

Arduino Launchpad

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Introduction

The Arduino launchpad project was found from the Internet and the group's aim was to be able to make one just like it or at least one that would work. The idea behind Arduino launchpad is to utilize serial communication and processing in order to play audio samples on button touch. Practically launchpad works like a piano.



FIGURE 1. An example picture of the completed Arduino launchpad (from the instructions).

Objectives

The main aim was to end up with a perfectly working Arduino launchpad. If this expectation would not be met, the group would still have learnt a great deal especially in soldering.

The device will play audio samples on button touch through correctly set serial communication and processing.

Methods

The instructions for the Arduino launchpad included many demonstrative pictures that the group used in building the device. The needed code was ready and only required commenting and testing.

Materials needed included Arduino Uno, 1k potentiometers, PCB boards, male headers, shift registers, tactile push buttons, 10k ohm resistors, wire and leds. Soldering played a big role.

The user presses a button that is supposed to play an audio sample defined by the code.

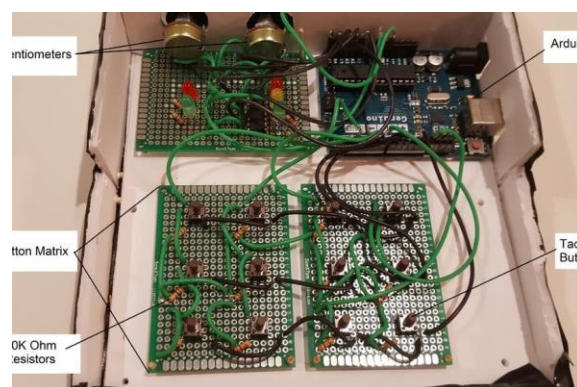


FIGURE 2. What the Arduino launchpad is supposed to look like inside the box (from the instructions).

Results

The thing is: it does not work. The project shows some signs of life but nothing wanted.

Due to this misfortune, the group did not build the core for Arduino launchpad.

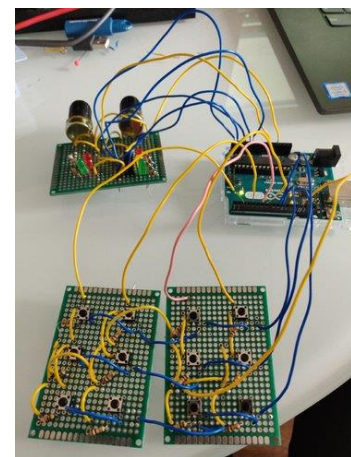


FIGURE 3. What the group ended up with until the hope dried up.

Conclusions

The group did learn a lot during this project. Unfortunately it did not work after all. At the time of this poster the group is trying to build Arduino launchpad again expecting a better outcome.

References

1. Arduino launchpad instructions: <https://www.instructables.com/id/Arduino-Uno-Launchpad/>
2. Arduino launchpad demonstration: <https://youtu.be/BRQNBLYLpHs>