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**Week 1: Regulation and privacy on the web**

**Task 1: GDPR Data Request**

1. Which company did you choose to request your data from and how long did it take to submit that information?

I chose Medium.com, it’s a blog website for both personal and profitable use. I emailed them and there was an automated response first, then I created my request again via the link they provided with that automated e-mail. After my request, they responded via e-mail within an hour.

1. In what format did you receive your data and how many pages/bytes of it were there?

They sent me .zip file inluding the following folders:

A screenshot of a calendar

AI-generated content may be incorrect.

The files in those folders are in .html format.

1. What kind of information was there that you had not directly given yourself?

-IP addresses I used

-My sessions (My active and inactive sessions)

-My X friends who are also on Medium

1. Did you understand the meaning of the information?

Yes it was very simple and well-organized. They also provided me a roadmap to explain which file includes which informations.

A white paper with black text

AI-generated content may be incorrect.

1. Do you think that the company collected the least amount of data required to provide the service you needed?

I think they are very open and transparent when it comes to keep the data. I read their privacy page on the website as well and I can say that they don’t keep any unnecessary information that bothered me.

1. Were you surprised about something, what?

I was surprised about the IP addresses because I didn’t know that they were keeping that information however I understood why they do that afterwards. I looked up for it and found that it’s to protect themselves against syber attacks, also they understand if I am logging in from a new IP and asks an authentication code, so they protect my account as well.

**Task 2: Cookie Raid**

* How many necessary cookies are there?

71

* What happens if you try to disable necessary cookies?

It gives the following error:

*Mandatory - can not be deselected. Necessary cookies help make a website usable by enabling basic functions like page navigation and access to secure areas of the website. The website cannot function properly without these cookies.*

* List at least 6 different expiry times from the necessary cookies

|  |
| --- |
| **CookieConsentBulkSetting-# [x5]**  Enables cookie consent across multiple websites  Maximum Storage Duration: **Persistent**  Type: HTML Local Storage |
| 1.gif  Used to count the number of sessions to the website, necessary for optimizing CMP product delivery.  Maximum Storage Duration: **Session**  Type: Pixel Tracker |
| test\_cookie  Used to check if the user's browser supports cookies.  Maximum Storage Duration: **1 day**  Type: HTTP Cookie |
| datadome  Used in context with the website's BotManager. The BotManager detects, categorizes and compiles reports on potential bots trying to access the website.  Maximum Storage Duration: **1 year**  Type: HTTP Cookie |
| JSESSIONID [x2]  Preserves users states across page requests.  Maximum Storage Duration: **Session**  Type: HTTP Cookie |
| jagex-support-data  Used to locally store a copy of current announcement articles to reduce the necessary rate of requests  Maximum Storage Duration: **Persistent**  Type: HTML Local Storage |

* List 3 different cookie types from necessary cookies

- HTTP Cookie

- HTML Local Storage

- Pixel Tracker

* In Statistics, what are the expiry time and cookie type of **JXWEBUID**

|  |
| --- |
| **JXTRACKING**  An identifier we use to track the pages you visit on our websites. We use the information to make improvements to the website.  Maximum Storage Duration: **Session**  Type: **HTTP Cookie** |

* In Statistics and Marketing, what other Apps or Companies are listed, other than Jagex

-Google

-Framer

-Taboola

-Tiktok

-Reddit

-Meta

**Task 3: Browser Fingerprinting**

**Task 3 A) EFF Cover Your Tracks**

* Return two categories and results where you had the highest and lowest amount of identifying bits of information.

- Hash of canvas fingerprint (9,77)

- Hash of WebGL fingerprint (10,08)

* Why does identifiability matter?

Identifiability matters because it can compromise privacy and security, making it easier for attackers to target individuals or misuse data.

* What pros and cons can you think of to being unique vs common?

**Pros of being unique:**

-Stands out and attracts attention.

-Offers a sense of individuality and originality.

-Can lead to innovation and creative solutions.

**Cons of being unique:**

-May face resistance or rejection from others.

-Could be isolating or misunderstood.

-Might require more effort to maintain or explain.

**Pros of being common:**

-Easier to fit in and gain acceptance.

-Less likely to face criticism or resistance.

-Can offer stability and familiarity.

**Cons of being common:**

-May feel unremarkable or overlooked.

-Limited opportunities for standing out.

-Can lead to a lack of differentiation or uniqueness.

**Task 3 B) AmIUnique**

* Canvas + WebGL Data

|  |  |  |
| --- | --- | --- |
| Canvas | 0.05 % | A black background with green text and a yellow smiley face  AI-generated content may be incorrect. |
| WebGL Data | 0.21 % | A yellow triangle on a black background  AI-generated content may be incorrect. |

* Screen width, Screen height

|  |  |  |
| --- | --- | --- |
| Screen width | 6.36 % | 1440 |
| Screen height | 5.65 % | 900 |

* Screen available width, Screen available height, Can you explain your result?

Screen available width 6.49 % 1440

-Returns the amount of horizontal space in pixels available to the window.

Screen available Height 0.07 % 825

-Specifies the height of the screen, in pixels, minus permanent or semipermanent user interface features displayed by the operating system, such as the Taskbar on Windows.

**Task 4: TikTok Challenge (bonus)**

**Task 4 A) Analysing the HAR file**

-**Browser:** Safari 16.3

-**Operating System:** macOS 10.15.7

-**Screen Size:** The screen size is not directly available in the logs. This information is typically accessed via JavaScript using window.screen.width and window.screen.height, which is not provided here.

-**Local Language:** The local language is not explicitly mentioned, but the presence of URLs like default.esm.js and captcha.js suggests the user might be using English or another common language supported by TikTok.

-**Browser Language:** English (Great Britain)

-**Region:** The region can be inferred from the URLs and domains:

* The use of tiktok-web-us in the URLs suggests the user is accessing the US version of TikTok.
* Domains like byteoversea.com and ttwstatic.com are commonly associated with TikTok's global services, but the us in tiktok-web-us points to the US region.

-**Timezone:** The timezone is not explicitly mentioned in the logs. This information is typically accessed via JavaScript using Intl.DateTimeFormat().resolvedOptions().timeZone, which is not provided here.

-**Search Keyword:** pellesecurity

**Task 4 B) TikTok data obfuscation**

1. I opened Tiktok on Firefox Developer Edition and from Developer Monitor / Network I copied the following cURL:

*curl 'https://mcs-va.tiktokv.com/v1/list' -X POST -H 'User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10.15; rv:137.0) Gecko/20100101 Firefox/137.0' -H 'Accept: \*/\*' -H 'Accept-Language: en-US,en;q=0.5' -H 'Accept-Encoding: gzip, deflate, br, zstd' -H 'Content-Type: application/json; charset=utf-8' -H 'Referer: https://www.tiktok.com/' -H 'Origin: https://www.tiktok.com' -H 'Sec-Fetch-Dest: empty' -H 'Sec-Fetch-Mode: cors' -H 'Sec-Fetch-Site: cross-site' -H 'Connection: keep-alive' -H 'TE: trailers' --data-raw '[{"events":[{"event":"window\_size\_change","params":"{\"page\_name\":\"others\_homepage\",\"enter\_from\":\"others\_homepage\",\"time\_from\_origin\":92354,\"is\_landing\_page\":0,\"previous\_page\":\"search\_user\",\"page\_url\":\"https://www.tiktok.com/@pellesecurity\",\"userAgent\":\"Mozilla/5.0 (Macintosh; Intel Mac OS X 10.15; rv:137.0) Gecko/20100101 Firefox/137.0\",\"user\_type\_alias\":\"user\",\"domain\_name\":\"www.tiktok.com\",\"page\_path\":\"/@pellesecurity\",\"vidab\":\"70508271,73184477,73280492,73282495,73294390,73294937,73340490,73404637,73408307,73411239,73418134,73419053,73425708,73427272,73432220,73449066,73453775,73459765,73470036,73470127,73482194,73484781,73539009,70405643,71057832,71200802,73004916,73171280,73208420,73385640\",\"seo\_vidab\":\"\",\"is\_non\_personalized\":\"0\",\"data\_collection\_enabled\":0,\"height\_after\":408,\"width\_after\":1280,\"play\_mode\":\"three\_column\",\"height\_before\":658,\"width\_before\":1280,\"prediction\_payload\":\"0,1,0,0,0,0,0,0,0,1,0,1296000,1,8,0,0,0,0,0,0,1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,3,18,2,1,0,0,0,1,1,0.96,1,1,0,0,2,1,1,1,0,0,0,0,0,1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,2.93,0.99,0,0,0,0,0,0,0,0,0,0,0,0,0,1,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,0,0,0,0,0,0,0,0,3,14,2500000,16900000,2400000,43700,212200,540,1,1,0,1,1,0,0,0,0,0,0,0,3,14,2500000,16900000,2400000,43700,212200,540,1,1,0,1,1,0,0,0,0,0,2.93,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,0,1,1,7.6,7.6\",\"event\_index\":1741707782155}","local\_time\_ms":1741707400814,"is\_bav":1,"ab\_sdk\_version":"73410695,72901874,121503376","session\_id":"33638a8e-a88e-4498-9670-26650bd2ffb7"}],"user":{"user\_unique\_id":"7480575891869861381","user\_type":12,"user\_id":"7480575647509644343","user\_is\_login":false,"device\_id":"7480575891869861381"},"header":{"app\_id":1988,"os\_name":"mac","os\_version":"10.15","device\_model":"Macintosh","network\_type":"","language":"en-US","region":"TR","platform":"web","sdk\_version":"5.3.8\_oversea","sdk\_lib":"js","timezone":3,"tz\_offset":-10800,"resolution":"1440x900","browser":"Firefox","browser\_version":"137.0","referrer":"https://www.tiktok.com/search/user?q=pellesecurity&t=1741707356589","referrer\_host":"www.tiktok.com","width":1440,"height":900,"screen\_width":1440,"screen\_height":900,"custom":"{\"session\_id\":\"74805758918698613811741707309355\",\"webid\_created\_time\":\"1741707308\",\"app\_language\":\"en\",\"page\_name\":\"homepage\_hot\",\"device\":\"pc\",\"launch\_mode\":\"organic\",\"traffic\_type\":\"google\",\"source\":\"\",\"referer\_url\":\"https://www.google.com/\",\"browserName\":\"firefox\",\"hevcSupported\":1,\"cpu\_core\":8,\"hardware\_score\":7.6,\"total\_score\":7.6,\"release\":\"1.0.2.4909\",\"user\_is\_login\":0,\"landing\_page\":\"homepage\_hot\",\"is\_kids\_mode\":0,\"region\":\"TR\",\"extraData\":\"{}\",\"is\_downgrade\":false,\"is\_sharing\":0,\"vidab\":\"70508271,73184477,73280492,73282495,73294390,73294937,73340490,73404637,73408307,73411239,73418134,73419053,73425708,73427272,73432220,73449066,73453775,73459765,73470036,73470127,73482194,73484781,73539009,70405643,71057832,71200802,73004916,73171280,73208420,73385640\",\"seo\_vidab\":\"\",\"b\_c\":\"0\",\"max\_touch\_points\":0}"},"local\_time":1741707401,"verbose":1}]'*

After encoding, I got the following Headers:

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

*Content-Length: 8*

*X-Tt-Logid: 20250311180126803529321A19A7E69409*

*Access-Control-Allow-Origin: https://www.tiktok.com*

*Access-Control-Max-Age: 1800*

*Access-Control-Allow-Credentials: true*

*Access-Control-Allow-Methods: GET, OPTIONS, HEAD, PUT, POST*

*Cross-Origin-Resource-Policy: cross-origin*

*Cache-Control: no-store, no-cache, must-revalidate*

*Pragma: no-cache*

*Expires: 0*

*x-tt-trace-host: 019aaaf2b44d18f0ce0f0299326d0f5b2e430bafa4d539a359f3b14fc89ac23e59367a9403ef5a0b6cd082d4120586b837d86e07e566589696d5dabb821d36b4c69c591ba6a710d376c0b3085b98fa4ccfa08454e04ed098322ef111102987d2f95d2c74050e2cb0d08490024789b5f2f4*

*x-tt-trace-id: 00-250311180126803529321A19A7E69409-42658BC82FC22D75-00*

*Server: TLB*

*X-Origin-Response-Time: 5,23.48.249.166*

*Date: Tue, 11 Mar 2025 18:01:27 GMT*

*Connection: keep-alive*

*x-tt-trace-tag: id=16;cdn-cache=miss;type=dyn*

*Server-Timing: cdn-cache; desc=MISS, edge; dur=12, origin; dur=5*

*Server-Timing: inner; dur=2*

*X-Parent-Response-Time: 16,23.195.36.70*