

GitHub Username: <https://github.com/devdoug>

Brain Beats

Brain Beats is an application designed to create, organize and present a library of binaural beats focused around increasing productivity, helping to relax and help alleviate common ailments and health issues. The application will allow users to not only have easy access to categories binaural beats but they will be allowed to change the levels of sound waves to adjust the effect of the beat. This will allow users to tweak popular beats to have a better effect and share their creations with friends.

Intended User

Students, working class people, average everyday users and anyone with high stress or health concerns.

Features

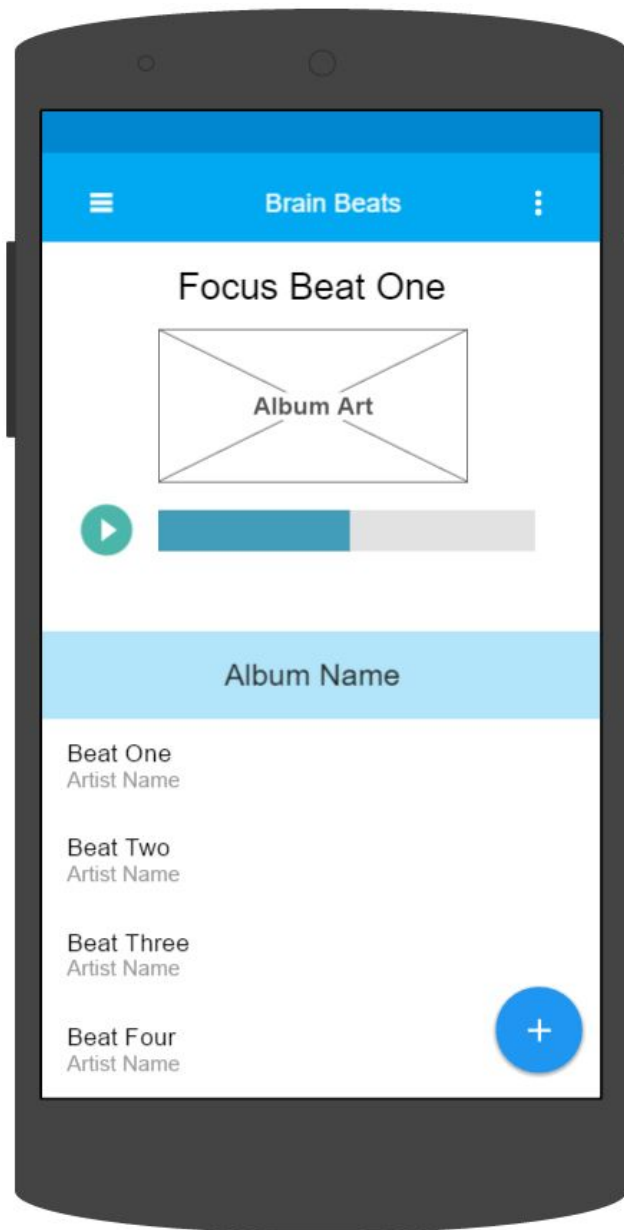
- Displays a library of binaural beats.
- App will tune selected beats to give users a better effect.
- Allows users to share, favorite and save binaural beats.
- Allows users to tweak existing beats to improve individual effects.

User Interface Mocks

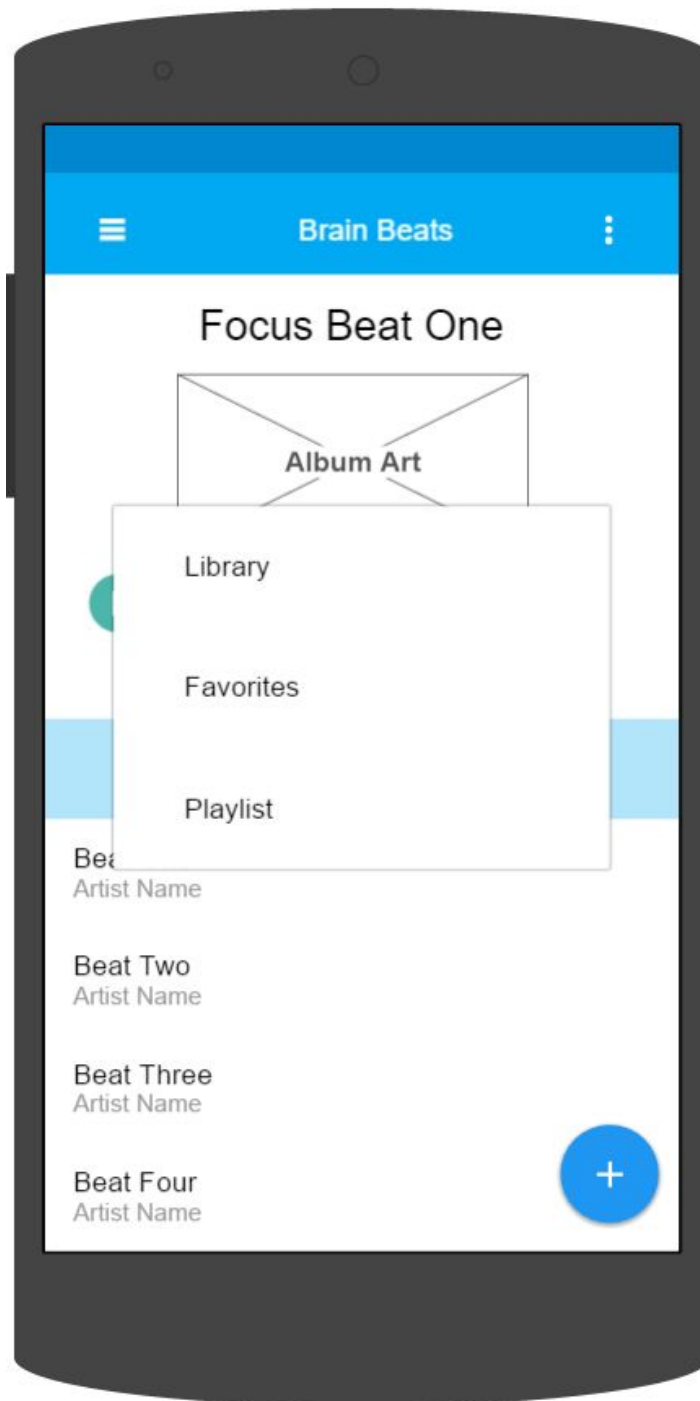
Screen 1



Screen 2



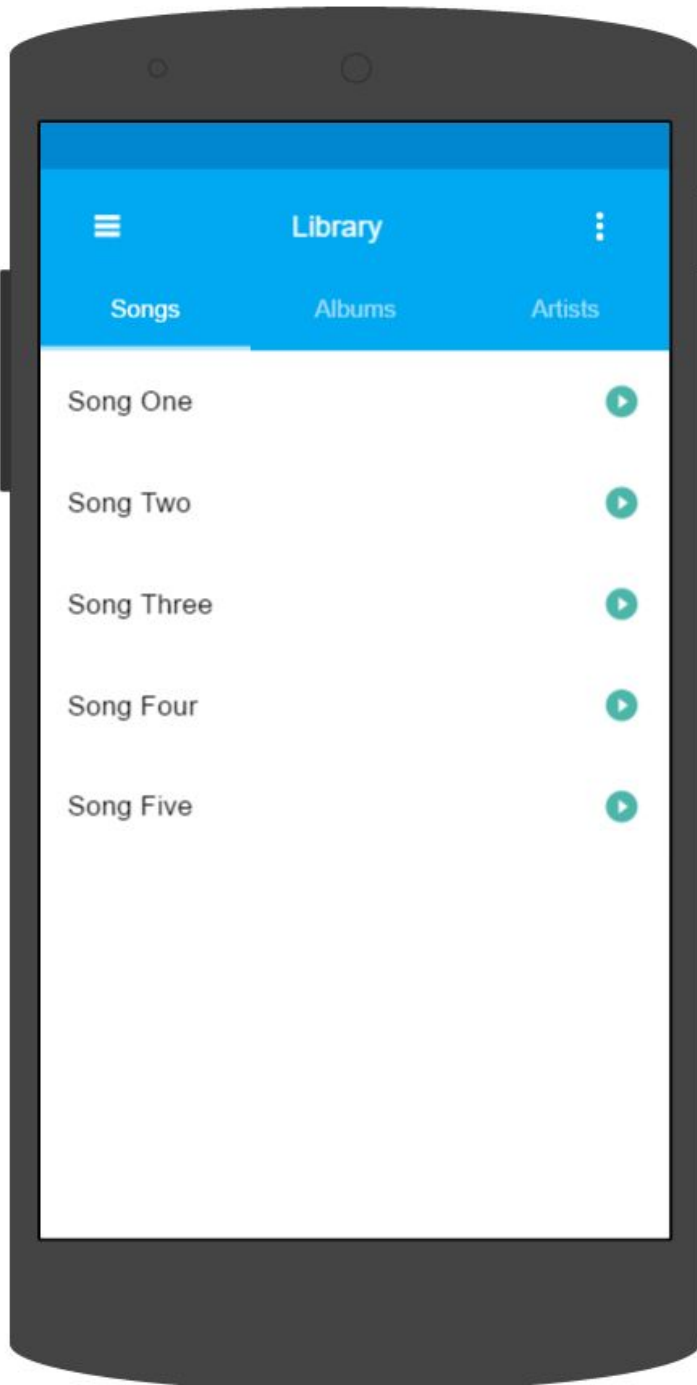
Screen 3



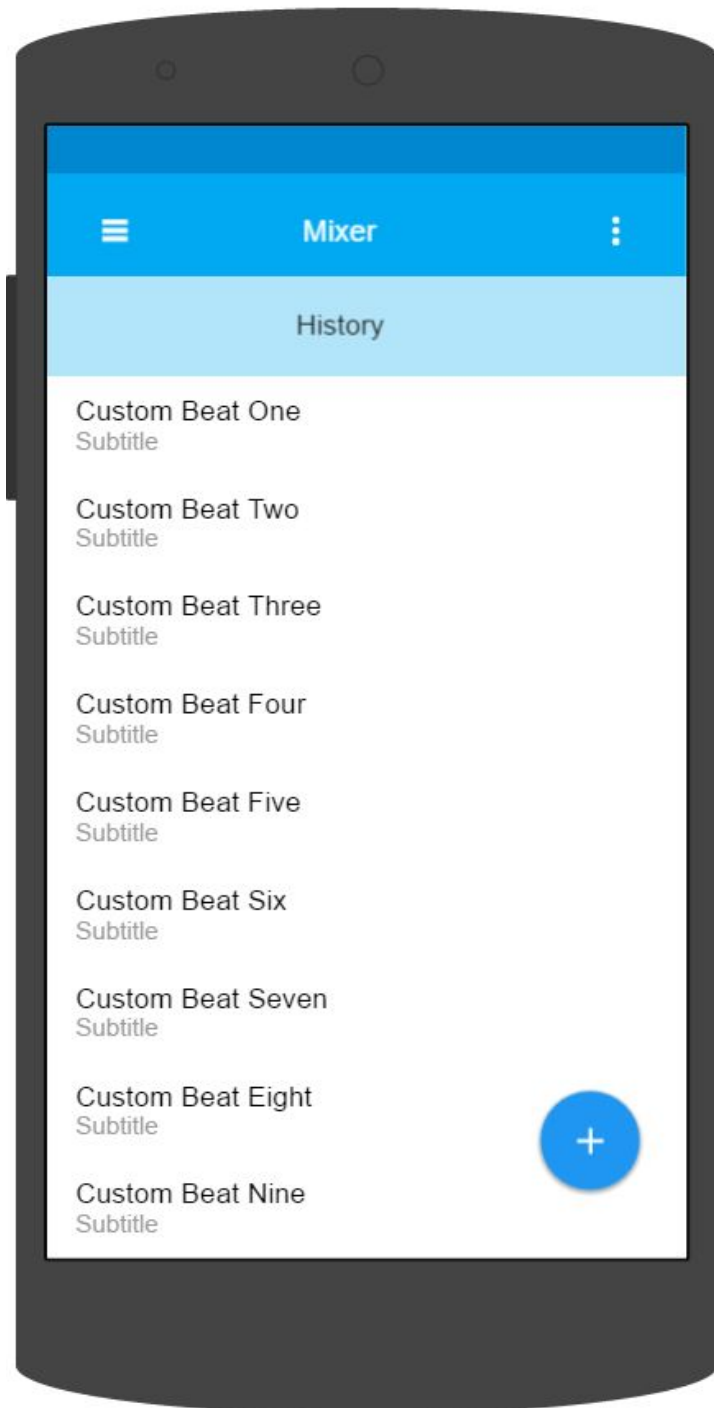
Screen 4



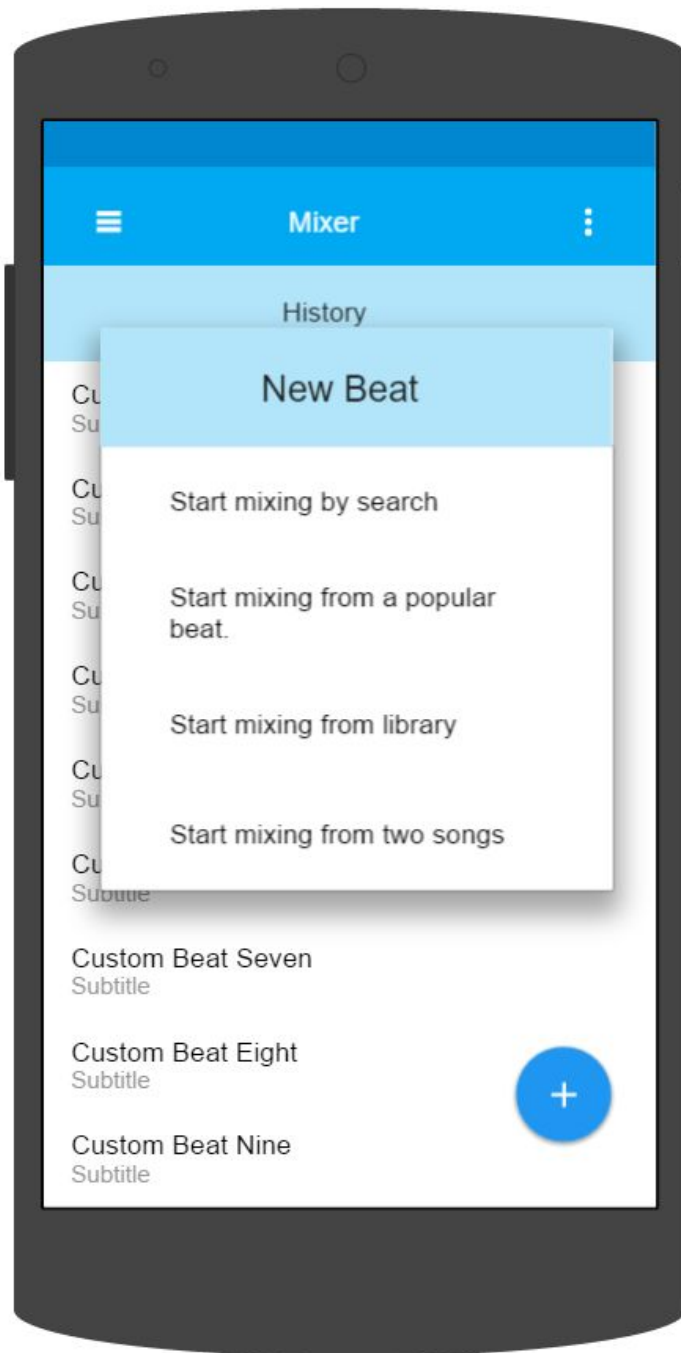
Screen 5



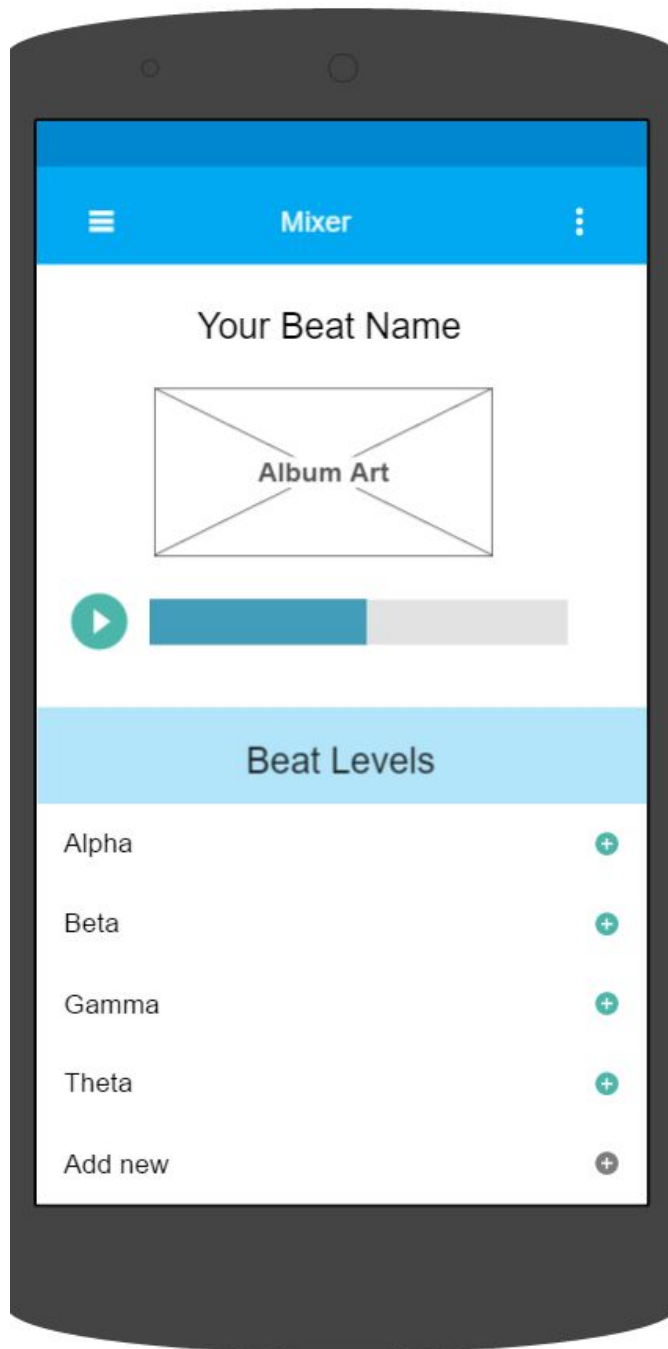
Screen 6



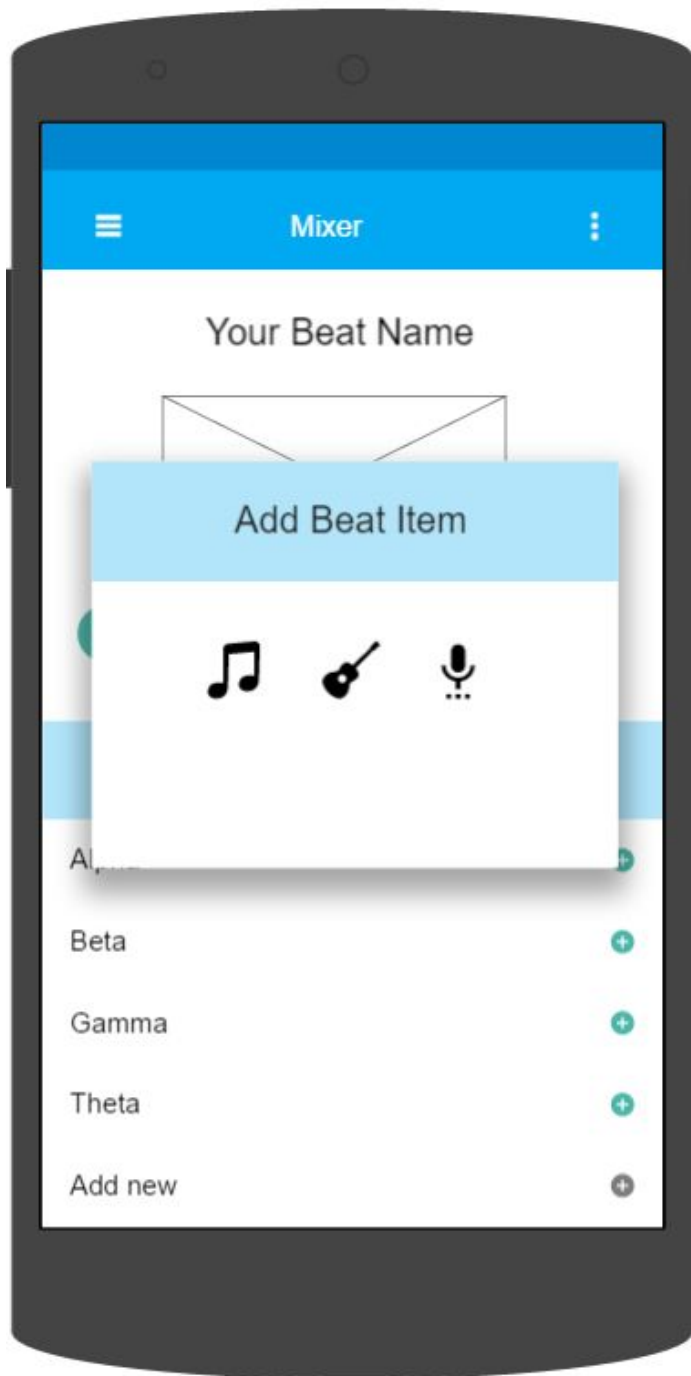
Screen 7



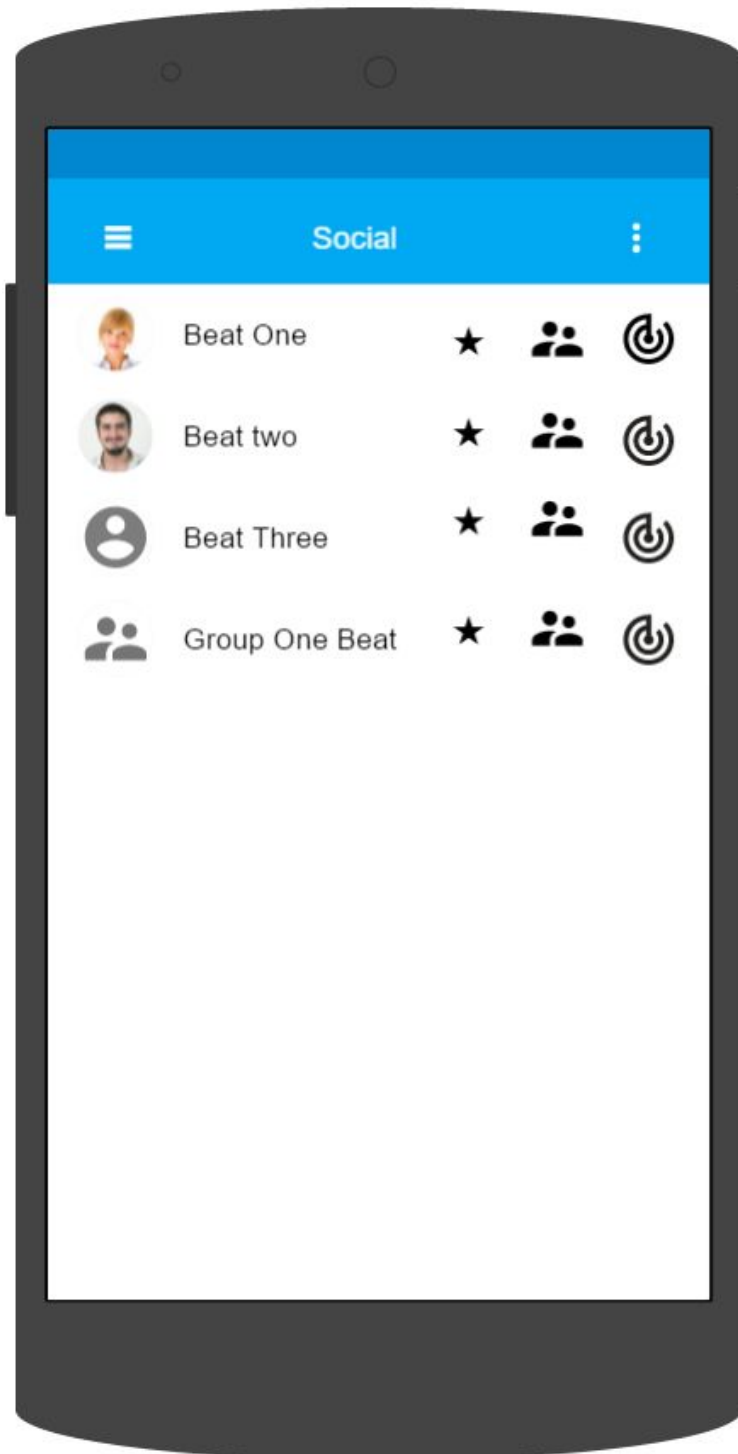
Screen 8



Screen 9



Screen 10



Key Considerations

How will your app handle data persistence?

It will implement a new content provider. Everything will be pulled from the soundcloud API unless the user wants to save a particular song. Then It will be stored on the device using a sqlite database.

Describe any corner cases in the UX.

- When the user selects a detail screen the user will be able to swipe left to return back to the previous screen. For example go to dashboard, click on an item the user is taken to the detail screen they are then able to return to the dashboard screen by swiping to the left.
- When navigating between major functionality users will use the Navbar by clicking the icon in the top left.

Describe any libraries you'll be using and share your reasoning for including them.

- Picasso for loading album art into a image view.
- Google Cloud Messaging.
- Retrofit for REST API communication.
- Butterknife.

Next Steps: Required Tasks

Task 1: Project Setup

Setup default classes and structure without implementing any details:

- Setup new project.
- Implement application architecture such as creating files folders .
- Create all basic wireframe classes.
- Add any service's notifications and back end classes.

Task 2: Implement UI for Each Activity and Fragment

Create and implement UI for app:

- Build UI for Dashboard Screen.

- Build UI for Beat Detail Screen.
- Build UI for Library Screen.
- Build UI for Beat Mixer Screen.
- Build UI for Dialogs.

Task 3: Implement Validation and Logic

Implement the app validation and screen flows:

- Implement screen flows with dummy data.
- Implement app validation.
- Display all appropriate error messages and logs.

Task 4: Implement UX

Implement app animations ux,transitions and effects:

- Implement animations and screen transitions.
- Implement any widget effects including fades or transitions.
- Implement any state transitions and transformations.

Task 5: Set up services and backend

Add any services, libraries and API's that the app requires:

- Set up SoundCloud API.
- Setup Google Maps.
- Setup Google Cloud Messaging.
- Add any necessary Libraries.

Task 5: Set up social component

Add functionality to allow users to perform a wide variety of social interactions:

- Setup sharing.
- Setup friends.
- Setup rating of beats.
- Setup like and favorite.

Task 6: Set up learner

Create the learner that will tweak current beats for desired user effect:

- Setup learner algorithms for filtering beats to tune user's selected beat.

Task 5: Set up mixer factory to splice beats and change wave levels

Add any services, libraries and API's that the app requires:

- Implement function to allow user to increase independent waves in a beat.
- Implement function to allow user to add sounds to a beat such as piano.
- Implement function to allow user to splice two beats together.
- Implement function to allow user to decrease independent waves in a beat.