

PortSwigger Labs

TASK TWELVE

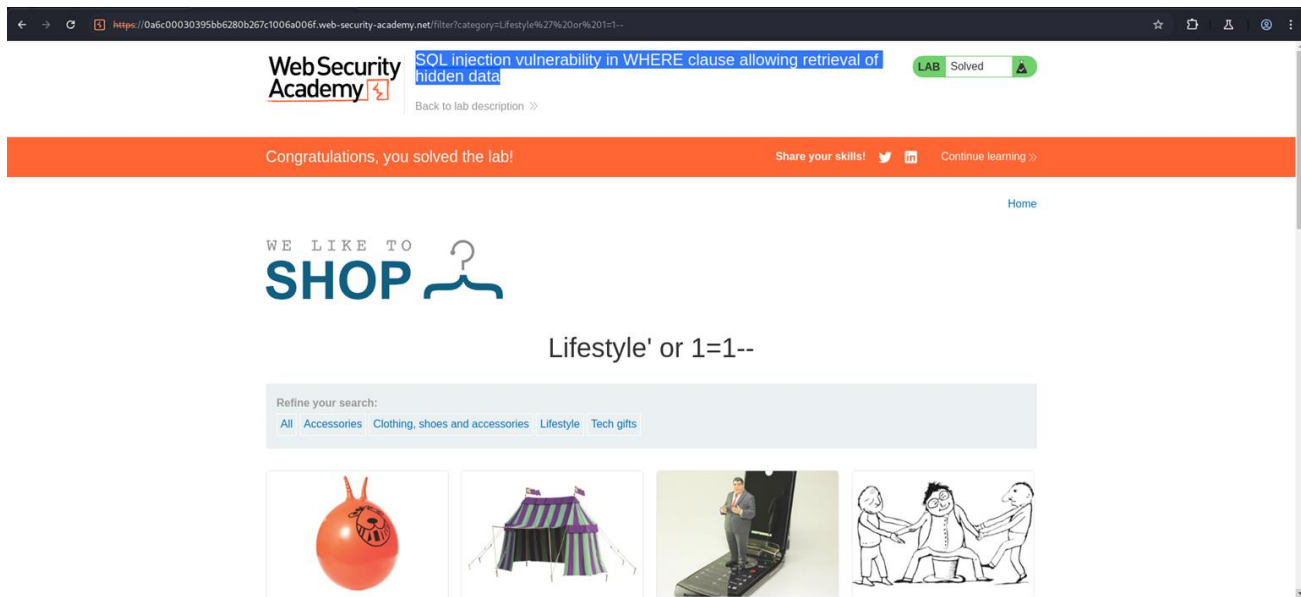
VIKAS S MENON

Contents

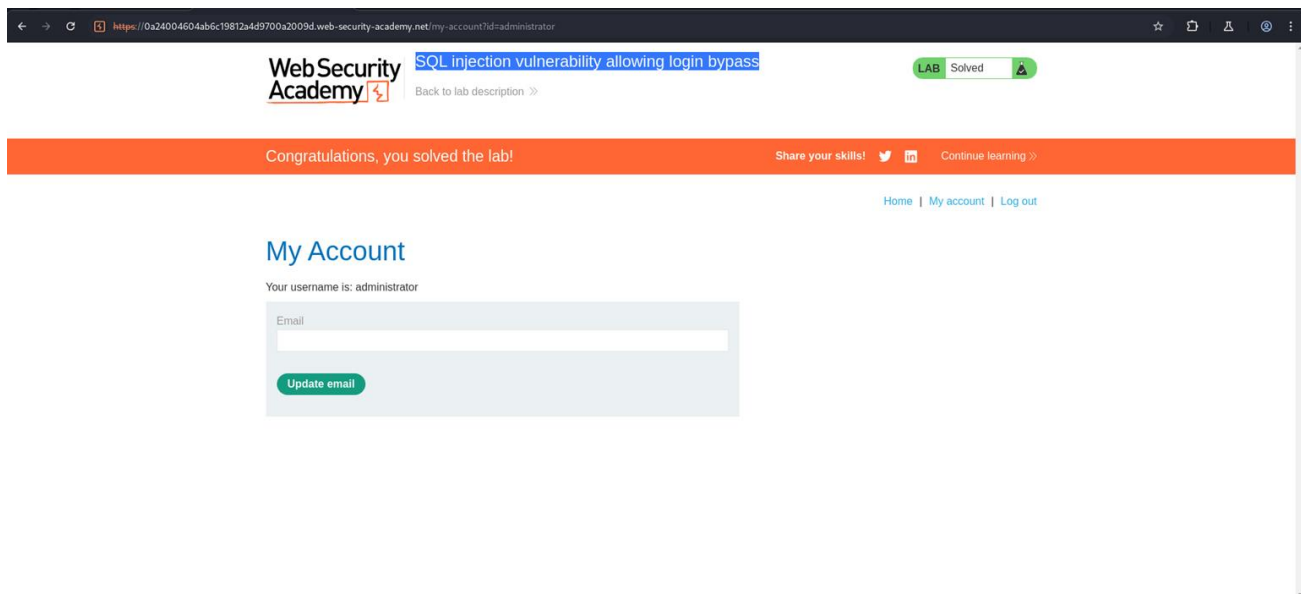
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SQL injection

1. SQL injection vulnerability in WHERE clause allowing retrieval of hidden data



2. SQL injection vulnerability allowing login bypass



3. SQL injection UNION attack, determining the number of columns returned by the query

The screenshot shows a web browser window with two tabs. The active tab is titled "SQL injection UNION attack, determining the number of columns returned by the query". The URL is <https://0aa600d6403fb27280d81c4500d600a7.web-security-academy.net/filter?category=Toys+%26+Games>. The page header includes the WebSecurity Academy logo and a "LAB Solved" badge. A green banner at the top says "Congratulations, you solved the lab!". Below this, there are links to "Share your skills!", "Continue learning >>", and "Home | My account". The main content area features a "WE LIKE TO SHOP" header with a shopping bag icon. Underneath, it says "Toys & Games". A search bar with the text "Refine your search:" is present, with filters for "All", "Accessories", "Clothing, shoes and accessories", "Corporate gifts", "Tech gifts", and "Toys & Games". A table of products is displayed:

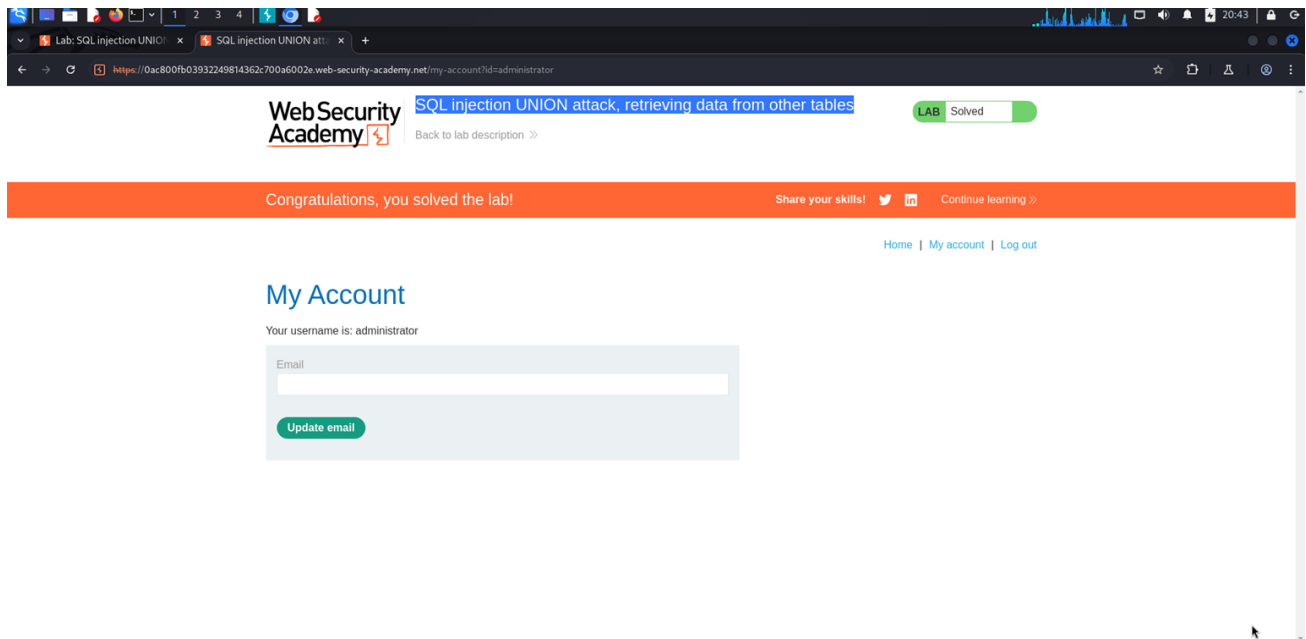
Poo Head - It's not just an insult anymore.	\$2.52	View details
Inflatable Dartboard	\$78.32	View details
Paintball Gun - Thunder Striker	\$52.01	View details
What Do You Meme?	\$34.58	View details

4. SQL injection UNION attack, finding a column containing text

The screenshot shows a web browser window with two tabs. The active tab is titled "SQL injection UNION attack, finding a column containing text". The URL is <https://0a7000c60473d6de815c481b000700a7.web-security-academy.net/filter?category=Pets>. The page header includes the WebSecurity Academy logo and a "LAB Solved" badge. A green banner at the top says "Congratulations, you solved the lab!". Below this, there are links to "Share your skills!", "Continue learning >>", and "Home | My account". The main content area features a "WE LIKE TO SHOP" header with a shopping bag icon. Underneath, it says "Pets". A search bar with the text "Refine your search:" is present, with filters for "All", "Clothing, shoes and accessories", "Gifts", "Lifestyle", "Pets", and "Tech gifts". A table of products is displayed:

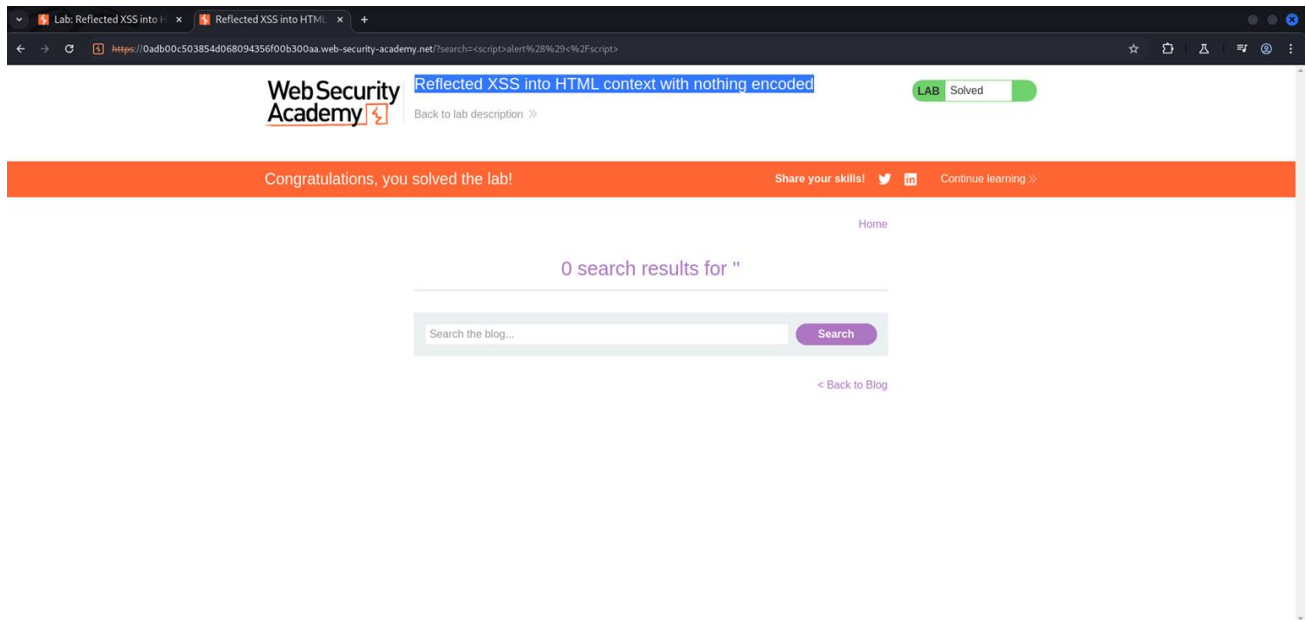
Fur Babies	\$13.66	View details
Babbage Web Spray	\$7.86	View details
More Than Just Birdsong	\$64.80	View details
Pet Experience Days	\$96.98	View details

5. SQL injection UNION attack, retrieving data from other tables

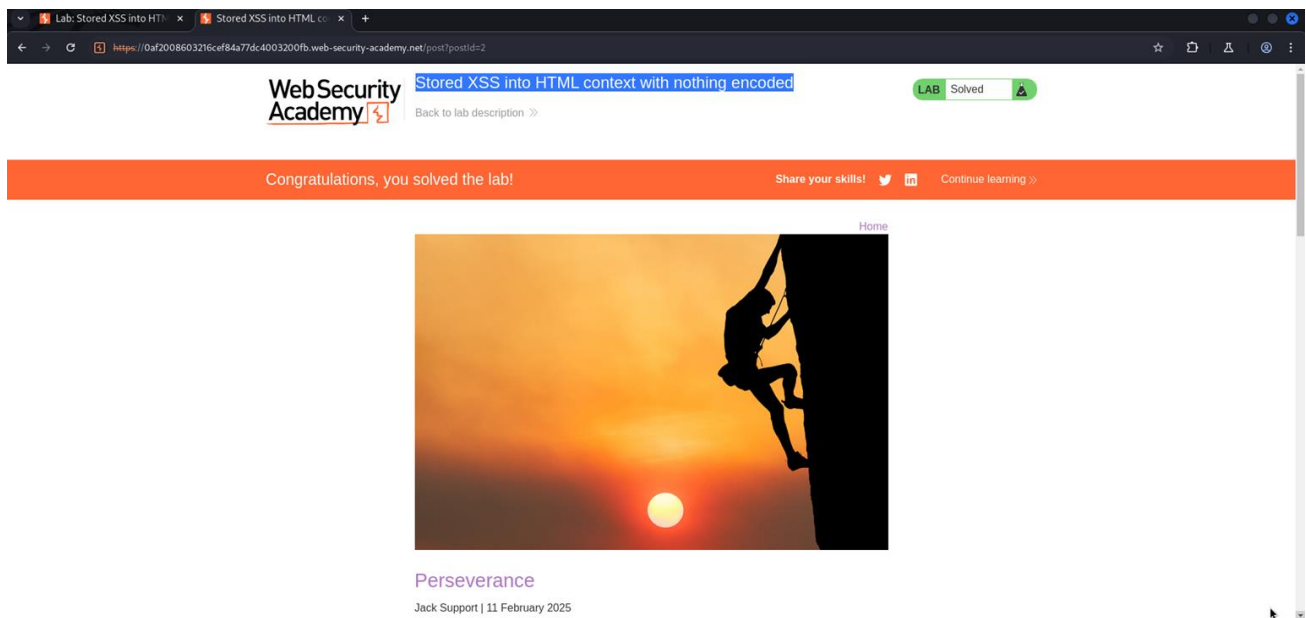


Cross-site scripting

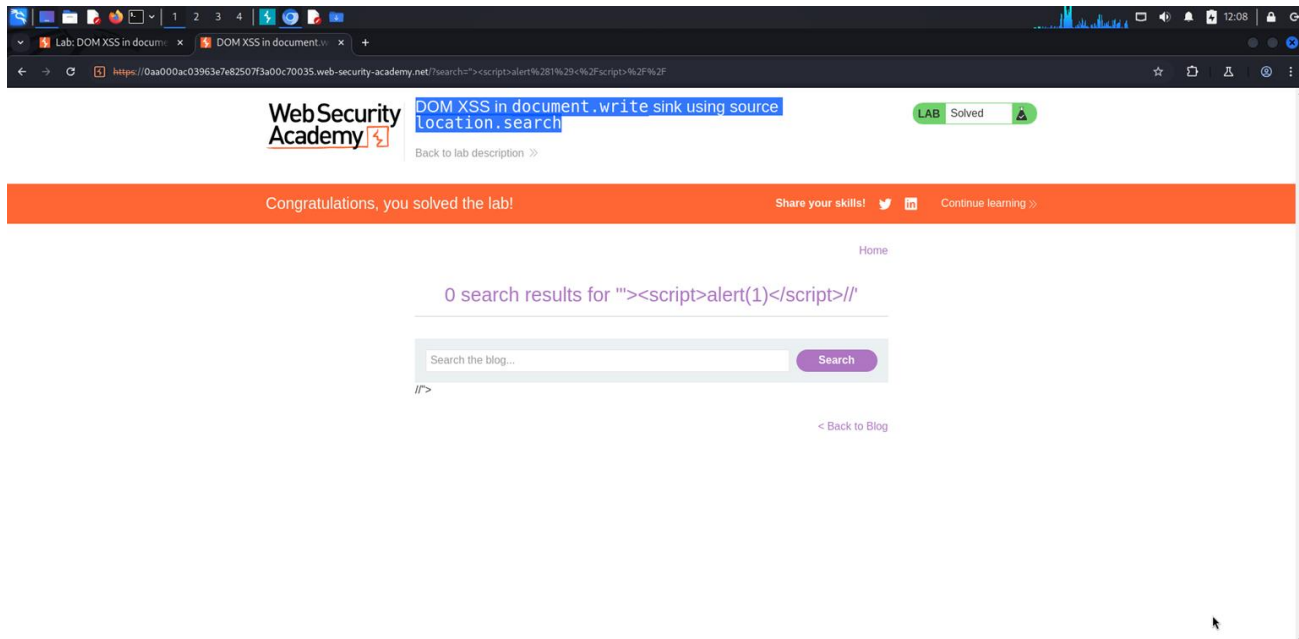
1. Reflected XSS into HTML context with nothing encoded



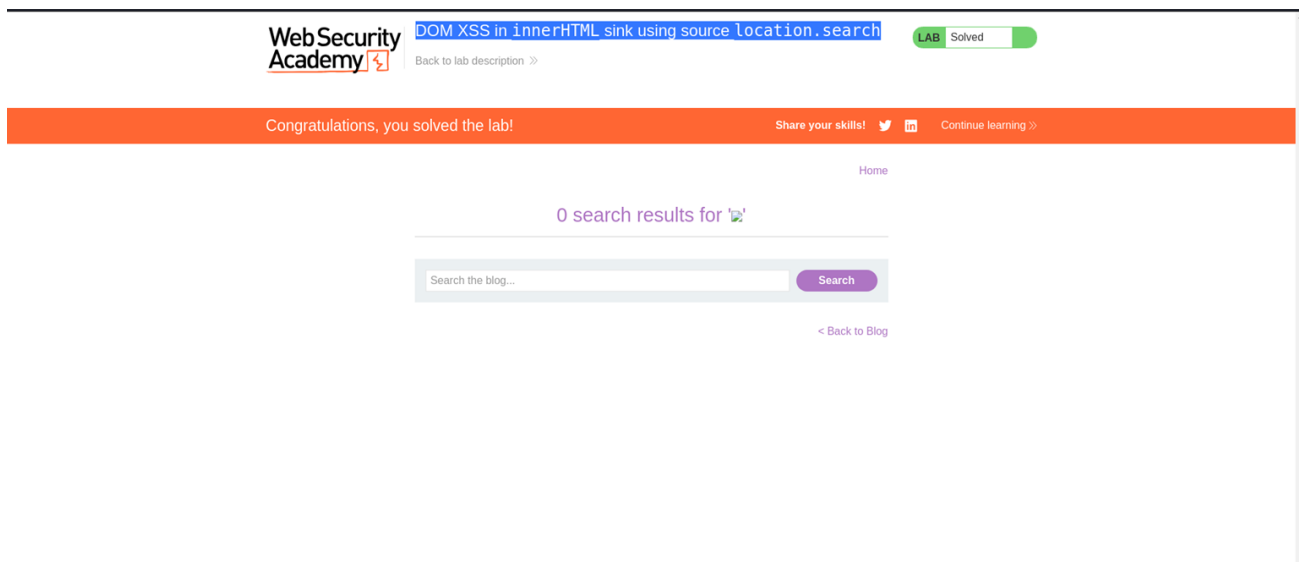
2. Stored XSS into HTML context with nothing encoded



3. DOM XSS in document.write sink using source location.search



4. DOM XSS in innerHTML sink using source location.search



Cross-site request forgery (CSRF)

1. CSRF vulnerability with no defenses

Web Security Academy | **CSRF vulnerability with no defenses** | LAB Solved

Back to lab description >>

Congratulations, you solved the lab! | Share your skills! | Continue learning >>

This is your server. You can use the form below to save an exploit, and send it to the victim.
Please note that the victim uses Google Chrome. When you test your exploit against yourself, we recommend using Burp's Browser or Chrome.

Craft a response

URL: `https://exploit-0ab800d303d1504b800b6be501af0064.exploit-server.net/exploit`

HTTPS

☒

File:

Head:

HTTP/1.1 200 OK
Content-Type: text/html; charset=utf-8

2. CSRF where token validation depends on request method

Web Security Academy | **CSRF where token validation depends on request method** | LAB Solved

Back to lab description >>

Congratulations, you solved the lab! | Share your skills! | Continue learning >>

This is your server. You can use the form below to save an exploit, and send it to the victim.
Please note that the victim uses Google Chrome. When you test your exploit against yourself, we recommend using Burp's Browser or Chrome.

Craft a response

URL: `https://exploit-0abc008003ca10ac805a024b018600a2.exploit-server.net/exploit`

HTTPS

☒

File:

Head:

HTTP/1.1 200 OK
Content-Type: text/html; charset=utf-8

3. CSRF where token validation depends on token being present

Lab: CSRF where token... | CSRF where token valid... | Exploit Server: CSRF wh...

https://exploit-0a31002c04ebbd7e806f2a3f01c80093.exploit-server.net

WebSecurity Academy | CSRF where token validation depends on token being present | LAB Solved | Back to lab description >>

Congratulations, you solved the lab! | Share your skills! | Continue learning >>

This is your server. You can use the form below to save an exploit, and send it to the victim.
Please note that the victim uses Google Chrome. When you test your exploit against yourself, we recommend using Burp's Browser or Chrome.

Craft a response

URL: https://exploit-0a31002c04ebbd7e806f2a3f01c80093.exploit-server.net/exploit

HTTPS

File: /exploit

Head: HTTP/1.1 200 OK
Content-Type: text/html; charset=utf-8

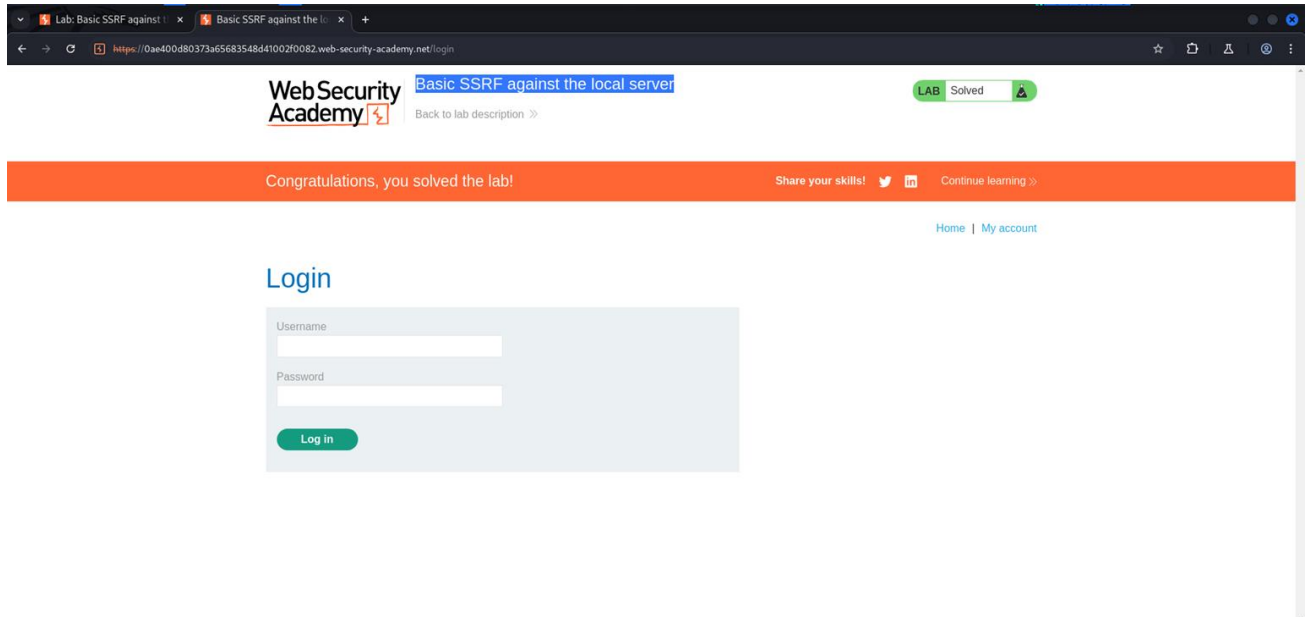
Cross-origin resource sharing (CORS)

1. CORS vulnerability with basic origin reflection

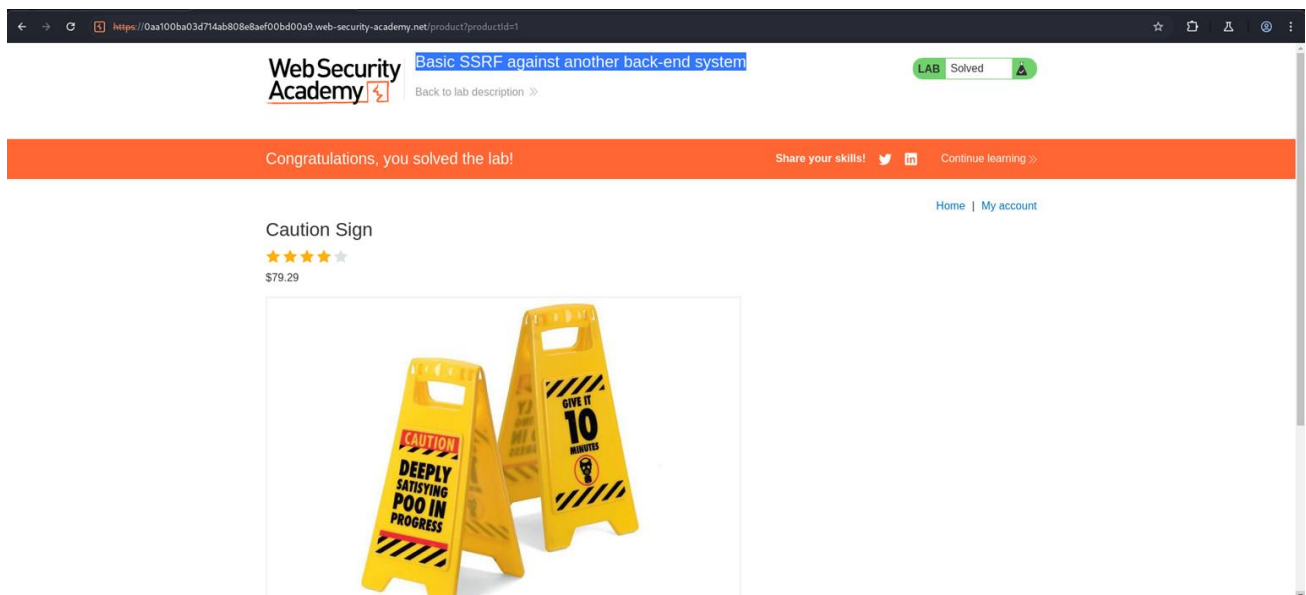
```
49.47.240.251 2025-03-09 08:46:34 +0000 "GET / HTTP/1.1" 200 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:46:34 +0000 "GET /resources/css/labsDark.css HTTP/1.1" 200 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:47:29 +0000 "POST / HTTP/1.1" 200 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:47:29 +0000 "GET /resources/css/labsDark.css HTTP/1.1" 200 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:47:33 +0000 "POST / HTTP/1.1" 302 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:47:33 +0000 "GET /deliver-to-victim HTTP/1.1" 302 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
10.0.3.133 2025-03-09 08:47:33 +0000 "GET /exploit/ HTTP/1.1" 200 "user-agent: Mozilla/5.0 (Victim) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/125.0.0.0 Safari/537.36"
10.0.3.133 2025-03-09 08:47:34 +0000 "GET /resources/css/labsDark.css HTTP/1.1" 200 "user-agent: Mozilla/5.0 (Victim) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/125.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:47:34 +0000 "GET / HTTP/1.1" 200 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:47:34 +0000 "GET /resources/css/labsDark.css HTTP/1.1" 200 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:48:23 +0000 "POST / HTTP/1.1" 302 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:48:23 +0000 "GET /resources/css/labsDark.css HTTP/1.1" 200 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:48:27 +0000 "GET /deliver-to-victim HTTP/1.1" 302 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:48:32 +0000 "GET /resources/css/labsDark.css HTTP/1.1" 200 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:48:32 +0000 "GET / HTTP/1.1" 200 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:48:33 +0000 "GET /resources/css/labsDark.css HTTP/1.1" 200 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:50:38 +0000 "POST / HTTP/1.1" 302 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:50:38 +0000 "GET /log HTTP/1.1" 200 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:50:38 +0000 "GET /resources/css/labsDark.css HTTP/1.1" 200 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
49.47.240.251 2025-03-09 08:50:38 +0000 "GET /resources/css/labsDark.css HTTP/1.1" 200 "user-agent: Mozilla/5.0 (X11; Linux x86_64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/132.0.0.0 Safari/537.36"
10.0.3.133 2025-03-09 08:57:03 +0000 "GET /exploit/ HTTP/1.1" 200 "user-agent: Mozilla/5.0 (Victim) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/125.0.0.0 Safari/537.36"
10.0.3.133 2025-03-09 08:57:03 +0000 "GET /exploit/0a6c0946033885b5809c67cf803309ad.web-security-academy.net/accountDetails HTTP/1.1" 404 "user-agent: Mozilla/5.0 (Victim) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/125.0.0.0 Safari/537.36"
10.0.3.133 2025-03-09 08:57:03 +0000 "GET /log?key=22&resource=20found&20not=20Academy%20Exploit%20Server%22 HTTP/1.1" 200 "user-agent: Mozilla/5.0 (Victim) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/125.0.0.0 Safari/537.36"
```

Server-side request forgery (SSRF)

1. Basic SSRF against the local server

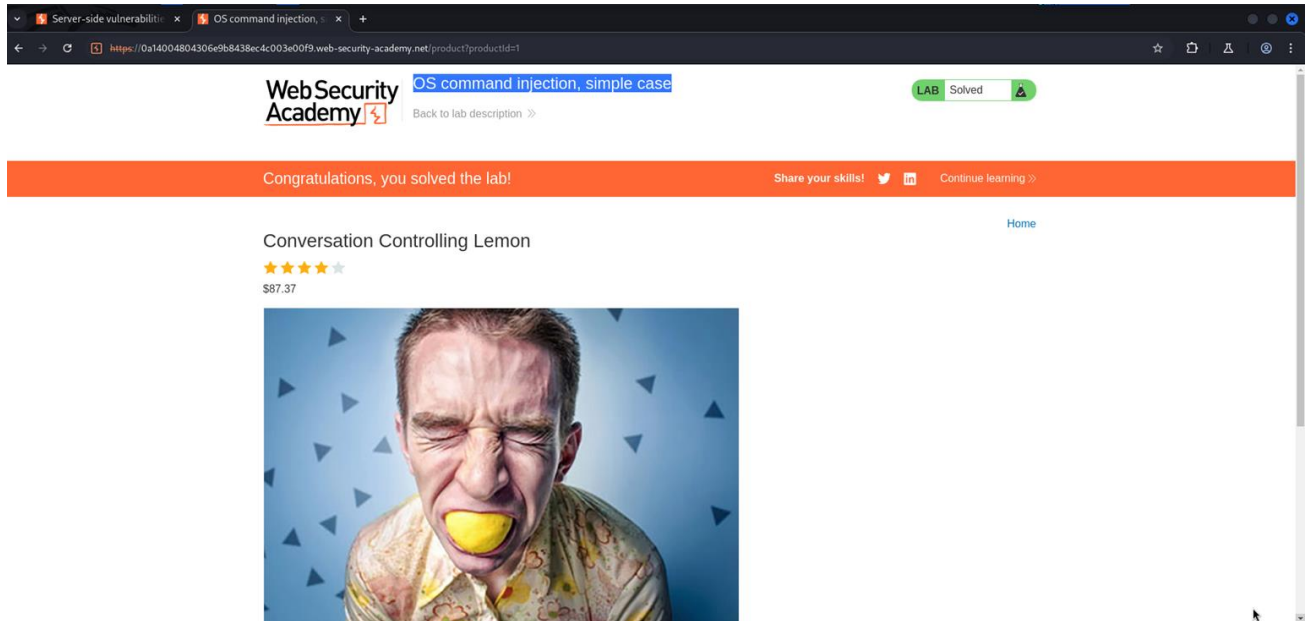


2. Basic SSRF against another back-end system



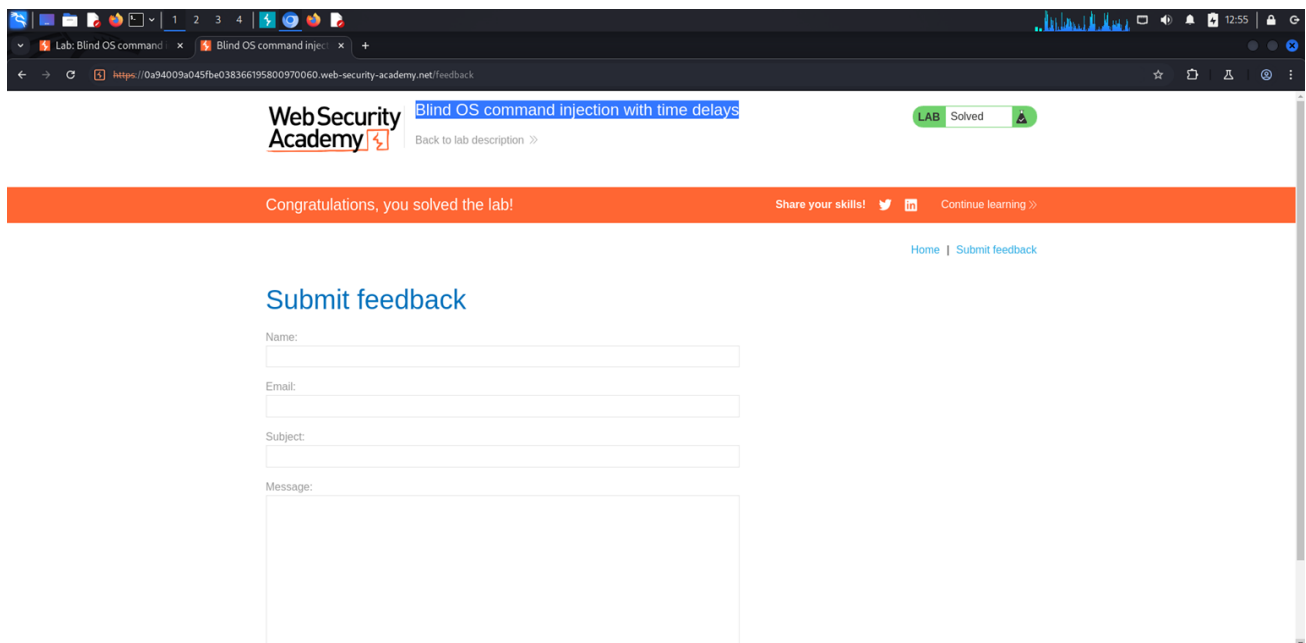
OS command injection

1. OS command injection, simple case



The screenshot shows a web browser window with the URL <https://0a14004804306e9b8438ec4c003e00f9.web-security-academy.net/product?productid=1>. The page title is "OS command injection, simple case". The WebSecurity Academy logo is visible. A green "LAB Solved" badge is in the top right. An orange banner reads "Congratulations, you solved the lab!". Below this, the text "Conversation Controlling Lemon" is displayed with a 4-star rating and a price of "\$87.37". A large image of a man with a pained expression biting a lemon is shown. A "Home" link is in the top right.

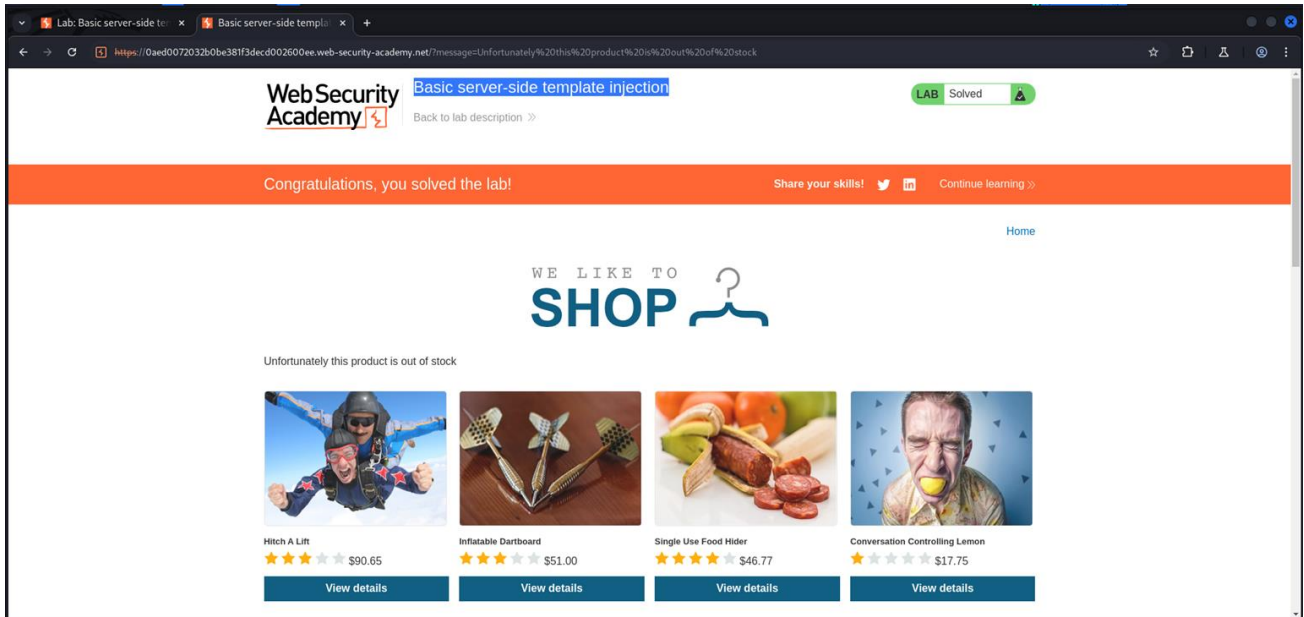
2. Blind OS command injection with time delays



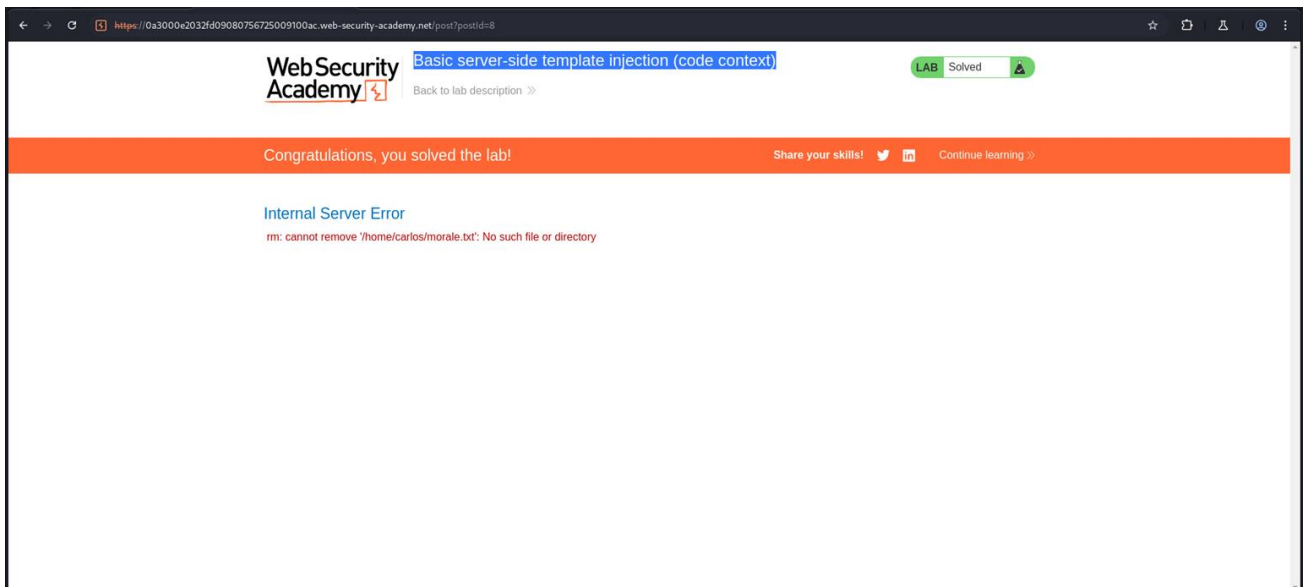
The screenshot shows a web browser window with the URL <https://0a94009a045f6e038366195800970060.web-security-academy.net/feedback>. The page title is "Blind OS command injection with time delays". The WebSecurity Academy logo is visible. A green "LAB Solved" badge is in the top right. An orange banner reads "Congratulations, you solved the lab!". Below this, the text "Submit feedback" is displayed. A feedback form with fields for Name, Email, Subject, and Message is shown. Links for "Home" and "Submit feedback" are in the top right.

Server-side template injection

1. Basic server-side template injection

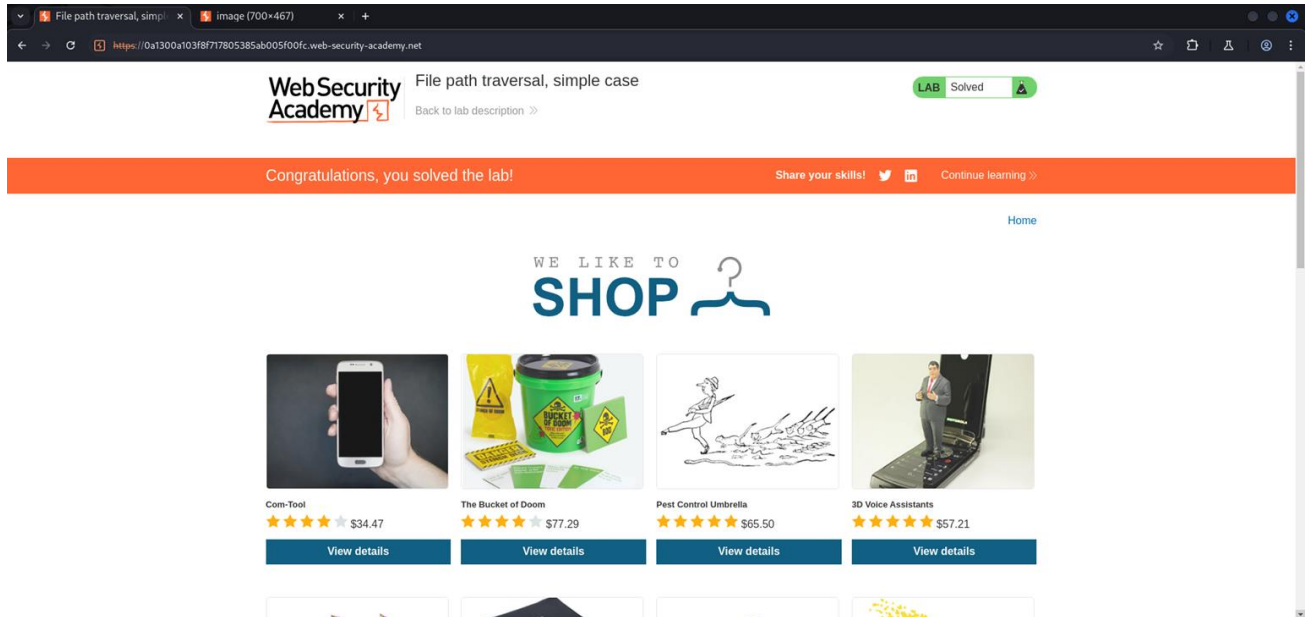


2. Basic server-side template injection (code context)



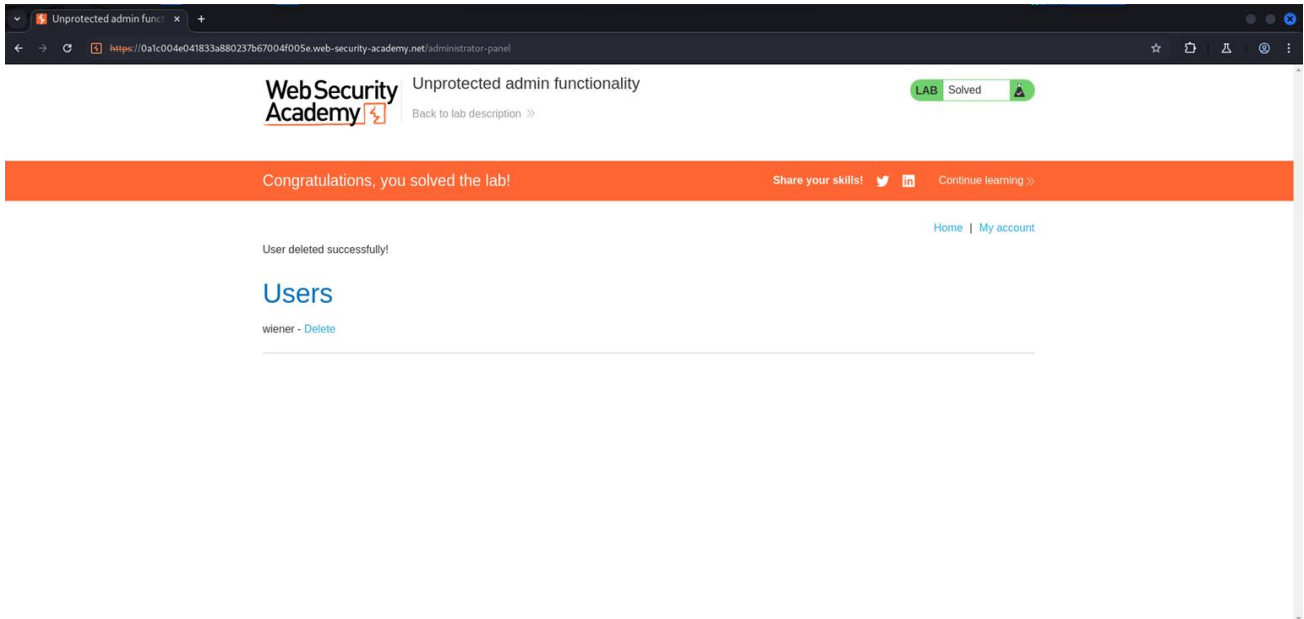
Path traversal

1. File path traversal, simple case

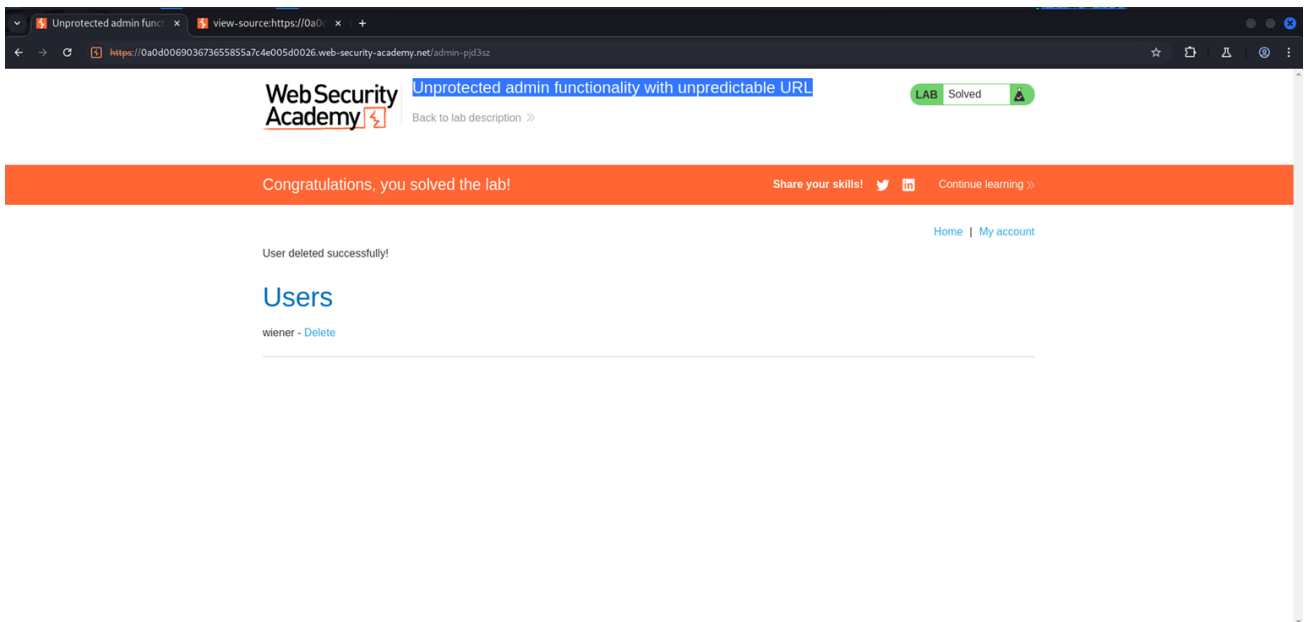


Access control vulnerabilities

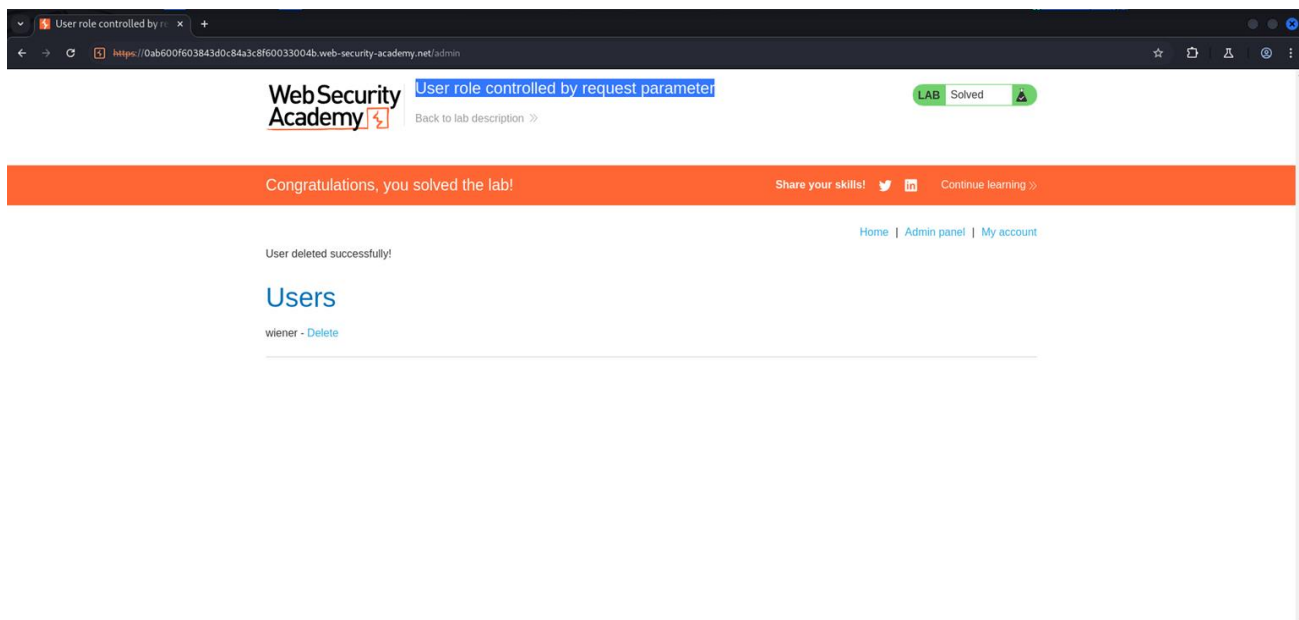
1. Unprotected admin functionality



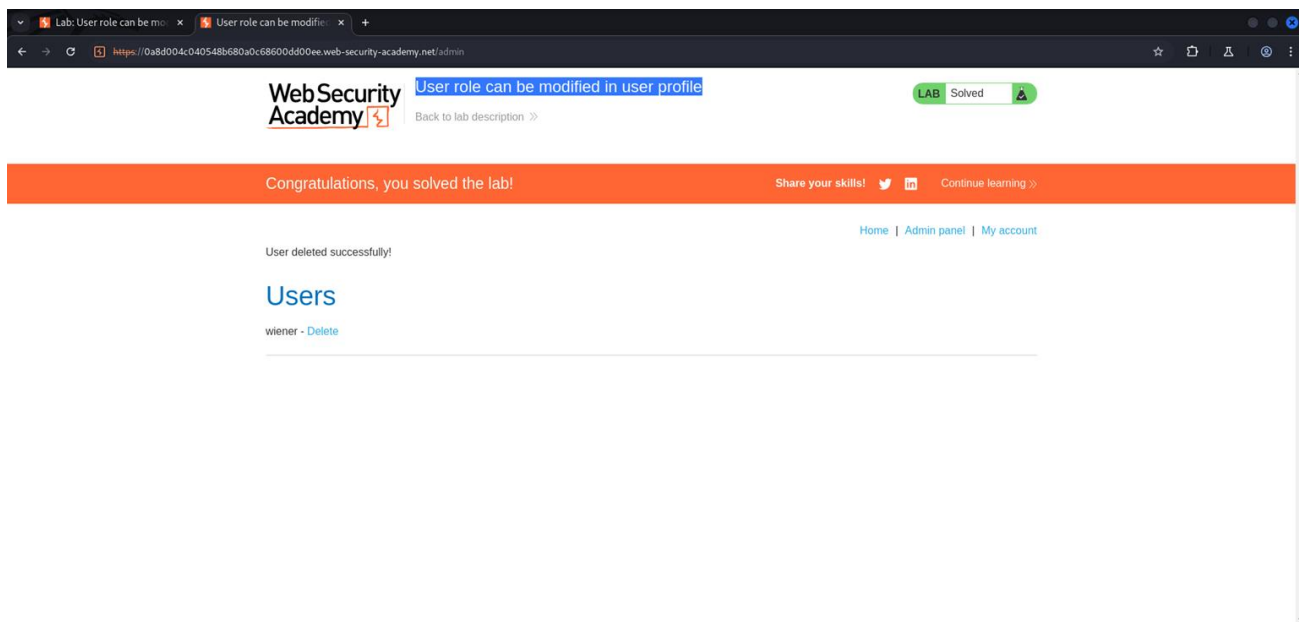
2. Unprotected admin functionality with unpredictable URL



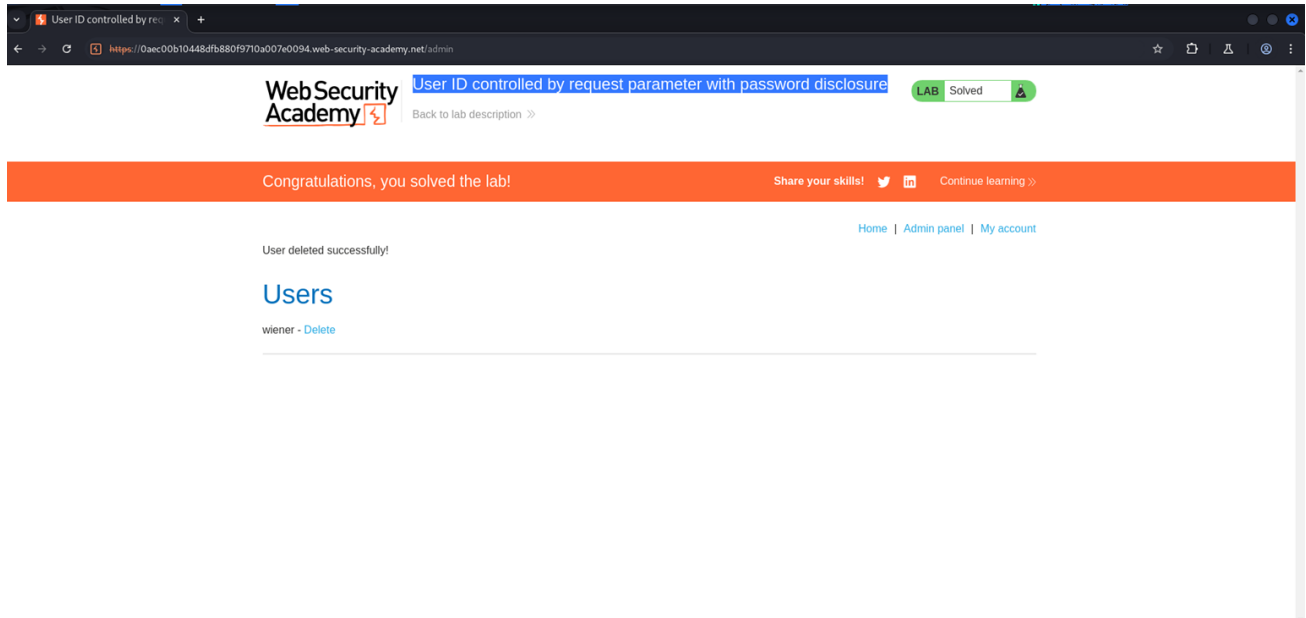
3. User role controlled by request parameter



4. User role can be modified in user profile

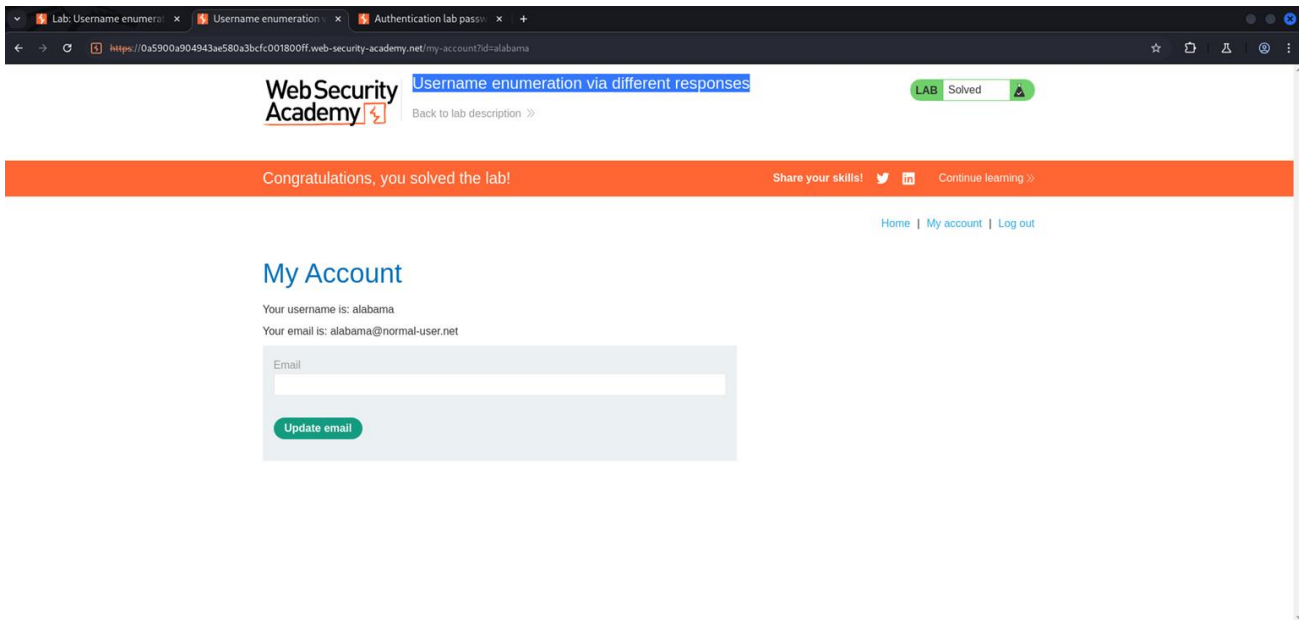


5. User ID controlled by request parameter with password disclosure

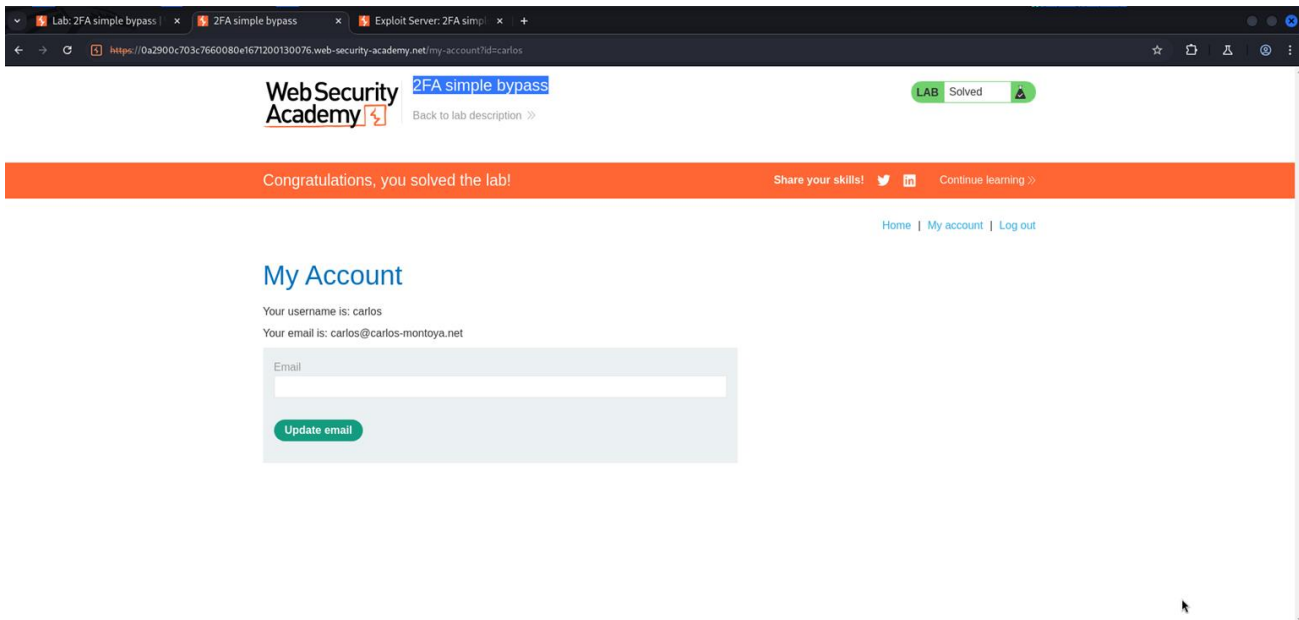


Authentication

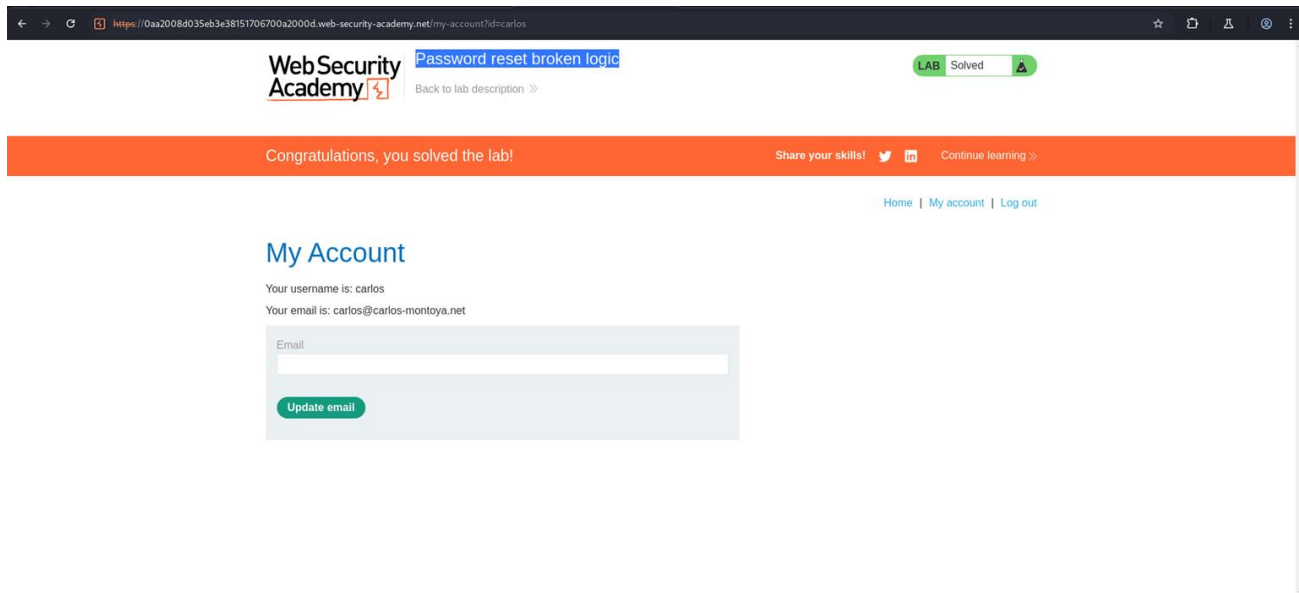
1. Username enumeration via different responses



2. 2FA simple bypass

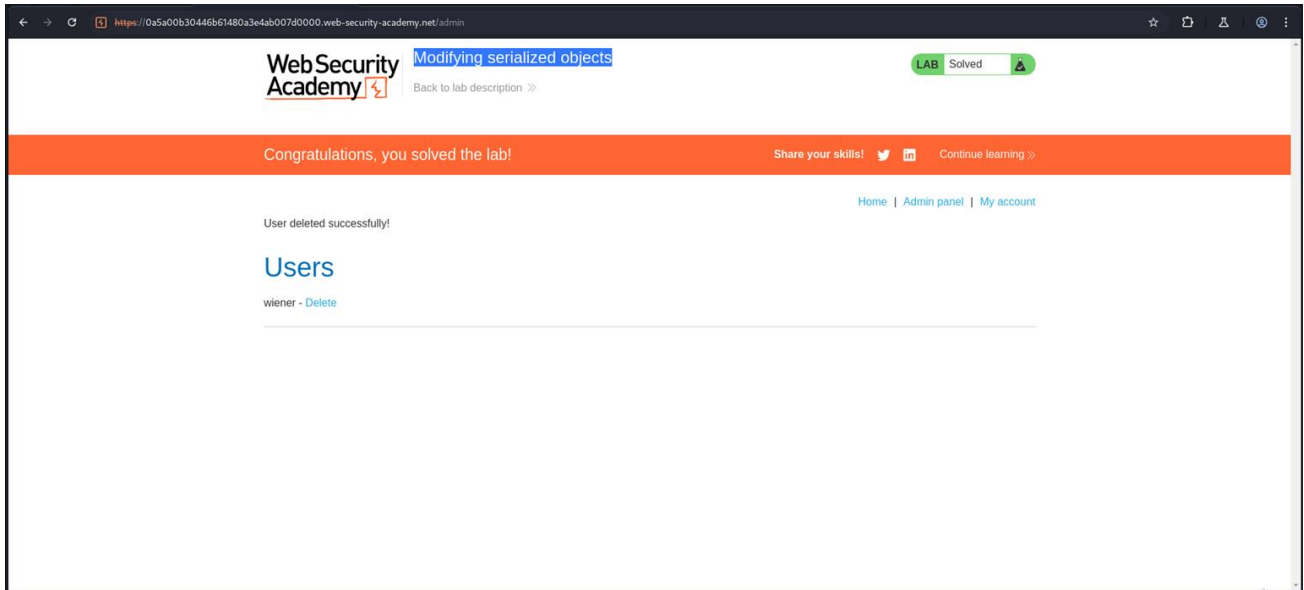


3. Password reset broken logic



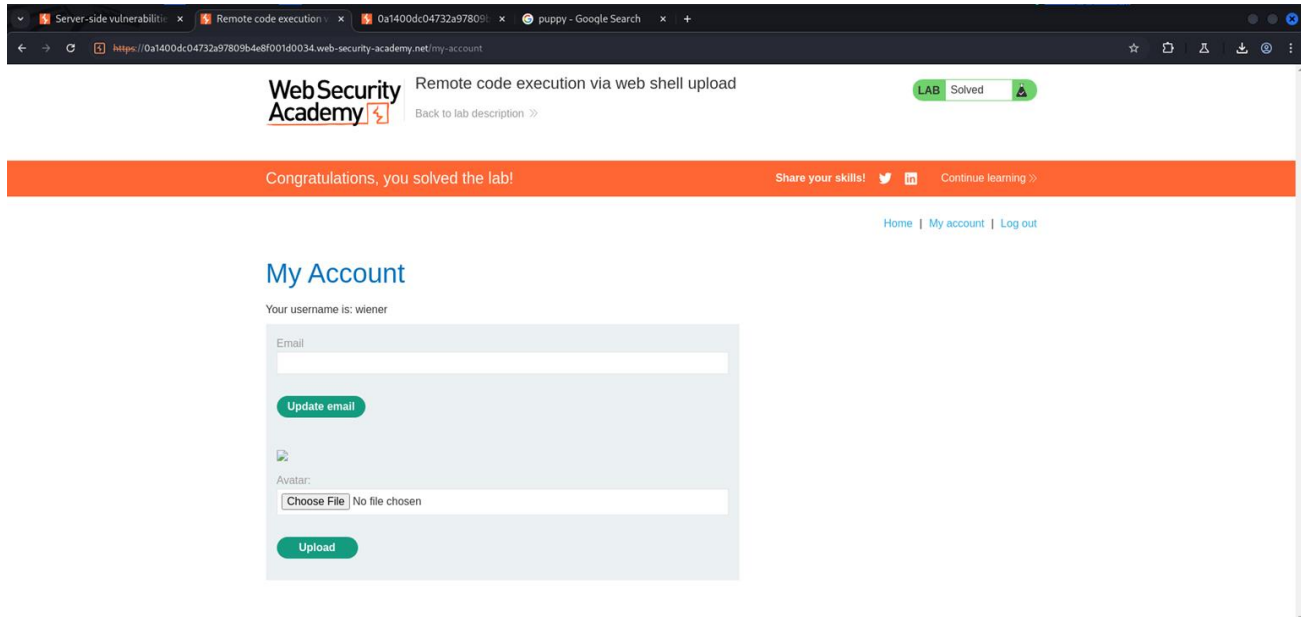
Insecure deserialization

1. Modifying serialized objects



File upload vulnerabilities

1. Remote code execution via web shell upload



2. Web shell upload via Content-Type restriction bypass

