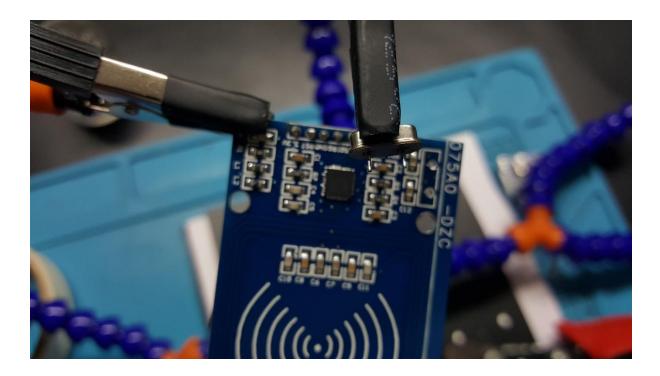
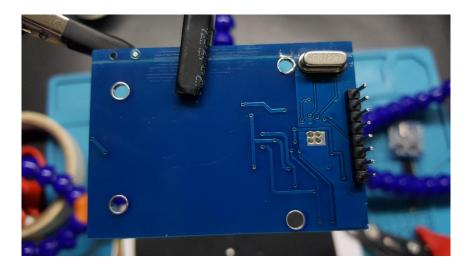
3.1: Making the Security Module

3.1.1:

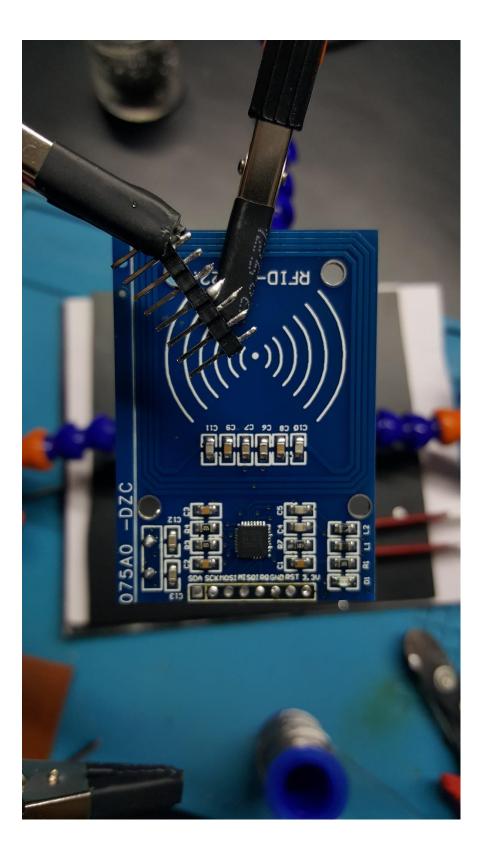
Desolder the oscillator from the RFID module : In order for the RFID module to be flush against the enclosure.



After desoldering, resolder the oscillator into the other side of the board (polarity does not matter).



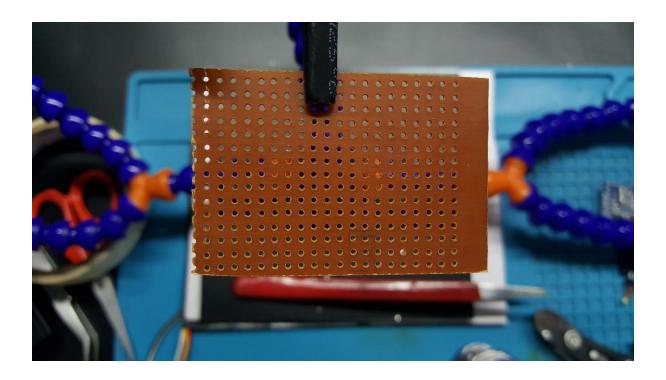
Desolder the pins in the RFID module



3.1.2:

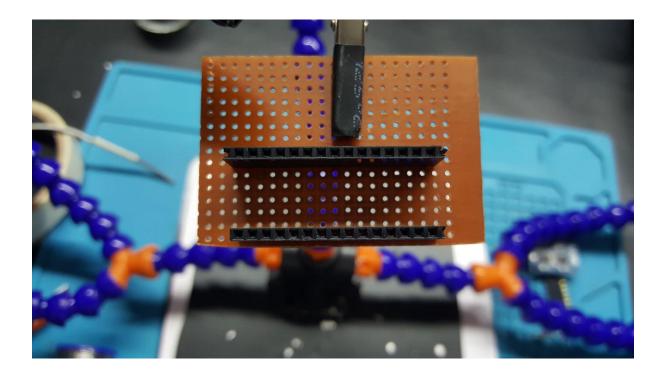
3.1.3:

Prepare the perf board



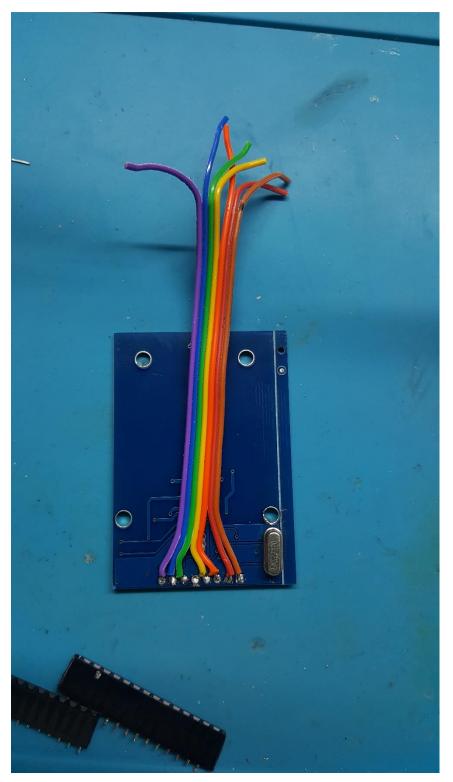
3.1.4:

Solder the headers for the Arduino.



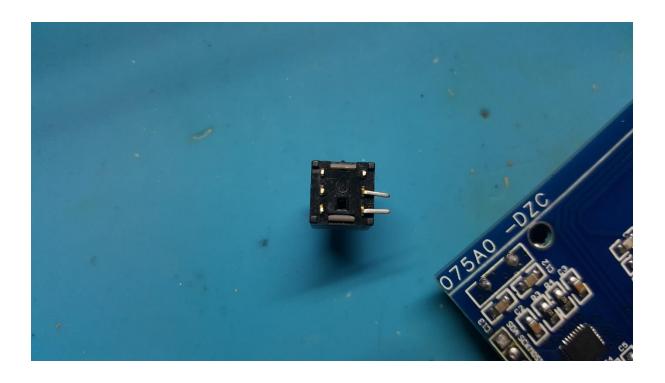
3.1.5:

Solder wires to RFID module



3.1.6:

Prepare the button : Trim the pins except the used pins.



3.1.7:

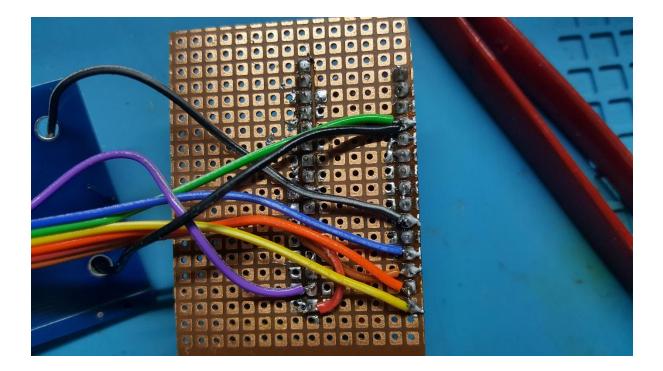
Solder wires to the push button



3.1.8:

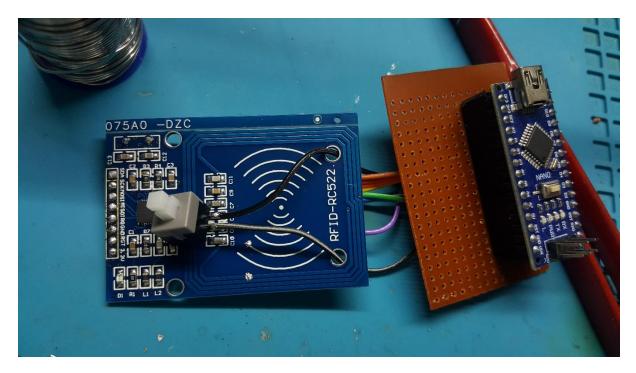
Connect the wires to the Arduino Nano's headers in the following connection:

- SDA \rightarrow D10
- SCK \rightarrow D13
- MOSI \rightarrow D11
- MISO \rightarrow D12
- RQ \rightarrow (not used)
- $GND \rightarrow GND$
- RST \rightarrow D9
- 3V3 \rightarrow 3V3 pin on the Arduino Nano



3.1.9:

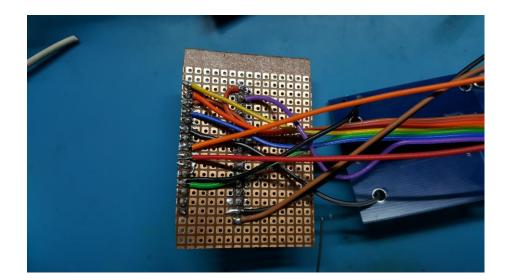
Get the button wires through the holes in the RFID module



3.1.10:

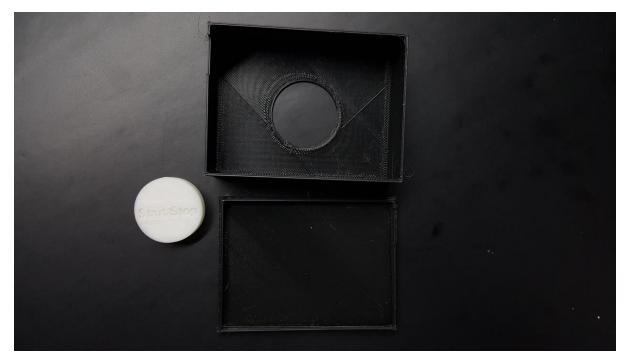
Solder the wires from JST connector in the following way:

Black	\rightarrow Gnd
Brown	→ vcc
Red	→ D4
Orange	→ D5



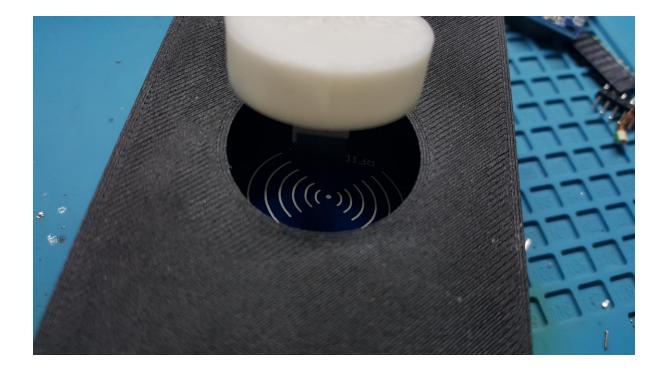
3.1.11:

Prepare the enclosure



3.1.12:

Secure everything inside with the RFID module facing up and glue the button into its designated slot on the button cap (white).



3.1.13:

Glue the button on the RFID module and align the button cap to the designated hole for the button cap



Everything works as intended so, I put on the back cover of this enclosure. And we are done!