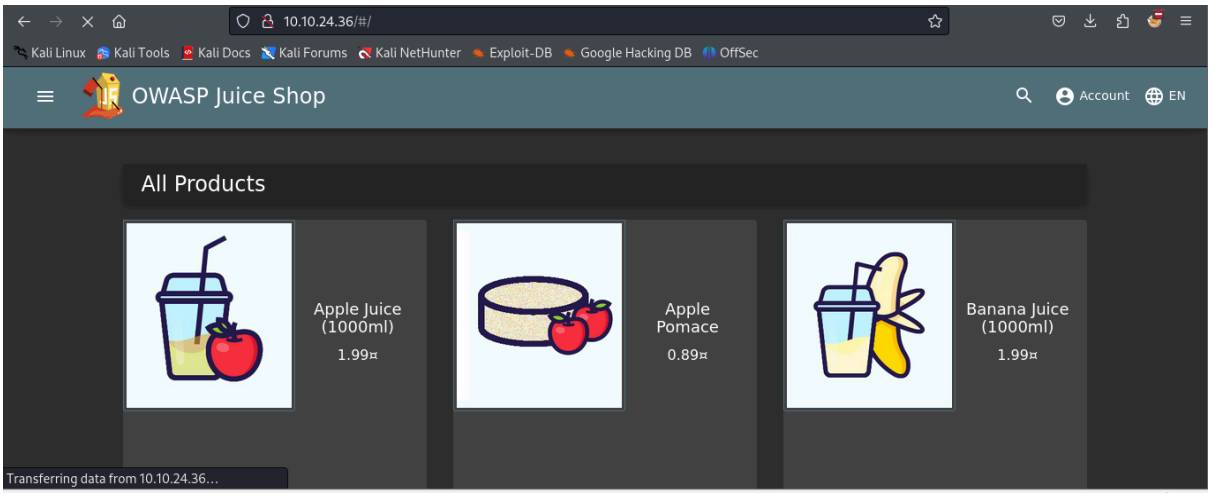
OWASP Juice Shop

This room uses the Juice Shop vulnerable web application to learn how to identify and exploit common web application vulnerabilities.

Task 1 Open for business!

➔ I accessed the machine by copying and pasting its IP into my browser



Task 2 Let's go on an adventure!

Question #1: What's the Administrator's email address?

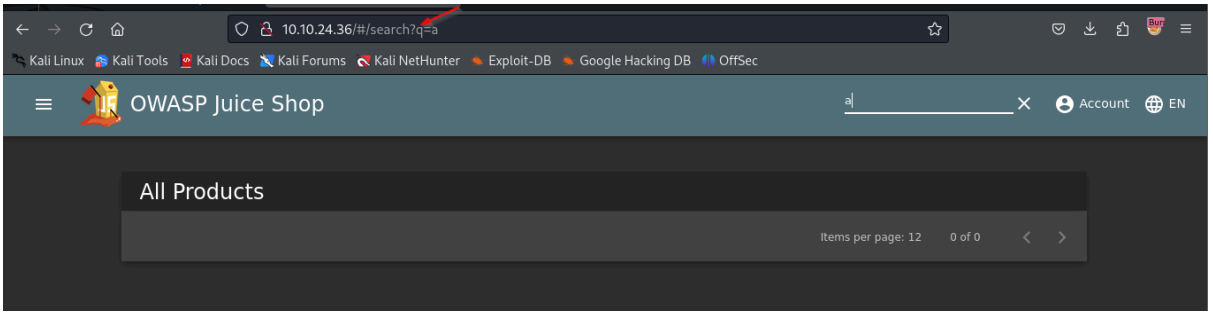
➔ I Found the email under reviews by clicking on the Apple Juice product.

Answer: **admin@juice-sh.op**

Question #2: What parameter is used for searching?

➔ I searched for "a" by clicking on the search button and observing the parameter in the URL.

Answer: q

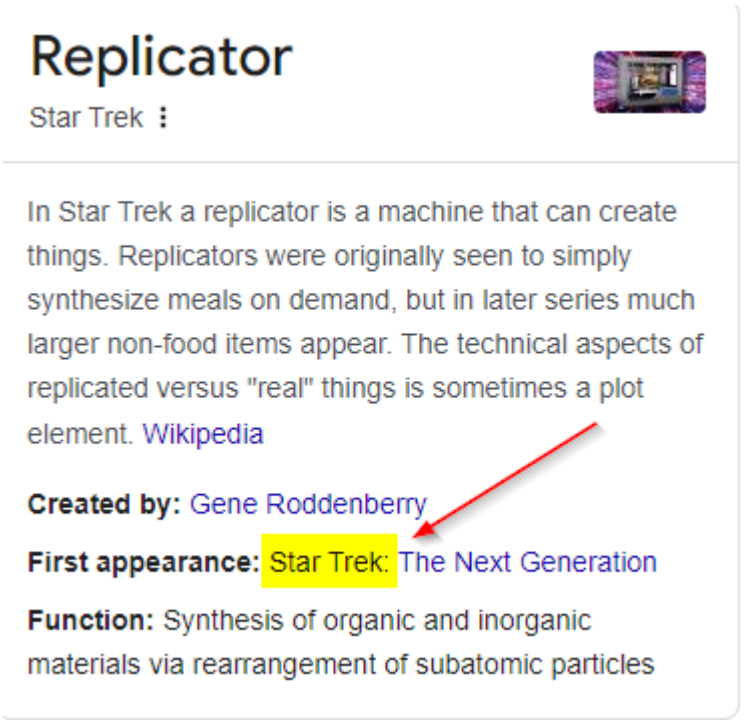


Question #3: What show does Jim reference in his review?

➔ I discovered that the review for the green smoothie product is from "replicator."

➔ I googled "replicator" and found its first appearance in a TV show called Star Trek.

Answer: **Star Trek**

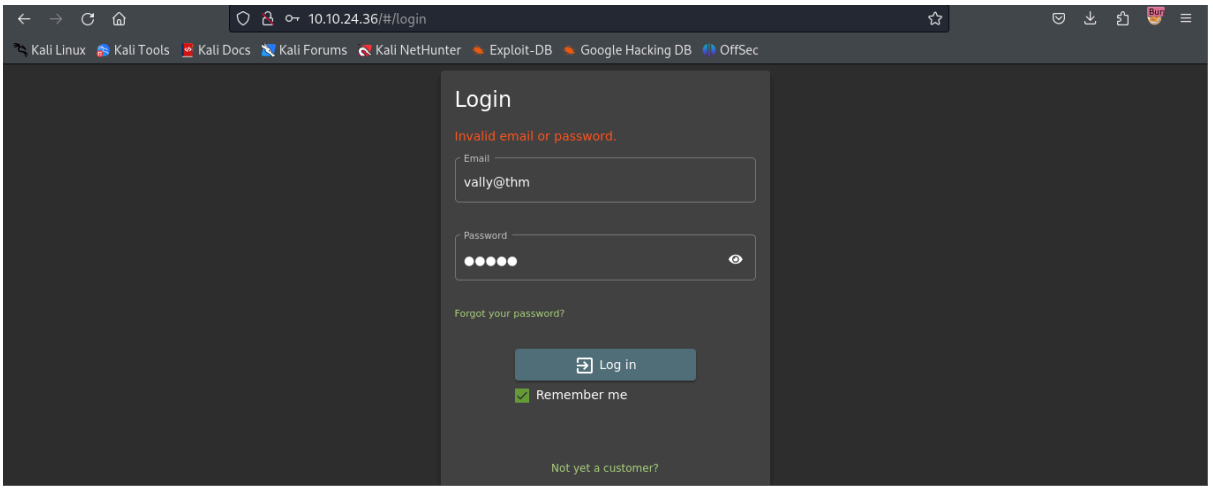


Task 3 Inject the juice

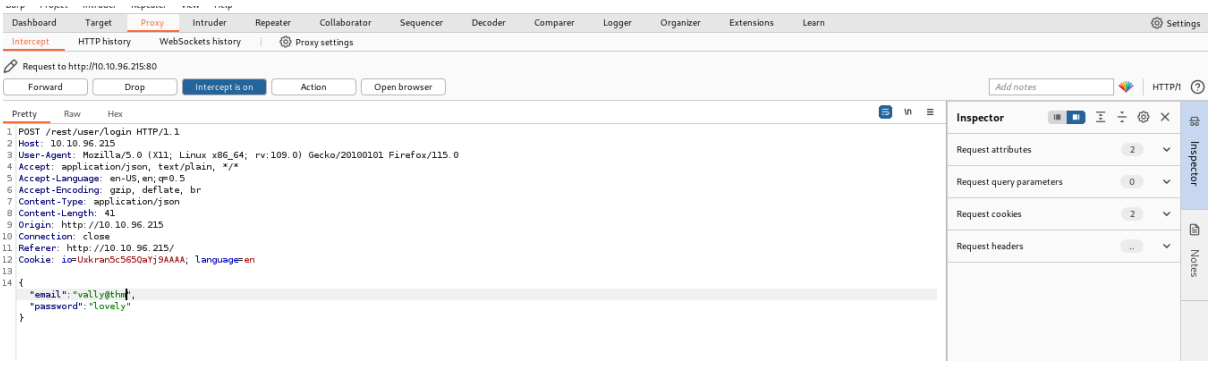
Question #1: Log into the administrator account!

Answer/Flag: 32a5e0f21372bcc1000a6088b93b458e41f0e02a

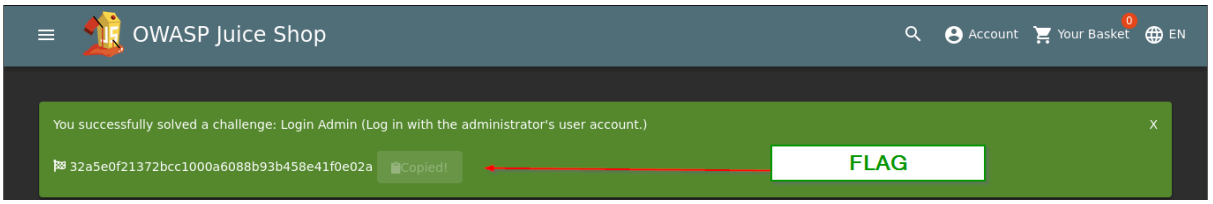
➔ I navigated to the login page and inputted arbitrary details while ensuring Burp Intercept mode was on before clicking login.



➔ With Intercept on, I clicked "Forward" until reaching the relevant POST request, going back to the webpage and found that I am successfully logged in as admin

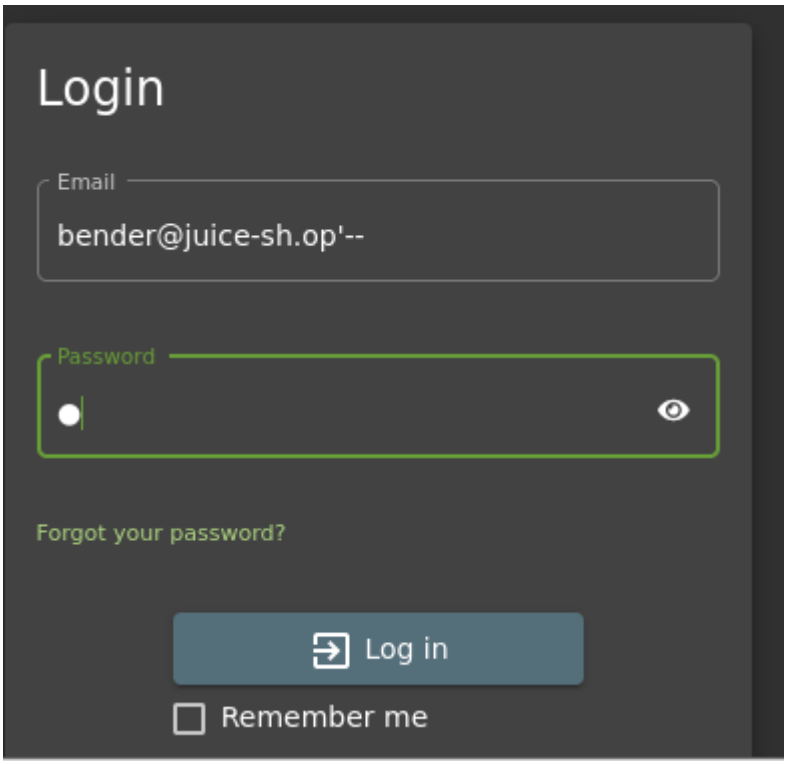


➔ I changed the email field from "vally@thm" to '" or 1=1--" and forwarded it to the server.



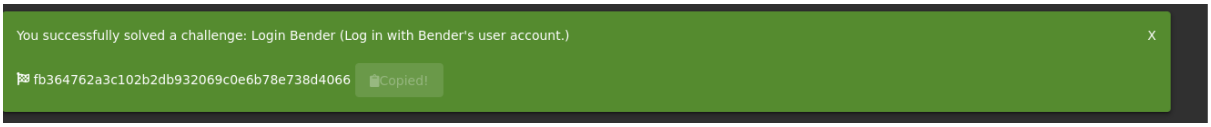
Question #2: Log into the Bender account!

➔ I logged into bender's account using the details provided using same technique



➔ Getting the flag

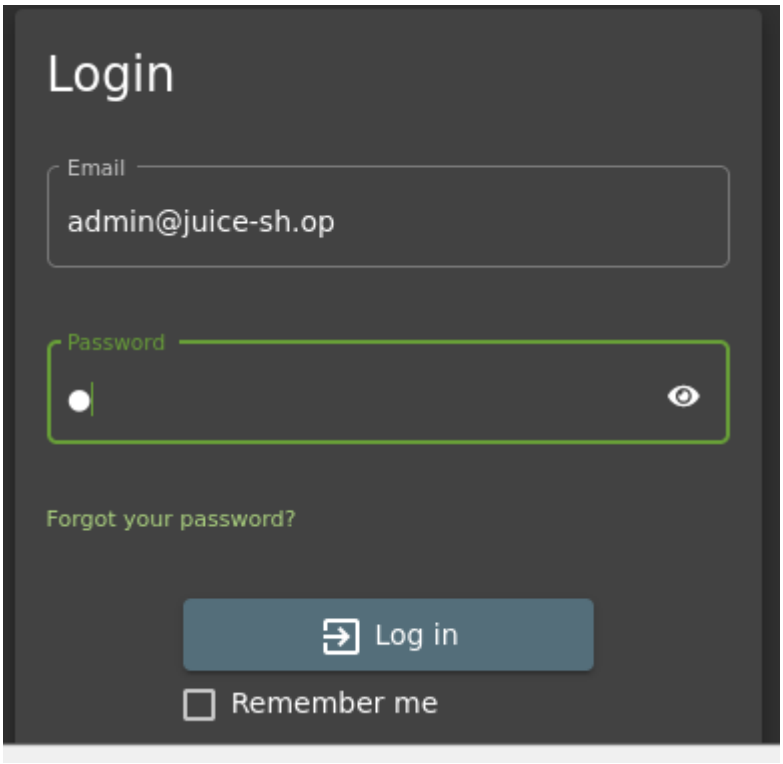
Answer/Flag: **fb364762a3c102b2db932069c0e6b78e738d4066**



Task 4 Who broke my lock?!

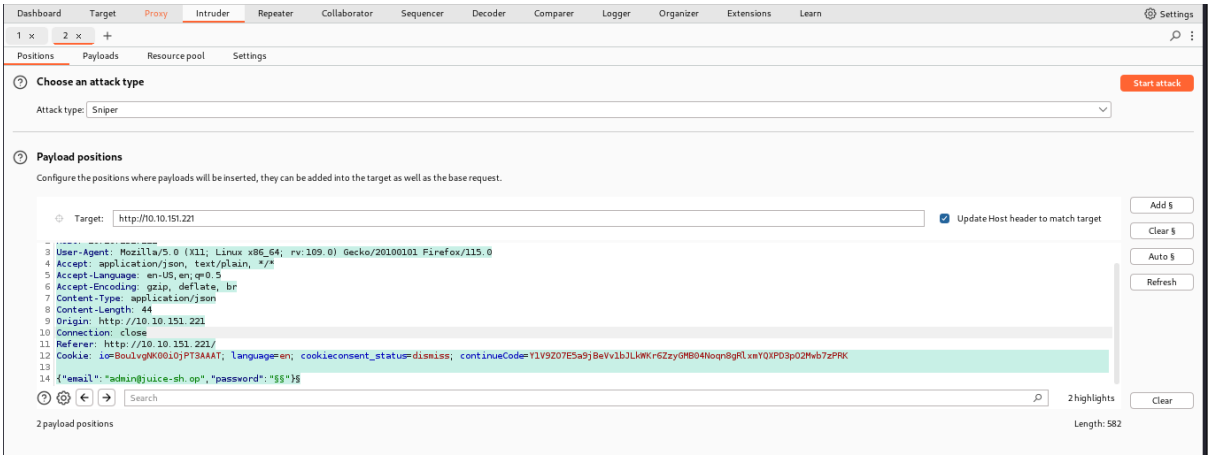
Question #1: Bruteforce the Administrator account's password!

➔ I entered the admin email on the login page with an arbitrary password.



➔ In Burp Suite, i navigated to the Intruder tab, selected "Clear" in Positions, then captured the login request and sent it to Intruder.

➔ In the password field, I placed two § inside the quotes.



➔ To set up the payload, i installed the The "seclists" package, a collection of multiple lists that includes

Password lists: Lists of common or frequently used passwords.

Usernames lists: Lists of common or default usernames.

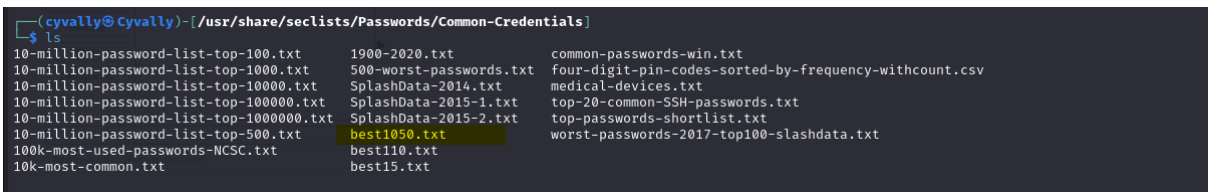
Fuzzing lists: Lists used for fuzzing attacks, which involve sending malformed or unexpected data to a target to discover vulnerabilities.

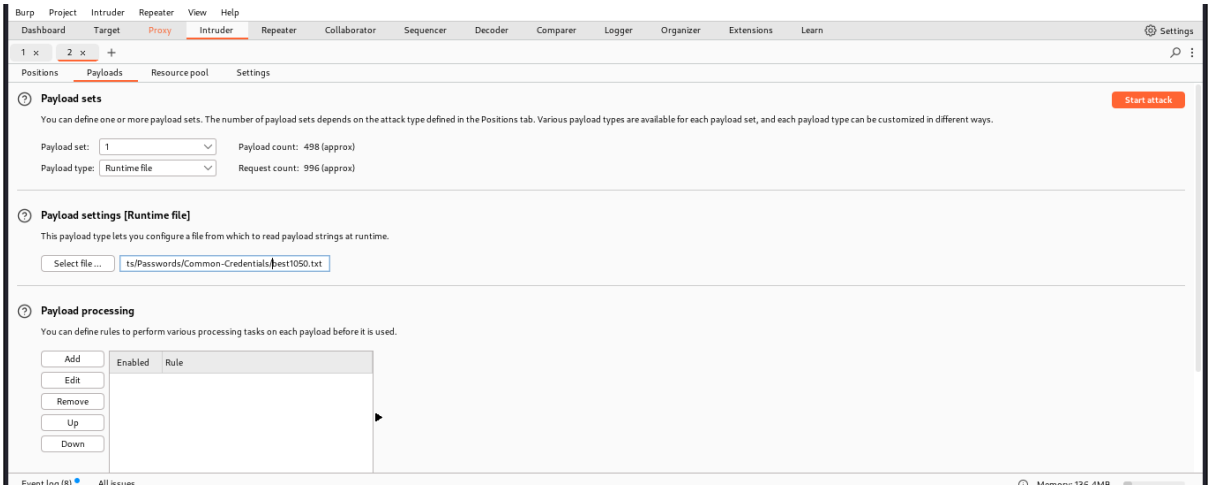
Payloads: Lists of payloads for various types of attacks, such as SQL injection, cross-site scripting (XSS), etc.

Command: apt-get install seclists

➔ I had to load the list from from /usr/share/seclists/Passwords/Common-Credentials/best1050.txt

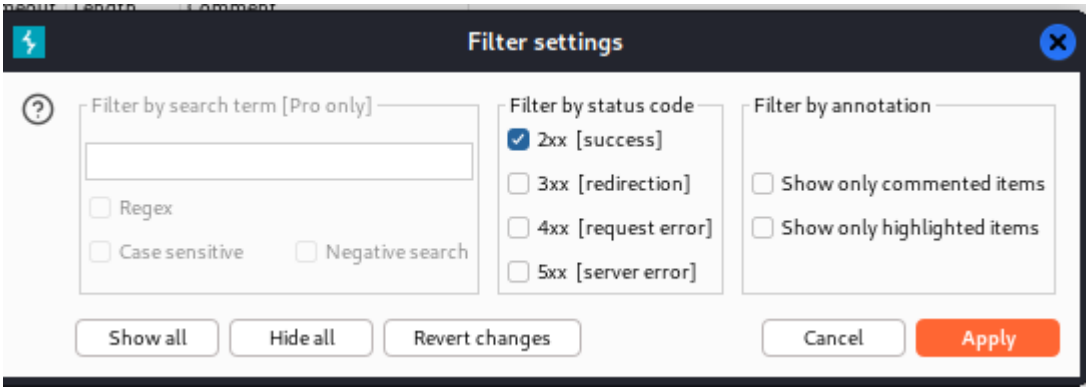
➔ Note: confirm the location of your seclist first

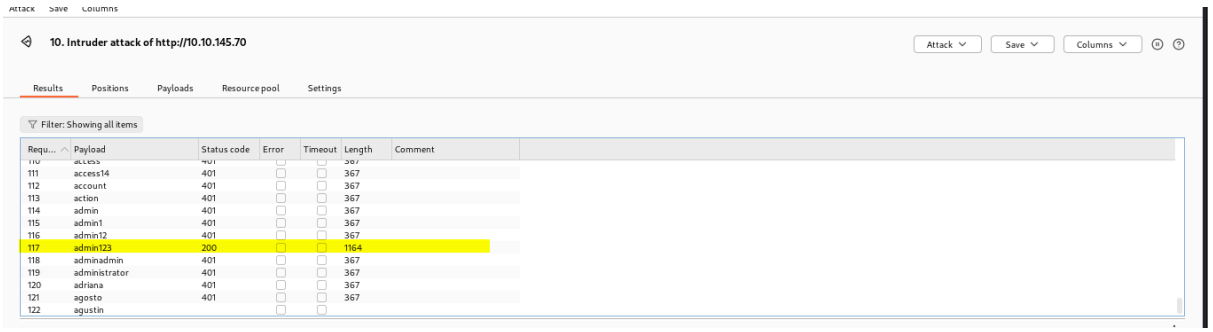




➔ Once the file is loaded into Burp, i started the attack and filtered for the request by status, leaving only successful result

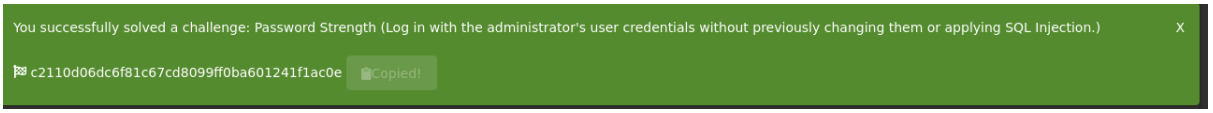
➔ Note: the brute force will be very slow if you are using community version





➔ I found the password and used it to login to the account and got my flag

Answer/Flag: 32a5e0f21372bcc1000a6088b93b458e41f0e02a



Question #2: Reset Jim's password!

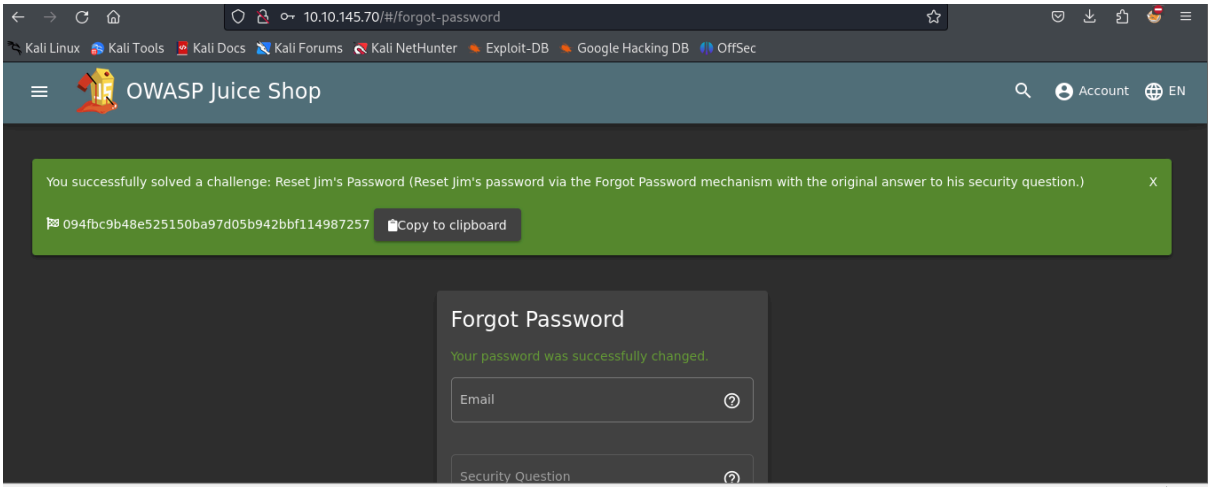
➔ I found jim's password in the green smoothie product which is: jim@juice-sh.op

➔ In Task 2, upon investigation, I discovered a potential link between Jim and Star Trek. By searching "Jim Star Trek," on google, I came across a Wikipedia page for James T. Kirk from Star Trek and found that Kirk has a brother whose middle name is Samuel.

Family	George Kirk (father) Winona Kirk (mother) George Samuel Kirk (brother) Tiberius Kirk (grandfather) James (maternal grandfather) Aurelan Kirk (sister-in-law) Peter Kirk (nephew) 2 other nephews

➔ Entering “Samuel” that into the Forgot Password page allows me to successfully change his password to anything

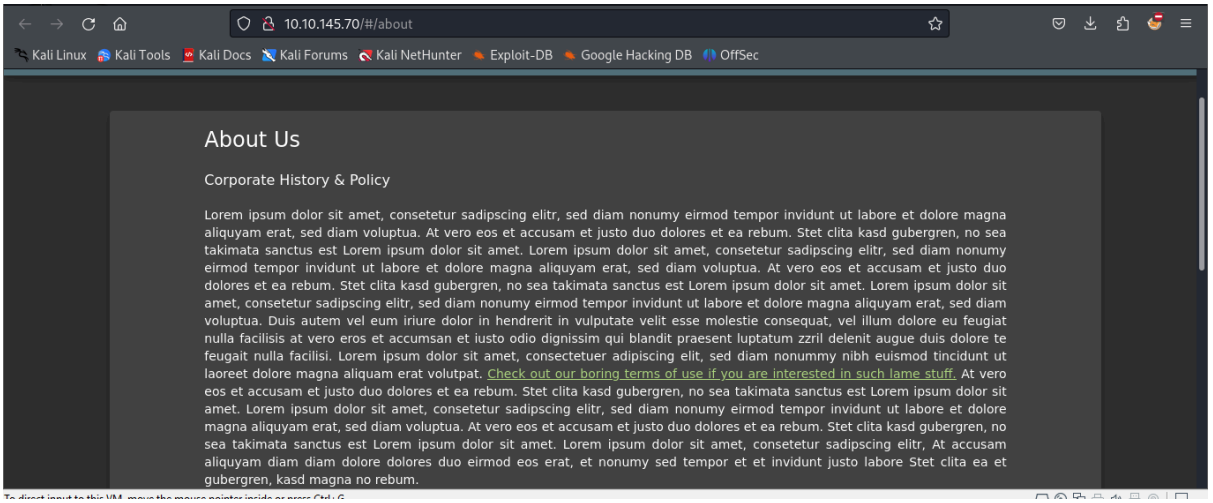
Answer/Flag: **094fbc9b48e525150ba97d05b942bbf114987257**



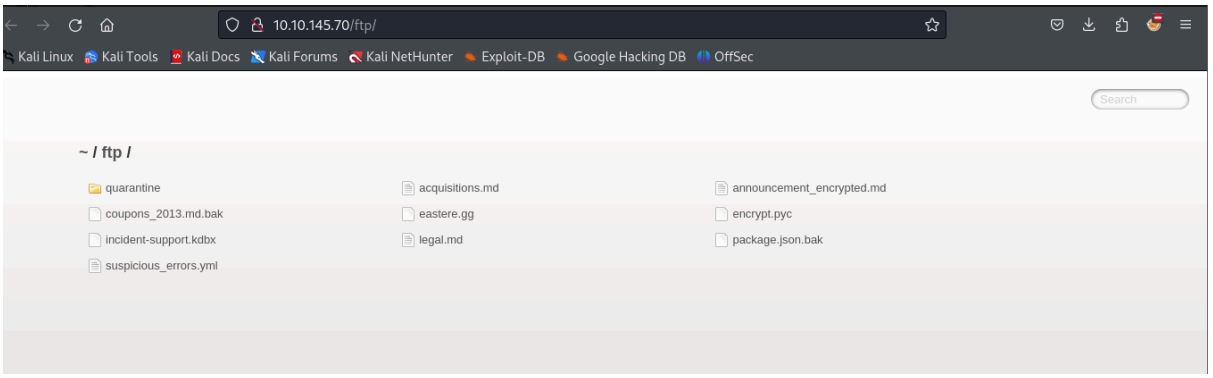
Task 5 AH! Don't look!

Question #1: Access the Confidential Document!

➔ I Navigated to the “About Us” page, and to the "Check out our boring terms of use if you are interested in such lame stuff " line.

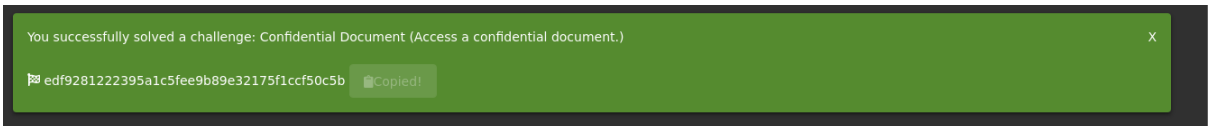


➔ I noticed a link leading to http://10.10.145.70/ftp/legal.md. Curious, I navigated to the /ftp/ directory and realized it was publicly exposed.



➔ I downloaded the acquisitions.md file and saved it.

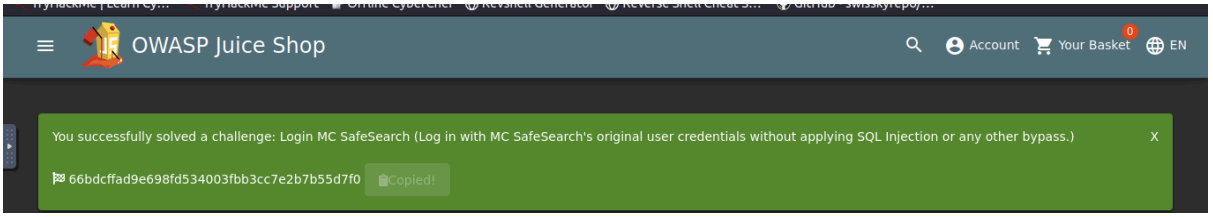
Answer/Flag: **edf9281222395a1c5fee9b89e32175f1ccf50c5b**



Question #2: Log into MC SafeSearch's account!

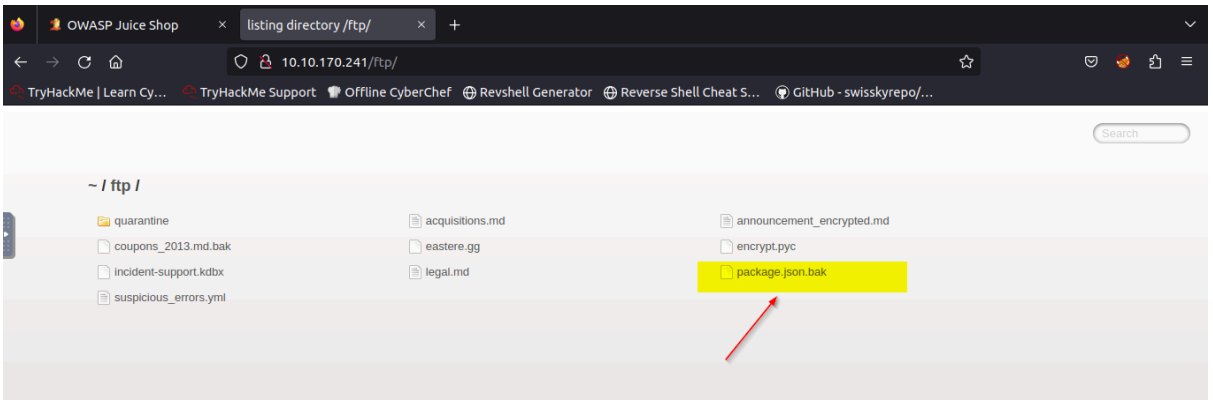
➔ After watching the video, I discovered that MC SafeSearched revealed his password as "Mr. Noodles," but with some vowels replaced by zeros, specifically the o's replaced by 0's. So, his password for the mc.safesearch@juice-sh.op account is "Mr. N00dles."

Answer/Flag: 66bdcffad9e698fd534003fbb3cc7e2b7b55d7f0

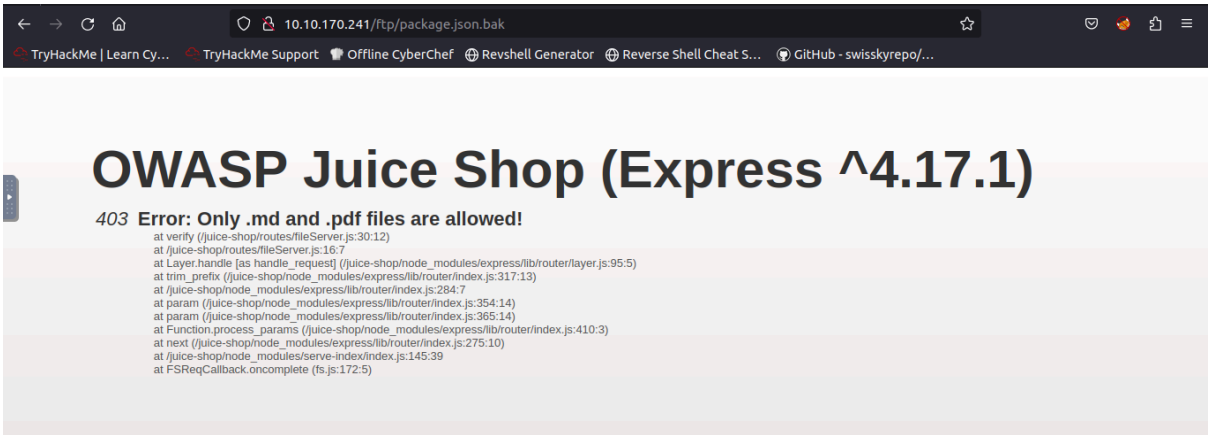


Question #3: Download the Backup file!

➔ Going to http://10.10.170.241/ftp/ folder, i try to download package.json.bak

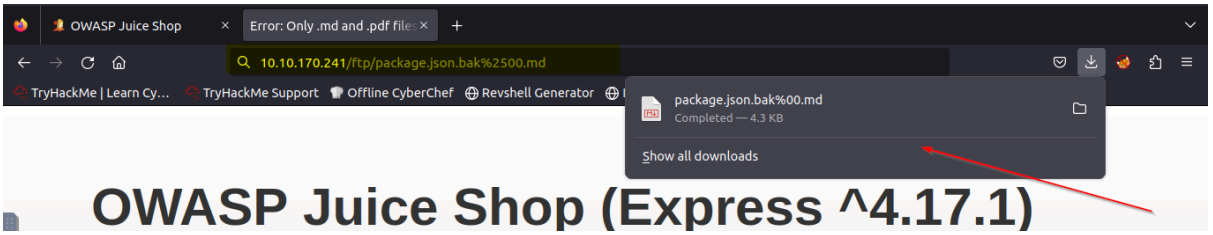


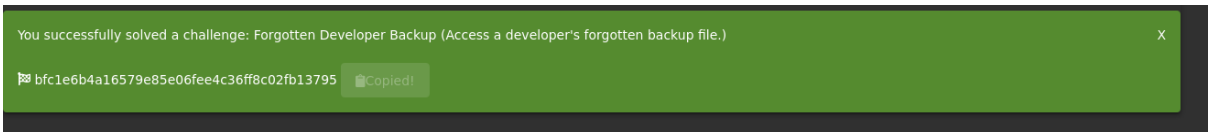
➔ When attempting to download a file, I encountered a 403 error message indicating that only files with the extensions .md and .pdf are permitted for download.



➔ To bypass this restriction, I utilized a character bypass technique known as "Poison Null Byte," represented as %00. By converting it to %2500 and appending .md to the end of the URL, I successfully bypassed the 403 error.

Answer/Flag: bfc1e6b4a16579e85e06fee4c36ff8c02fb13795

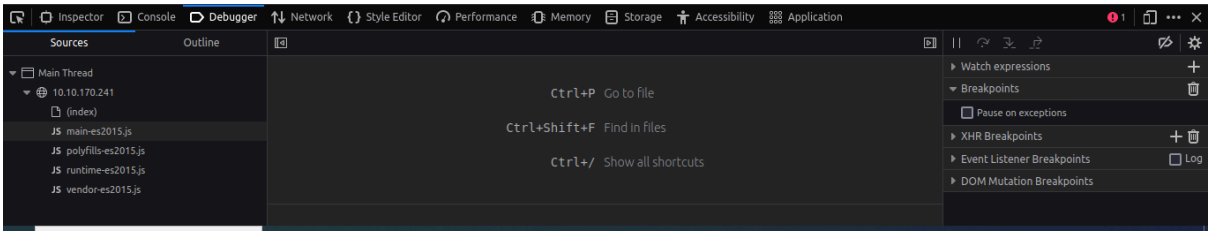




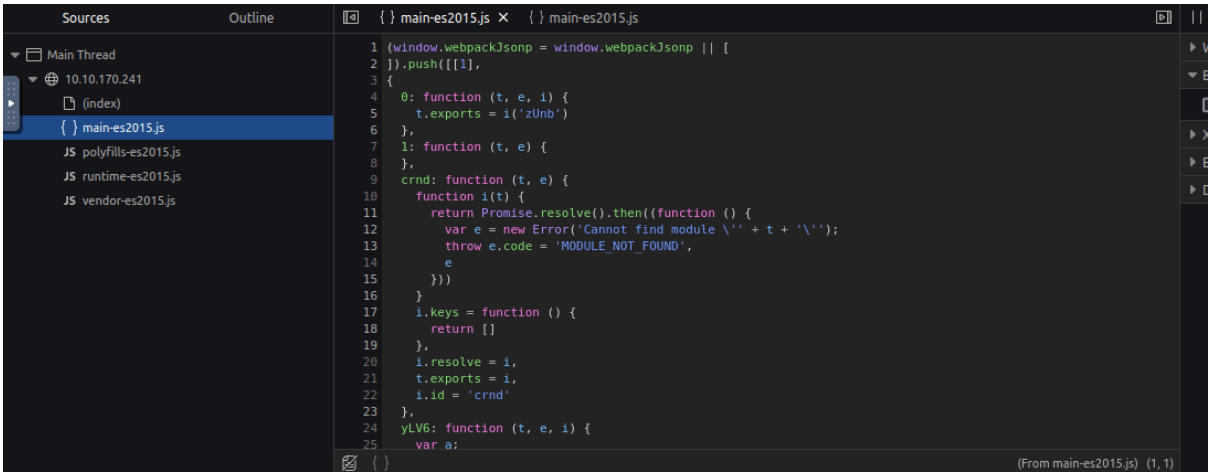
Task 6 Who's flying this thing?

Question #1: Access the administration page!

➔ I navigated to the Web Developers menu(using keyboard shortcut f12), opened the Debugger and found the javascript file for main-es2015.js

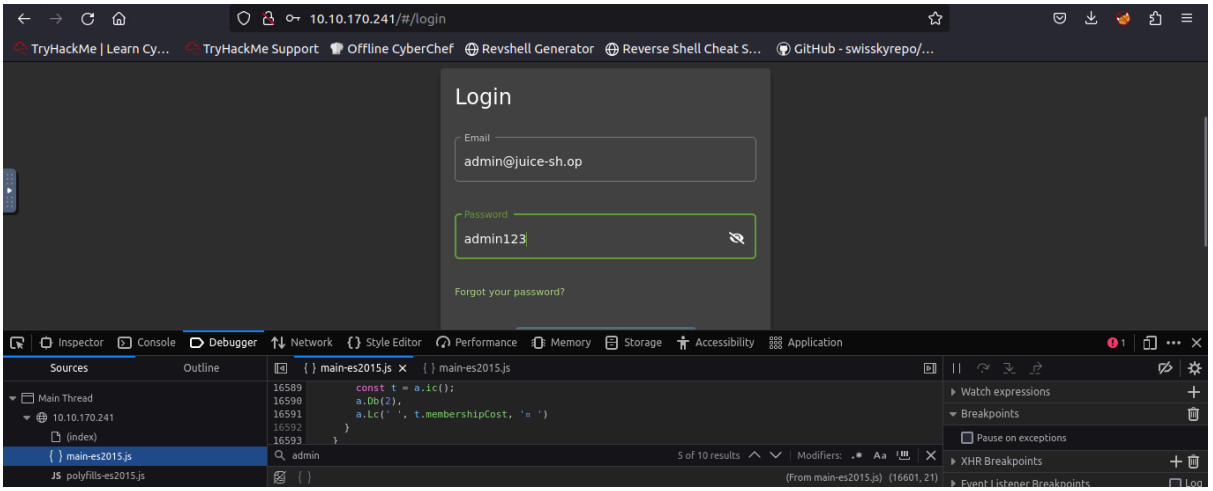


➔ I clicked on the main-es2015.js file and clicked the { } button to refreshed to make it readable



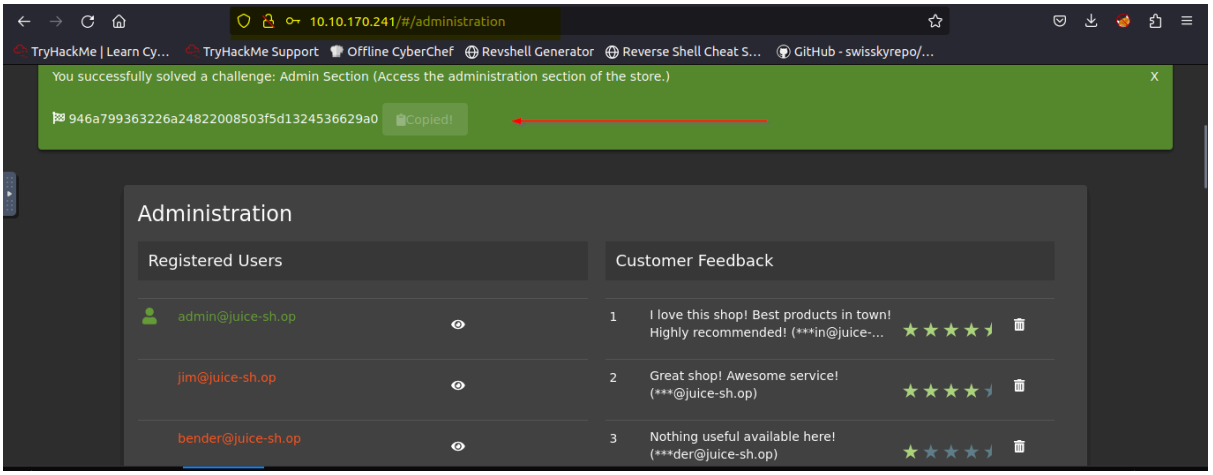
➔ I searched for the term admin but looked specifically for "path: administration"

➔ Since it is an admin page, I need to be logged in as an Admin account in order to view it.



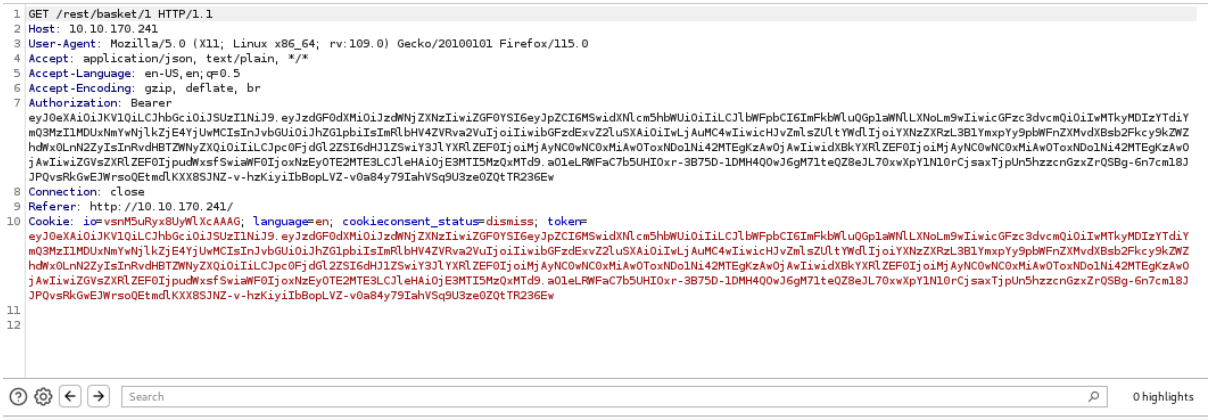
➔ Added administration to the url

Answer/Flag:946a799363226a24822008503f5d1324536629a0



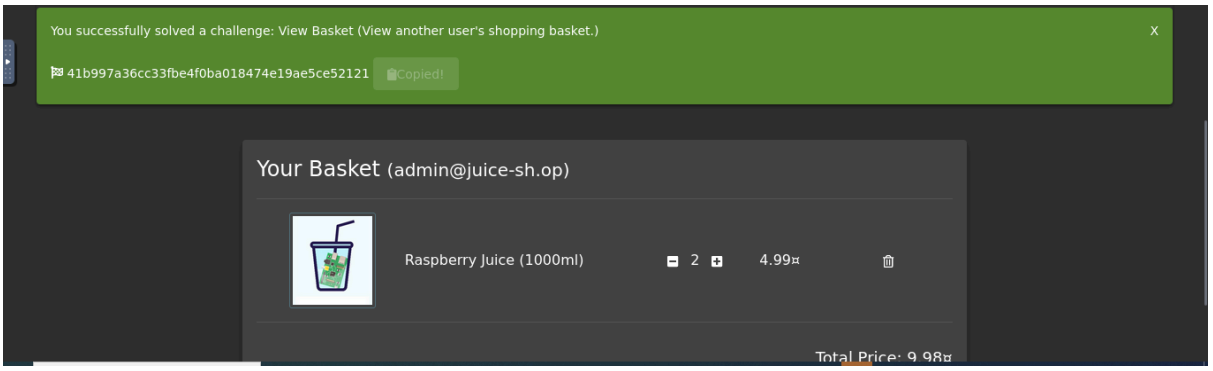
Question #2: View another user's shopping basket!

➔ I logged into the Admin account and accessed 'Your Basket'. With Burp running to capture the request, I forwarded each request until I identified the one containing: GET /rest/basket/1 HTTP/1.1.



➔ I replaced the get request with different id(e.g change the number 1 after /basket/ to 2) then forward it

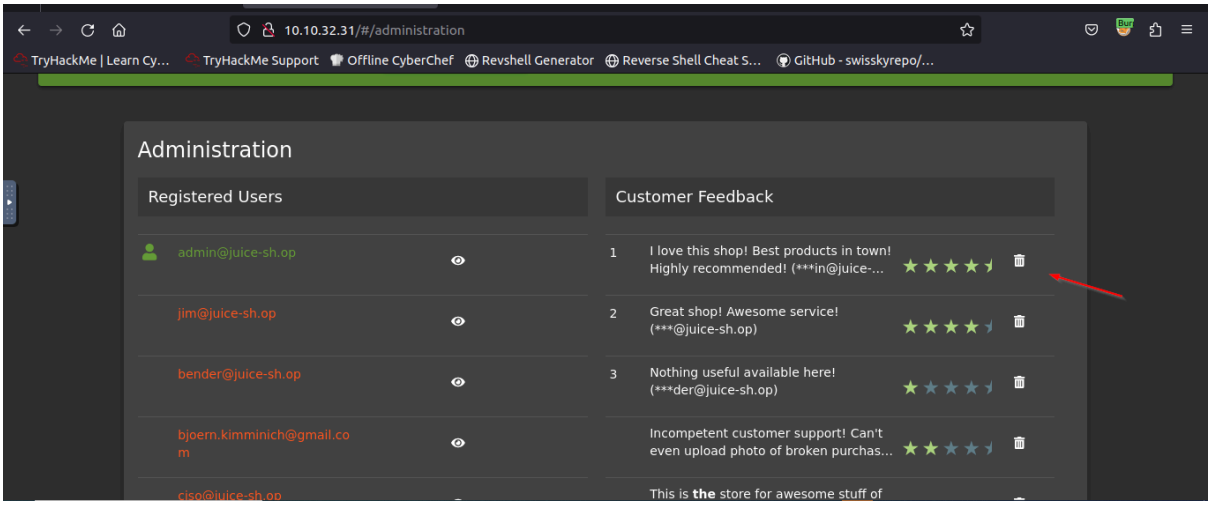
Answer/Flag: **41b997a36cc33fbe4f0ba018474e19ae5ce52121**

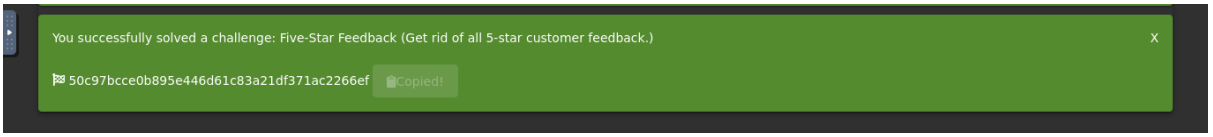


Question #3: Remove all 5-star reviews!

➔ I Navigated to the http://10.10.170.241/#/administration page again and clicked on the bin icon next to the review with 5 stars!

Answer/Flag: **50c97bcce0b895e446d61c83a21df371ac2266ef**



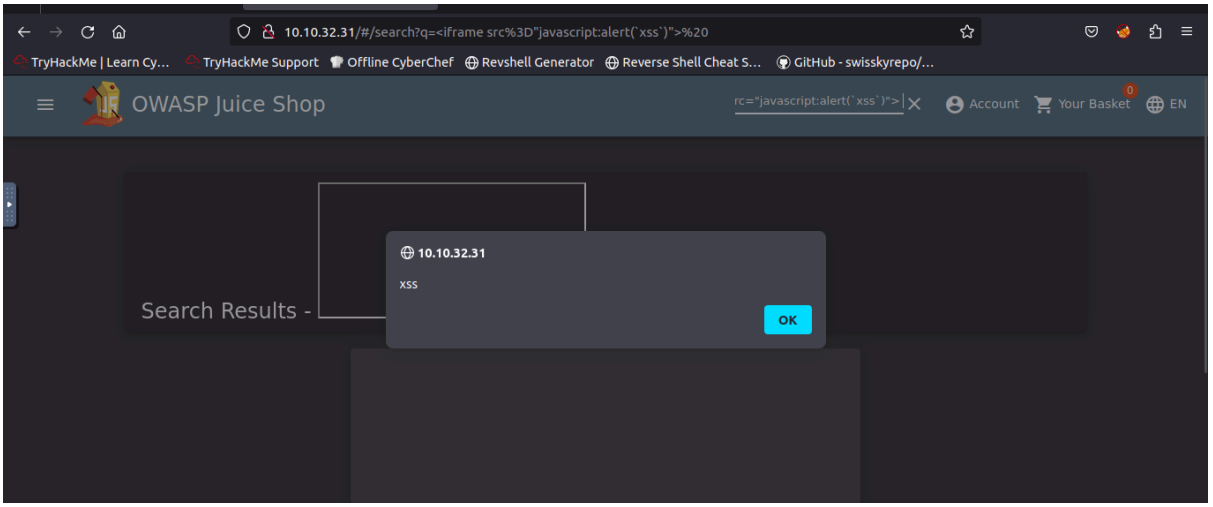


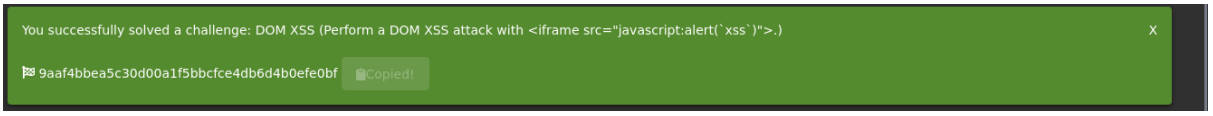
Task 7 Where did that come from?

Question #1: Perform a DOM XSS!

➔ I inputted <iframe src="javascript:alert(`xss`)"> search bar which triggered an alert.

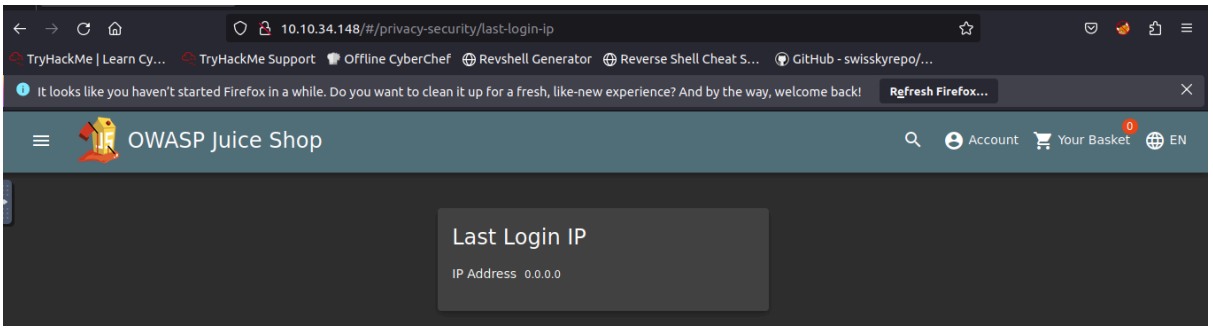
Answer/Flag: **9aaf4bbea5c30d00a1f5bbcfce4db6d4b0efe0bf**





Question #2: Perform a persistent XSS!

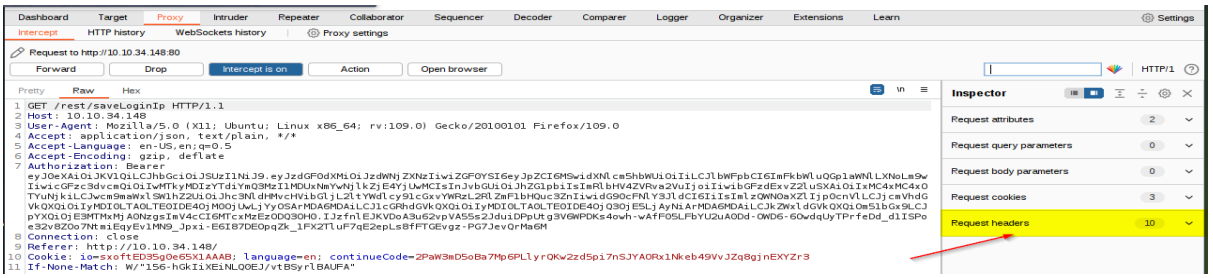
➔ I logged into admin account, navigated to “privacy and security” then to "Last Login IP"



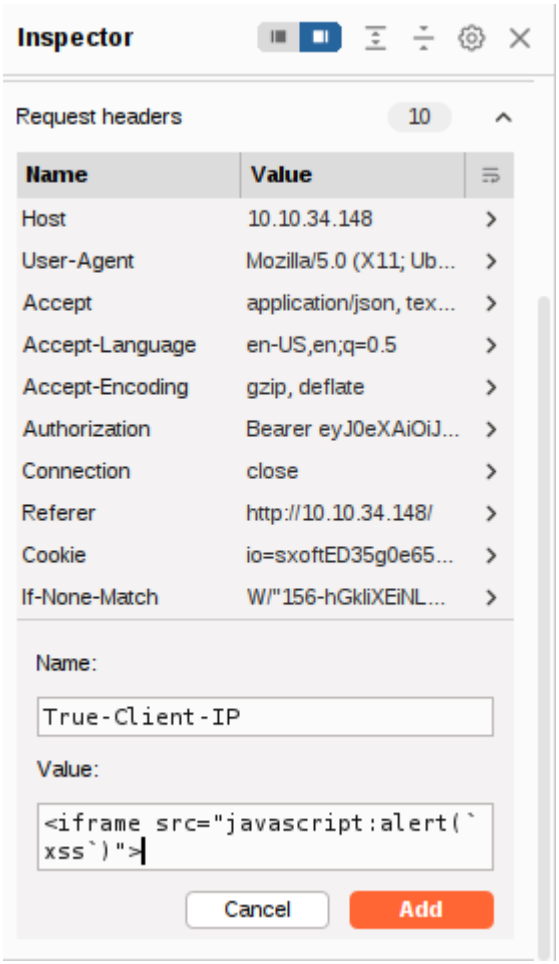
➔ I put on my intercept to catch the logout request.

```
GET /rest/saveLoginIp HTTP/1.1
Host: 10.10.34.148
User-Agent: Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:109.0) Gecko/20100101 Firefox/109.0
Accept: application/json, text/plain, */*
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate
Authorization: Bearer
eyJ0eXAiOiJKV1QiLCJhbGciOiJSUzI1NiJ9.eyJzdGF0dXMiOiJzdWNjZXNzIiwiZGF0YSI6eyJpZCI6MSwidXNlcmShbWUiOiIiLCJlbWFpbCI6ImFkbWluQGplaWNlLXNoLm9w
IiwicGFzc3dvcmQiOiIwMTkyMDIzYTdiYmQ3MzI1MDUxNmYwNjlkZjE4YjUwMCIsInJvbGUiOiJhZG1pbiIsImRlbHV4ZVRva2VuIjoiIiwibGFzdExvZ2luSXAiOiIxMC4xMC4xO
TYuNjkiLCJwcm9maWxlSW1hZ2UiOiJhc3NldHMvcHVibGljL2ltYWdlcy91cGxvYWRzL2RlZmF1bHQuc3ZnIiwidG9OcFNlY3JldCI6IiIsImlzQWN0aXZlIjp0cnVlLCJjcmVhdG
VkQXQiOiIyMDI0LTA0LTE0IDE4Oj M0Oj UwLjYyOSArMDA6MDAiLCJlcGRhdGVkQXQiOiIyMDI0LTA0LTE0IDE4Oj Q3Oj E5LjAyNiArMDA6MDAiLCJkZWxldGVkQXQiOm51bGx9LCJ
pYXQiOjE3MTMxMjA0NzgsImV4cCI6MTcxMzEzODQ3OH0.IJzfnlEJKVDoA3u62vpVA55s2JduiDPpUtg3V6WPDKs4owh-wAfF05LFbYU2uAODd-OWD6-6OwdqUyTPrfeDd_d1ISPo
e32v8ZOo7NtmiEqyEv1MN9_Jpxi-E6I87DEOpqZk_1FX2TluF7qE2epLs8fFTGEvgz-PG7JevQrMa6M
Connection: close
Referer: http://10.10.34.148/
Cookie: io=sxoftED35g0e65X1AAAB; language=en; continueCode=2PaW3mD5oBa7Mp6PLlyrQKw2zd5pi7nSJYAORx1Nkeb49VvJZq8gjnEXYZr3
If-None-Match: W/"156-hGkIiXEiNLQOEJ/vtBSyrlBAUFA"
```

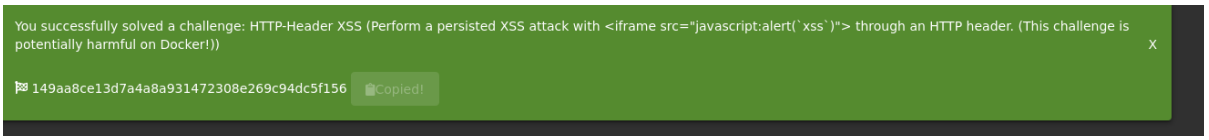
➔ Then i headed over to the Headers tab where i will add a new header



➔ I added then headers then forward the request



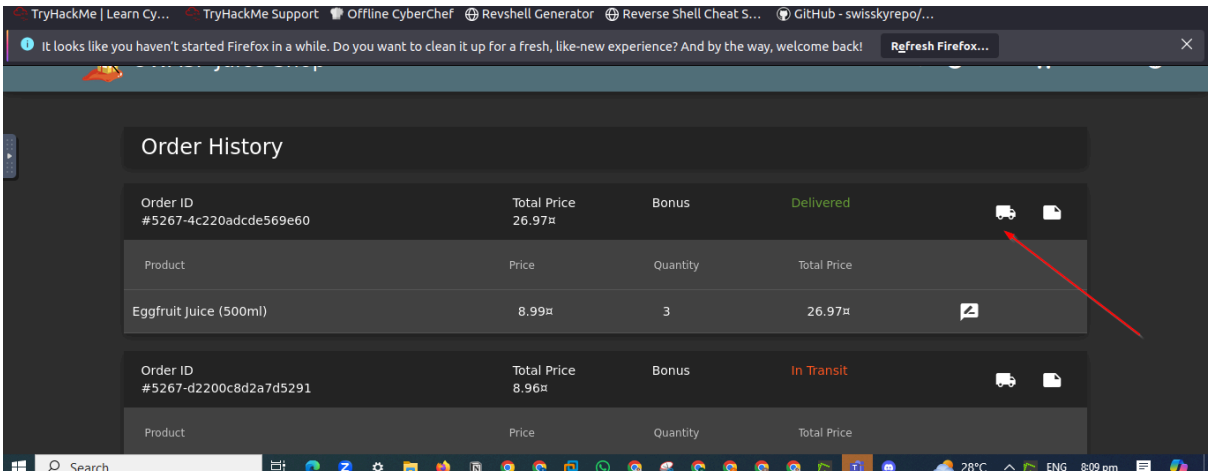
Answer/ Flag:149aa8ce13d7a4a8a931472308e269c94dc5f156



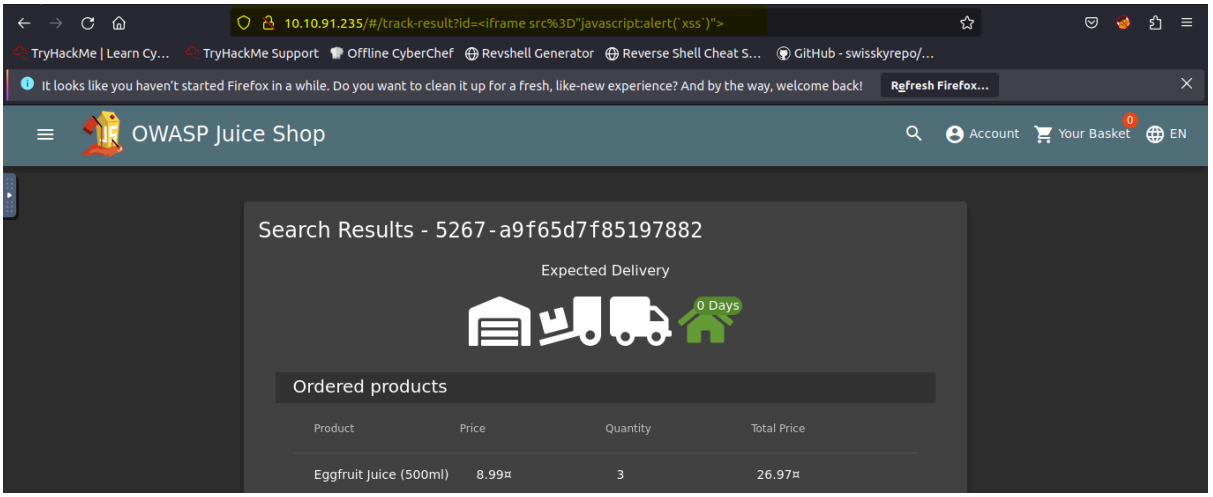
Question #3: Perform a reflected XSS!

➔ I Login into the admin account, navigated to the “order and payment” then to 'Order History' page.

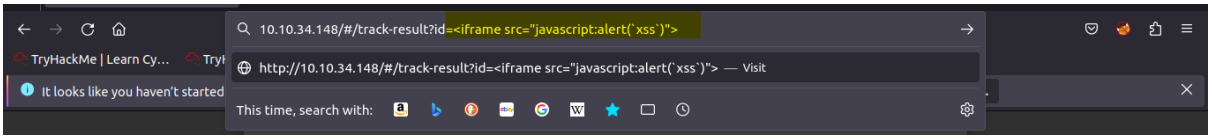
➔ Then i saw the "Truck" icon



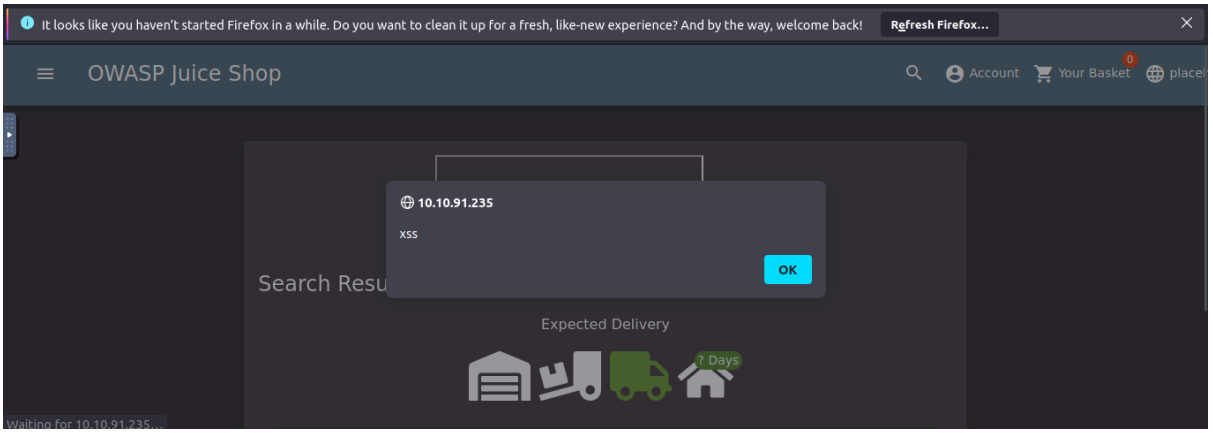
➔ I navigated to the track result page by clicking on the trunk, where I found an ID paired with the order in the URL: track-result?id=5267-a9f65d7f85197882.



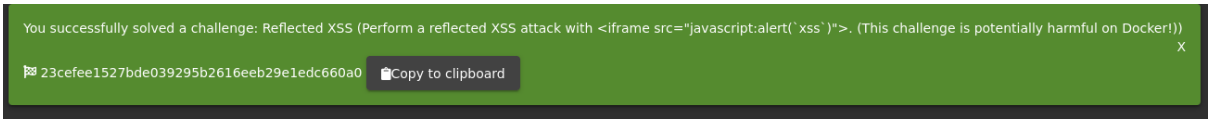
➔ I use the iframe XSS, <iframe src="javascript:alert(`xss`)">, in the place of the 5267-4c220adcde569e60



➔ I submitted the URL, refreshed the page and got an alert saying XSS!



Answer/Flag: **23cefee1527bde039295b2616eeb29e1edc660a0**

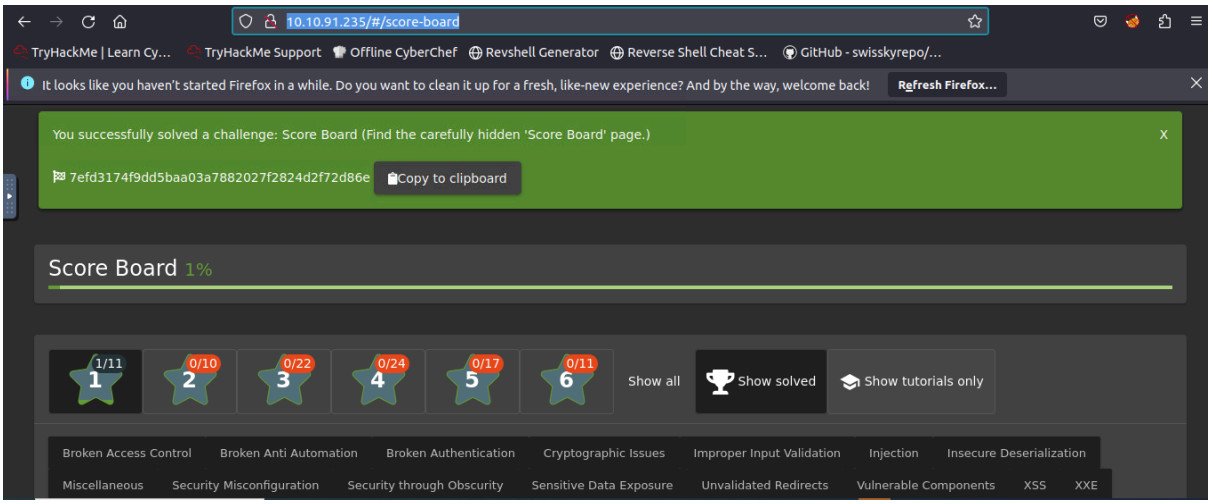


Task 8 Exploration!

Access the /#/score-board/ page

➔ I used the url: http://10.10.91.235/#/score-board/

Answer/Flag: **7efd3174f9dd5baa03a7882027f2824d2f72d86e**



END!!!