

Android studio

Music Buddies Final Instruction

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Set-up:

Required Downloads on Emulator/Phone:

- Youtube
- Spotify (Must be signed in)

Required Files:

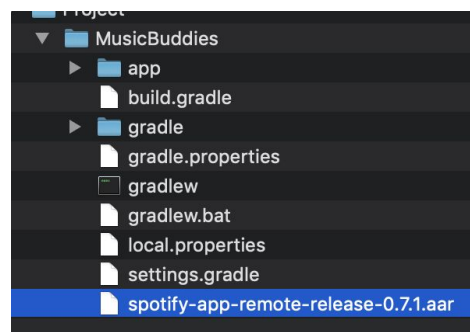
- Google-services.json

Required Dependencies:

- [Spotify-app-remote-release-0.7.1.aar](#)

Setting Up Spotify:

- Spotify must be downloaded on phone / emulator. Log in to your Spotify app on the phone / emulator.
- Example Spotify URL for testing:
<https://open.spotify.com/playlist/0t2lyBw6U0VE8rEXCqS9H4?si=EnTHdYqTS1my3ph53CVAMw>
 - To test your own playlist go to the spotify app, go to a playlist, and click “share” and get the url with “copy playlist link”
- Add the spotify dependency -- Your project directory should contain the .aar file as shown here.



Download link: <https://github.com/spotify/android-sdk/releases>

Set up an SHA footprint for Spotify: (Alternatively, email nye@bu.edu your footprint and I will add your footprint to my Spotify developer account)

1. Go to develop.spotify.com (log in and go to your dashboard). Click on “create an app.”
2. Enter any app name and app description and copy the client ID after you create the app.

3. Change the client ID with the one you copied just now on signUpProfile2.java
4. On the Spotify developer dashboard, click on “edit settings” and enter:
`com.example.musicbuddies://callback` under “Redirect URIs”
5. On your terminal, cd to the project directory and enter the following command to get a SHA1 footprint:

```
# On Bash style shells
$ keytool -exportcert -alias androiddebugkey -keystore
~/.android/debug.keystore -list -v | grep SHA1
```

```
# On Windows Powershell
$ keytool -exportcert -alias androiddebugkey -keystore
%HOMEPATH%\android\debug.keystore -list -v | grep SHA1
```

(from <https://developer.spotify.com/documentation/android/quick-start/>)

6. Copy the footprint you got from the terminal and add it to “Android packages” (from “edit settings”) (with your own footprint):

Android Packages

`com.example.musicbuddies`

`E7:47:B5:45:71:A9:B4:47:EA:AD:21:D7:7C:A2:8D:B4:89:1C:BF:75`

`[enter your own footprint that you got from the terminal]`

7. Make sure you click “save” after you “edit settings.”
8. Open apikeys.properties and place client id from Spotify

Setting Up Firebase

The google_services.json is included however to view the database please contact nye@bu.edu to be added to the project otherwise we have provided instructions on how to retrieve the json file below.

Retrieving google_services.json

1. Go to <https://console.firebase.google.com/u/0/?pli=1>
2. Create a new project called Music Buddies
3. In the project overview, add a new app with the package name
`com.example.musicbuddies`
4. Download google_services.json in the app folder of Music Buddies
5. “Get Started” on Authentication, Realtime Database and Storage

Other Errors that May Be Encountered

- Red errors on variable types (such as FirebaseAuth, etc), dependencies for these variable types must be added

How to Run and Test the App

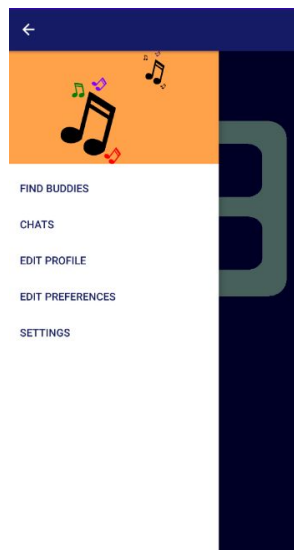
Splash

- When you first open the app there will be a splash screen with our logo that will last for a while and then it will go to the sign in/ sign up page.



Menu

- This is where you can navigate to other pages. Click the hamburger menu in the top left hand corner of any page to see this menu.



Sign in / sign up

- First, click the sign up button to create an account. Enter the requested information and hit sign up.
- Once you have signed up, you can create a profile. Enter the requested information about yourself and press next.
- Now, you can add your spotify and youtube playlists for others to enjoy. To find your spotify playlist, go to the spotify app and sign in. You can search for a playlist or find a playlist from your library. Click on the playlist, then click the 3 dots, then click the share

button and lastly click copy link. Paste the link into our app. To find a YouTube playlist, go to the youtube app or website on your phone and navigate to your playlists or search a playlist that you really like. Click the share button and copy the link provided. Paste this link into our app and click confirm. You must fill out all of the fields.

The image displays four sequential mobile app screens for 'MUSIC BUDDIES'.

- Screen 1: MUSIC BUDDIES** - A dark blue header with the app name in orange. Below is a light blue card with input fields for 'Email' and 'Password', and two buttons: 'SIGN IN' and 'SIGN UP'.
- Screen 2: SIGN UP** - A dark blue header with the title in orange. Below is a light blue card with input fields for 'Name', 'Email', 'Password', and 'Confirm Password', and a 'SIGN UP' button.
- Screen 3: PROFILE** - A dark blue header with the title in orange. Below is a light blue card with a circular 'Upload Photo' button, and input fields for 'Name', 'Gender', 'Birthday' (with a DD/MM/YYYY placeholder), 'Favorite Genre', 'Favorite Artist', and 'Bio'. A 'NEXT' button is at the bottom.
- Screen 4: PROFILE** - A dark blue header with the title in orange. Below is a light blue card with a section 'Add Your Music Playlists'. It includes an 'Enter Spotify Playlist URL:' field with a '+ SPOTIFY PLAYLIST' button, and 'PREVIOUS', 'PLAY PLAYLIST', and 'NEXT' buttons. Below that is a 'Currently Playing: None' section. Then, an 'Enter Youtube Playlist URL:' field with a '+ YOUTUBE PLAYLIST' button and a note 'Playlist must be public.'. At the bottom is a 'CONFIRM' button.

Find Buddies

- This is the first page you will reach once you've logged in. Click on the hamburger menu icon to navigate the app's pages.
- Swipe right to like the profile you see.
- Swipe left to see the next user on this page.
- When you leave this page, the matches refresh. They are not saved and therefore you will be able to see a user again after you have swiped on them.

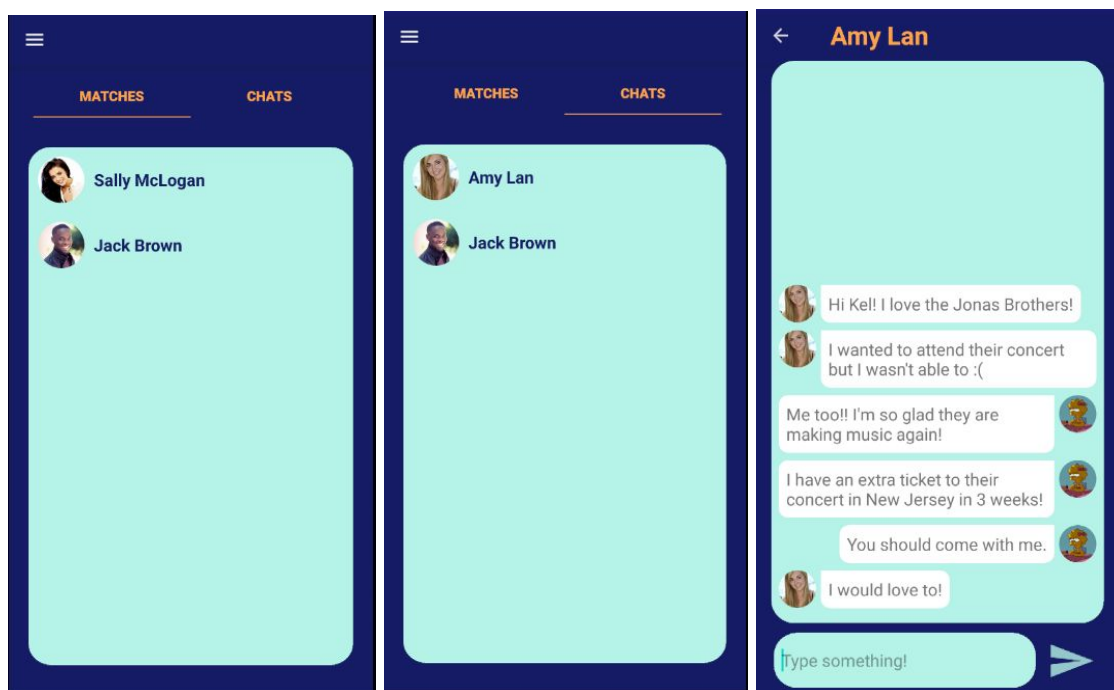
The image displays two mobile app screens for 'MUSIC BUDDIES'.

- Screen 1: FIND BUDDIES** - A dark blue header with the title in orange. Below is a light blue card featuring a profile picture of a man, the name 'Jack Brown', and a list of attributes: 'Gender: Other', 'Age: 28', 'Favorite Genre: Pop', 'Favorite Artist: Katy Perry', and 'Bio: Music is life'. A 'PLAYLISTS' button is at the bottom. Below the card, text reads 'Swipe Right to Like' and 'Swipe Left to see Next'.
- Screen 2: FIND BUDDIES** - A dark blue header with the title in orange. Below is a light blue card with the title 'PLAYLISTS' in orange. It has a 'PLAY SPOTIFY PLAYLIST' button, followed by 'Currently Playing: Monster (Shawn Mendes & Justin Bieber) by Shawn Mendes' and 'PREVIOUS'/'NEXT' buttons. Below that is a 'PLAY YOUTUBE' button and a video player showing a colorful abstract pattern. A 'CANCEL' button is at the bottom. Below the card, text reads 'Swipe Right to Like' and 'Swipe Left to see Next'.

Chats

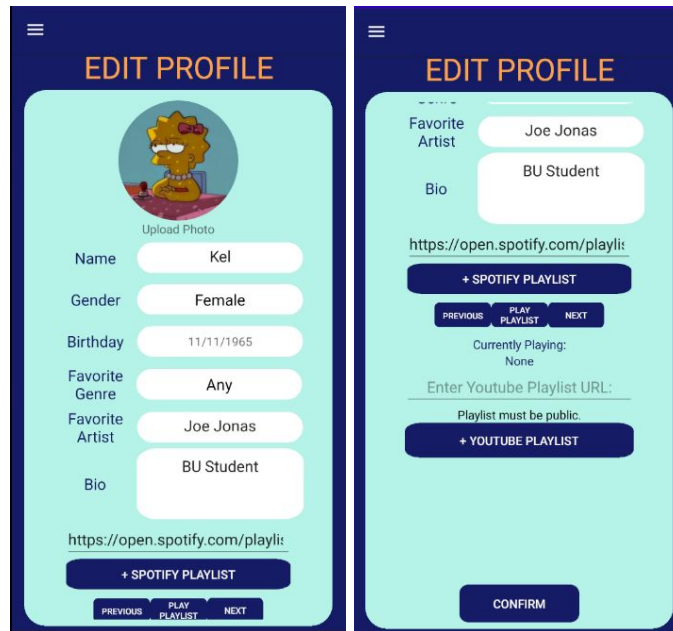
This page is divided into two tabs: the “matches” tab and the “chats” tab

- “Matches” Tab:
 - Here you’ll see people that you’ve matched with; they won’t show up in the chats tab until you chat with them.
 - You can click any user to chat with.
- “Chats” Tab:
 - Here you’ll see people that you have already chatted with.
 - We have a real-time chat function so graders can use two devices and create two accounts and experience the real-time chat function.
- You can swipe between 2 tabs.



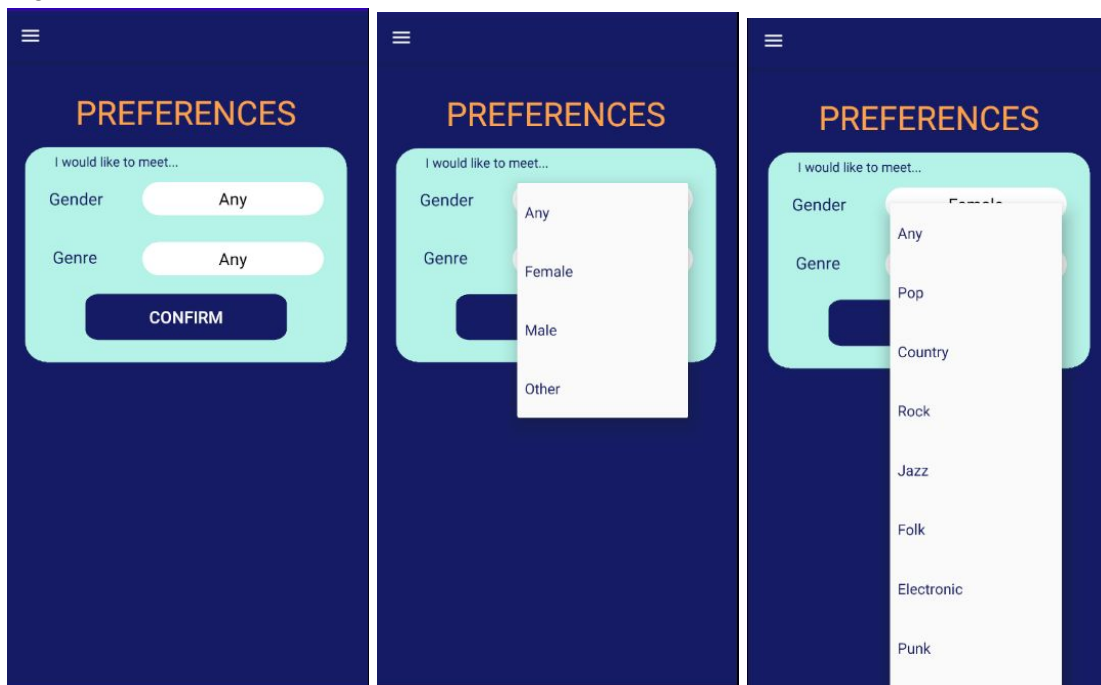
Edit Profile

- This is similar to setting up a profile. All of your previous information is there and you can edit it. Click the confirm button at the bottom to save your changes.



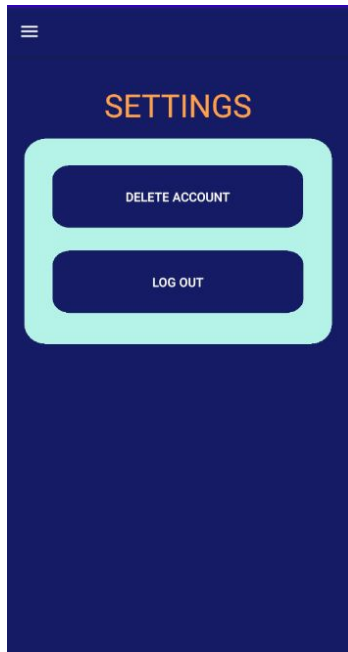
Edit Preferences

- It says “I would like to meet...” meaning you can adjust what kind of users you’d like to see on the “Find Buddies” page.
- For example, if you choose “female” for gender. You will only see female profiles on the swipe page. And if you choose “female” and “country” for music genre and press confirm, there will only be female profiles who chose “country” as their favorite music genre.



Settings

- The user can “delete account” and a warning message will pop-up and you’d have to click “confirm” to actually delete your account.
- The user can choose to “log out.” If they do so they will be taken back to the sign in/ sign up page.



Note to Graders:

- For Extra Credit:
 - We targeted multiple locales including English, Chinese, and French.
 - We have fragments.
 - We have gestures (swipe)
- Based on lecture feedback, we’ve added:
 - If there is no playlist available for a user profile when you’re on the swipe page, a toast will appear and tell you that.
- There might be red underlines under code with Youtube Support Fragment but the app will still run and work.
- For the find buddies pages, the matches refresh. We were not able to finish implementing saved matches. Therefore, once you navigate away from the find buddies page and then back to it, you will be able to see a user again even after you have swiped on them. However, if you stay on this find buddies page, the matches are not refreshed and you will eventually run out of users to swipe on once you’ve gone through all of them.

Code References:

For spotify: <https://developer.spotify.com/documentation/android/quick-start/>

For App and youtube: developer.android.com

- [YoutubePlayerSupportFragment](#)
- Youtube API Tutorial:
<https://www.sitepoint.com/using-the-youtube-api-to-embed-video-in-an-android-app/>
- [Calendar](#)

To calculate age: <https://stackoverflow.com/questions/38967422/calculate-age-from-birthdate>

For Spinner: <https://www.broculos.net/2013/09/how-to-change-spinner-text-size-color.html>

For hamburger / sliding menu: <https://www.youtube.com/watch?v=do4vb0MdLFY>

Profile Picture: [Part 1](#), [Part 2](#), [Part 3](#)

For Splash Page:

<https://stackoverflow.com/questions/5486789/how-do-i-make-a-splash-screen>