

## Project Proposal

- A brief description of the concept and inspiration for the project.

I plan on adding an additional outer space themed emotional regulation component to my weather app. I am going to buy 3 cotton stuffed planets (Earth, Jupiter, Mars,) and embed 1 LED and 1 push button(switch) inside each of them. I will be implementing a knob to control the activation of these components via the bread board. Upon turning the knob (completely) the lights will turn on(letting the user know they buttons are now active) and the buttons on each planet will become active. Within the processing window a new background will also become visible. The background will be of outer space. It will have all the planets within our solar system and the sun (each planet will have a facial expression).

(Back in the physical world) The button on each planet will play a different song from the CPU when pressed.

Earth - will play happy sounding music

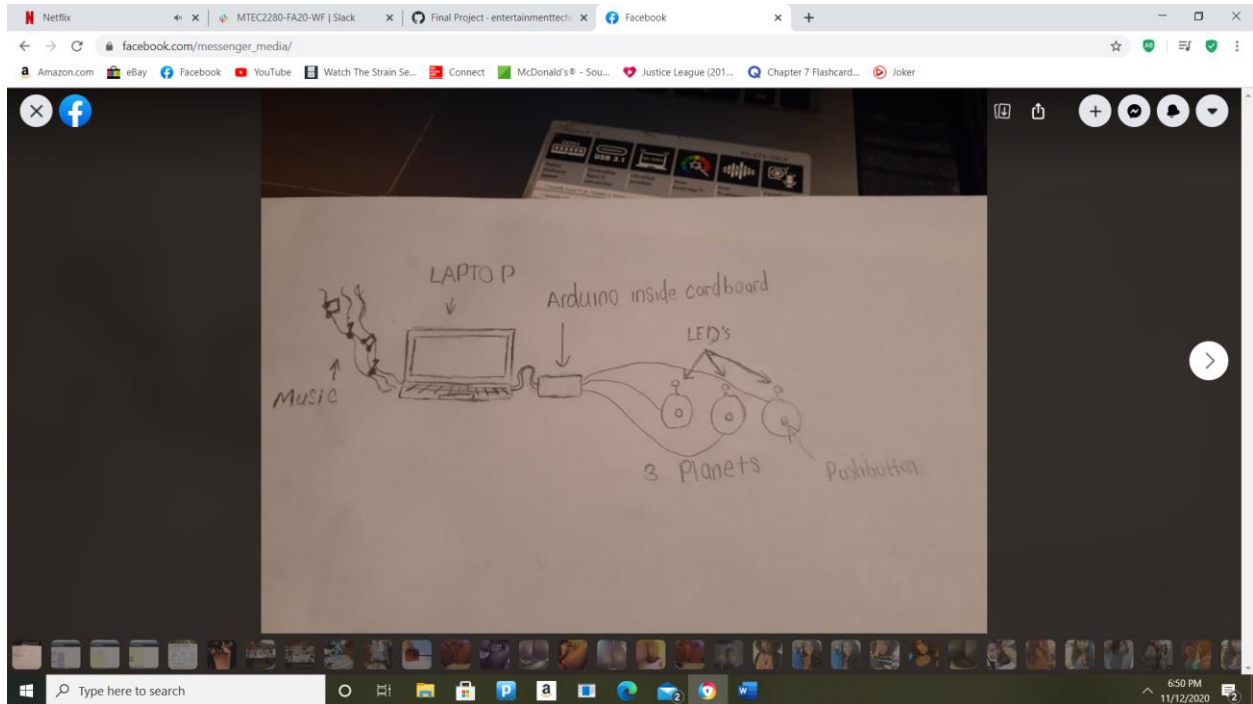
Mars - will play angry sounding music

Jupiter - will play sad sounding music

The goal of this is to allow the user to feel and work through their emotions via the music as opposed to bottling them all up. Once the user has gotten through their angry, sad, or happy mood they may turn the music off.

I will also be implementing a default option so that different calming music will play as long as the interface is open. It will change based on the time of day (morning, evening, and night). The purpose of this is to keep the user calm while relaxing or performing a task in their room or house.

- What does it look like? Include a preliminary sketch of the project (hand-drawn or digital).



- What materials will you need to make it? (Include hardware, software, and physical materials.)

Arduino Board, LED's, Knob, Push Buttons/Switches, Stuffed toy planets, Wires, Wire cutters, cardboard, CPU.

- What skills and techniques do you already know in order to complete the project?

I know how to connect the LED's and the knob to the processing program. I know how to create the processing outer space interface I plan on using.

- What skills and techniques do you need to research and learn?

I need to learn how to add audio files into processing. I need to figure out what conditions I'm going to use to get the lights, switches and music so work together. I need to figure out how to wire the LED's and the Switches through the toys I'm going to buy.

- Include at least 3 links to precedent research (other projects with technical, conceptual, or aesthetic overlap).

<https://processing.org/reference/>

The processing website.

[https://www.dropbox.com/s/jwuz87ipife0xjd/Make\\_Getting\\_Started\\_with\\_Processing\\_Second\\_Edition.pdf?dl=0](https://www.dropbox.com/s/jwuz87ipife0xjd/Make_Getting_Started_with_Processing_Second_Edition.pdf?dl=0)

I will be using the book itself.

<https://www.arduino.cc/reference/en/>

The Arduino website

The stuffed Elmo music project that a student made will also be used as a reference

- Create a calendar of tasks: Outline the steps for completing the project, with a proposed week by week timeline. Include any research, tutorials to complete, project iterations, and testing.

Week 1 buy materials and create the processing interface.

Week 2 Add music selections and begin implementing them as intended.

Week 3 begin implementing buttons and LEDs by connecting them to the toys.

Week 4 begin testing connectivity and fixing any issues related to that. Connect music to actuators.

Week 4 last minute additions and debugging and final testing.