## DataBase Project: Music Recommender Part1 Proposal

## 1. High-level Description Of The Application

For project 1, we plan to build a music recommender database based on the data on Spotify and Rovi API. To achieve this goal, we will include entities like users, artists, albums, tracks, playlists, and metadata like moods or genres. The relationship sets will also be built accordingly.

A web application will be implemented in part 3 to incorporate the following functionalities: 1. Once the user has signed up and login, we will show some hot artists or tracks for them to choose for the cold start part, thus we could build the user profile and store them. 2. Based on the user records, we could recommend tracks, artists, playlists to the user once logged in. 3. we offer different playlists for the user according to moods or environments as they wish.

## Challenges:

- 1. To construct suitable database structure to describe the relationships between entities
- 2. To implement and optimize recommendation algorithm based on user profile (like/ dislike of artists, genre or mood)
- 3. To design a easy to use, esthetically pleasing web application interface.

## **Contingency Plan**

Should there be any unexpected condition regarding the team formation and contribution effort down-sizing, the recommendation application can be down-graded to an multi-criteria music search application.