

Kaiqi Du, Cheng Yu, Zeying Yu

DSC 478 – Final Project – Music Recommender System Application

Appendix III

Complete Sample runs of the application with descriptions

```
Welcome to the Music Reccomender System!  
loading user data...  
user data loaded...  
loading data...  
song data loaded...  
users.csv does not exist yet
```

```
-----  
What would you like to do?  
1.Find similar music.  
2.Create New User  
3.Login  
4.Get music suggestions for you  
5.Add to your Playlist  
6.View your playlist  
7.Lookup a song  
8.Display Songs List  
9.Get a random song  
10.Look up an Artist  
11.Quit
```

Put MRS.py and Users.py files in the same folder, and then put music_dataset folder (which contains 10000.txt and song_data.csv) in that folder too, and run command of "python ./MRS.py" on the Terminal in the Python 3 environment. After running, you will see the welcome page on the left, with multiple functions for you to play with.

1

Please give the id of the song you would to find similar music to: SOLLGNU12AF72A4D4F

Please enter the number of similar songs you would like: 10

*****Similar Songs*****

| Song ID | Song Title |
|--------------------|---------------------------------|
| SOHQWYZ12A6D4FA701 | "Heaven's gonna burn your eyes" |
| SODDNQT12A6D4F5F7E | "Apuesta Por El Rock 'N' Roll" |
| SOBYHAJ12A6701BF1D | Constellations |
| SOAKIMP12A8C130995 | "The Cove" |
| SOFGUAY12AB017B0A8 | "Stacked Actors" |
| SOBBMDR12A8C13253B | "Entre Dos Aguas" |
| SODXRTY12AB0180F3B | "Paper Gangsta" |
| SOBXHDL12A81C204C0 | Stronger |
| SODACBL12A8C13C273 | "Learn To Fly" |
| SOFRQTD12A81C233C0 | "Sehr kosmisch" |

The Option 1: Find Similar Music

User gives the id of the song, and enters the number of similar songs you would like the application to generate. The application will give the number of songs that are similar to the song you selected based on content-based recommendation.

2

```
CREATE NEW USER  
Enter a username: kdu  
Enter a password: 123  
User succesfully added!
```

3

```
LOGIN  
Please enter a username: kdu  
Please enter the users password: 123  
  
Logged in as: kdu
```

Users can create their user accounts on the application, and also set their own passwords. Then, the users can login to the application next time. Those functions are for user-based recommendation, and the application will save playlists of users under their corresponding user names.

PLAYLIST EDITOR

| Song ID | Song Title |
|--------------------|------------|
| SOAKIMP12A8C130995 | "The Cove" |

Would you like to add this song to your Playlist? (y/n): n
 Would you like to see another song? (y/n): y

| Song ID | Song Title |
|--------------------|-------------------|
| SOBBMDR12A8C13253B | "Entre Dos Aguas" |

Would you like to add this song to your Playlist? (y/n): y
 song added
 Would you like to see another song? (y/n): y

| Song ID | Song Title |
|--------------------|------------|
| SOBXHDL12A81C204C0 | Stronger |

Would you like to add this song to your Playlist? (y/n): y
 song added
 Would you like to see another song? (y/n): y

| Song ID | Song Title |
|--------------------|----------------|
| SOBYHAJ12A6701BF1D | Constellations |

Would you like to add this song to your Playlist? (y/n): y
 song added

In Option 5 - Add to your Playlist.

The users can like or dislike the randomly popped up songs by the applications. The liked songs will not only automatically add to the playlist of the users, those songs are also the sources to give user-based recommendation to the users.

----MUSIC SUGGESTIONS FOR kdu----

| Index | Song ID | Song Title |
|-------|--------------------|---------------------------------|
| 0 | SOAFTRR12AF72A8D4D | "Harder Better Faster Stronger" |
| 1 | SOCNIFM12A8C13D73B | "Ona Kasuita" |
| 2 | SODHKOL12A8C141128 | "I'm Not Waiting In Line" |
| 3 | SODJWHY12A8C142CCE | "Hey_ Soul Sister" |
| 4 | SOEWYLX12A6D4F8E5F | "Digital Love" |
| 5 | SOGIJYM12A6D4FCD3D | "Give Me More" |
| 6 | SOGOZLT12A6D4FB302 | "Teenagers (Album Version)" |
| 7 | SOGPNGN12A8C143969 | "Gives You Hell" |
| 8 | SOHYLXU12A8C139492 | "Non E_ Per Te_ Per Me" |
| 9 | SOJJYDE12AF729FC16 | "Two Is Better Than One" |

Would you like to add these songs to your playlist (y/n): y

song added

song added

song added

song added

song added

song added

song added

song added

song added

song added

songs added!

Logged in as: kdu

In Option 4 - Get Music Suggestions for You

Based on what the users liked, the application suggested ten songs for the users, and those songs are also added the playlist of the users.

kdu's Playlist

| Index | Song ID | Song Title |
|-------|--------------------|---------------------------------|
| 0 | SOBBMDR12A8C13253B | "Entre Dos Aguas" |
| 1 | SOBXHDL12A81C204C0 | Stronger |
| 2 | SOBYHAJ12A6701BF1D | Constellations |
| 3 | SOAFTRR12AF72A8D4D | "Harder Better Faster Stronger" |
| 4 | SOCNIFM12A8C13D73B | "Ona Kasuita" |
| 5 | SODHKOL12A8C141128 | "I'm Not Waiting In Line" |
| 6 | SODJWHY12A8C142CCE | "Hey_ Soul Sister" |
| 7 | SOEWYLY12A6D4F8E5F | "Digital Love" |
| 8 | SOGIJYM12A6D4FCD3D | "Give Me More" |
| 9 | SOGOZLT12A6D4FB302 | "Teenagers (Album Version)" |
| 10 | SOGPNGN12A8C143969 | "Gives You Hell" |
| 11 | SOHYLXU12A8C139492 | "Non E_ Per Te_ Per Me" |
| 12 | SOJJYDE12AF729FC16 | "Two Is Better Than One" |

Logged in as: kdu

In Option 6 - View Your Playlist

The users can view all the songs (liked by themselves and suggested by the application) in their own personal playlist under their accounts.

7
Please give the id of the song you want to look up: SOBXHDL12A81C204C0
Stronger
loading
Do you want the song list shared by other listeners(Similar Preference)? (y/n): y

=====Song List By Listener=====

| Listener ID | Song Title |
|--|--|
| b80344d063b5ccb3212f76538f3d9e43d87dca9e | The Cove |
| | Entre Dos Aguas |
| | Stronger |
| | Stronger |
| | Constellations |
| | Learn To Fly |
| | Apuesta Por El Rock 'N' Roll |
| | Paper Gangsta |
| | Stacked Actors |
| | Sehr kosmisch |
| | Heaven's gonna burn your eyes |
| | Let It Be Sung |
| | I'll Be Missing You (Featuring Faith Evans & 112)(Album Version) |
| | Love Shack |
| | Clarity |
| | I?'m A Steady Rollin? Man |
| | The Old Saloon |
| | Behind The Sea [Live In Chicago] |
| | Champion |
| | Breakout |
| | Ragged Wood |
| | Mykonos |
| | Country Road |
| | Oh No |
| | Love Song For No One |
| | Jewels And Gold |
| | Warning |
| | 83 |
| | Neon |
| | The Middle |
| | High and dry |
| | All That We Perceive |
| | The Christmas Song (LP Version) |
| | Our Swords (Soundtrack Version) |
| | Are You In? |
| | Drive |
| | Generator |
| | Come Back To Bed |
| | He Doesn't Know Why |
| | Trani |
| | Bigger Isn't Better |
| | Sun Giant |
| | City Love |
| | Right Back |

In Option 7 - Look up a song

You can decipher the song title of the song id that you entered in Option 1. And more, you can see the users who liked this song also gave high ratings to those songs in the list.

| Song ID | Song Title |
|--------------------|---|
| SOAKIMP12A8C130995 | "The Cove" |
| SOBBMDR12A8C13253B | "Entre Dos Aguas" |
| SOBXHDL12A81C204C0 | Stronger |
| SOBYHAJ12A6701BF1D | Constellations |
| SODACBL12A8C13C273 | "Learn To Fly" |
| SODDNQT12A6D4F5F7E | "Apuesta Por El Rock 'N' Roll" |
| SODXRTY12AB0180F3B | "Paper Gangsta" |
| SOFGUAY12AB017B0A8 | "Stacked Actors" |
| SOFRQTD12A81C233C0 | "Sehr kosmisch" |
| SOHQWYZ12A6D4FA701 | "Heaven's gonna burn your eyes" |
| SOIYTOA12A6D4F9A23 | "Let It Be Sung" |
| SOIZAZL12A6701C53B | "I'll Be Missing You (Featuring Faith Evans & 112)" |
| SOJNNUA12A8AE48C7A | "Love Shack" |
| SOJPFQG12A58A7833A | Clarity |
| SOKRIMP12A6D4F5DA3 | "I?'m A Steady Rollin? Man" |
| SOLLGNU12AF72A4D4F | "The Old Saloon" |
| SOMGIYR12AB0187973 | "Behind The Sea [Live In Chicago]" |
| SOMLMKI12A81C204BC | Champion |
| SOMSQJY12A8C138539 | Breakout |
| SONSAEZ12A8C138D7A | "Ragged Wood" |
| S00KGRB12A8C13CD66 | Mykonos |
| SOPCVQE12AC468AF36 | "Country Road" |
| SOQIVUD12AB01821D2 | "Oh No" |
| SOQJLDY12AAF3B456D | "Love Song For No One" |
| SOQLCKR12A81C22440 | "Jewels And Gold" |
| SORPMYJ12AF729EB90 | Warning |
| SORQHCG12A58A7EEBA | 83 |
| SORUFVF12AB018230B | Neon |
| SORWLTW12A670208FA | "The Middle" |
| SORZASF12A6D4F8CFA | "High and dry" |
| SOSYBEV12AB0182933 | "All That We Perceive" |
| SOTFATN12A6D4FA74D | "The Christmas Song (LP Version)" |
| SOTLVCL12AB0182D22 | "Our Swords (Soundtrack Version)" |
| SOTRSFZ12A8C142BF6 | "Are You In?" |
| SOUKXIN12A8C133C7F | Drive |
| SOVHRGF12A8C13852F | Generator |
| SOVQEYZ12A8C1379D8 | "Come Back To Bed" |
| SOVYIYI12A8C138D88 | "He Doesn't Know Why" |
| SOWQLXP12AF72A08A2 | Trani |
| SOWSPUS12AC468BEE3 | "Bigger Isn't Better" |
| SOXMIUS12A8C13CD59 | "Sun Giant" |
| SOXRXDG12A8C131DE5 | "City Love" |
| SOXZQDE12A8C135833 | "Right Back" |
| SOYHEPA12A8C13097F | Moonshine |

In Option 8 - Display Songs List

This option just gives a list of songs ranked by ratings.

Nommo by Max Roach
Do you like it? (y/n): y
Do you want all songs by this artist? (y/n): y

=====All Songs by Max Roach =====

Blue Waltz
Another Valley
The Most Beautiful Girl In The World
Din-Ka Street (LP Version)
Deeds Not Words
Festival Journey
Let Thy People Go (LP Version)
Nommo
Little Folks
Jordu - Live
It's You Or No One
Love For Sale - Live
Joshua (LP Version)
Hope So Elmo (LP Version)
Who Will Buy? - Live
Lover
Valse Hot
Were You There When They Crucified My Lord (LP Version)
This Night Mountain - Live
You Stepped Out Of A Dream

Logged in as: kdu

In Option 9 - Get a random song

This option just gives a random song with its artist from the dataset. If the users happen to like the song and its artist, the users can see all songs by this artists.

10

Please give the name of the artist you want to look up: Max Roach

=====All Songs by Max Roach =====

Blue Waltz
Another Valley
The Most Beautiful Girl In The World
Din-Ka Street (LP Version)
Deeds Not Words
Festival Journey
Let Thy People Go (LP Version)
Nommo
Little Folks
Jordu - Live
It's You Or No One
Love For Sale - Live
Joshua (LP Version)
Hope So Elmo (LP Version)
Who Will Buy? - Live
Lover
Valse Hot
Were You There When They Crucified My Lord (LP Version)
This Night Mountain - Live
You Stepped Out Of A Dream

Logged in as: kdu

In Option 10 - Look up an artist

This option gives users a chance to look up if their favorite artists in the dataset. If so, all the songs of the artist will be printed out.

```
11  
goodbye!  
Data succesfully written!
```

In Option 11 - Quit

You can quit this application. The generated user's own playlist will be saved in the same folder of the application.