Verbal Description

As my semester-long project for CMSI 4072 Senior Project II, I'll be individually develop an app,

"Archived", which is a Swift-based mobile application designed to help

- Producers to sell beats to a niche audience

- Artists to purchase beats and opens (*opens: tracks started by an artist but not finished and could be completed with a feature - such as a chorus, verse)

- Users who aim to purchase unreleased tracks (most unreleased tracks are worth 2k-10k) through group-buy (*group-buy: each person pitches in a small amount to accumulate enough to purchase unreleased/ track)

I chose *Archived* as my project because I felt that there was a lack of platform/community for independent small artists/producers to engage in. As some of my friends who are artists and producers, have suggested, I hope to create an app that makes it easier for artists to find and collaborate with other artists and producers who share similar interests.

Similar existing softwares

BeatStars: a global subscription-based music licensing platform where recording artists and producers collaborate, license, and distribute their work to multiple parties through a variety of non-exclusive and exclusive license types

- This is the software that's most similar to what I'm attempting to build

Soundcloud is a German audio streaming service that enables all of its users to upload, promote, and share audio files.

- Soundcloud's partial functionality and its UI is my key inspiration in my front-end development

Bandlab: a freemium online digital audio workstation (DAW) tool with social media functions, and distributing functions for creating music collaboratively, sharing it, and selling it

- We are planning to incorporate its collaborative nature into our app, but realistically, this has low feasibility unless I'm able to get a partnership license with Bandlab

Most Important Features

- Producers can sell/auction beats on the app - allowing artists to buy instantly or bid
- Artists can purchase beats/opens through buy instantly or auctioning
- Users can purchase/sell unreleased tracks (if purchase, can allow purchasing individually or group-buy)
- Users can DMing each other as well as receiving requests
    - Artists: can reach out to other artists/producers, submit requests for beats/opens he/she wants
    - Producers: can reach to other artists/producers and fulfill artists' request of beats
- Payment system with ApplePay/PayPal

Hardware/Software required: XCode (Swift), Google Firebase

*Intended Audience***:** aspiring "underground" producers/artists/fans

Justification

I believe my choice of project is appropriate for this class as it combines knowledge previously gained from my CS classes such as Artificial Intelligence and Algorithm Development and app development skills from my previous banking and music application internships. I aim to apply my current knowledge and skills and bring it up a notch through the implementation of PKPaymentSystem as well as incorporating machine learning in my backend feed algorithm. This project will allow me to further master working with Swift and Google Firebase (what my group did last semester for Senior Project I) as

well as experiment with new components such as payment system and machine learning-based

algorithmic development.