## The idea

MusicShake is a music software letting you explore new music and easy share your favorite songs with friends.

It contains two main features: music and shake.

For music features, it support music search, download and play songs.

For shake features, it support matching people who are shaking at the same time as you do and show their playlist and then you can look at others' playlist and download their songs if interested in.

By doing these, it helps you to share songs with your friends by shaking the device and establish new connections with people which you might not know but have same taste as you.

Generally speaking, it strengthens established connections and it provides potential connections all based on music.

## Challenges

- Match the best people for shaking feature. On the one hand, this person should shake the device at the same time. On the other hand, because of limited space, we need to find the best matching persons by checking other conditions, like distance between the pair of persons.
- Communication between local android application and remote web services including file transfer.
  We need to guarantee the correctness, robustness, concurrency of all operations.
- Design storage schema to make sure efficiency and avoid data redundancy both locally and remotely.
- Implement a user-friendly UI.

## Notable Features

- Shake & Recommendation
  - Music search
  - Music download
    - Music play

(To do: Add details)

