

What went well?

Recording multiple tracks, saving the recordings and transferring the saved files across tabs went well when developing this app. The user is able to record two separate tracks, save the recordings, and then select the tracks from a list in a separate tab for playback. The volume control also worked well for playing each recording, allowing a user to mute or solo each track as well as vary the volume with a slider..

What did not go well?

Since the first track loops repeatedly, the second track also needs to be looped repeatedly, starting at the same point every loop. Aligning the playbacks in this way is not trivial, though, when the second track is not necessarily the same duration as the first. Thus, I attempted to add silence at the end of the second track until the first starts again. I used a timer and the AVAudioPlayer function `play(at:)` to accomplish this, however, the playback seems to fail on every other loop. I was unable to figure out why but think it has to do with the playback start time being overwritten.

I also had issues with making the data persistent. The type-casting was difficult given the nature of trying to save audio files. I attempted to merely save the locations of the files but plists were not generated when I expected them to be and were generated when I did not expect them to be.

Revision Options

If I were to continue working on this app, I would first try to fix the issue with the looping of the second track. If I couldn't fix it, I would then explore a different framework, perhaps AudioKit or AVAudioEngine, to see if the process is any easier. I would also try to make the data persistent so that the user can listen to old recordings. Along with the persistent data, I would allow the user to remove recordings from the list

Another functionality I would like to add is allowing a user to add and delete tracks to the looper. This would give more flexibility to the app and provide the means for recording more complex sounds.

I'm hoping that, since I dropped one of my classes this past week, I will be able to balance my time better and allocate the time required to make my apps more functional. Had I more time when working on this project, I would have researched the other framework options more prior to starting.