Project Title: Home Studio Improvement

Project Description:
Having a great studio space at home is a key component of making professional-quality electronic music. My newly assembled studio space has been an exceptional way for me to work on my music at any point during my time at home. However, as I've continued to work in this new space, certain limitations have come to my attention which I believe could be addressed through the purchase of further equipment. My current space is limited in several ways, including an inability to access all my equipment at the same time, whether due to a lack of available connections or a less-than-ideal placement of equipment due to cord length and other factors. The room is also lacking in suitability for home recording, due to, among other things, a lack of acoustic treatment. I believe that the purchase of additional equipment will help to alleviate or even solve these issues.

Objectives:
The goal of this proposal is to improve the efficiency, workflow, and overall quality of recordings in my home studio. This will be accomplished by achieving these goals:
- Determine new placements for my studio monitors to minimize unwanted boosting of frequencies from particular surfaces (i.e. tables) utilizing newly purchased equipment
- Using newly purchased equipment to maximize usable space on desk to allow accommodation of all necessary equipment in an accessible way
- Utilize newly purchased equipment to use an external display better suited to the Logic Pro workflow
- Utilize newly purchased equipment to record both new and old vocals to provide cleaner audio to use in projects
- Utilize newly purchased equipment to connect all necessary devices for my composition at the same time, negating the need for constant cable swapping

Limitations:
Though I would ideally like to acoustically treat my room, I currently share a room with another person, so I need to scale down the equipment I use for now to account for the reduced space while maintaining the highest level of recording quality possible. This influenced my choice of equipment, which comes in a smaller form factor, but is also effective. Additionally, though there are spaces in which clean recordings can be made around the University, the accessibility to said places is restricted due to Covid, so having an option to work at home and still receive quality audio results will be invaluable for my current and future projects.

Statement of Need:
To complete this project, I will need studio monitor stands, a powered USB hub, a HDMI to USB adapter, a HDMI cord, USB-A to USB-C cables, two ¼ inch to XLR cables (10 ft), a wireless keyboard, a wireless mouse, and a reflection filter. These are necessary for the following reasons:

- Studio monitor stands are used to isolate your studio monitors from interference. This is useful because vibrations in particular frequency ranges from a monitor can be amplified by the surface they rest on. This can be seen in desks, for example, where the material of a desk, objects on the desk, and more impact the sound heard by the listener. Separating studio monitors from these creates a more nuanced sound which isn't overblown at particular parts of the frequency spectra.
- Powered USB hubs allow you to connect many devices which have a high power demand (e.g. audio interfaces, external hard drives, MIDI controllers, etc) at the same time without sacrificing their functionality.
- An HDMI to USB adapter and HDMI cord will let me connect my laptop to a monitor, which will be easier to see and will free up more space on my desk to use large devices like MIDI controllers.
- USB-A to USB-C cables will allow me to connect my USB-C devices to the USB hub, which only uses USB-A connections.
- Longer ¼ inch to XLR cables will allow a wider variety of both studio monitor and audio interface placements.
- A wireless keyboard and mouse will allow me to control my laptop remotely, which in turn frees me from the constraint of having to be close to it to interact with Logic.
- A reflection filter will allow me to create clearer vocal tracks with less ambient noise in areas where permanent acoustic treatment isn't really possible (i.e. a shared room).

Schedule for Completion:
Oct 15 – Funding Received; Equipment is purchased
Oct 18-20 – Equipment is delivered
October 22 – All equipment set up (Includes experimentation with monitor placement, equipment arrangement, etc.)
November 5 – Old vocal tracks on songs in progress are re-recorded, improving sound quality

Budget:

Item	Quantity	Price	Description
Ultimate Support JS-MS70 JamStands Series Studio Monitor Stands (Pair) (or maybe MS-100B?)	1	$64.99	Stands used to prop up and isolate studio monitors from other surfaces
Universal 8-Port Powered USB	1	$48.99	Powered USB hub which allows for the simultaneous use of many devices
Lemorele HDMI to USB Adapter	1	$24.99	Adapter which converts an USB-A signal into an HDMI signal
8K HDMI 2.1 Cable 48Gbps 6.6FT/2M	1	$18.99	Standard HDMI Cable
Cable Matters USB-IF Certified 10 Gbps Gen 2 USB A to USB C Cable (USB C to USB Cable) in Black 3.3 Feet	3	$10.49	Cable to connect USB-C devices to USB-A devices
Cable Matters 1/4 Inch TRS to XLR Cable (Male to Male) - 10 Feet	2	$11.99	Connector cable for monitors, mics, etc.
iClever BK10 Bluetooth Keyboard	1	$32.99	Wireless keyboard well suited for Mac
Logitech 910002332 M325 Wireless Mouse	1	$29.99	Wireless mouse
Primacoustic VoxGuard Recording Mic Ambient Noise Attenuator	1	$99.99	Filter which can be attached to a mic stand that surround the mic and creates a cleaner sound for audio recordings
Total (Tax not included)	N/A	**$376.38**	