#### MEMBERS:

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## APP NAME:

#### **Music Streamz**

## APP TAGLINE:

Geared towards your personal music taste, Music Streamz finds the best music streaming app for your playlist while simultaneously recommending songs based off your recent searches.

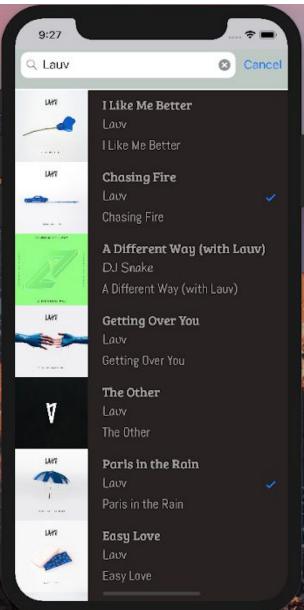
## GITHUB REPO:

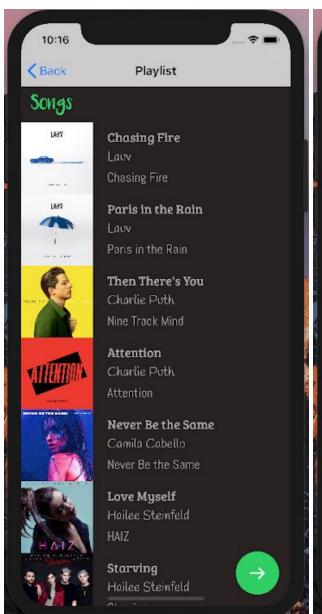
https://github.com/tyleri/music-streamz

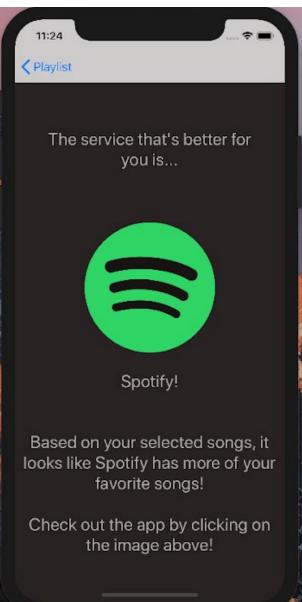
## **SCREENSHOTS:**

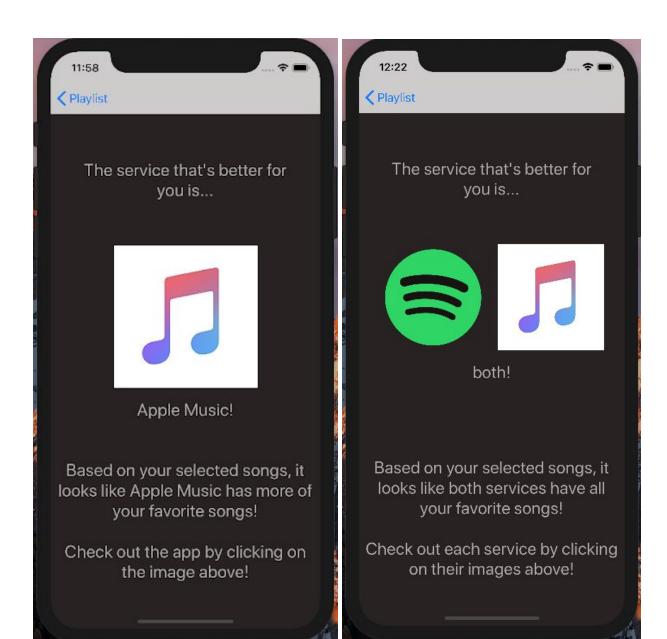
(see next pages)

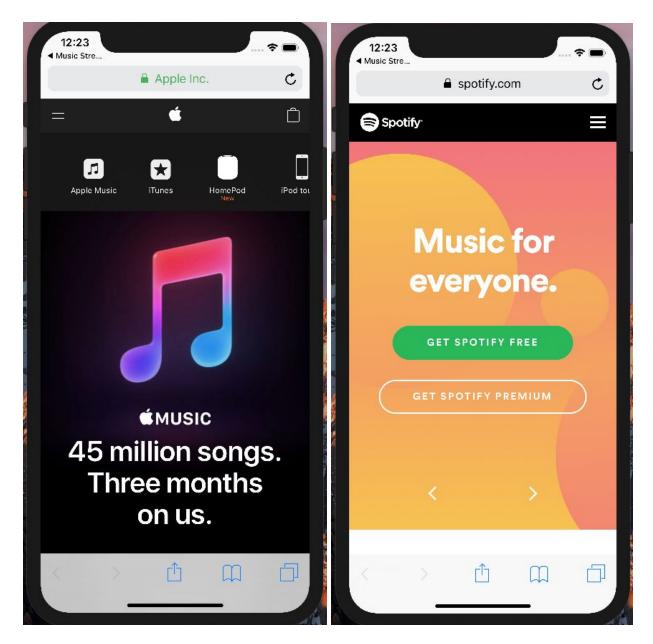












#### **DESCRIPTION:**

The purpose of Music Streamz is to convenience the user by comparing two API's, Apple Music and Spotify, to tell the user which is the better of the two applications for servicing one's music needs. Features include a search bar - with which one can search up a song, artist, or album, icons that enable navigation between different pages on the app and gives direct access to either/both Spotify and Apple Music, and a Recommendations page that takes into consideration past searches the user has made so that the main page is personally fitted for the consumer.

### **REQUIREMENTS:**

#### Use AutoLayout

In our constraints function, we utilize leadingAnchor, trailingAnchor, etc to ensure that our image, label, text positioning wouldn't be hardcoded to constants. The app can be displayed on various iPhone dimensions as a result.

#### Use CollectionView + TableView

We use the UITableView for the search navigation page and for the cart navigation page. This is because music applications commonly display songs (with artist and album information) in rows, with reusable cells that appear as you scroll down. For the main page, we use the UICollectionView to display four recommended songs; this allows for an eye-catching display upfront.

## Use some sort of navigation

Our ViewController, controlling most of the code for the main CollectionView page, navigates to the search and cart pages with button presses. The search page uses modal navigation and is thus presented directly on top of the ViewController. The cart page uses the back button to slide back to the main, as well as an arrow button to navigate to the results page. Ultimately the results page navigates to the Spotify or/and Apple Music sites.

#### ❖ Integrate an API

The APIs we incorporate are the Spotify and Apple Music APIs to act as music sources from which we are able to pull music real-time. These APIs are accessed by utilizing the work done by the backend part of the project.

### ❖ Implement an API using Flask boilerplate

Our API was developed off of the Flask boilerplate that was provided in AI (Todo list).

## Have some sort of database modeling

We use MySQL to store data about songs from Spotify and Apple Music, including information about which services each song can be found on.

# Deploy it on Google Cloud

Our backend is deployed in Google Cloud and can be accessed at <a href="https://musicstreamz.tyleri.me">https://musicstreamz.tyleri.me</a>, which just points to the IP address 35.190.164.37. The "/" route is not handled, but you can go to the route <a href="https://musicstreamz.tyleri.me/search?q=Chasing+Fire&page=1">https://musicstreamz.tyleri.me/search?q=Chasing+Fire&page=1</a> to see the service in action.

## COMMENTS:

We used office hours and referenced StackOverflow in some cases, like creating a resize function for our images and for some backend implementation, and furthermore used the Apple Developer site for looking up functions and classes outside the scope of class. We also utilized