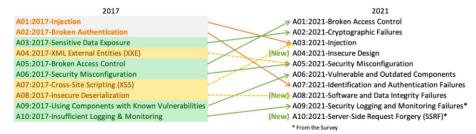
AI WITH CYBER SECURITY

ASSIGNMENT-1

SHREYA SINGH

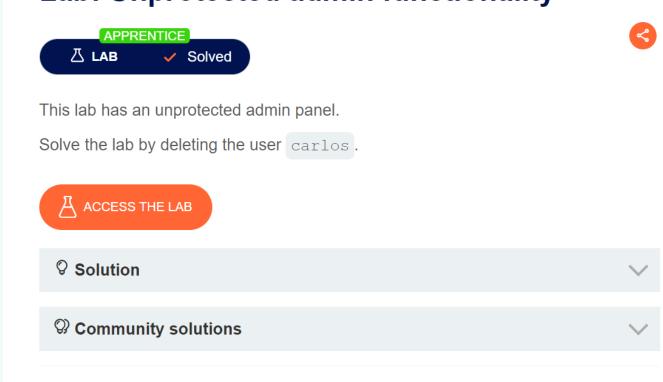
Top 10 Web Application Security Risks

There are three new categories, four categories with naming and scoping changes, and some consolidation in the Top 10 for 2021.



A01: BROKEN ACCESS CONTROL

Lab: Unprotected admin functionality



4

友 https://0a970026034b4086828c6a9600cd0009.web-security-academy.net/robots.txt

Used robots.txt to get information about the admin accessible link.

User-agent: * Disallow: /administrator-panel

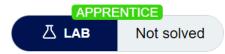
tttps://0a970026034b4086828c6a9600cd0009.web-security-academy.net/administrator-panel

Congratulations, you solved the lab!

Users

wiener - Delete

Lab: Unprotected admin functionality with unpredictable URL

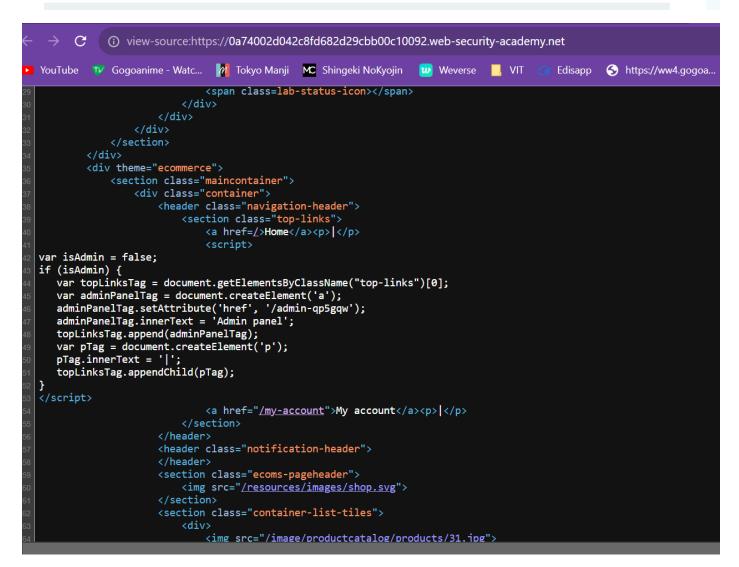




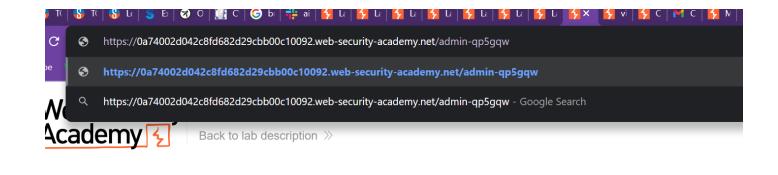
This lab has an unprotected admin panel. It's located at an unpredictable location, but the location is disclosed somewhere in the application.

Solve the lab by accessing the admin panel, and using it to delete the user carlos.

ACCESS THE LAB



Opened source code after accessing the website and searched for the admin javascript file and copied the admin link.

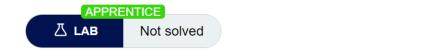


Users

wiener - Delete carlos - Delete

A02: CRYPTOGRAPHIC FAILURES

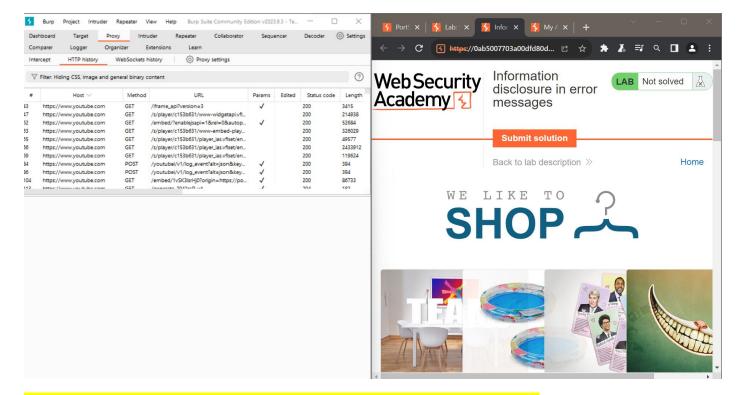
Lab: <u>Information disclosure</u> in error messages



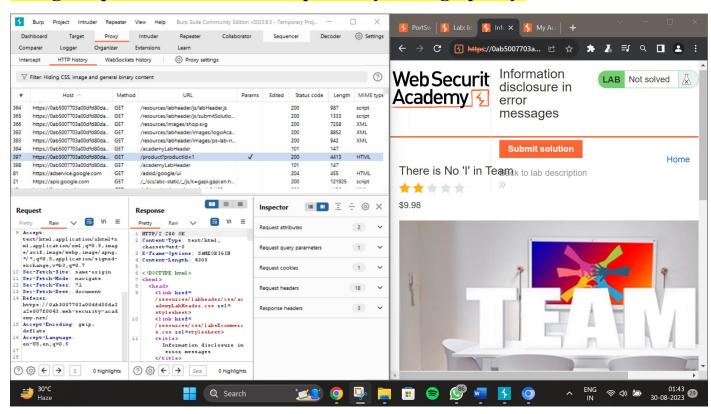


This lab's verbose error messages reveal that it is using a vulnerable version of a third-party framework. To solve the lab, obtain and submit the version number of this framework.

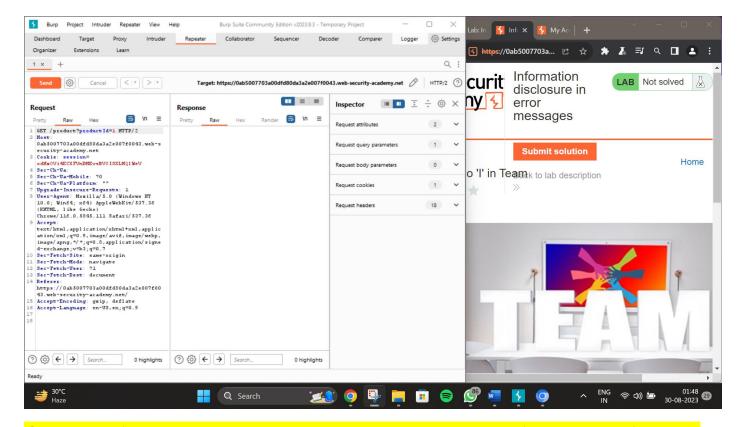




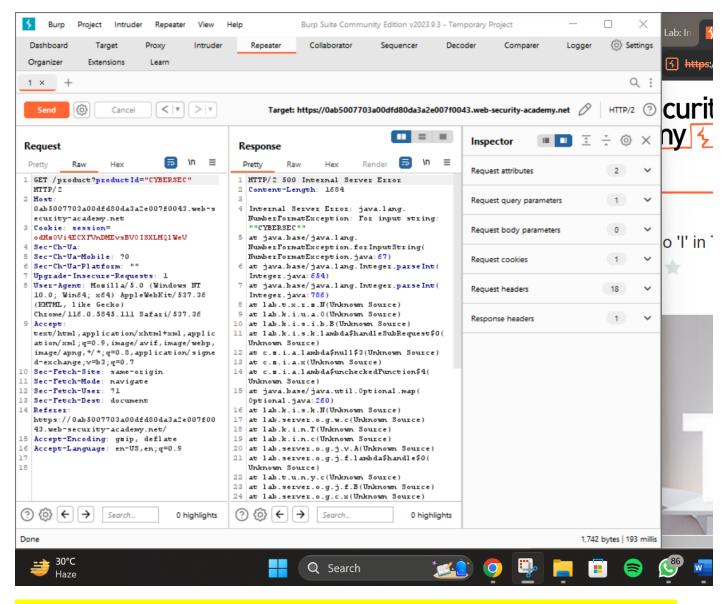
Using burp suite to track the http history through proxy.



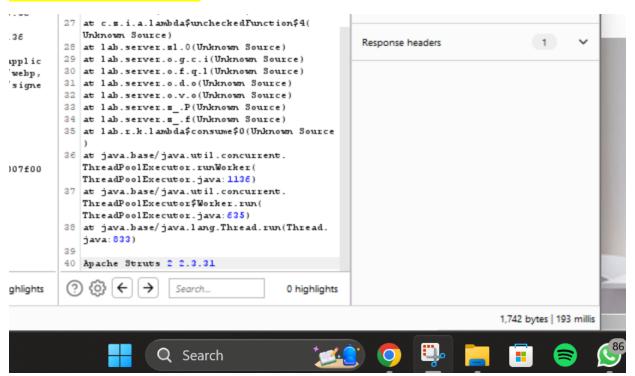
Selecting one product and clicking the HTTP URL to open the request and then right clicking and sending to repeater.



Once opening the repeater, we can change the product id and send it to get response.



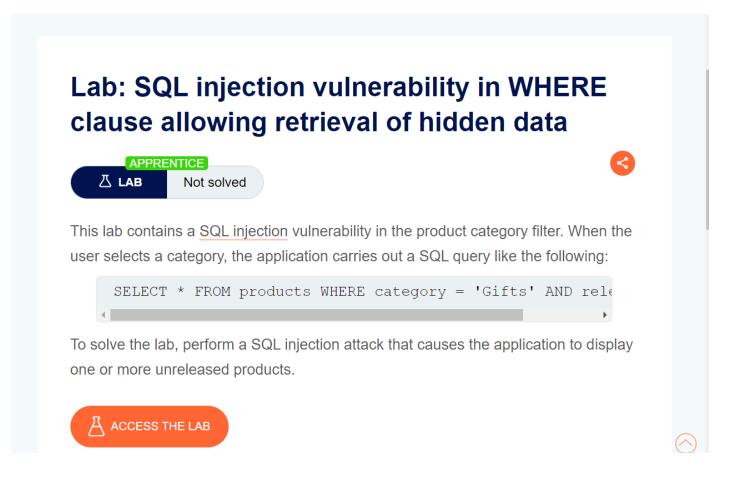
Change the product id=1 to cybersec and on sending it we get an error of internal server error.

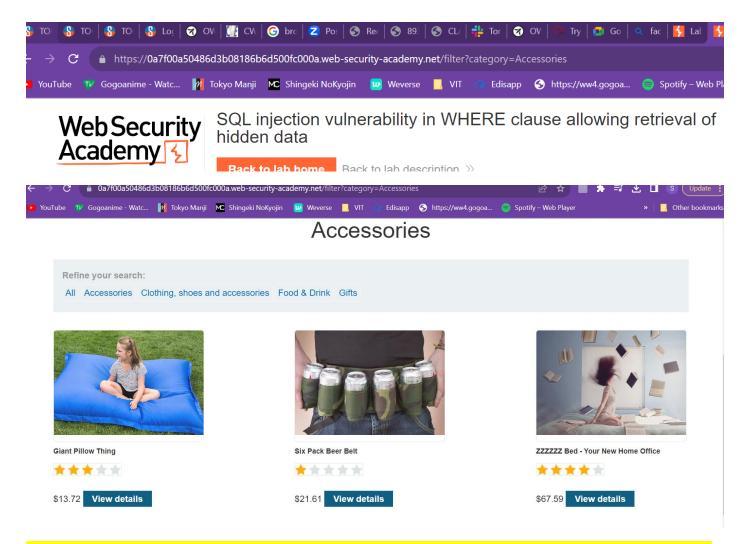


Apache status is the solution of this lab.

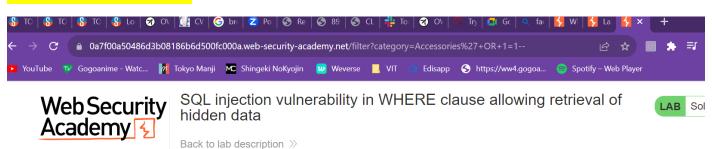


AO3: INJECTIONS & AO4: INSECURE DESIGN

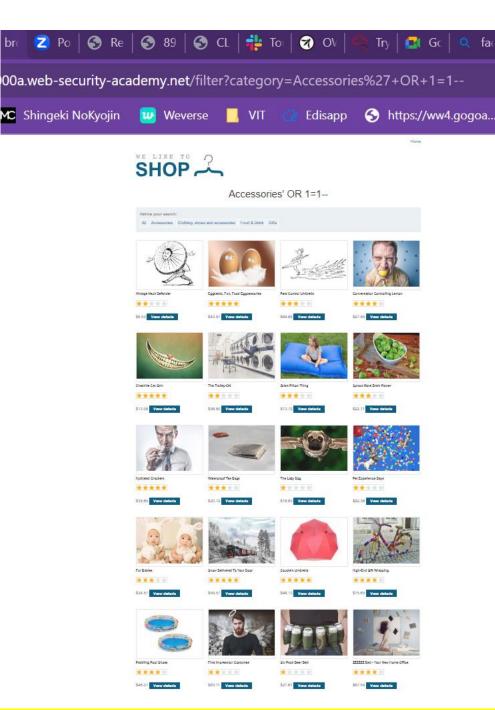




CHOSE ACCESSORIES AND ITS SHOWING THE PRODUCTS UNDER THAT CATEGORY



WE ADD '+ OR + 1=1--AHEAD OF ACCESSORIES WHICH SIGNIFIES THAT SHOW ALL THE PRODUCTS FOR TRUE (1=1). --THIS SIGN MEANS OMIT WHATEVER COMMAND IS AHEEAD AND TREAT IT AS COMMENT SO THAT PART IS NOT EXECUTED.



ONCE WE EXECUTE THE COMMAND, WE CAN SEE ALL THE PRODUCTS UNDER THE ACCESSORIES CATEGORY.

Lab: SQL injection vulnerability allowing login bypass





This lab contains a SQL injection vulnerability in the login function.

To solve the lab, perform a SQL injection attack that logs in to the application as the administrator user.

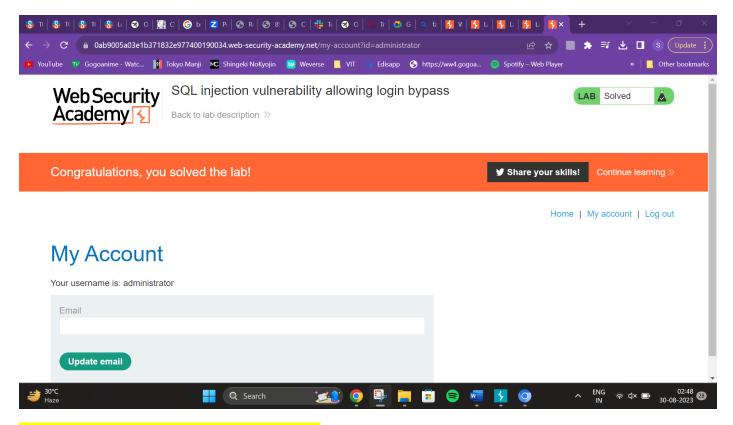


Login

Invalid username or password.

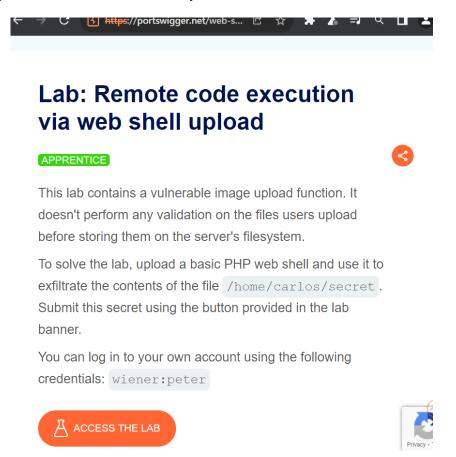
Username	
administrator'	
Password	
Log in	

WE USED THE COMMAND ADMINISTARTOR'--AS THE USERNAME WHAT IT SIGNIFIES IS THAT FOR THE USERNAME ADMINISTRATOR LOGIN INTO THE APPLICATION WITHOUT CHECKING THE PASSWORD BECAUSE --IS USED WHICH COMMENTS OUT WHATEVER IS WRITTEN AHEAD OF IT THUS COMMENTING OUT THE PASSWORD MATCHING SQL QUERY.

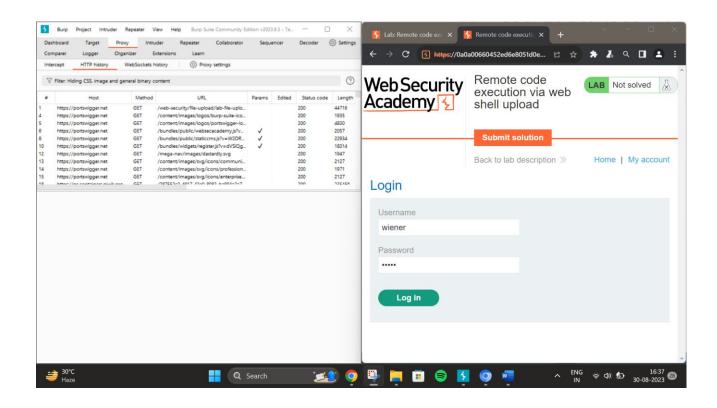


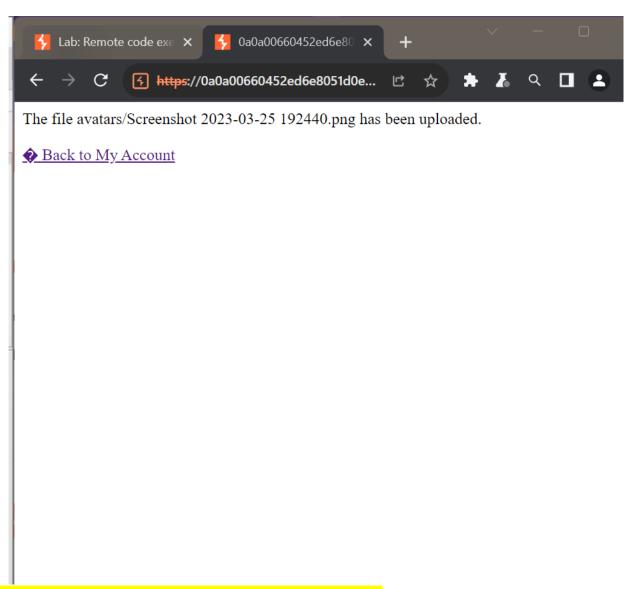
THUS, WE BYPASSED LOGIN.

A05: SECURITY MISCONFIGURATION

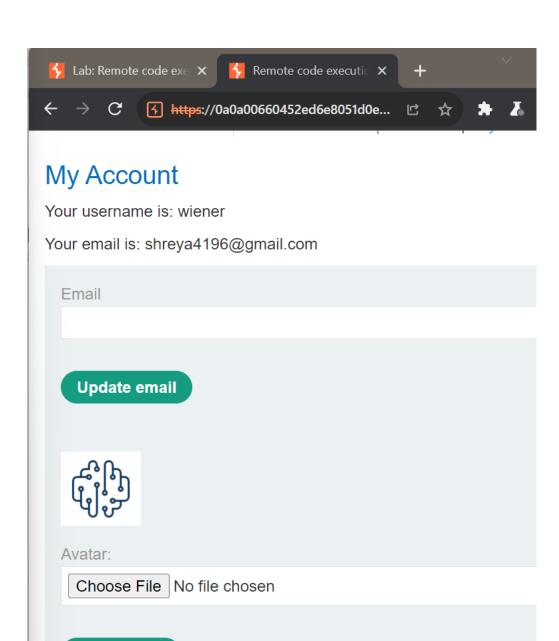


WE HAVE TO TRY AND UPLOAD A MALICIOUS PHP FILE IN THE UPLOAD SECTION WHERE IT IS ASKING FOR PNG FILE.

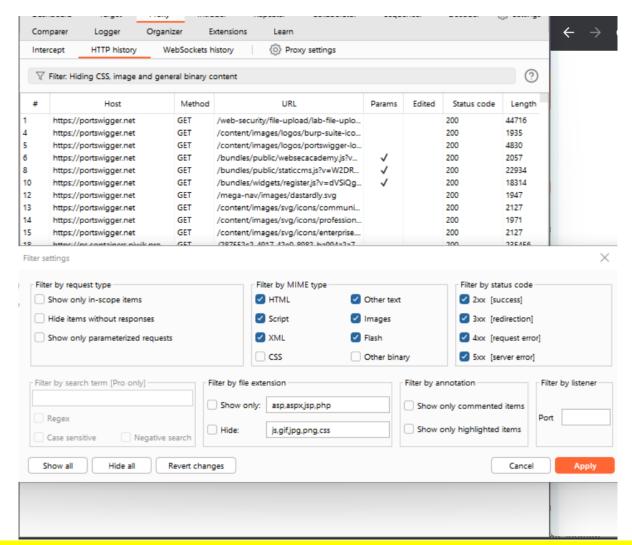




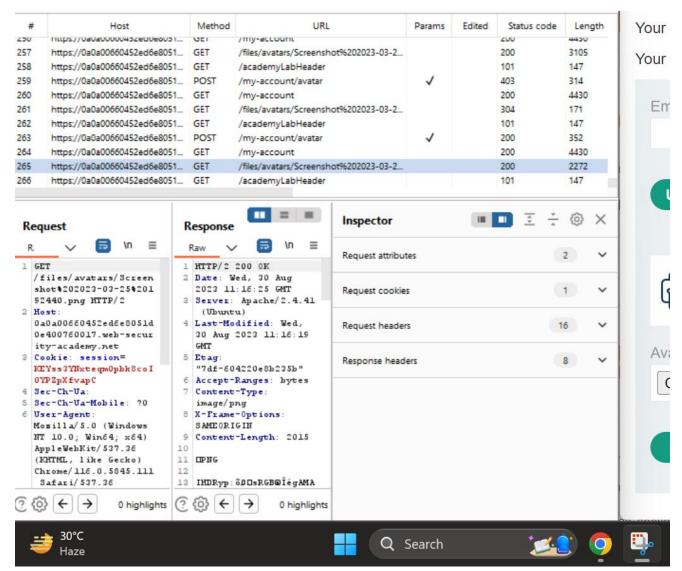
Logging in and uploading the file as image.



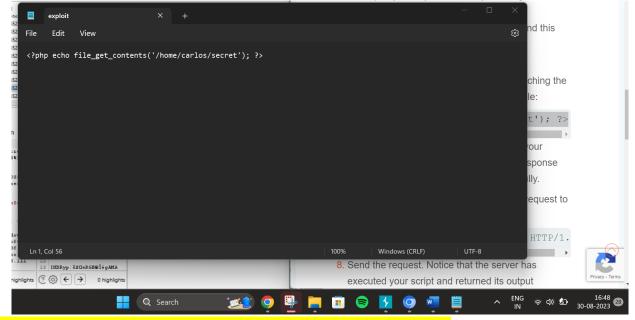
Upload



In Burp Suite, we open proxy->HTTP history and select image in filter by MIME type.



Then we select the URL of our image upload and send the request to repeater.

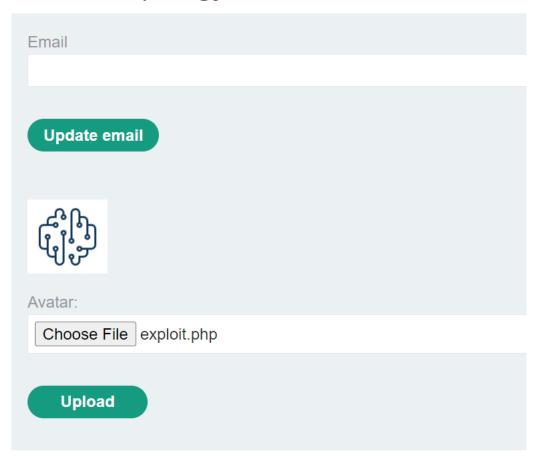


We create a php file called exploit.php and save it.

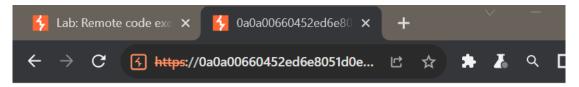
My Account

Your username is: wiener

Your email is: shreya4196@gmail.com

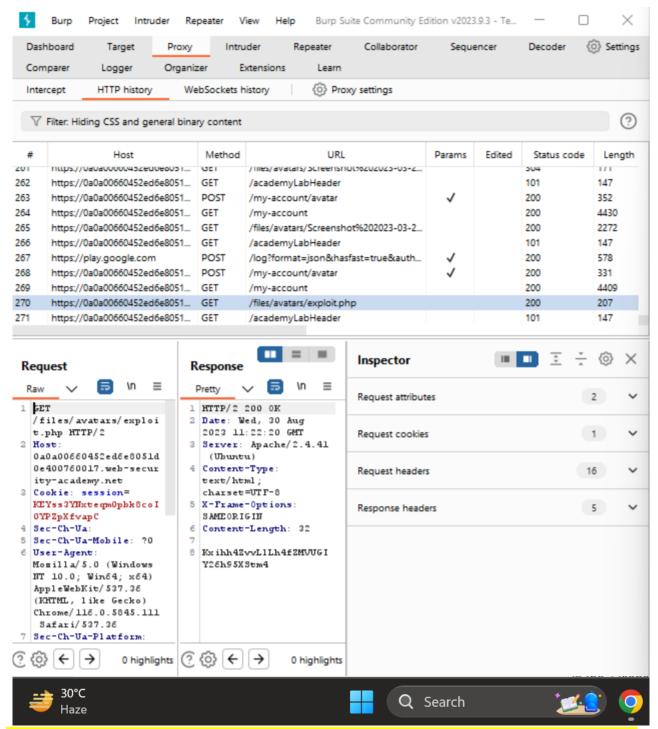


Now in place of the image we upload the exploit php file.

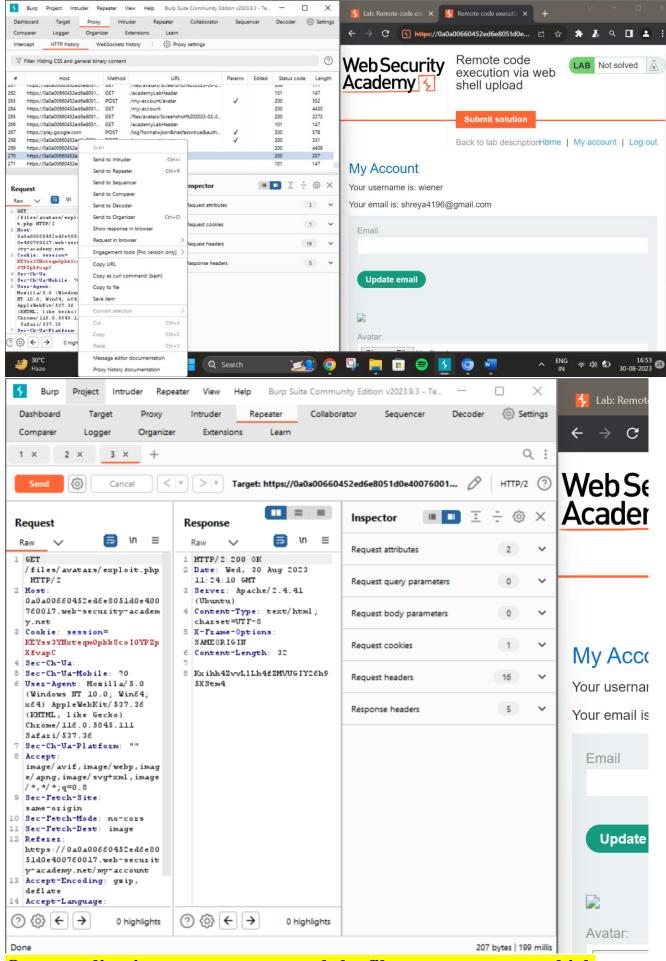


The file avatars/exploit.php has been uploaded.

Back to My Account



Now we select the URL of exploit.php upload and the sent the request to repeater.



Once sending it to repeater we send the file to get response which contains Carlos's secret message.

