**Project Report: Extracting Browser Data**

**Github :**

1. **Introduction**:

The purpose of this project is to extract data from the Google Chrome browser such as addons, bookmarks, cookies, downloads, form fill-ups data, and history, and export the extracted data into a JSON or plain text file. This report describes the objectives, scope, and system description of the project, along with the analysis report of the system snapshots.

* 1. Objective of the project:

The main objective of this project is to extract data from the Google Chrome browser and export the extracted data into a JSON or plain text file. The project aims to provide a simple and efficient method for extracting browser data.

* 1. Description of the project:

The project involves using Python programming language and open-source libraries such as SQLite3 and Json to extract data from the Google Chrome browser. The extracted data is then exported to a JSON or plain text file. The project is designed to be simple, efficient, and user-friendly.

* 1. Scope of the project:

The project has a wide scope as it can be used by anyone who wants to extract data from the Google Chrome browser. The project can be extended to extract data from other browsers and can also be used for data analysis and data mining purposes.

1. **System** **Description**

2.1 Target System Description

The target system for this project is the Google Chrome browser. We used the open-source software "sqlite3" to extract the desired data from the browser's database files.

2.2 Assumptions and Dependencies

We assume that the user has access to the Google Chrome browser and the necessary permissions to access its database files. Additionally, we assume that the user has basic knowledge of Python programming.

The project is dependent on the following open-source software packages:

* Python 3.6 or later
* sqlite3

2.3 Functional/Non-Functional Dependencies

The project's main functional dependency is on the Google Chrome browser's database files, which contain the data we wish to extract.

The project has no significant non-functional dependencies.

2.4 Data Set Used in Support of Your Project

We did not use any external data sets in support of this project.

1. **Analysis** **Report**

We successfully extracted the desired data from the Google Chrome browser's database files using the sqlite3 package. The following data was extracted:

* Addons: We were able to extract a list of all installed addons and their details, including the name, version, and description.
* Bookmarks: We extracted a list of all bookmarks, including their URLs and titles.
* Cookies: We were able to extract all cookies set by websites visited on the browser, including their name, value, and encrypted value.
* Downloads: We extracted a list of all files downloaded from the browser, including their URLs, filenames, and download times.
* Form Fill-Ups: We extracted a list of all form data entered on websites visited on the browser, including the field names, values, and times of entry.
* History: We extracted a list of all URLs visited on the browser, including their titles, last visit times, and visit count.
* We exported the extracted data in JSON file format, making it easy to import and use in other applications for further analysis.

1. **Reference**/ **Bibliography**

We used the following resources in support of this project:

* Google Chrome APIs: https://developer.chrome.com/docs/extensions/reference/
* Python SQLite3 Documentation: https://docs.python.org/3/library/sqlite3.html
* Python JSON Documentation: https://docs.python.org/3/library/json.html
* Mozilla Firefox Add-ons API: https://developer.mozilla.org/en-US/docs/Mozilla/Add-ons
* Mozilla Firefox Cookies API: https://developer.mozilla.org/en-US/docs/Mozilla/Add-ons/WebExtensions/API/cookies
* Mozilla Firefox Bookmarks API: https://developer.mozilla.org/en-US/docs/Mozilla/Add-ons/WebExtensions/API/bookmarks
* Mozilla Firefox History API: https://developer.mozilla.org/en-US/docs/Mozilla/Add-ons/WebExtensions/API/history
* Mozilla Firefox Downloads API: https://developer.mozilla.org/en-US/docs/Mozilla/Add-ons/WebExtensions/API/downloads
* W3C HTML5 Forms Specification: https://www.w3.org/TR/html5/forms.html