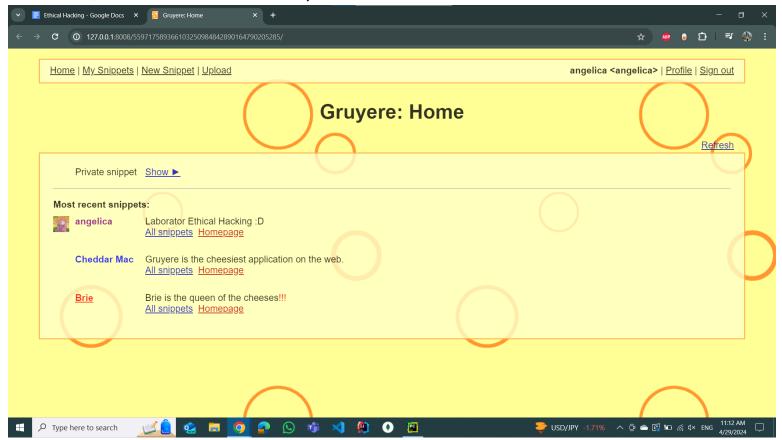
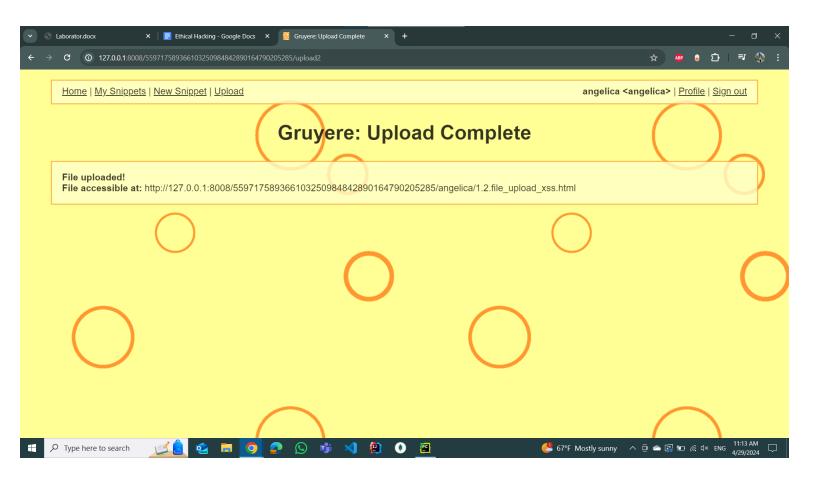
### 1. Exercitiul 1.1.

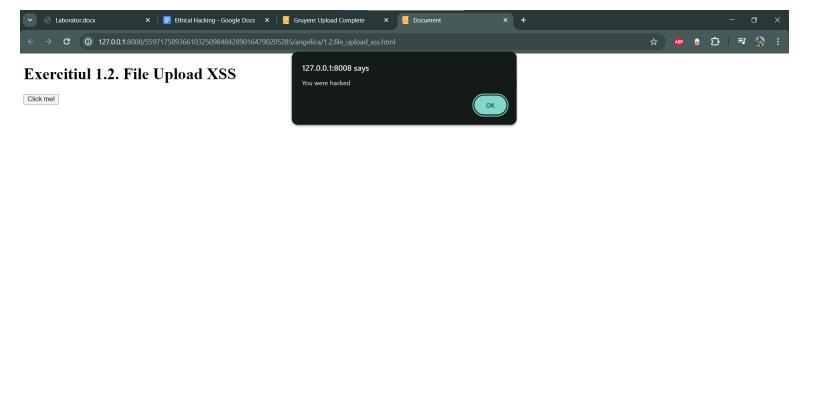
Porniți o instanță Gruyere (online sau local. Atenție! Pentru partea a doua a laboratorului aveți nevoie de o instanță locală). Urmați pașii din Using Gruyere. Creați un cont, adăugați un snippet și o poză de profil (icon), adăugați un fișier. Păstrați informațiile pentru că vă sunt necesare pentru următoarele exerciții.



## 2. Exercitiul 1.2.

Urmați pașii din File Upload XSS. Creați și adăugați un fișier care permite rularea unui script.



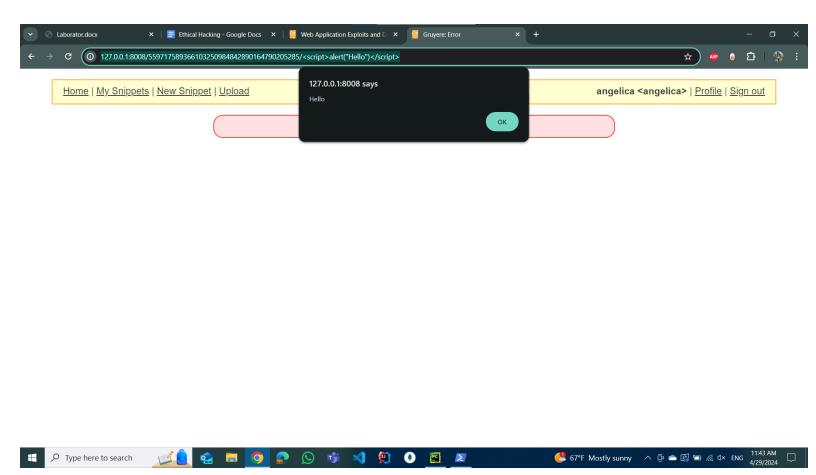


## 3. Exercitiul 1.3.

Type here to search

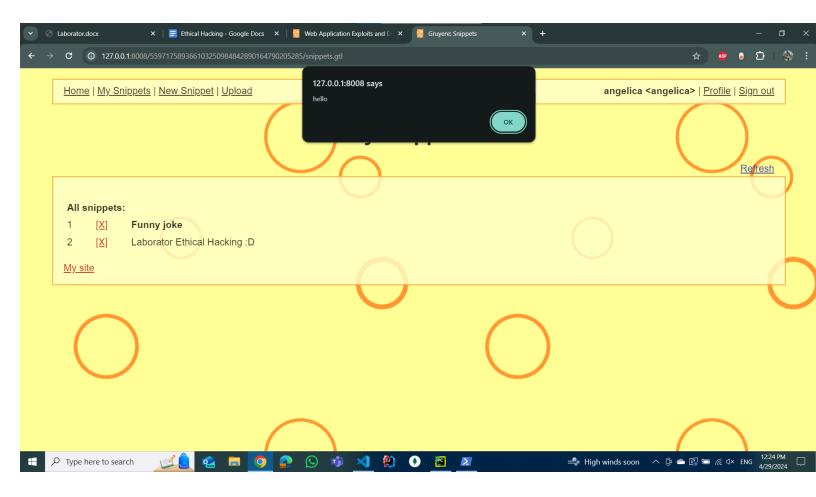
Urmați pașii din Reflected XSS. Găsiți un URL care să permită rularea unui script.

Script: <script>alert("Hello")</script>



## 4. Exercitiul 1.4.

Urmați pașii din Stored XSS. Adăugați un script care să deservească și altui utilizator. Snippet: <b onmouseover="alert(\'hello\')">Funny joke</b> (cand facem hover pe snippet se declanseaza o alerta)



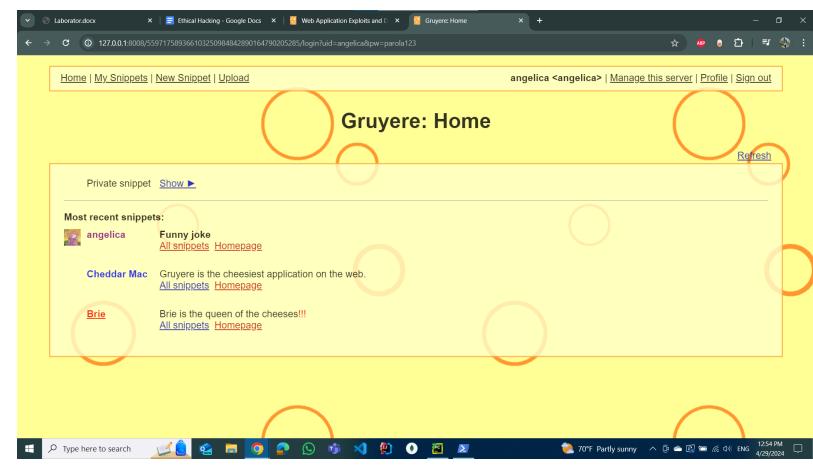
## 5. Exercitiul 1.5.

Urmați pașii din Elevation of Privilege. Transformați contul creat într-un cont de administrator.

```
🗬 gruyere.py
               ≡ editprofile.gtl × <> 1.2.file_upload_xss.html
    Q- admin
                                 [[include:menubar.gtl]][[/include:menubar.gtl]]
      <h2>Gruyere: Profile</h2>
      </div>
     <div class='content'>
     [[if:_cookie.is_admin]]
      <h3>Add a new account or edit an existing account.</h3>
     [[/if:_cookie.is_admin]]
     [[if:!_cookie.is_admin]]
      <h3>Edit your profile.</h3>
     [[/if:!_cookie.is_admin]]
     [[if:_message]]
     <div class='message'>{{_message}}</div>
     [[/if:_message]]
      <form method='get' action='/{{_unique_id}}/saveprofile'>
      <input type='hidden' name='action' value='update'>
     [[if:_cookie.is_admin]]
          <input type='hidden' name='uid' value='{{uid.0}}'>
          {{vid.0}}
```

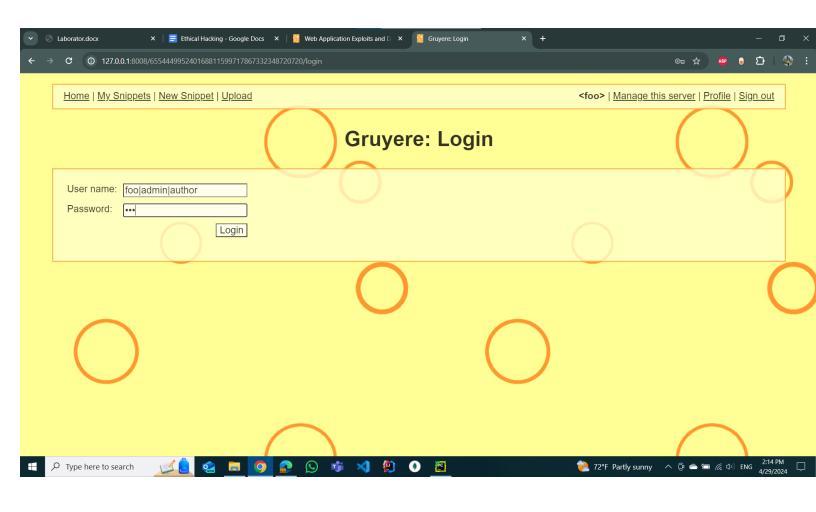
Observam ca pentru a avea privilegiul de a fi admin, cookie-ul "is\_admin" trebuie sa fie <u>True</u>. Deci, trebuie sa găsim o modalitate de a schimba valoarea acestui cookie la <u>True</u> prin URL. Deci, vom face un update la profil setand is\_admin=True

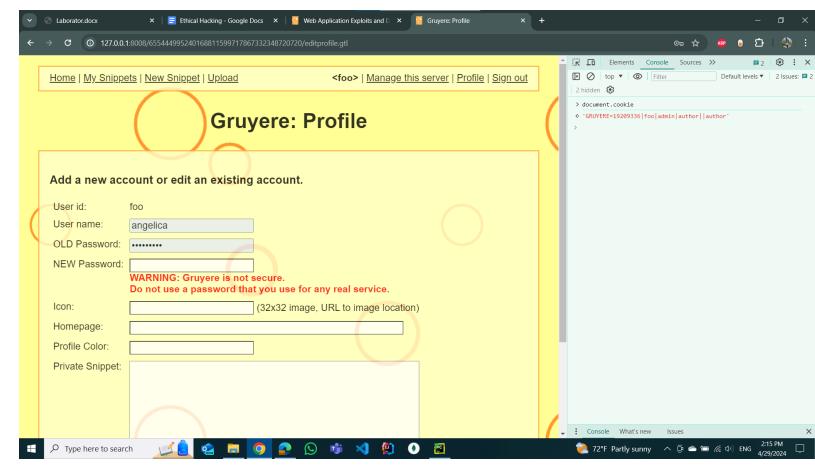
/saveprofile?action=update&is\_admin=True



# 6. Exercițiul 1.6.

Urmați pașii din Cookie Manipulation. Obțineți un cookie pentru un alt cont. Am obtinut un cookie pentru cont de administrator.





## 7. Exercițiul 1.7.

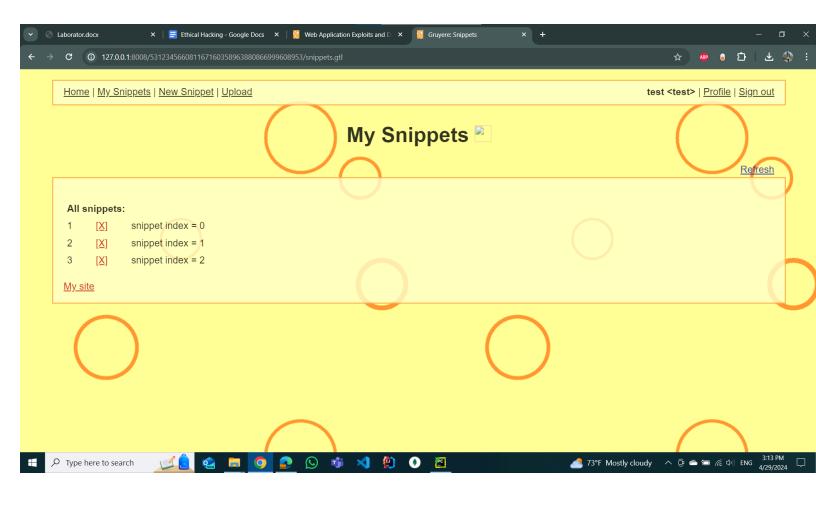
Urmați pașii din XSRF Challenge. Obțineți o modalitate de ștergere a înregistrărilor de tip snippet.

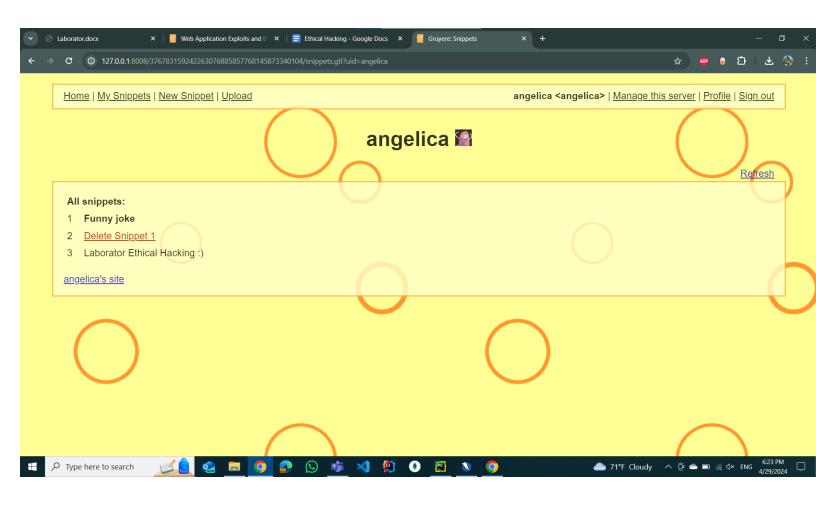
**URL-ul pentru stergere snippet:** 

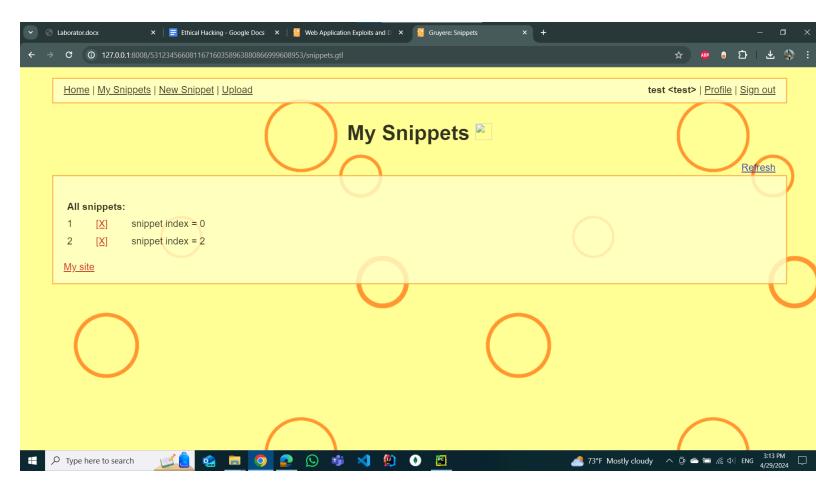
```
≡ snippets.gtl × ≡ editprofile.gtl

gruyere.py
                                     <> 1.2.file_upload_xss.html
                                                 \wedge \vee \forall :
   Q- delete
                           <b>All snippets:</b>
           [[for:_profile.snippets]]
            <script>document.write({{_key}} + 1)</script>&nbsp;&nbsp;
              <a href='/{{_unique_id}}/deletesnippet?index={{_key}}'>[X]</a>&nbsp;
              <div id='{{_key}}'>
                 {{_this:html}}
               </div>
```

Am facut un snippet: <a href="/{{\_unique\_id}}/deletesnippet?index=1">Delete Snippet 1</a> Acum incerc de pe alt cont sa dau click pe acest snippet si sa vad daca se sterge snippet-ul cu index=1



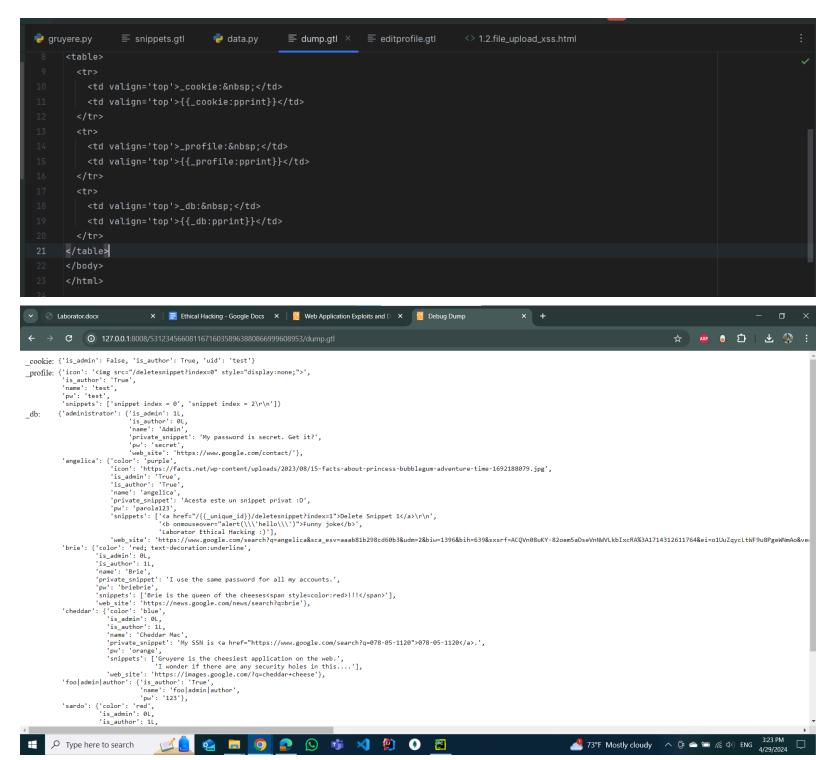




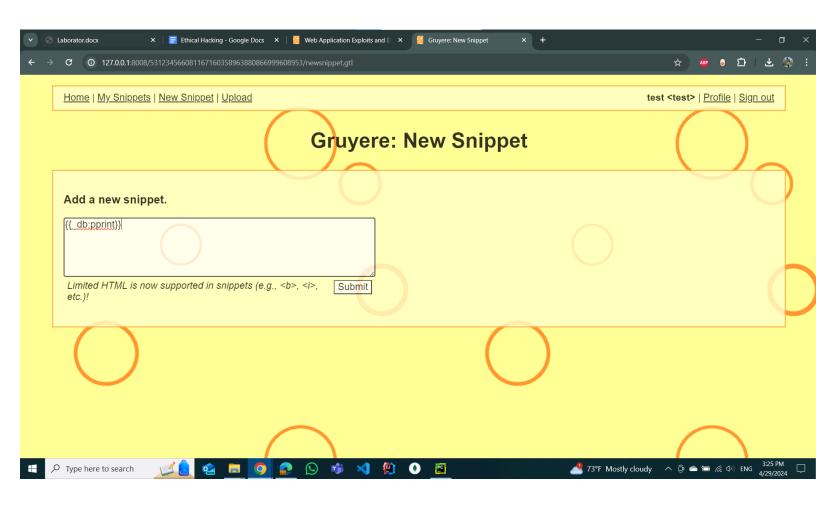
# 8. Exercițiul 1.8.

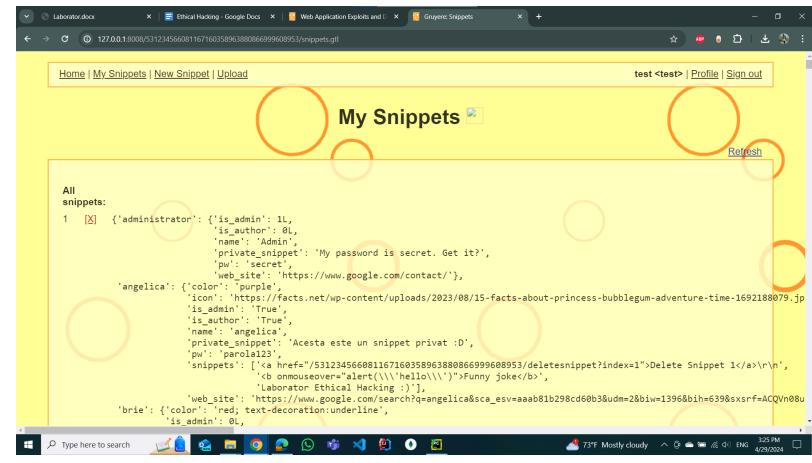
Urmați (cel puțin una dintre) modalitățile de citire a bazei de date conform Configuration Vulnerabilities.

#1. Daca mergem in /dump.gtl putem accesa baza de date Observam ca dump.gtl printeaza baza de date



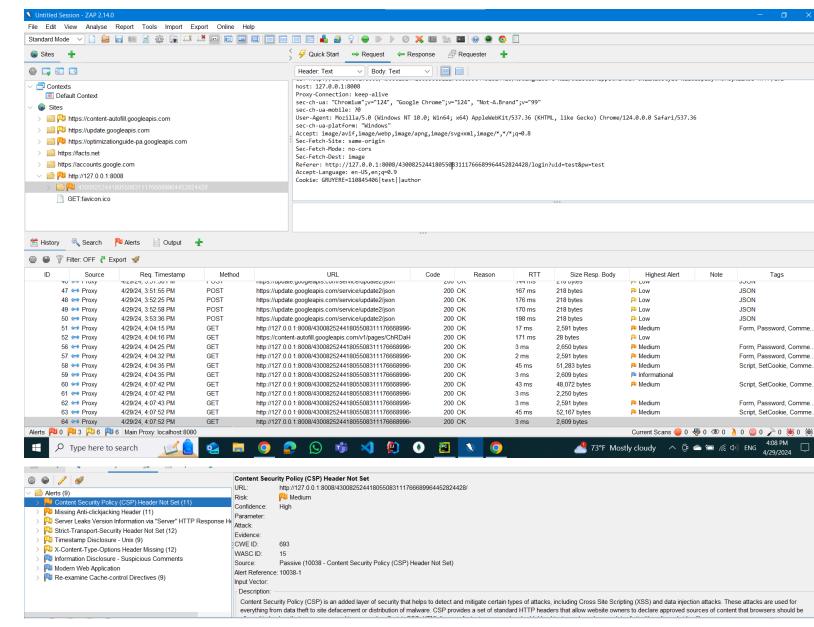
#3 daca punem intr-un snippet {{\_db:pprint}} putem printa intreaga baza de date intr-un snippet





## 9. Exercițiul 2.1.

Realizați o scanare manuală a Gruyere lansat local. Verificati tab-urile History și Alerts. Explicați o vulnerabilitate la alegere.



# Content Security Policy (CSP) Header Not Set (11)

- atacatorii pot executa script-uri rau-intentionate

## 10. Exercițiul 2.2.

Folosiți Manual Request Editor. Gasiți request-ul de login, rulați din nou, manual, cererea de login, mai intai cu utilizatorul creat de dvs. și apoi cu niște credențiale oarecare (invalide). Observați diferența în tab-ul Response.

VALID:

Body: Text Method Header: Text Send

GET http://127.0.0.1:8008/430082524418055083111766689964452824428/login?uid=test&pw=test HTTP/1.1

host: 127.0.0.1:8008

Proxy-Connection: keep-alive

sec-ch-ua: "Chromium";v="124", "Google Chrome";v="124", "Not-A.Brand";v="99"

sec-ch-ua-mobile: ?0

sec-ch-ua-platform: "Windows" Upgrade-Insecure-Requests: 1

User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/124.0.0.0 Safari/

537.36

Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,\*/\*;q=0.8,application/

signed-exchange; v=b3; q=0.7 Sec-Fetch-Site: same-origin Sec-Fetch-Mode: navigate Sec-Fetch-User: ?1

Sec-Fetch-Dest: document

Referer: http://127.0.0.1:8008/430082524418055083111766689964452824428/login?uid=test&pw=test

Accept-Language: en-US,en;q=0.9

content-length: 0

Cookie: GRUYERE=110845406|test||author

```
<img alt='' height='32' width='32' src='&lt;img src="/deletesnippet?index=0" style="display:none;"&gt;'>
    <b><span style='color:'>test</span></b>
    <span id='test'>{'administrator': {'is_admin': 1L,
                   'is author': 0L,
                   'name': 'Admin',
                   'private snippet': 'My password is secret. Get it?',
                   'pw': 'secret',
                   'web_site': 'https://www.google.com/contact/'},
  'angelica': {'color': 'purple',
               'icon':
 'https://facts.net/wp-content/uploads/2023/08/15-facts-about-princess-bubblegum-adventure-time-1692188079.jpg',
              'is admin': 'True',
              'is author': 'True',
              'name': 'angelica',
              'private_snippet': 'Acesta este un snippet privat :D',
              'pw': 'parola123',
              'snippets': ['<a href="/430082524418055083111766689964452824428/deletesnippet?index=1"&gt;Delete
Snippet 1</a&gt;\r\n',
                           '<b onmouseover="alert(\\\'hello\\\')"&gt;Funny joke&lt;/b&gt;',
                           'Laborator Ethical Hacking :)'],
              'web site': 'https://www.google.com/search?q=angelica&sca esv=aaab81b298cd60b3&udm=2&
 biw=1396&bih=639&sxsrf=ACQVn08uKY-82oem5aDseVnNWVLkbIxcRA%3A1714312611764&ei=o1UuZqycLtWF9u8PgeWNmAo
 &ved=0ahUKEwjs-YeSiOWFAxXVgv0HHYFyA6MQ4dUDCBA&uact=5&oq=angelica&
 gs lp=Egxnd3Mtd216LXNlcnAiCGFuZ2VsaWNhMgUQABiABDIFEAAYgAQyBRAAGIAEMgUQABiABDIFEAAYgAQyBRAAGIAEMgUQABiABDIFEAAYgAQyBRA
 gUQABiABEjCD1DcCFi2DnABeACQAQCYAWygAd0FqgEDNy4xuAEDyAEA-AEBmAIJoAKaBsICChAAGIAEGEMYigXCAgQQIxgnmAMAiAYBkgcDNi4zoAfIL
 A& sclient=gws-wiz-serp'},
 'brie': {'color': 'red; text-decoration:underline',
           'is admin': 0L,
          'is author': 1L,
          'name': 'Brie',
          'private snippet': 'I use the same password for all my accounts.',
          'pw': 'briebrie',
          'snippets': ['Brie is the queen of the cheeses<span style=color:red&gt;!!!&lt;/span&gt;'],
          'web_site': 'https://news.google.com/news/search?q=brie'},
  'cheddar': {'color': 'blue',
             'is admin': 0L,
             'is author': 1L,
             'name': 'Cheddar Mac',
             'private_snippet': 'My SSN is <a href="https://www.google.com/search?q=078-05-1120"&gt;078-05-1120
 </a&gt;.',
                                       4 L No matches Time: 51 ms Rody Length: 52 167 Total Length: 52 375 hytes
Find:
```

#### **INVALID:**

Jellu

GET http://127.0.0.1:8008/430082524418055083111766689964452824428/login?uid=test&pw=invalid HTTP/1.1

host: 127.0.0.1:8008

Proxy-Connection: keep-alive

sec-ch-ua: "Chromium";v="124", "Google Chrome";v="124", "Not-A.Brand";v="99"

sec-ch-ua-mobile: ?0

sec-ch-ua-platform: "Windows"

```
Text
                         Send
    Xa III'et= /43000Z3Z441003300311170000330443Z0Z44Z0/ >TIOIIIeX/ ax
      <a href='/430082524418055083111766689964452824428/snippets.gtl'>My&nbsp;Snippets</a>
      <a href='/430082524418055083111766689964452824428/newsnippet.gtl'>New&nbsp;Snippet</a>
      <a href='/430082524418055083111766689964452824428/upload.gtl'>Upload</a>
  </span>
  <span id='menu-right'>
      <span class='menu-user'>
       test <test&gt;
      </span>
      <a href='/430082524418055083111766689964452824428/editprofile.gtl'>Profile</a>
      <a href='/430082524418055083111766689964452824428/logout'>Sign out</a>
  </span>
</div>
<div>
<h2>Gruyere: Login</h2>
</div>
<div class='message'>Invalid user name or password.</div>
<div class='content'>
<form method='get' action='/430082524418055083111766689964452824428/login'>
<ta
    User name:
  <input type='text' name='uid'>
>
    Password:
  >
    <input type='password' name='pw'>
align='right'>
    <input type='submit' value='Login'>
</form>
</div>
</body>
</html>
Find:
                                         No matches
                                                                   Time: 3 ms | Body Length: 3,009 | Total Length: 3,165 bytes
```

## Diferente din response:

## Valide:

- suntem redirectionati catre pagina de home a aplicatiei Invalide:

- suntem redirectionati catre o pagina cu "Invalid user name or password" unde trebuie sa introducem din nou datele de login