2023 Privacy and IOT Research EXPLORATION MVP'S

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ProperData

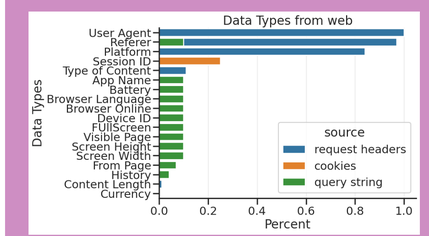
INTRODUCTION

Goal Statement

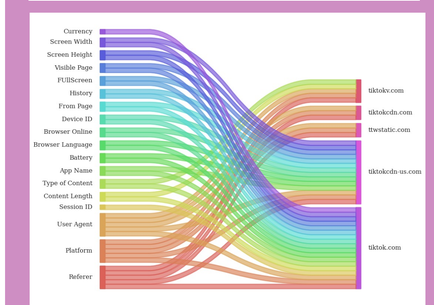
Our primary goal was to learn more about how to protect our privacy and enhance our digital security. In today's world, where personal information is constantly being collected and shared, it is crucial to understand how to safeguard our privacy effectively. We also aimed to create a device that would recognize a voice and respond to questions that it had access to. Our mission was to swiftly deliver essential knowledge through voice-based interactions, all the while minimizing data tracking and reducing reliance on third-party entities, and we accomplished that through Mycroft.

We conducted an analysis of TikTok's data collection practices. TikTok has garnered significant attention regarding its data handling practices. Through careful examination, we sought to understand the extent of data that TikTok collects from its users. Our investigation revealed that TikTok collects various types of data, including personal information, device information, location data, and usage patterns. We strive to empower individuals with knowledge, encouraging them to navigate the digital landscape with a heightened sense of privacy awareness and the ability to make informed choices about their personal data.

TikTok



In this specific image, we successfully identified and examined the data collection methods employed by TikTok with respect to its users. Notably, we discovered that the TikTok web platform gathers various details including the web ID, battery status, browsing history, and the user's online browser information when accessing the application.



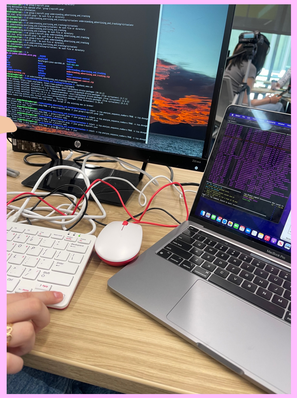
The second image provides a graph illustrating the data collection process, clearly indicating that all the collected data is directed towards the Titok.com website.

TikTok

MYCROFT AND RASPBERRY PI

In this image we are testing out our skills through Mycroft and using our personal computers to connect and test our skills, within the terminal and using our command lines.

We both faced similar challenges due to the fact that we have never used Mycroft before and we were not familiar with its interface. Additionally, it was also the first time we worked with a Raspberry Pi, although it seemed quite complex, eventually, we were able to learn a lot.



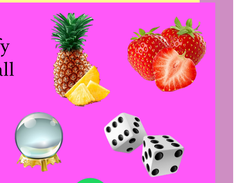
Mycroft Development

Materials

- Raspberry Pi 400
- Speaker
- Microphone
- SD card
- Mycroft AI Software

Skills

- Mycroft-Spotify
- Skill-Cristal-ball
- Skill laugh
- Pick-number
- Pandora
- Dice-skill
- Pineapple
- Strawberry

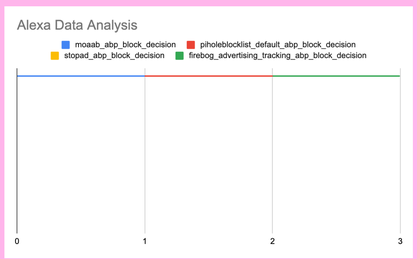


Future Innovations

The purpose of our Mycroft device is to allow the user to navigate and explore all its interfaces without tracking or collecting information about the user. In other words, it's a high-privacy voice assistant.

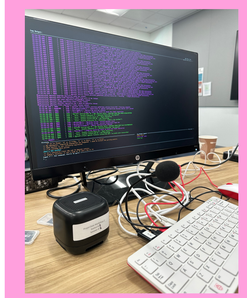
alexa

Based on the information given, we observed the absence of any trackers in Alexa, which was surprising as we had anticipated the presence of such trackers.

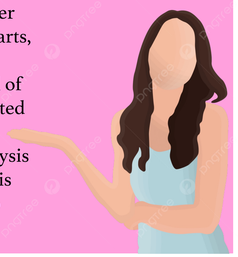


Graph that represents the information about Alexa

MYCROFT AI



Upon examining the data collection practices of Mycroft, we observed that unlike other voice assistants, Mycroft stands out due to its strong commitment to user privacy by default. Unlike its counterparts, Mycroft refrains from sharing user information and maintains a high level of privacy. While they may share aggregated data with third parties for marketing research or similar objectives, our analysis revealed that Mycroft's data collection is significantly minimal in comparison to other software and voice assistants.



ACKNOWLEDGEMENTS

Prior to this workshop, our team had limited experience with Raspberry Pi, Mycroft software, and the process of building a voice assistant from scratch. Furthermore, our knowledge regarding trackers and ad blockers was quite limited. However, through this project, we were able to acquire a wealth of knowledge and skills. We had the opportunity to not only learn the theory but also actively apply our skills, leading us to a successful outcome. We are immensely grateful for the abundant resources and assistance provided by the instructors. We would like to express our heartfelt appreciation to everyone involved for this incredible experience

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