

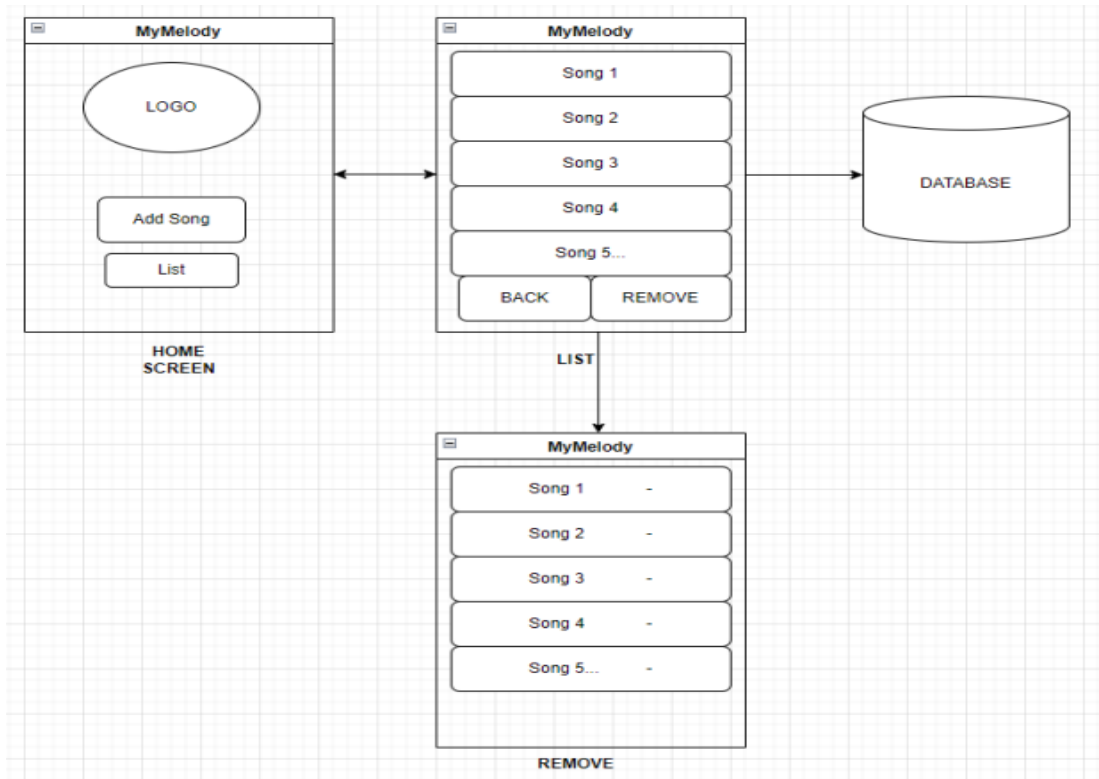
FUNCTIONALITIES

- **Add Song**
 - This function allows the user to store a song into the database that can be viewed by clicking on the list of views in the home menu
- **View List**
 - This function allows the user to see a list of songs that have been stored in the database
- **Back**
 - This feature allows the user to return back to the home screen and is only available in the view list view control.
- **Remove**
 - This function allows the user to remove a song from the list and database.

ARCHITECTURE & DESIGN

This application uses the SQLite library to store all the song entities into a default SQL database.

Design of the application:



Small changes were made in the List view controller screen. The back and remove features are located on the top.

GITHUB LOCATION

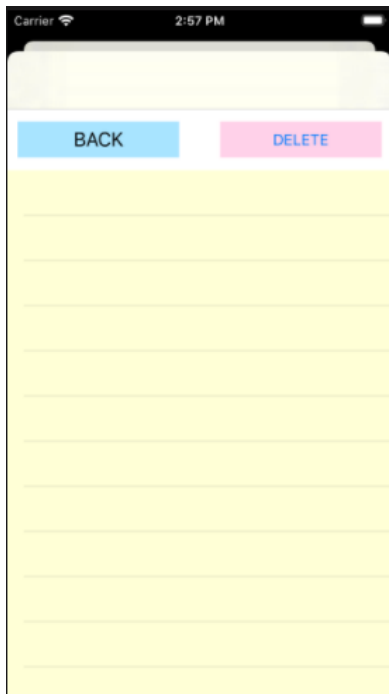
<https://github.com/16mnguyen10/CPSC-411-Mobile-Dev>

The Github location stores my project as well as a README for installation and how to run the project.

TEST RESULTS

There were two scenarios that I've tested for any bugs. The first scenario was an empty list and the second scenario was when the list had many entities.

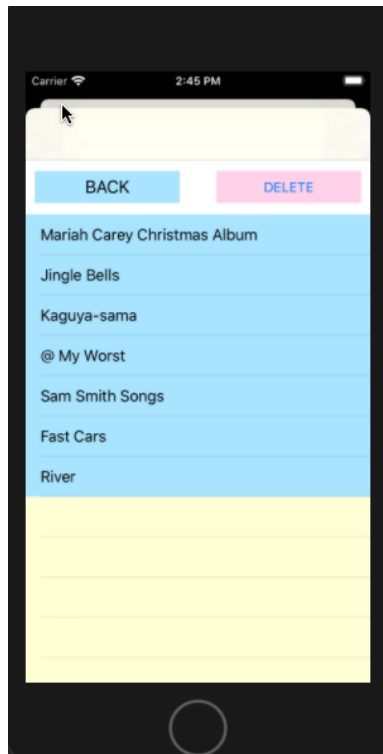
- Scenario 1 (Empty List)



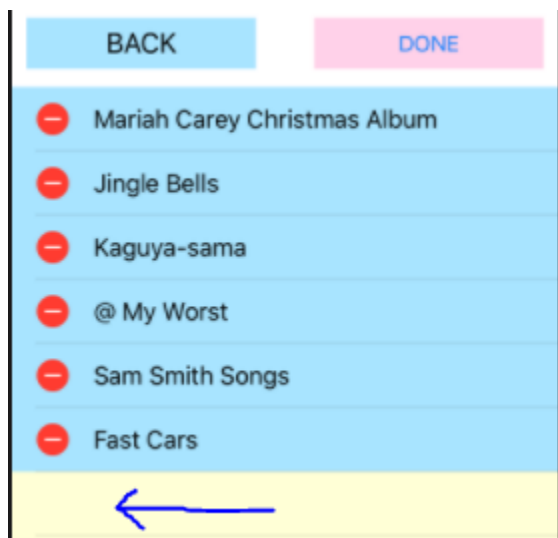
```
Database location:
/Users/mnguyen993/Library/Developer/CoreSimulator/Devices/36E4
ntainers/Data/Application/435C747F-A52B-41AA-A54B-ADF3F7587234
Number of entries: 0
```

Result: All functions/features work perfectly and there is nothing stored in the database.

- Scenario 2 (List of many entities)



Database location:
/Users/mnguyen993/Library/Developer/CoreSimulator/Devices/36E43DA5-FD12-49CF-933F-E8F5F623F8D0/data/Containers/Data/Application/267AB460-FF66-4A81-81FA-3BC6669E9B08/Documents/MelodyDB.sqlite
Number of entries: 7



Number of entries: 6

Result: All the functions/features worked perfectly and the database successfully removed the deleted entity

FUTURE WORK

There is one small problem in this application. After closing the application, I receive a Thread 1: signal SIGTERM error which I believe the problem is located in my delete function.

In my future work of this app, I'd go back and resolve where the problem lies in the delete function logic.

Another improvement that can be made is to improve the front end of the app to make it look more appealing to look at for hours.

The last improvement that can be made would be to add another function that would allow recording and storing that recording to the database.