We are going to use MongoDB for our database.

There are going to be 2 databases.

1. The key is date+city, and the value is the list of concerts.

Because on the same day in the same city, the concerts information does not change.

For this database, the sequence is following:

a. User are required to type in the date and the city.

b. Then we search in the database using key “date+city”.

If there is such a key/value pair, we return the value(list of concerts) back to the users.

Or there is not such a key. Then we build a key, search date and city by Spotify API and get the lists of concerts as value.

2. The key is artistID, and the value is list of concerts.

Sequence:

a. Users log in to Spotify

b. Use Spotify API to get user’s top 5 artists.

c. Return the list of five artists. User can click one of them or search for artists.

d. Using key = artistID, seach in the database

If there exists, return the list of concerts.

Or there is not such a key. Then we build a key = artistID, searach artistID by Spotify API and get the lists of concerts as value.