learn what software and version the server is using



2) **Endpoint Discovery:**

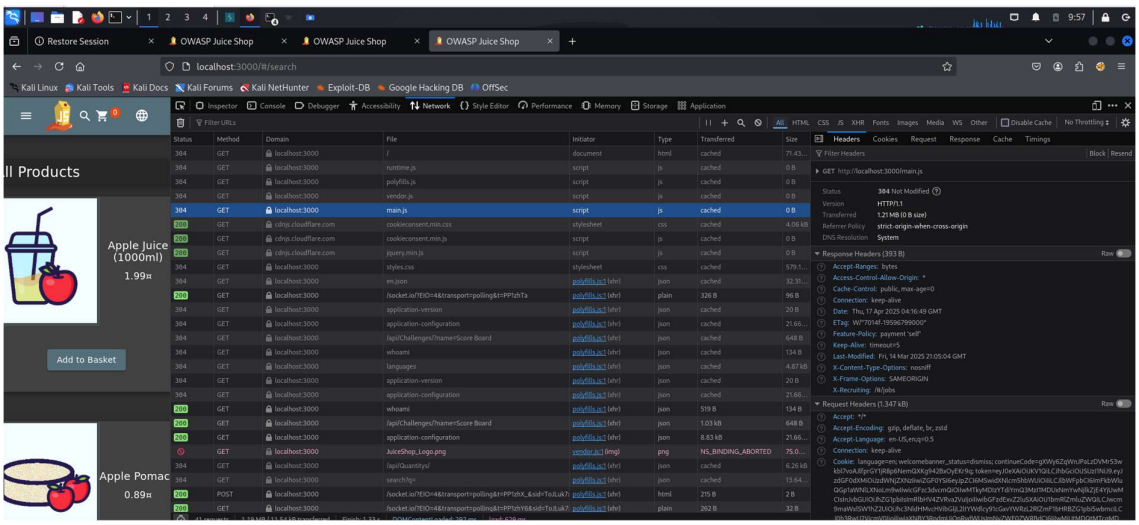
Command: gobuster dir -u http://localhost:3000 -w /usr/share/wordlists/dirb/common.txt --exclude-length 71432

To find hidden pages



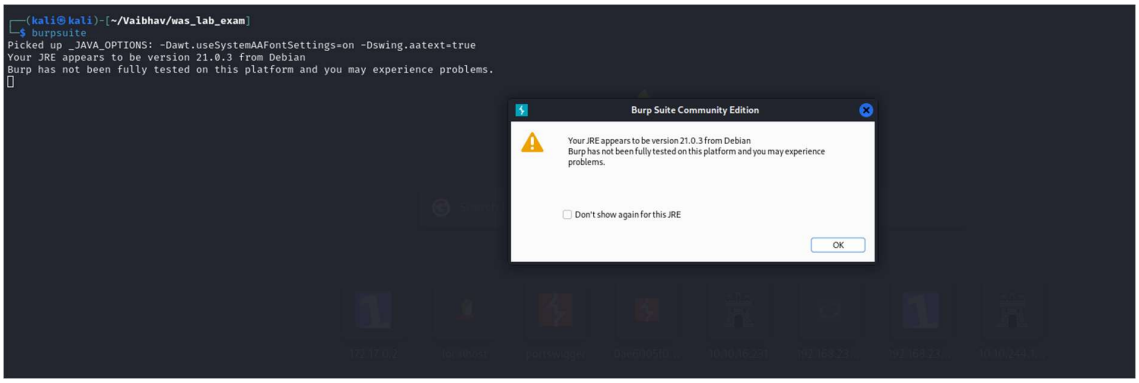
3) JavaScript File Analysis:

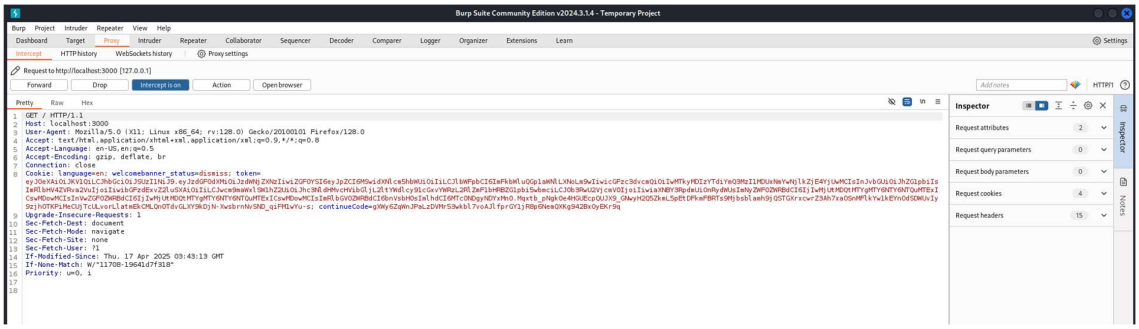
To find hidden API endpoints, token handling, logic



4) **Burp Suite :**

To analyse HTTP requests/responses in detail





5) Nmap Scanning :

Command: nmap -A -T5 -p 3000 localhost

To scan for open ports, services, and versions:

```
┌──(kali㉿kali)-[~/Vaibhav/was_lab_exam]
└─$ nmap -A -T5 -p 3000 localhost
Starting Nmap 7.94SVN ( https://nmap.org ) at 2025-04-17 09:52 IST
Nmap scan report for localhost (127.0.0.1)
Host is up (0.000070s latency).
Other addresses for localhost (not scanned): ::1

PORT     STATE SERVICE VERSION
3000/tcp open  ppp?
| fingerprint-strings:
|   GetRequest:
|     HTTP/1.1 200 OK
|     Access-Control-Allow-Origin: *
|     X-Content-Type-Options: nosniff
|     X-Frame-Options: SAMEORIGIN
|     Feature-Policy: payment 'self'
|     X-Recruiting: /#/jobs
|     Accept-Ranges: bytes
|     Cache-Control: public, max-age=0
|     Last-Modified: Thu, 17 Apr 2025 03:43:13 GMT
|     ETag: W/"11708-19641d7f318"
|     Content-Type: text/html; charset=UTF-8
|     Content-Length: 71432
|     Vary: Accept-Encoding
|     Date: Thu, 17 Apr 2025 04:22:24 GMT
|     Connection: close
|     <!--
|     Copyright (c) 2014-2025 Bjoern Kimminich & the OWASP Juice Shop contributors.
|     SPDX-License-Identifier: MIT
|     <!doctype html>
|     <html lang="en" data-critters-container>
|     <head>
|     <meta charset="utf-8">
|     <title>OWASP Juice Shop</title>
```

```
kali@kali: ~/Vaibhav/was_lab_exam
File  Actions  Edit  View  Help
|     <!--
|     Copyright (c) 2014-2025 Bjoern Kimminich & the OWASP Juice Shop contributors.
|     SPDX-License-Identifier: MIT
|     <!doctype html>
|     <html lang="en" data-critters-container>
|     <head>
|     <meta charset="utf-8">
|     <title>OWASP Juice Shop</title>
|     <meta name="description" content="Probably the most modern and sophisticated insecure web application">
|     <meta name="viewport" content="width=device-width, initial-scale=1">
|     <link id="favicon" rel="icon"
|   HTTPOptions, RTSPRequest:
|     HTTP/1.1 204 No Content
|     Access-Control-Allow-Origin: *
|     Access-Control-Allow-Methods: GET,HEAD,PUT,PATCH,POST,DELETE
|     Vary: Access-Control-Request-Headers
|     Content-Length: 0
|     Date: Thu, 17 Apr 2025 04:22:24 GMT
|     Connection: close
|   Help, NCP:
|     HTTP/1.1 400 Bad Request
|_    Connection: close
1 service unrecognized despite returning data. If you know the service/version, please submit the following fingerprint at https://nmap.org/cgi-bin/submit.cgi?new-service :
SF-Port3000-TCP:V=7.94SVN%I=7%D=4/17%Time=68008200%P=x86_64-pc-linux-gnu%r
SF:(GetRequest,101B9,"HTTP/1\.1\x20200\x20OK\r\nAccess-Control-Allow-Origi
SF:n:\x20\*\r\nX-Content-Type-Options:\x20nosniff\r\nX-Frame-Options:\x20S
SF:AMEORIGIN\r\nFeature-Policy:\x20payment\x20'self'\r\nX-Recruiting:\x20/
SF:#/jobs\r\nAccept-Ranges:\x20bytes\r\nCache-Control:\x20public,\x20max-a
SF:ge=0\r\nLast-Modified:\x20Thu,\x2017\x20Apr\x202025\x2003:43:13\x20GMT\
SF:r\nETag:\x20W/\"11708-19641d7f318\"\r\nContent-Type:\x20text/html;\x20c
SF:harset=UTF-8\r\nContent-Length:\x2071432\r\nVary:\x20Accept-Encoding\r\
SF:nDate:\x20Thu,\x2017\x20Apr\x202025\x2004:22:24\x20GMT\r\nConnection:\x
SF:20close\r\n\r\n<!--\n\x20\x20~\x20Copyright\x20\(c\)\x202014-2025\x20Bj
SF:oern\x20Kimminich\x206\x20the\x20OWASP\x20Juice\x20Shop\x20contributors
SF:\.\n\x20\x20~\x20SPDX-License-Identifier:\x20MIT\n\x20\x20-->\n\n<!doct
```

2. 5 web server vulnerabilities of that application

1. SQL Injection:

SQL Injection in Juice Shop enables attackers to control database queries by inserting malicious SQL statements into input fields, such as the login form, here I have used sqplmap for sql injection. This results in unauthorized access of the database.

2. Cross-Site Scripting (XSS):

With XSS in Juice Shop, a malicious attacker can inject malicious javaScript code into input fields like search bar, which is executed on other users browsers. This might steal sensitive data such as cookies or session tokens, or trick users into doing unintended things.

3. Broken Access Control:

Broken Access Control in Juice Shop allows users to bypass restrictions and access parts of the app meant to be restricted, such as admin panels or unauthorized user data.

4. Command Injection:

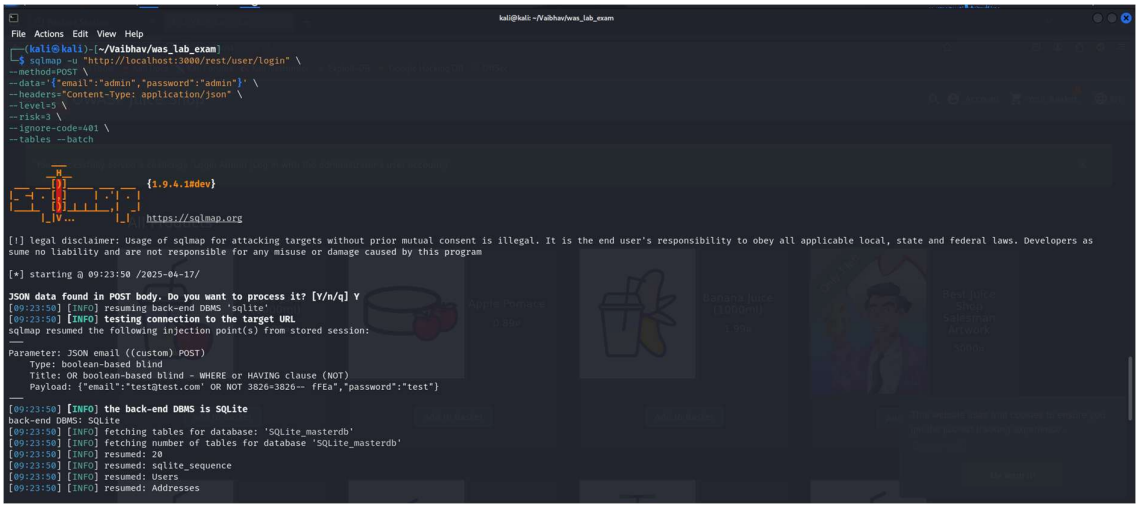
In Juice Shop, Command Injection vulnerabilities permit us to inject system commands in user input fields like I have used in complaint page, leading the server to execute unauthorized commands.

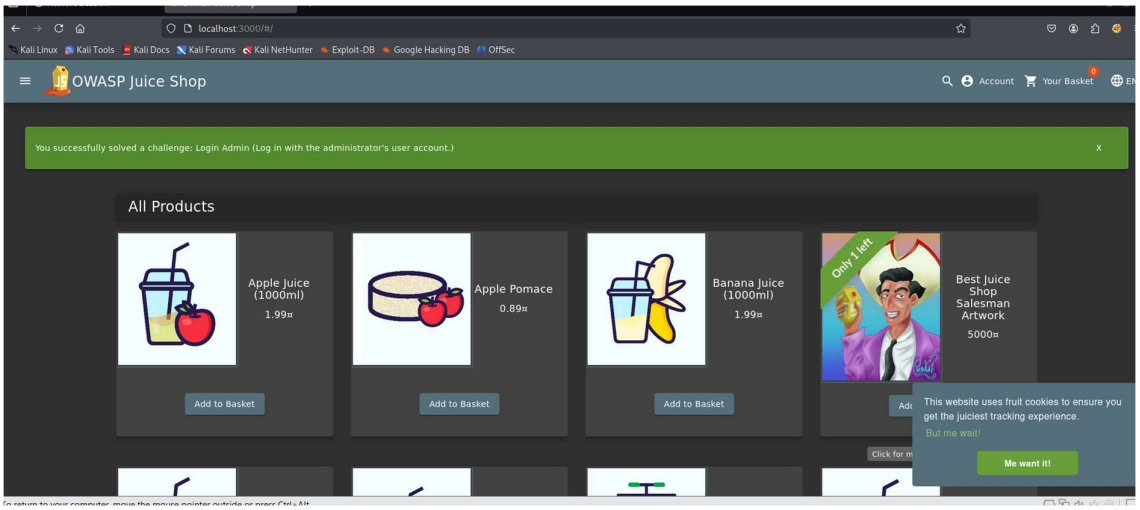
5. Directory Traversal:

Juice Shop also has a Directory Traversal flaw, which enables attackers to view files and directories beyond the desired folder by controlling file paths.Here I am able to access ftp page.

3. 5 exploitation or payloads, such as sql injection, clickJACKing, command injection

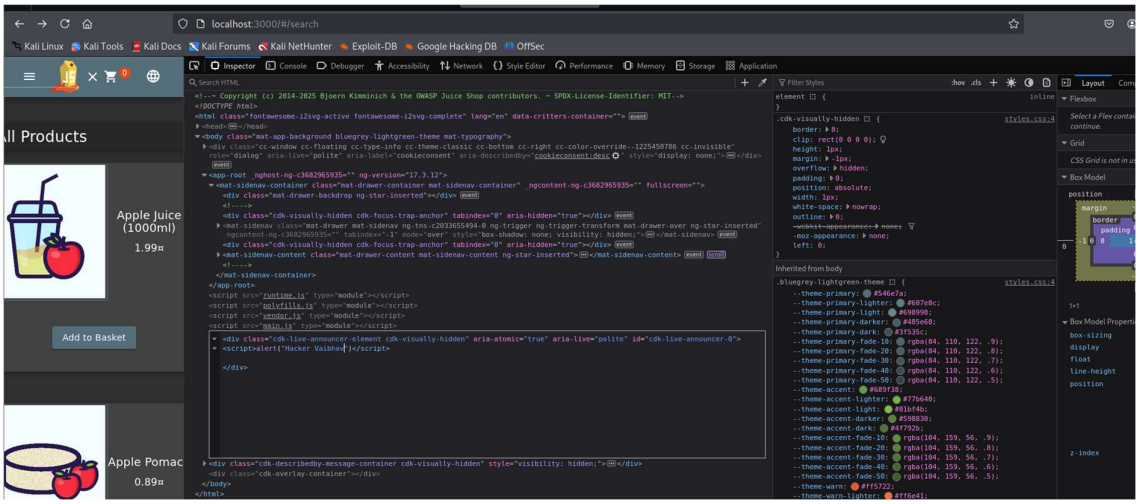
1)SQL Injection:

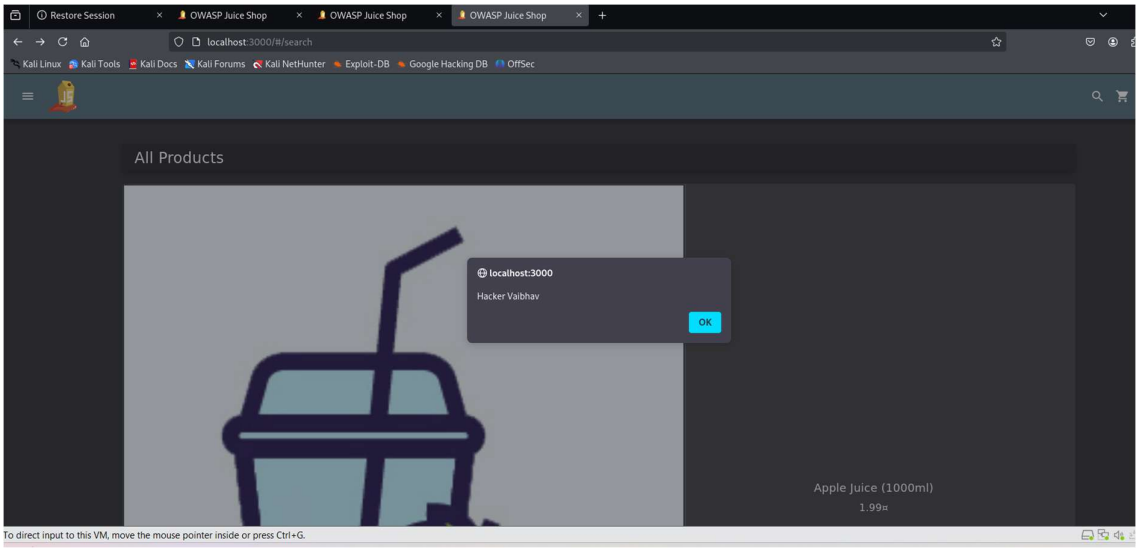




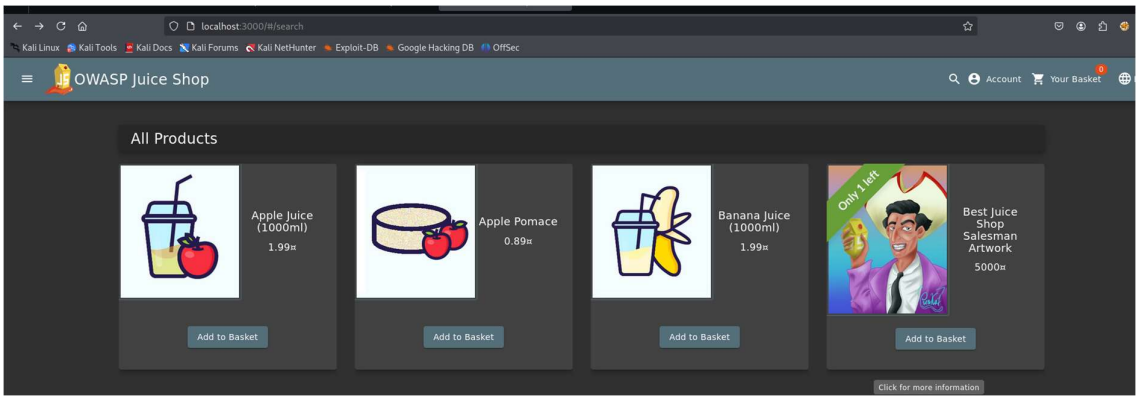
2)Cross-Site Scripting:

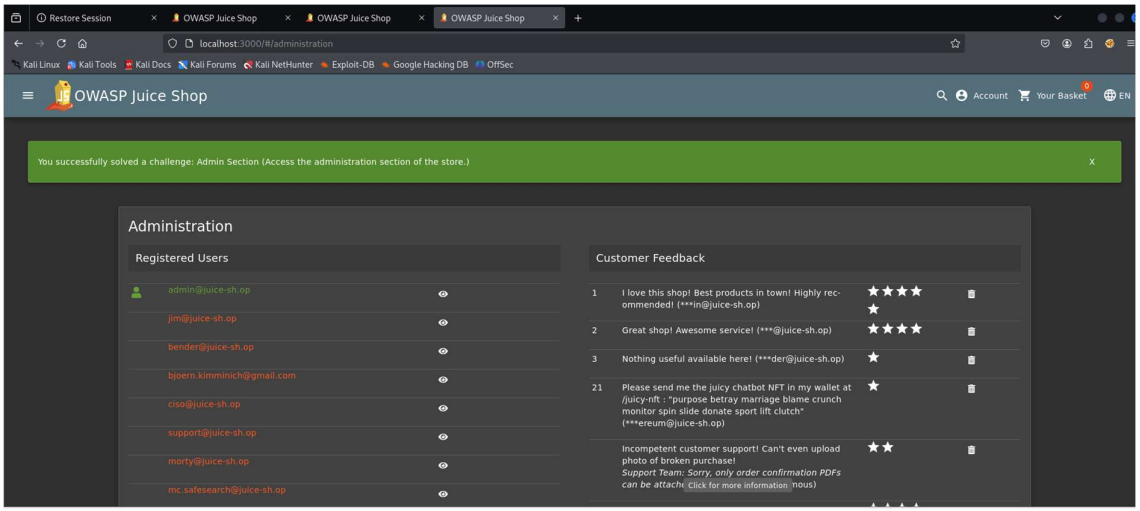
Payload : <img src="invalid_image" onerror="alert('Hacker Vaibhav')">



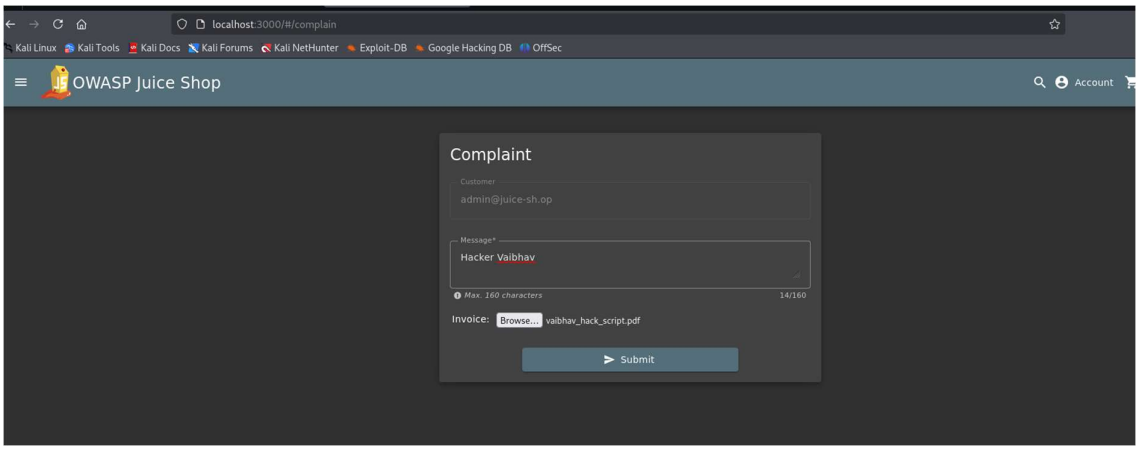


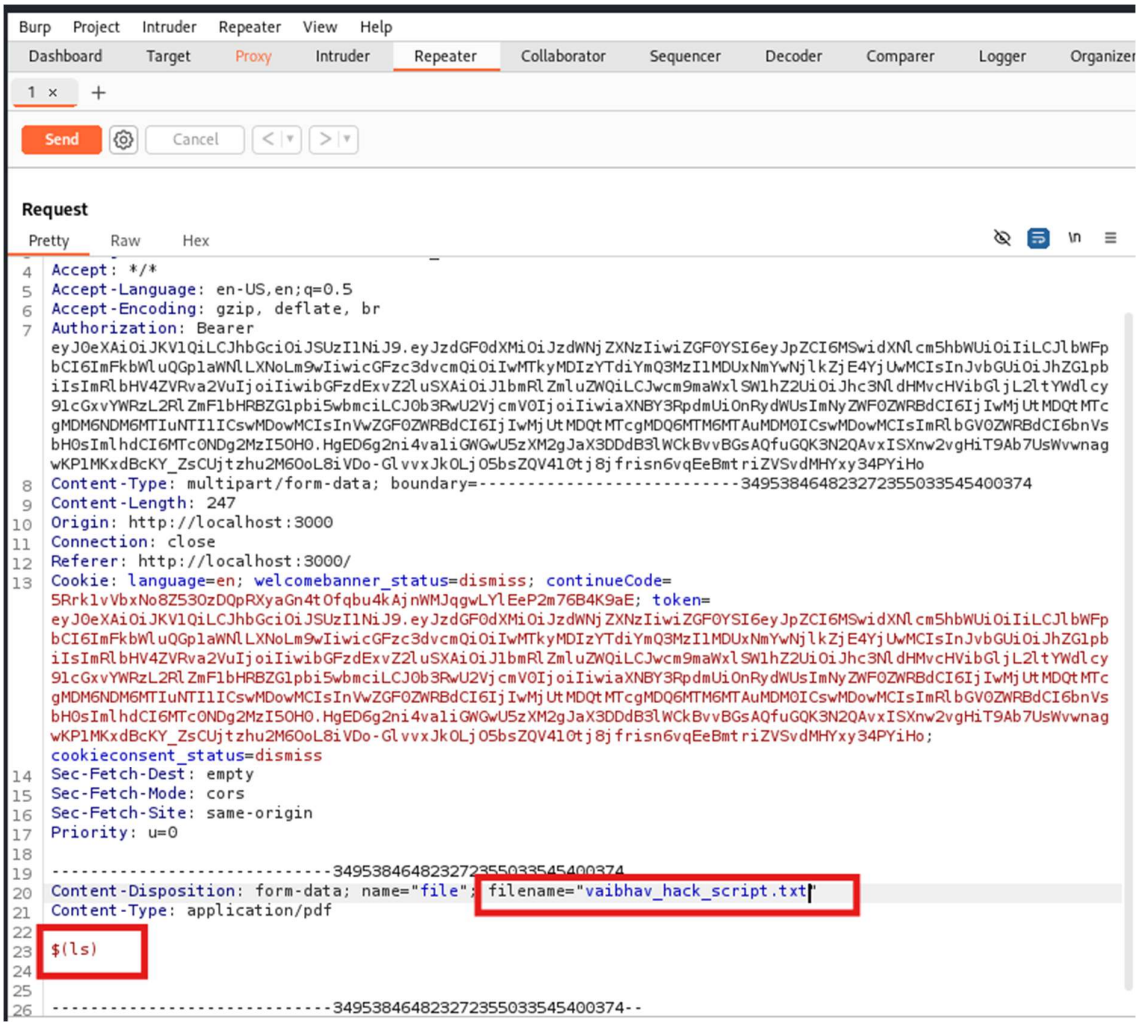
3)Broken access Control:





4)Command Injection:




Burp Project Intruder Repeater View Help
Dashboard Target Proxy Intruder Repeater Collaborator Sequencer Decoder Comparer Logger Organizer
1 ×
Send Cancel
Request
Pretty Raw Hex
Accept: */*
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate, br
Authorization: Bearer
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Content-Length: 247
Origin: http://localhost:3000
Connection: close
Referer: http://localhost:3000/
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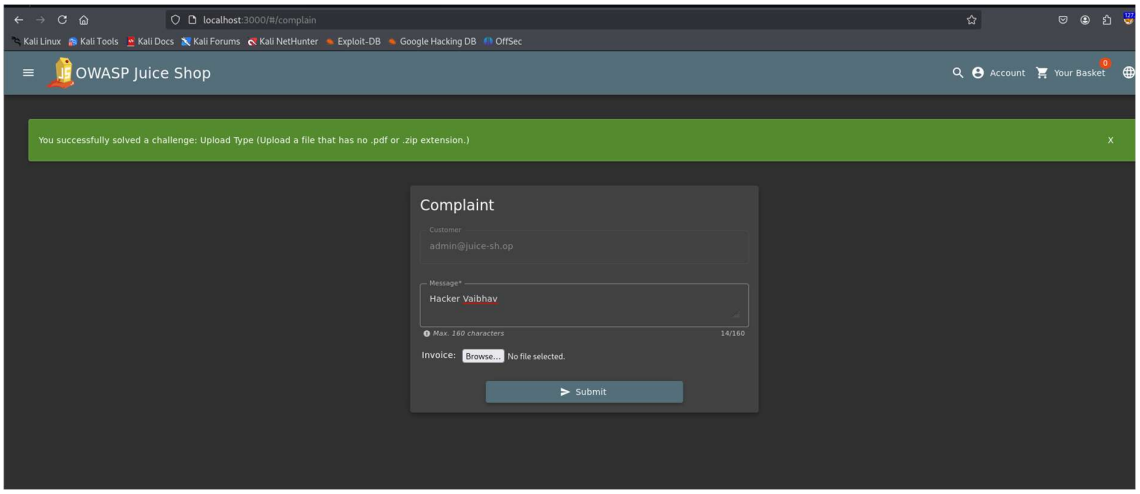
cookieconsent_status=dismiss
Sec-Fetch-Dest: empty
Sec-Fetch-Mode: cors
Sec-Fetch-Site: same-origin
Priority: u=0
----------------------------349538464823272355033545400374
Content-Disposition: form-data; name="file"; filename="vaibhav_hack_script.txt"
Content-Type: application/pdf
$(ls)
----------------------------349538464823272355033545400374--


localhost:3000/#/complain
Kali Linux Kali Tools Kali Docs Kali Forums Kali NetHunter Exploit-DB Google Hacking DB OffSec
OWASP Juice Shop
Account Your Basket
You successfully solved a challenge: Upload Type (Upload a file that has no .pdf or .zip extension.)
Complaint
Customer
admin@juice-sh.op
Message*
Hacker Vaibhav
Max. 160 characters
14/160
Invoice:
Browse...
No file selected.
Submit

5) Directory Traversal: