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ENT 4499

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1. Project description

During my time at City Tech, I have learned about sound designing and how Arduino works. When I took my first class of physical computing, I was so intrigued in how the Arduino works and I’m also a very hands-on person that I enjoyed working with Arduino. Since my concentration is Music Technology, I got an idea on merging both physical computing and music technology. During quarantine I catch myself searching up these sound bowls videos that are helpful with sleep, stress, meditation, and other things.

For my project I would like to replicate that same concept but with the help of an Arduino and Max/MSP to achieve those healing frequencies and to be able to be in a safe space with minimal lighting. I do believe that my project can be use in different ways, that I hope for one day I can introduce that into the music industry to showcase an artist new music, like a listening event as well.

1. Methods

For my project I will use Max/MSP to achieve those healing frequencies but first I will have to research what is the frequency range for stress, anxiety and meditation which will be the main three topics I will focus on. As for the Arduino all that it’s left to do is add more photocells to my protype and connected it to Max/MSP. I will use YouTube as my main resource to go and look at videos to see how I can make the Arduino work well with Max/MSP and I will also use google.

1. Project Deliverables

* Signed Proposal from Technical advisor
* Calendar
* Pictures of the installation
* Budget
* Material Breakdown
* Coding in Arduino
* Patches in Max/MSP

1. Schedule or calendar
2. Required Resources

* Arduino
* Max/MSP license
* Youtube
* Google

1. Budget

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| Budget Estimation | | |
| **Name** | **Description** | **Price** |
| Macbook | Personal Macbook | $ - |
| Arduino | Personal Arduino | $ - |
| Jumper Wires | 5M 1.27mm jumper cable | $ 6.99 |
| Photocells | Photocells (CDS PHOTORESISTOR) | $ 2.85 |
| RGB LED light | 50pc RGB common cathode LED | $ 5.89 |
| Flashlight | 2 Personal Flashlights | $ - |
| Arduino software | Free arduino software | $ - |
| Max/MSP | Free Student Annual license | $ - |
| Hook-up wires | 2 Hook-Up Wires - yellow - 25.00' (7.62m) | $ 5.90 |
|  | **Total Cost:** | $ 21.63 |

1. Proposed table of contents/Portfolio Outline

* Introduction
* Planning
* Design
* Code in Arduino
* Patch on Max/MSP
* Budget
* Project Calendar
* Photos of physical prototype