

Configuration Manual

MSc Research Project
MSc in Cybersecurity

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MSc Project Submission Sheet
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Programme: MSc in Cybersecurity **Year:** 2022
Module: MSc Research Project
Lecturer: Dr. Vanessa Ayala-Rivera
Submission Due Date: 15th Dec 2022
Project Title: Protecting Users Identity Against Browser Fingerprinting
Word Count: 676 **Page Count:** 8

I hereby certify that the information contained in this (my submission) is information pertaining to research I conducted for this project. All information other than my own contribution will be fully referenced and listed in the relevant bibliography section at the rear of the project.

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Configuration Manual

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1 Introduction

The developed plugin "Browser Fingerprint Defender" is specially designed for the Google Chrome browser, and it is used to protect the privacy of the user while surfing the internet. Many websites track users with the help of their system configuration [1] So our extension helps avoid this kind of tracking. We have used Microsoft Visual Studio to develop this extension, and you can also download the plugin from <https://github.com/PremShingote/Browser-Fingerprint-Defender> [2].

2 Environmental Setup

The Browser Fingerprint Defender extension tested for work on below configurations. For better experience of extension kindly use similar or higher configuration components.

2.1 Operating Systems (x32/x64)

- Windows 11
- Windows 10

2.2 Hardware

- **CPU:** Qualcomm, Snapdragon 850
- **RAM:** 4 GB
- **Hard Disk:** 100 GB

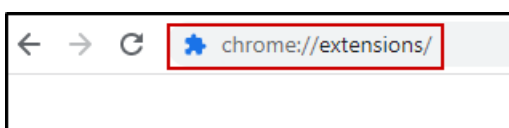
2.3 Browser Details

- **Browser Name:** Google Chrome
- **Minimum Version:** 100.0.4896

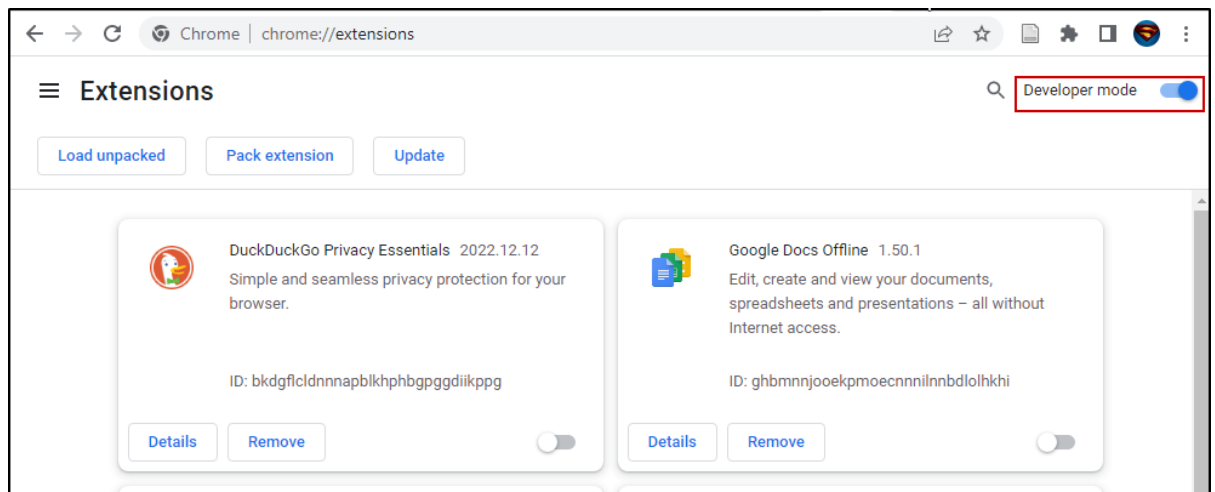
3 Installation

The following steps have to follow when you have to install "Browser Fingerprint Defender" on Google Chrome browser

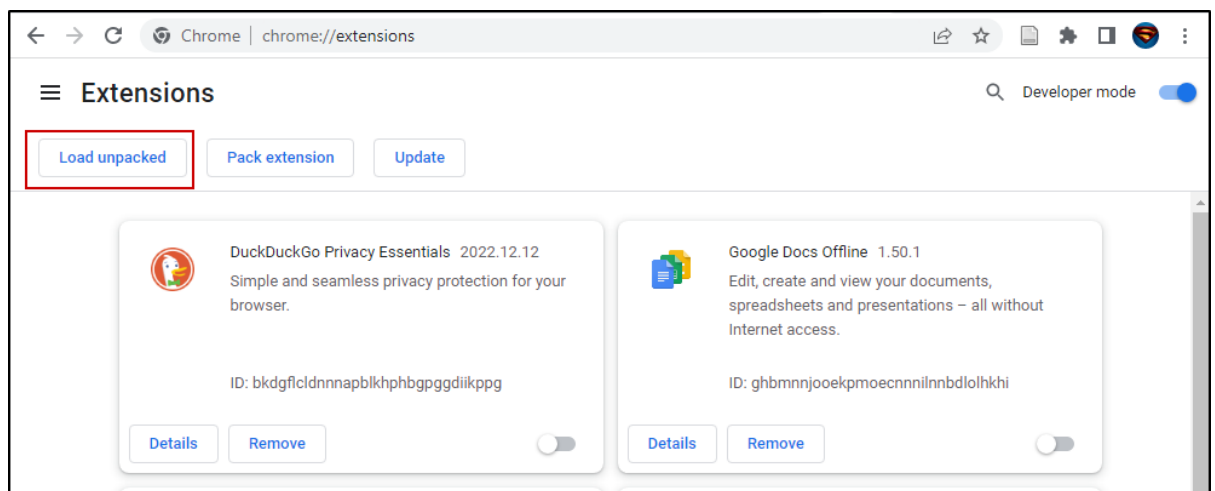
1. Open Google Chrome browser.
2. Input *chrome://extensions/* in URL bar and hit "Enter" button on keyboard.



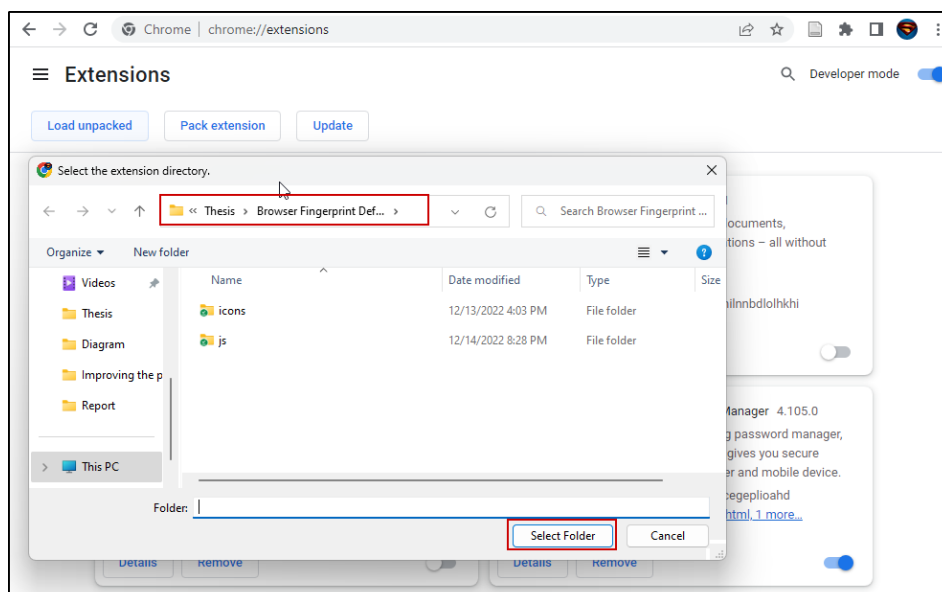
3. Turn on the Developer mode from top of the page.



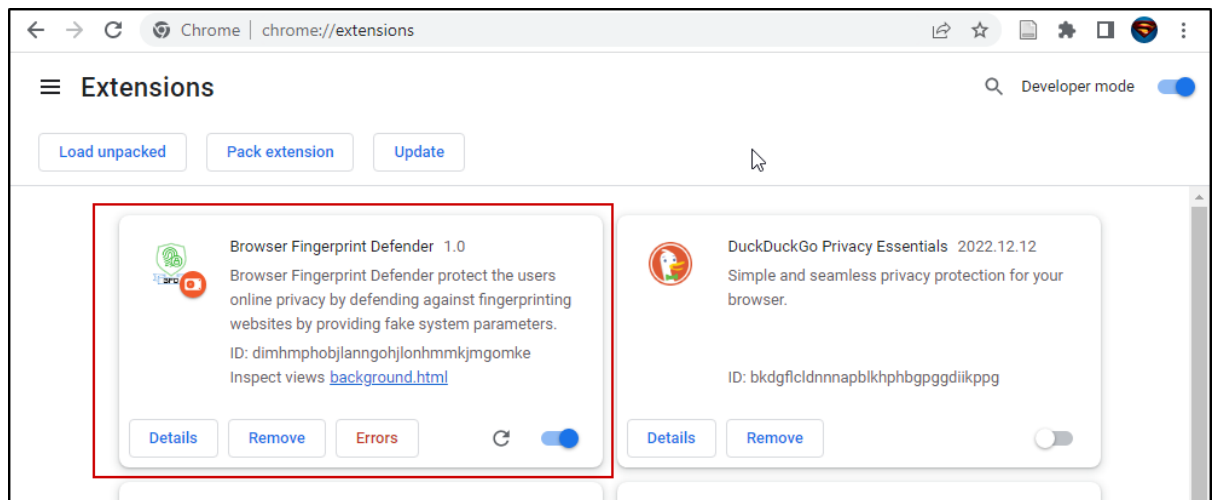
4. Then click on Load unpacked button to select the extension from folder.



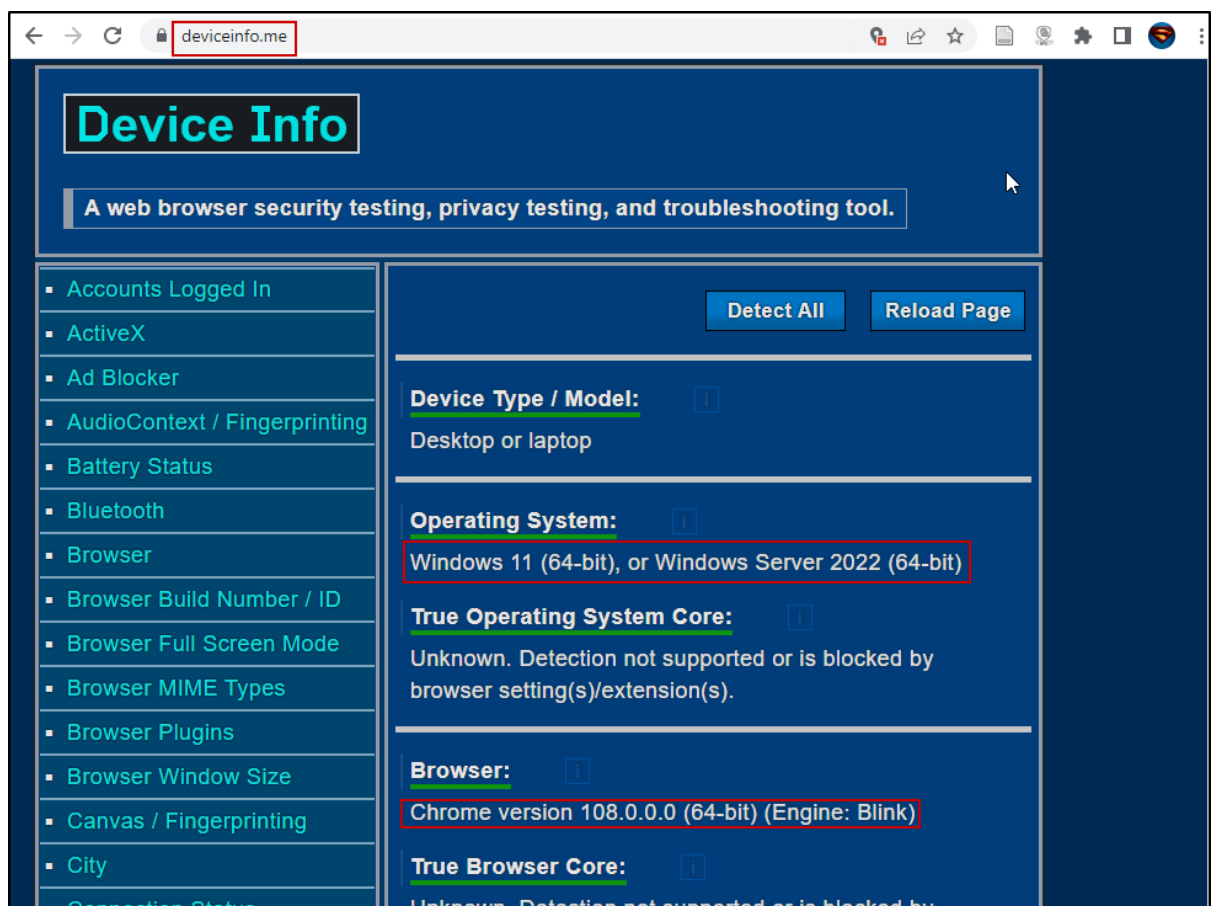
5. Then select the specific folder to select the extension file.



6. We have successfully added extension into browser.

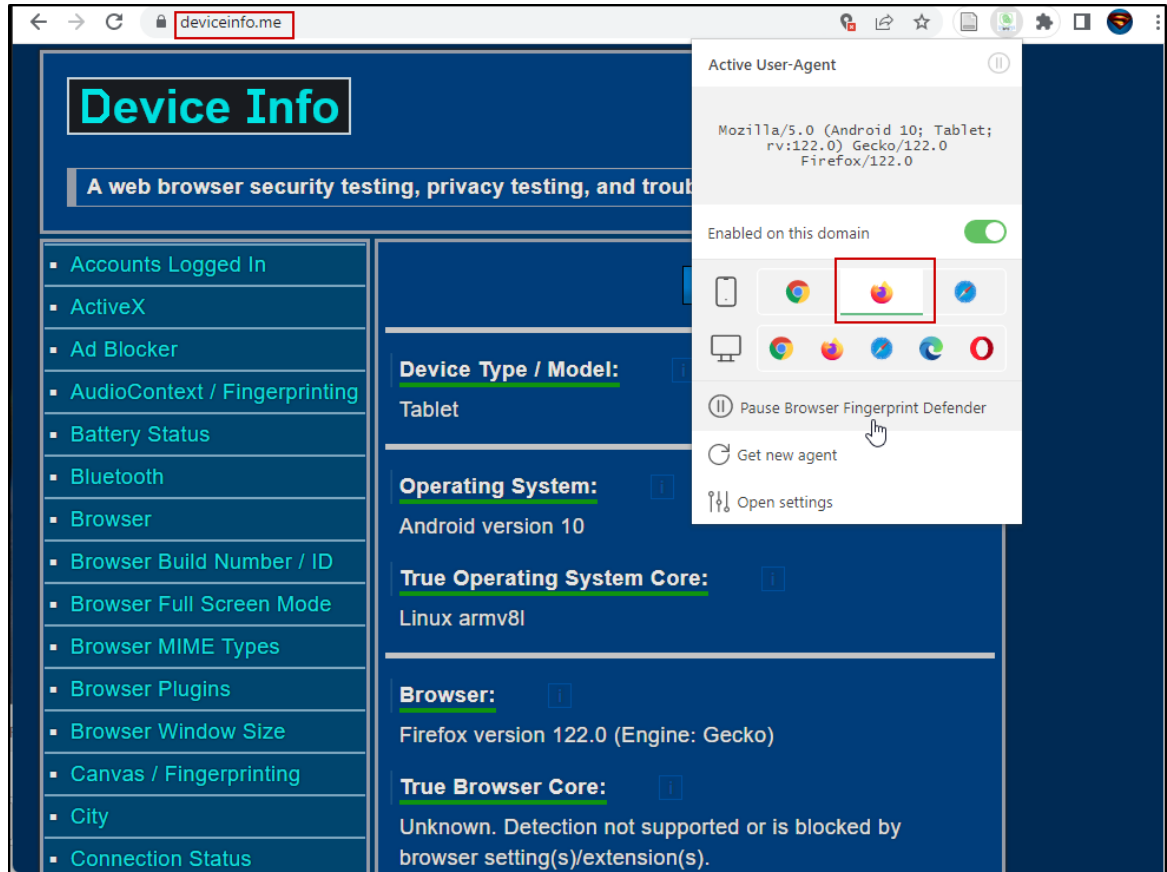


7. Open the <https://www.deviceinfo.me/> [3] to check the current browser fingerprint.

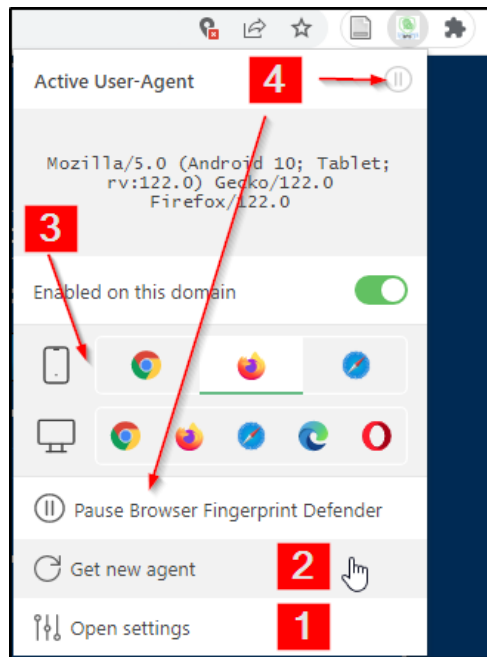


8. Now click on the extension to enable it and select any type of device whose fingerprint you want. as we selected a mobile device and Firefox as a browser. The user agent is also generated on the top side of the

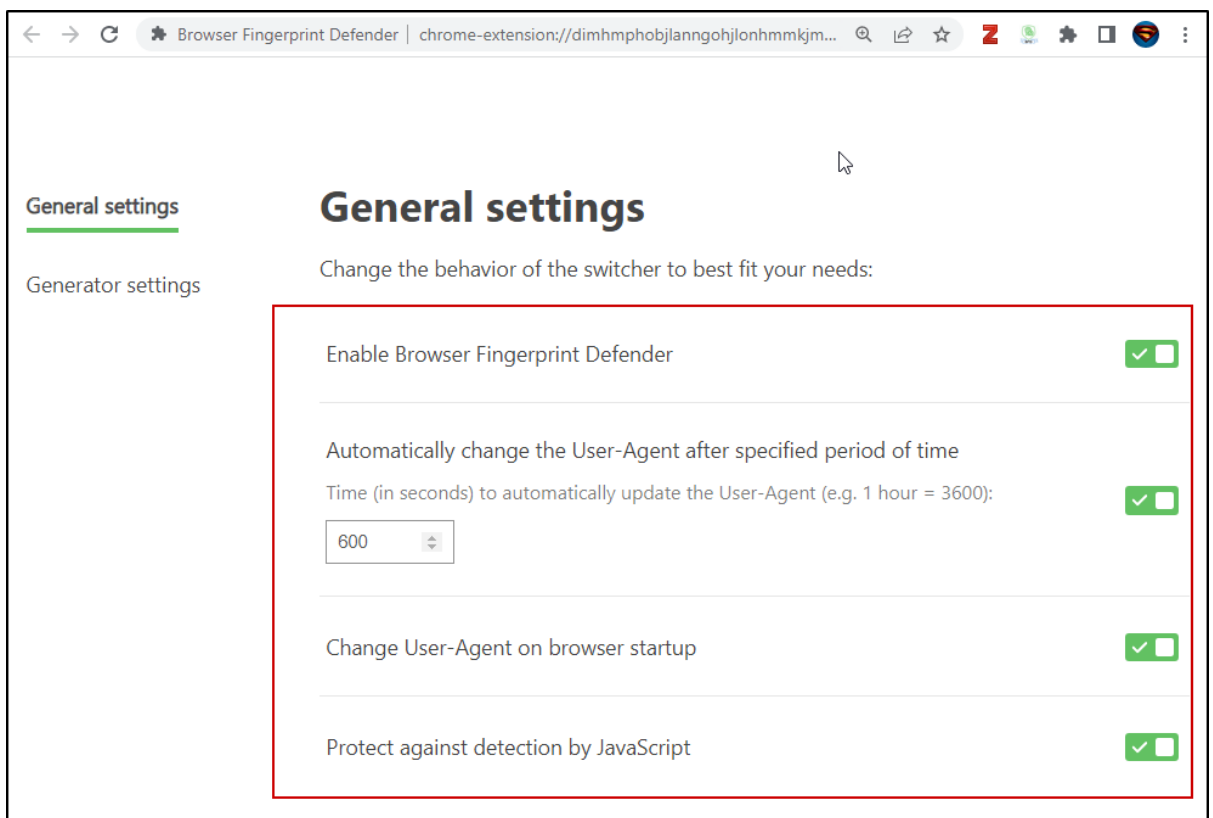
extension.



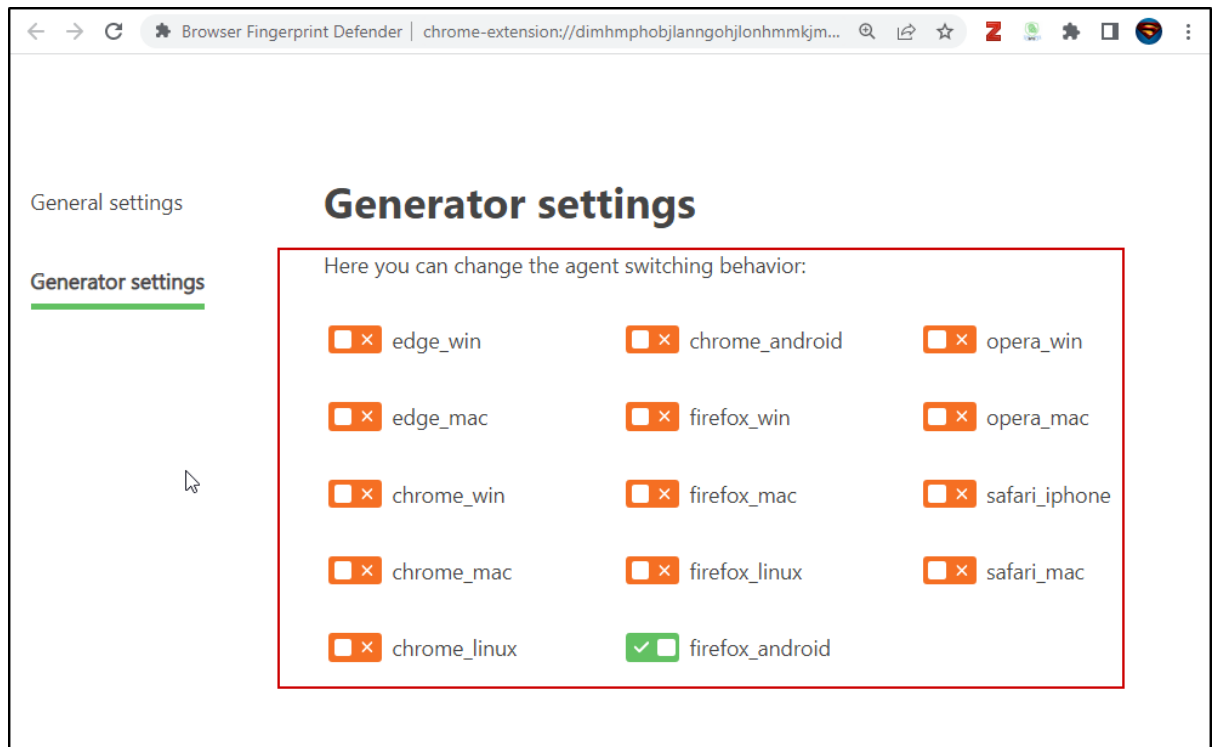
9. Here are some features of our extension.
 1. Open Setting: It give extra options to configure the extension.
 2. Get New Agent: Generate the new identity.
 3. Device Selection: We can select agent device as per our choice.
 4. Start / Pause extension: We can simply enable or disable the extension according to our need.



10. After clicking on "open settings," the general settings page opens, where we can enable some extra features of the extension.



11. As we click on "Generator Setting," we can use the user agent from the given list. This option is similar to the selection option we saw in point no. 8.



References

- [1] "Can You Prevent Browser Fingerprinting?" <https://fingerprint.com/blog/browser-fingerprint-prevention/> (accessed Dec. 15, 2022).
- [2] "PremShingote/Browser-Fingerprint-Defender," *GitHub*. <https://github.com/PremShingote/Browser-Fingerprint-Defender> (accessed Dec. 15, 2022).
- [3] "Device Info - Web browser security, privacy, and troubleshooting tool." <https://www.deviceinfo.me/> (accessed Dec. 15, 2022).