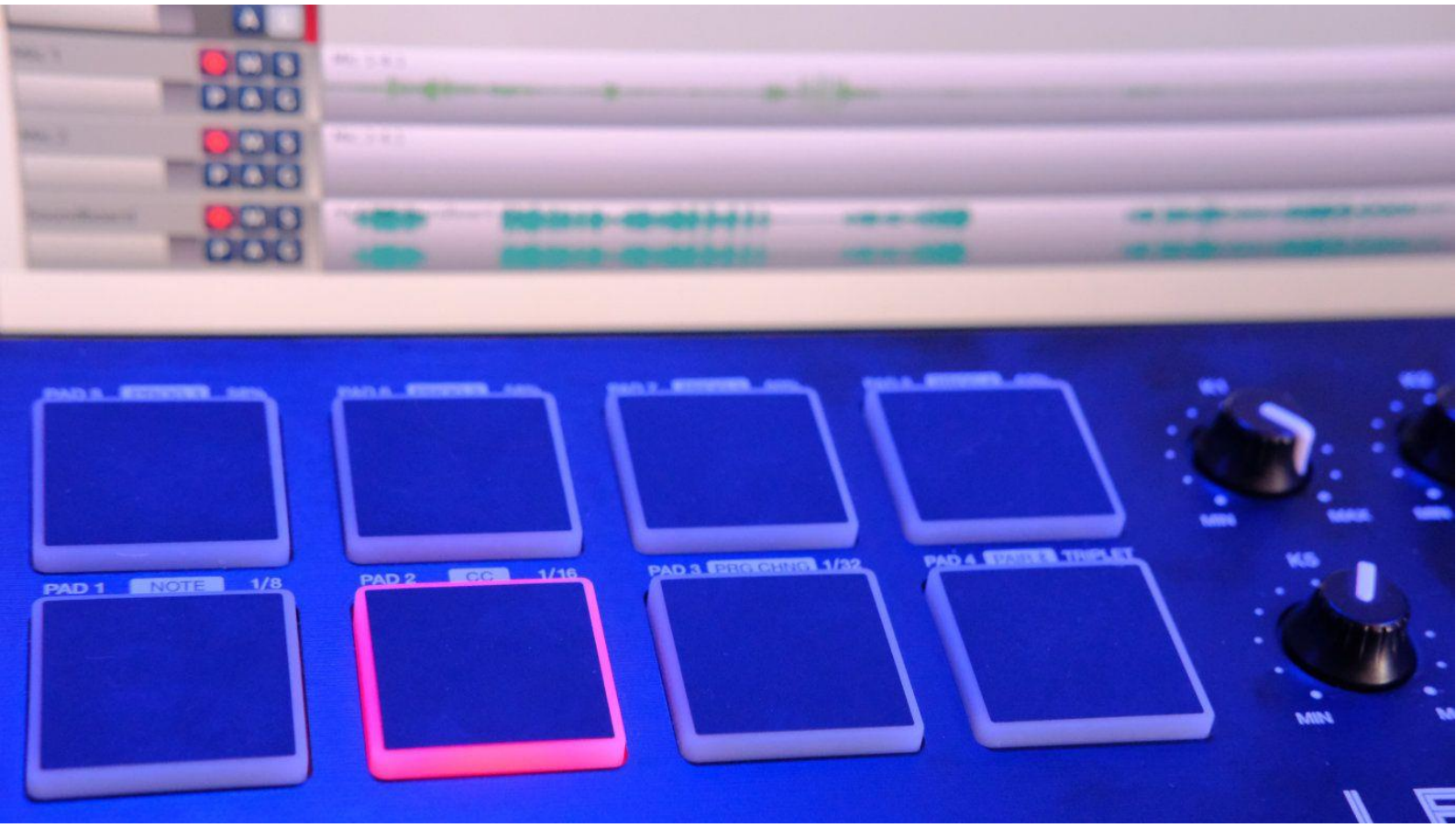
SORBONNE UNIVERSITÉ

SOUNDBOARD APP REPORT

ROMAIN BROSOLO

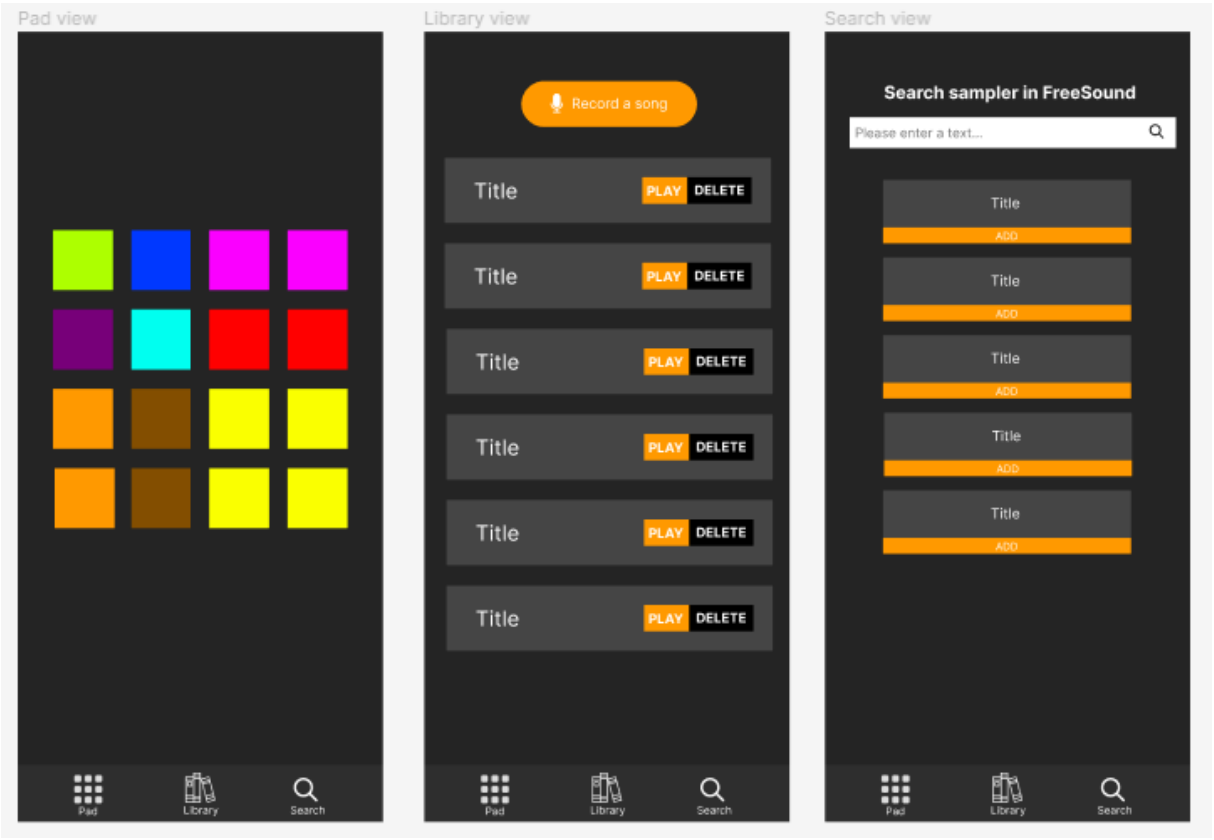


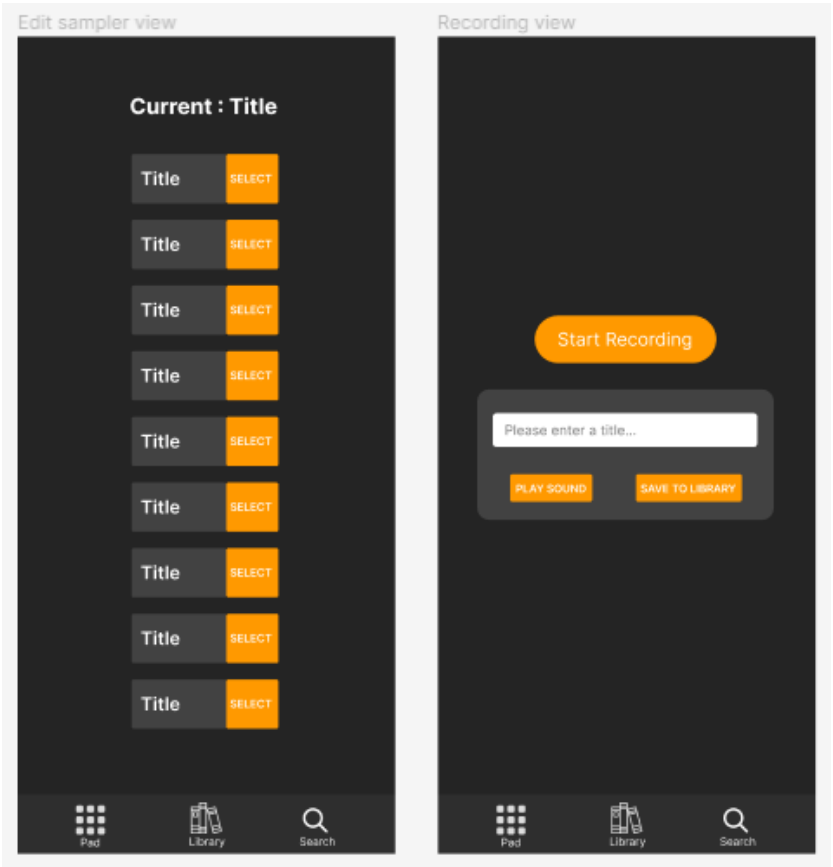
This application is coded under the open source React Native mobile application framework created by Meta formerly Facebook. It is used to develop applications for Android and IOS by allowing developers to use React with the native features of these platforms.

Summary

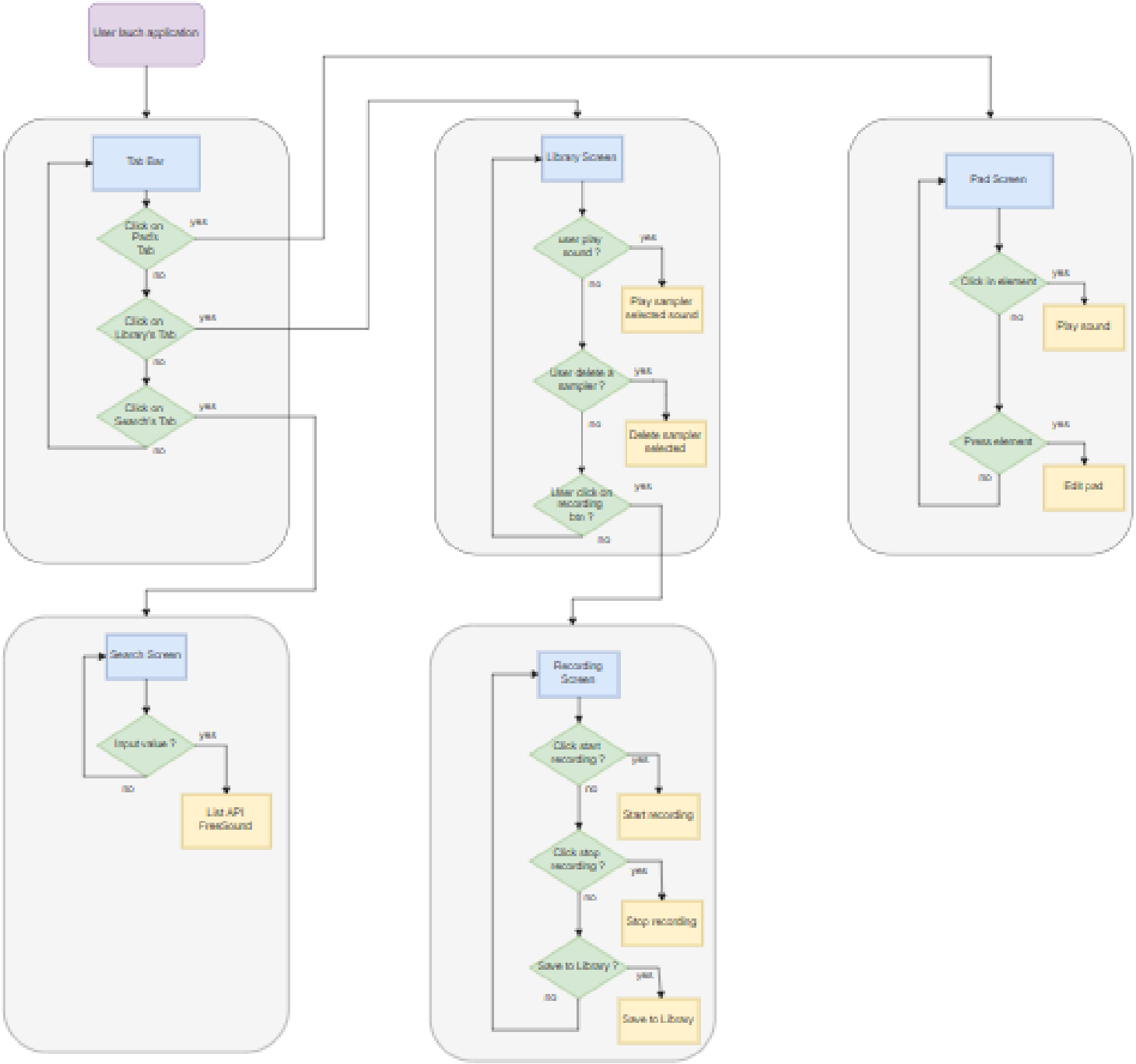
Development of the application model on Figma tools:

Here are the view mockups available on the SoundBoard application:





User Flow


User touch application
Tab Bar
Click on Pad's Tab
yes
no
Click on Library's Tab
yes
no
Click on Search's Tab
yes
no
Search Screen
Input value ?
yes
no
List API FreeSound
Library Screen
user play sound ?
yes
no
Play sampler selected sound
User delete a sampler ?
yes
no
Delete sampler selected
User click on recording btn ?
yes
no
Recording Screen
Click start recording ?
yes
no
Start recording
Click stop recording ?
yes
no
Stop recording
Save to Library ?
yes
no
Save to Library
Pad Screen
Click in element
yes
no
Play sound
Press element
yes
no
Edit pad

Pad Screen :

When launching the application we can see that there are several elements in the tab bar, a "Pad" element that directs the user to the view with the 16 pads. Each click on a pad makes a sound and each pad can be configured manually by the user by pressing it. A list appears where the user selects the sound he wants to have on the selected pad. The modified pad changes color according to the selected sound, one sound = one color. The pads modified with a sound recorded by the user's microphone will be white to differentiate them from the default sounds.

Library Screen

A second element "Library" sends the user to the Library view. This is a view that allows the user to see all the sounds available on the application. Each sound is titled and can be played or deleted individually. A "Record a song" button is placed above the list of sounds so that the user can create a sound from the microphone of his computer or smartphone. Note that permission is required on the platform for the application to access the microphone. You just have to press the "start recording" button to start the recording and press the "stop recording" button to end the recording. From there, several options are offered to the user, the first option is to add a title to the new recording, a second option is the possibility to listen to the recording, if the user is not satisfied with the recording he can start again by clicking on the "start recording" button, and finally a last option offering the user to save his audio in the library.

Each action of the user as well as the payload is dispatched to the redux store of the application, so the reducer returns a new list with the modifications made via the selectors

Search Screen :

A final item that the user can select from the tab bar is the "Search" item. A Search view is displayed to the user allowing him to search for any sound in a FreeSound API. The user writes his search in the available input then the results are displayed as a list, the user can then add a sound from the api in the library.

Problems encountered:

Unfortunately the option to add a sound from the FreeSound API is not available because I had difficulties to download the sound from the API on the application.

Not having an iPhone I could not test the integration of the application on it.

My mobile application Expo Go shows me an error at each QR code scan despite several attempts and being on the same network, so I could not see what the application gave on smartphone but only on the web.