Homework: Cookies



1. Read the following articles from [The Markup](https://themarkup.org/), an investigative nonprofit focused on the tech industry:
   1. [The High Privacy Cost of a “Free” Website](https://themarkup.org/blacklight/2020/09/22/blacklight-tracking-advertisers-digital-privacy-sensitive-websites):
   2. [From “Heavy Purchasers” of Pregnancy Tests to the Depression-Prone: We Found 650,000 Ways Advertisers Label You](https://themarkup.org/privacy/2023/06/08/from-heavy-purchasers-of-pregnancy-tests-to-the-depression-prone-we-found-650000-ways-advertisers-label-you)
   3. [How We Built a Real-time Privacy Inspector](https://themarkup.org/blacklight/2020/09/22/how-we-built-a-real-time-privacy-inspector)
2. Describe the distinction between first- and third-party cookies.

**First-party cookies are cookies only available to the website its created in where as Third-party cookies are available to any website that accepts and download the server-code for the cookies.**

1. How can cookies be used to track your internet usage across unrelated sites and apps, even across different devices?

**Cookies are piece of data websites and apps store of your unique sessions when you visit them. These data can be saved across different website and devices through your personal Email, Phone Number, Account, ect..**

1. Describe other ways sites have of tracking you, including:
   1. Key logging: **Key logging is a method which records the keys you press on your keyboard.**
   2. Session recording: **Session recording is capturing the users interaction with the website from key strokes, mouse movements and so on.**
   3. Canvas fingerprinting: **Canvas fingerprinting is a similar to cookies in a way that it generates a unique identifier for the user during the session even if they delete the cookies.**
   4. Web beacons/pixels: **Web beacons are hidden codes in images or email which when clicked would send a request to a server and reveal info about the user.**
2. What are the privacy implications of adding analytics gathering or social media widgets like AddThis? Are the widgets always visible to users of the website?

**It is implied that our personal information are confidential and secure that no one can access them and are protected, however often times widget aren’t always visible to users .**

1. Describe the bidding process that occurs when you load a web page containing ads.

**First the user visits the site, then a add request will be sent to a ad server. Then an Auction biddings occurs to advertisers who wants to display their adds to the user. Once the biddings is over, they then select which add to display. Then the add gets delivered to the website and is displayed to the user. The ads then tracks the users interaction with the ads to track its marketing performance.**

1. What are advertising segments and how are they constructed? Give some examples of sensitive advertising profile categories.

**Advertising segments are categories that places user that share common interest, characteristics and behavior. They are constructed based on the cookies/ datas on users and are then categorized based on the data websites have. Some example of sensitive advertising profile categories are:**

**Sexual Orientation**

**Religious belief**

**Health and Medical Conditions**

**Criminal History**

1. Can your online behavior be tied to your meatspace behavior, like your movements and in-person purchasing history?

**Using different methods such as location on your phone, we can deduce your behaviour by your location and most frequent visits.**

1. What are some compelling reasons that the developers of websites that contain sensitive material may rely on privacy-invasive trackers like AddThis?

**Websites owners/developers are able to get sensitive data on their users to be able to sell to advertisers to earn more profit.**

1. Use the [Blacklight](https://themarkup.org/blacklight) tool to scan the following and comment on your results:
   1. <https://www.dawsoncollege.qc.ca>

**There are very little to no ad trackers in dawsoncollege.qc.ca. there are in total 2 ad tracker**

* 1. <https://montreal.ca>

**There is only one ad tracker found in montreal.ca, this is probably because it’s a government website**

* 1. <https://www.quebec.ca>

**Quebec government website has surprisingly more ad tracking cookies and third-party cookies than expected. This is probably to track the citizens data for the next time they visit the website.**

* 1. <https://www.canada.ca>

**Canada has 4 ad tracker and 2 third party cookies, a lot less than Quebec.**

* 1. A site of your choice that you use frequently

**A site a most frequently use has like a million cookies and probably added a virus to my computer at some point but to point out exact numbers**

**There 35 ad trackers and 57 third-party cookies.**

**This is probably because it’s a free website and using the data they gather to sell to advertiser to keep their website up**