Playlist Transfer System

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Abstract: This playlist transfer web app is a platform designed to easily transfer music playlists from one music streaming service to another. This web app allows users to select their current music service, select their desired destination service, and transfer their playlists with just a few clicks. The app currently supports transfer of playlist from Spotify to Youtube Music. This app is ideal for anyone who wants to switch to a new music streaming service or who wants to make a backup copy of their playlists. This playlist transfer web app allows users to save time and effort and enjoy their music seamlessly across multiple platforms.

I. INTRODUCTION

Playlist Transfer System is a web application that transfers the playlist of songs or music from one music streaming platform like Spotify to another streaming platform like Youtube Music. Currently this web application only supports transfer of playlist which is present in Spotify to Youtube Music only. This web app is to be further developed to transfer playlists across many streaming platforms and to multiple platforms simultaneously with greater ease. This system works on the search and request basis. For each song in the playlist from Spotify, it will search for the same song in the Youtube music and add the songs into that playlist.

II. LITERATURE

There are some playlist transfer services across the internet like Soundiiz and SongShift but they require your login credentials like Email Id, Mobile Number and password for both the source and destination to access your streaming accounts which might be vulnerable to the user and will allow only limited song transfers with their free versions. Our system provides the complete transfer on songs from the playlist free of cost and the user only needs to enter the Spotify playlist link and will be signing in with Google Sign In, So the user's privacy will be protected.

III. IMPLEMENTATION AND EVALUATION

To transfer a playlist which is present in the spotify to Youtube Music, First the link of the playlist should be given as the input to the spotify api, which will be generating the metadata of the whole playlist.

The link should be given by the user as input in the input field of the web app. The web app then analyzes the link and will provide the metadata. Based on the metadata, the name of the song along with the artist name is collected. The system will then look into the target application and since it is Youtube Music in our case, the Google authentication will take place.

The next step is the user Authentication to their Google account. Other services like Soundiiz and SongShift will be asking for the login credentials like the Email Id, phone number and password for every platform and will login themselves to it and then will be transferring the songs. Our system will avoid this process since it will be affecting the users data privacy. The only thing needed is the user has to be logged in with the Google account in the browser and with the same account in the Youtube music. After the successful authentication, a prompt will appear as a successful authentication and the system will move to the next step.

After successful authentication, the metadata collected from the system from the link provided by the user, Datas like the song name along with the artist name is fetched and is fed into the search in the Youtube Music. There a new playlist with the same name in spotify will be created and the songs will be searched in Youtube with the song name and with the same artist name. The playlist will be created in the Youtube music with the same name and the songs will be added to the playlist.

IV. TECHNOLOGIES AND MODULES

The web app is made with web development languages with the use of HTML, CSS, Js and streamlit for the frontend and Python, Flask and many APIs for the Backend.APIs like Spotify Web API, Google Youtube API v3, Google Oauth 2.0. The hardware requirements includes a minimum of 2GB of RAM, 500GB of storage, any operating systems like Windows, Linux, MacOs etc., and a stable internet connectivity.

V. FUTURE DEVELOPMENTS

Our software tool was tested on a variety of Spotify playlists, ranging from small to large sizes, and the conversion process was successful in all cases. The tool was also tested on different operating systems, including Windows, macOS, and Linux, and worked seamlessly on all platforms. The tool was evaluated on various performance metrics, including conversion speed, memory usage, and error handling. The results show that the tool is efficient and reliable, with fast conversion times and minimal memory usage. The error handling was also effective, with appropriate error messages displayed in case of any issues during the conversion process.

Till now we have developed this web app to transfer songs only from Spotify to Youtube Music. Upon further development we will be able to make these transfers happen across all the music streaming platforms with seamless speed.

VI. RESULTS

In this project, we successfully developed a software tool that enables users to convert their Spotify playlists to YouTube Music playlists with ease. This tool is beneficial for users who want to switch between music streaming services or want to have their playlists available on both platforms.The software tool is designed with a user-friendly interface, making it easy to use for even those without a technical background. The tool is also robust and efficient, able to handle large Spotify playlists and convert them to YouTube Music playlists quickly. Overall, this project demonstrates the importance of creating software tools that enable users to easily transfer data between different platforms. With the increasing popularity of music streaming services, there is a growing need for tools that make it easy for users to switch
between services without losing their playlists.

VII. REFERENCES

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