Tune In - Music Recommendation Engine

Future Scope

- Keeping a timestamp attached with each rating, so that recent opinions can be weighed more as compared to old opinions. As, music preferences usually change at a faster pace than books or other things. So, ratings older than 2 years should have a lesser weight in a music recommender system.
Weighing can be done by:
Updated Rating = λ(Old Ratings) + (1-λ) New Ratings

- Instead of just ratings, more parameters such as like,dislike, length to which music is played can be used to decide user preferences.

- GUI can be developed to weigh in more features which can be helpful to decides user's preferences like items which the user has clicked on. Length at which users skips to next song, Genres he clicks on , Search term history etc.

- Spotify computes similarity on audio features like loudness, danceability, acousticness, timbre etc. Such features can be more meaningful to find similarity. Thus a song can be completely be similar based on its features rather than what ratings user give.

- Apart from song similarity artist similarity can also be added, Since in case of music apart from genre preference, a substantial artist preference is also observed.

- Serendipity can be introduced by user choice. Suppose the user in a mood to discover new songs/artists/genre user. Recommender Engine will give full Exploratory mode in this case.

- If provided with more computational resources, Natural Language processing can be done on articles floating on the internet on

popular music websites, to know which songs are more popular and to know the general feeling of people towards that song. spaCy can be helpful in this task.