Proposal of Music Recommendation System

**Overview**

This project explores the “hetrec2011-lastfm-2k” dataset from “http://www.last.fm” which contains social networking, tagging, and music artist listening information from a set of 2K users from Last.fm online music system and builds a music recommendation system for users. The data set can be found via the link:

https://grouplens.org/datasets/hetrec-2011/

**Goals**

The recommendation system will **give a ranked list of recommended artists** to users based on

1. Users-similarity: Recommend the artists that are in a user’s friends’ favorite artists list to the user.
2. Artists-similarity: Recommend the artists that are similar to the artists in a user’s favorite artists list to the user.

**Details**

**For the Users-similarity approach:**

The favorite artists list of each user can be obtained by the tagging records of each user which are already provided by the dataset.

The user-friend data frame provides the connection among users.

**For the Artists-similarity approach:**

The artists data frame provides descriptive webpages about artists details. The webpages contain descriptions of the albums, the listeners, and more importantly: similar artists list, among other details of artists. The challenge is how to efficiently read the data from these webpages into a program and evaluate similarities among artists.