LOVELY PROFESSIONAL UNIVERSITY

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Problem Statement:

Use any open source software to extract addons, bookmarks, cookies, downloads, form fill-ups data, history from your browser and export the data obtained after extraction either in a json file or plain text file

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CHAPTER – 1 Introduction

Fire fox is a dedicated to promoting an open and accessible internet. The browser was first released in 2004 and has since become one of the most widely used browsers in the world, with millions of users across multiple platforms. And offers a range of customization options to allow users to tailor their browsing experience to their individual needs. It is also a free and open-source software, which means that anyone can view and modify its source code, and contribute to its development and improvement. Firefox has a user-friendly interface and provides a range of features, including tabbed browsing, a download manager, built-in spell-checking, and support for a wide range of plugins and extensions. It also has a strong focus on privacy, with features such as a built-in tracker blocker, and support for the use of virtual private networks (VPNs).

1.1 Objective of the project

The objective of the project is to extract addons, bookmarks, downloads, form fil ups data, history, cookies from the browser using open source software export the data that has been obtained after extraction into json or text file.

1.2 Description of the project

This report provides a detail description of how to use firefox a free open source software to extract addons, bookmarks, cookies, downloads, form fill-ups data, history from our browser and export the data obtained after extraction either in a json file or plain text file. To use the firefox open source software we must first download and install the software on windows operating system. Once installed the software provides a user friendly interface. Overall it also allows for a greater degree of customization and flexibility for users who may want to modify the software to better suit their needs. Additionally, being open-source promotes the use of free software and the sharing of knowledge, which can have a positive impact on the tech industry as a whole.

1.3 Scope of the project

The scope of this report is to provide a comprehensive guide on firefox open source software. The report covers the basic usage of extensions to extract and export obtained data that are in firefox open source software.

Mainly the report covers the Firefox open source software which provides several ways to extract various types of data, including downloads, history, cookies, bookmarks, addons, form fill ups data, and export them into plain text files or json files

While the report focuses on the use of firefox open source software on windows operating systems, the software is also comapatible with other operating systems such as linux and macos.

Overall, Firefox is a open source software provides several ways to extract data and export it to plain text files or json file.

CHAPTER – 2 System And Software Description

2.1 Firefox Software Description

Step 1: Download and install firefox open source software

The first step is to download and install firefox open source software from its official website. The software is compatible with any operating system.

Step 2: Launch the firefox

After installing the software Look for the Firefox icon on your desktop or in your Applications folder. Double-click on the icon to launch Firefox. Alternatively, you can use the search bar on your computer and type in "Firefox," then click on the application when it appears in the search results.

Step 3: View hardware components

Firefox itself does not have the ability to view hardware components. However, we can use certain Firefox add-ons or extensions that can provide information about our computer's hardware components. Some of them them are Speccy, System Information Viewer, Hardware Monitor and this addons allows us to view detailed information about our computer's hardware components, including CPU usage, RAM usage, and hard drive activity.

Step 4: Customize tool bar

Once we click on Customize Toolbar the Customize Toolbar screen will appear. This screen displays an overview of Firefox's user interface and allows us to customize the toolbar to our liking. The Customize Toolbar screen displays various elements of the Firefox user interface, including the address bar, the search bar, the bookmarks toolbar, and the menu bar. It also displays icons for various Firefox features, such as the download manager, the history panel, and the Add-ons Manager.

Step 5: System summary

One of Firefox's key features is its privacy and security features. It has a built-in tracker blocker that prevents websites from tracking users' online activities. It also supports HTTPS encryption, which encrypts all data sent between the browser and websites to prevent eavesdropping and tampering.

2.2 Assumptions And Dependencies

Assumptions and dependencies of Firefox refer to the underlying factors that are required for the browser to function properly. Here are some examples of assumptions and dependencies of Firefox

Internet connection: Firefox assumes that the computer it is running on has an active internet connection in order to browse the web.

Operating system: Firefox relies on the operating system of the computer to provide basic functionality such as window management, file access, and memory management.

Hardware capabilities: Firefox depends on the hardware capabilities of the computer to provide performance and display graphics properly. For example, it requires a certain level of processing power, RAM, and graphics processing capability

Overall, Firefox's assumptions and dependencies are largely influenced by the wider technology ecosystem, including internet connection, operating systems, and user hardware capabilities.

2.3 Functional/Non-Functional Dependencies

Functional dependencies of Firefox refer to the features and capabilities that the browser provides to users. Non-functional dependencies of Firefox refer to the underlying characteristics and attributes of the browser that affect its performance and usability.

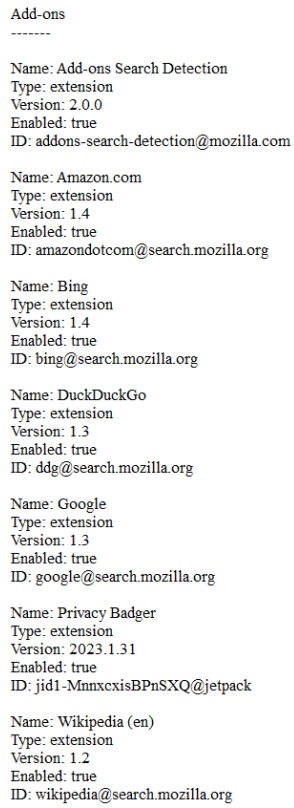
CHAPTER-3 Analysis Report

3.1 System Snapshots And Report

Basically i have used the firefox opensource software extensions like history master to extract history. And some other extensions to extract bookmarks, cookies, downloads, form fill ups data, history and exported the data obtained after extraction in a json file or plain text file.

Addons

Here for addons i have use about support page to extract a list of installed addons. And there we will have two options copy raw data to clipboard and other option copy text to clipboard we need to select copy text to clipboard and save the file as a text file. The text file will contain a list of all the addons.



Add-ons

Name: Add-ons Search Detection
Type: extension
Version: 2.0.0
Enabled: true
ID: addons-search-detection@mozilla.com

Name: Amazon.com
Type: extension
Version: 1.4
Enabled: true
ID: amazondotcom@search.mozilla.org

Name: Bing
Type: extension
Version: 1.4
Enabled: true
ID: bing@search.mozilla.org

Name: DuckDuckGo
Type: extension
Version: 1.3
Enabled: true
ID: ddg@search.mozilla.org

Name: Google
Type: extension
Version: 1.3
Enabled: true
ID: google@search.mozilla.org

Name: Privacy Badger
Type: extension
Version: 2023.1.31
Enabled: true
ID: jid1-MnnxcxisBPnSXQ@jetpack

Name: Wikipedia (en)
Type: extension
Version: 1.2
Enabled: true
ID: wikipedia@search.mozilla.org

Fig 3.1 Addons after extraction in text file

Bookmarks

For extracting bookmarks In the Library window click on Import and Backup located on the toolbar. Select Export Bookmarks from the options. But there is no chance to export the bookmarks as text or json file. So first I have exported as html file than I have converted into plain text file Choose a location on our computer where we want to save the exported file and i have saved in plain text format.

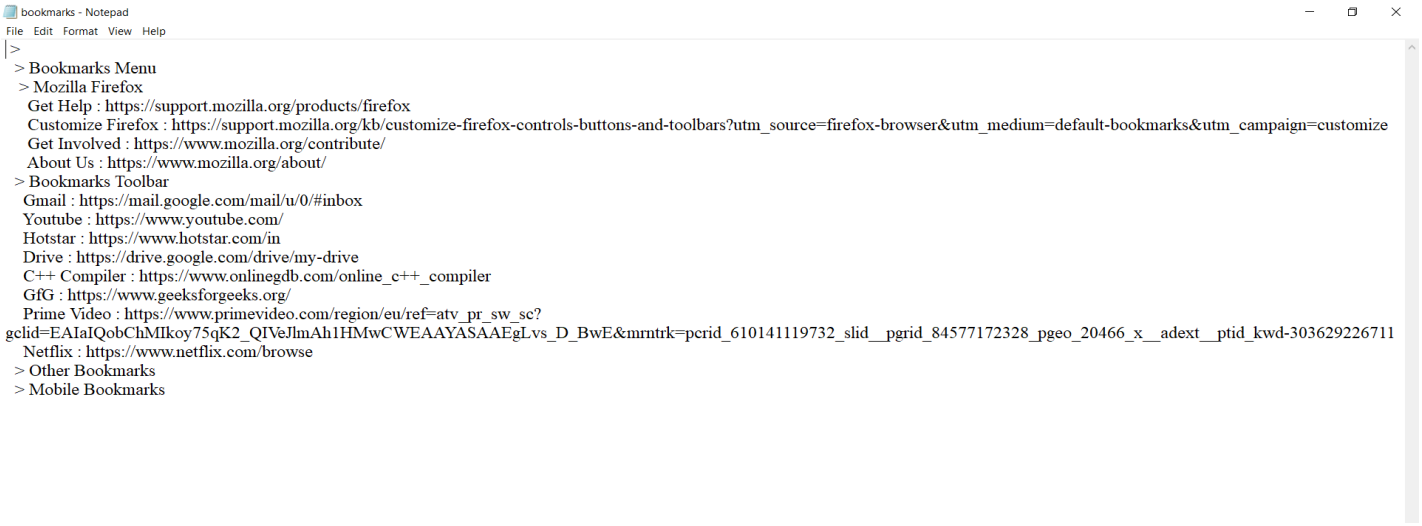


Fig 3.2 Bookmarks after extraction in text file

Cookies

For extracting cookies i have used the cookie quick manager extension Cookie Quick Manager is a Firefox extension that allows us to manage cookies on a per-site basis. It provides a quick and easy way to view, edit, delete, and protect cookies and also export cookies to a file. Here i have exported into json file.

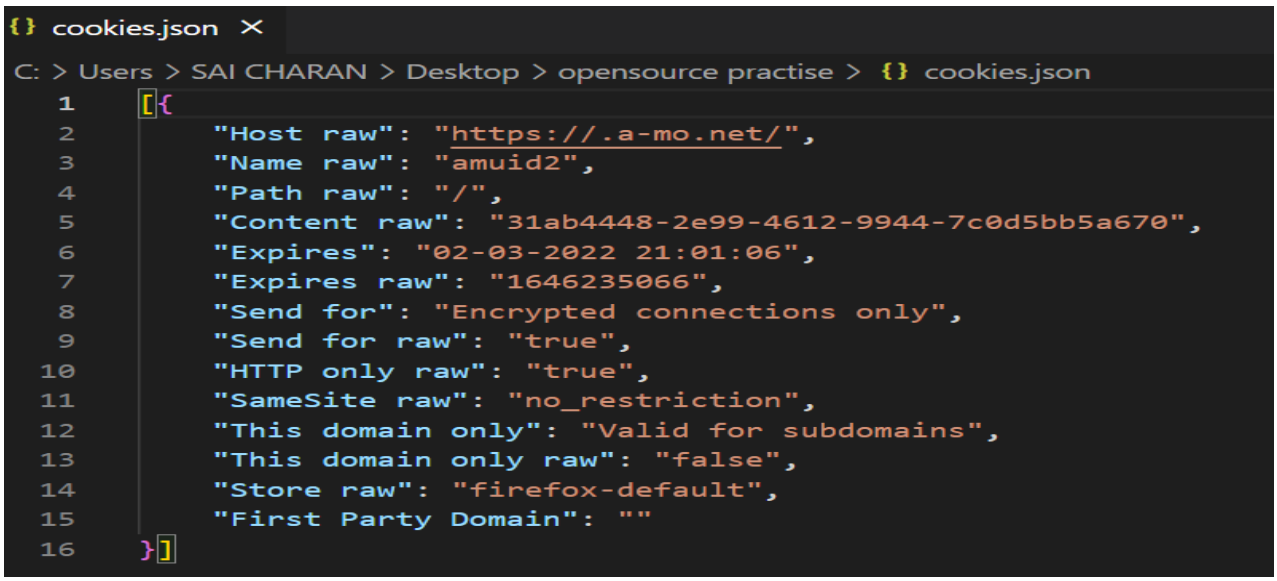


Fig 3.3 Cookies after extraction into json format

Downloads

For extracting and exporting downloads i have used download theme all extension where we have to search anything in firefox and then right click on it and we have to select the save link in download them all it helps us to export the data in text file,

FIG 3.4 Downloads after extraction into text file

Form fill ups data

For extracting and exporting the form fill ups data i have used form history control extension available in firefox open source software after that we need to click on advanced manage history then new tab will open. There we need to click on file then there will be a option export it will export in xml files and I have saved the exported xml file in json format,

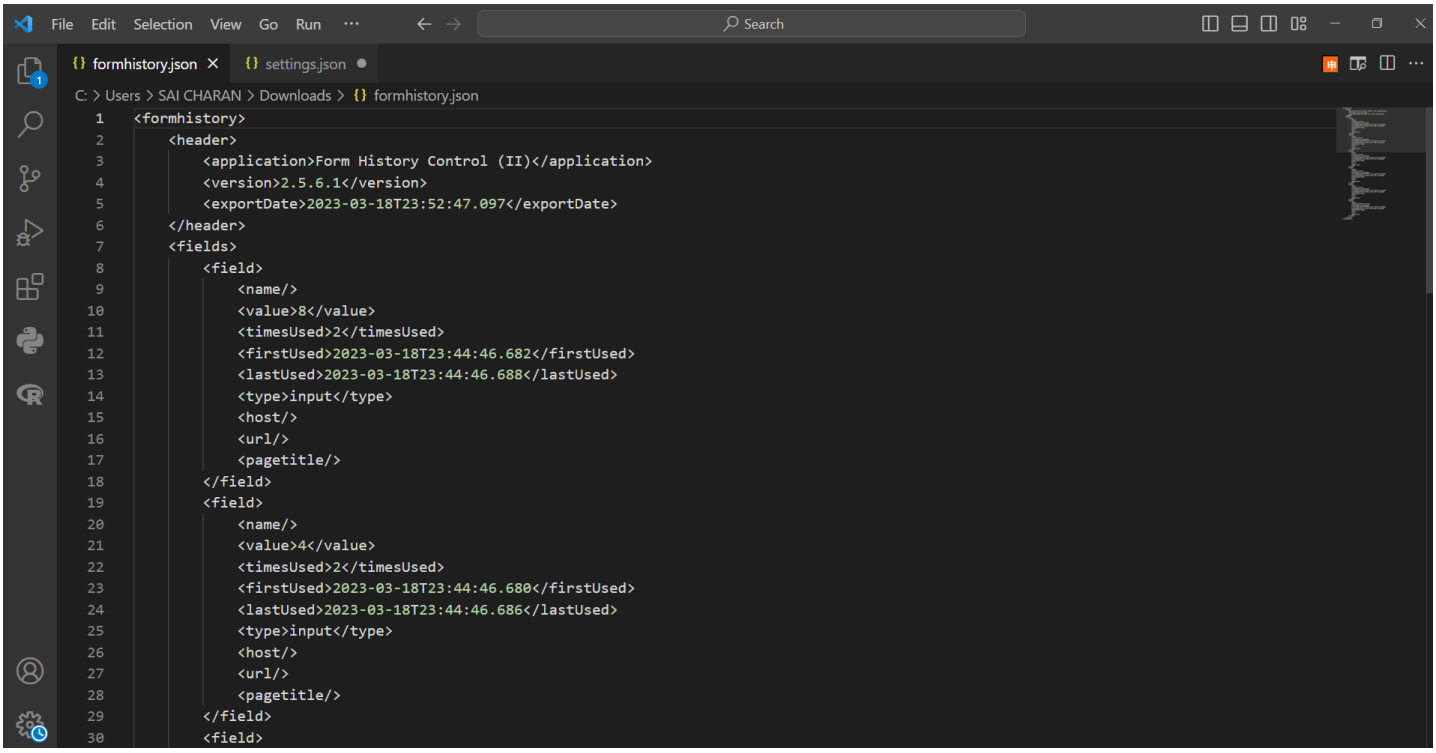


FIG 3.5 Form fill ups data after extraction into json format

History

For extracting and exporting the history i have used history master extension that is available in firefox open source software but it export the data into csv files and then I have saved the exported data after extraction in json format.

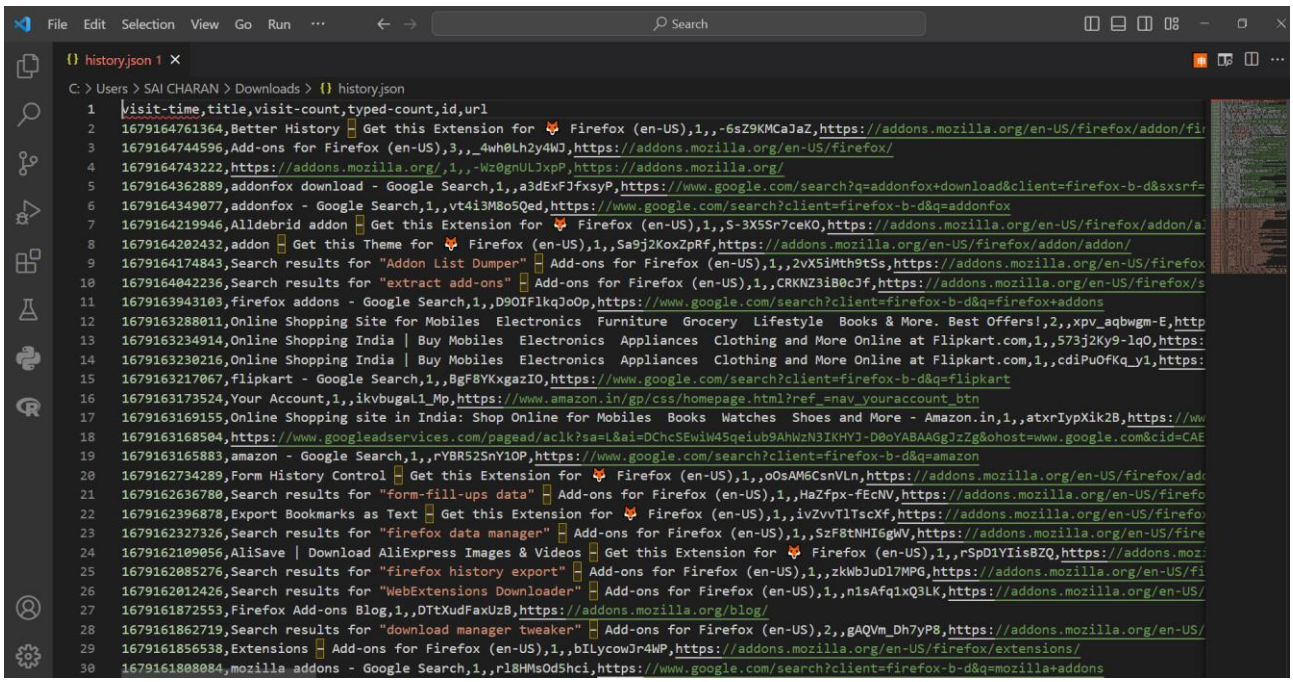


FIG 3.6 History after extraction into json format

CHAPTER-4 Conclusion

Here i have used different extension separately for each data item and extracted data but for only cookies and downloads I was able to extract the data into json and text file. For remaining there are some extensions which are used to export data into text files but that where not supported by firefox and some extensions are removed by firefox. One of the example is history master it is one kind of extension which was used to export data in text file but it was not working in firefox due to privacy issues. So I have first exported the data in available formats and then saved the data that is exported into json and text file format.

GitHub Link: https://github.com/saicharan321-creator/opensource

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Retrieved from https://www.ghacks.net/2019/05/04/your-firefox-extensions-are-all-disabled-thats-a-bug/

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