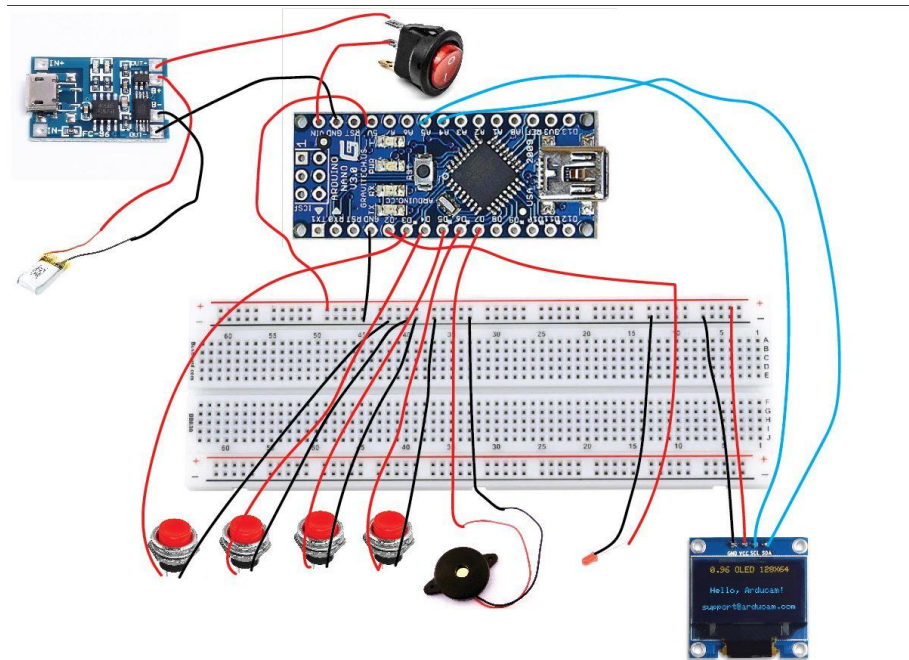


Saibamaze 4/23/2020  
**Arduino Nano Poket Pal**

**PARTS:**

1. Arduino nano
2. 350mah 3.7v lipo battery
3. 4x push buttons
4. on/off switch
5. Slow flashing RGB led
6. SSD1306 oled screen
7. TP4056 charging device
8. Piezo speaker

**CIRCUIT:**



### STEP 1:



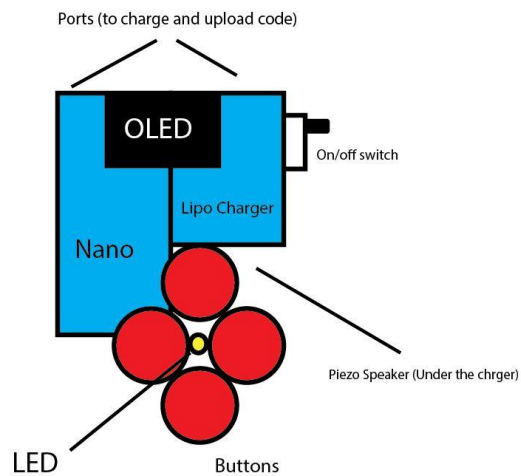
The first thing to do is to create a lipo charging circuit with on/off switch. Full instructions can be found under the “projects” tab on my website [yokon.net/lipocharger](http://yokon.net/lipocharger). This is also shown in the circuit diagram above.

### STEP 2:

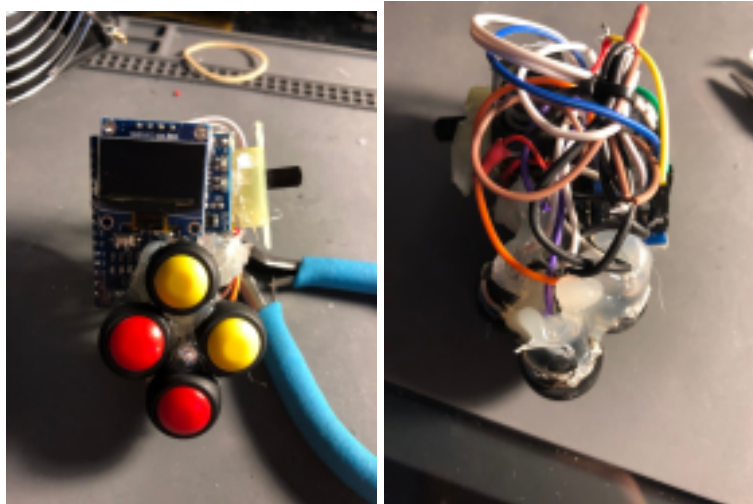


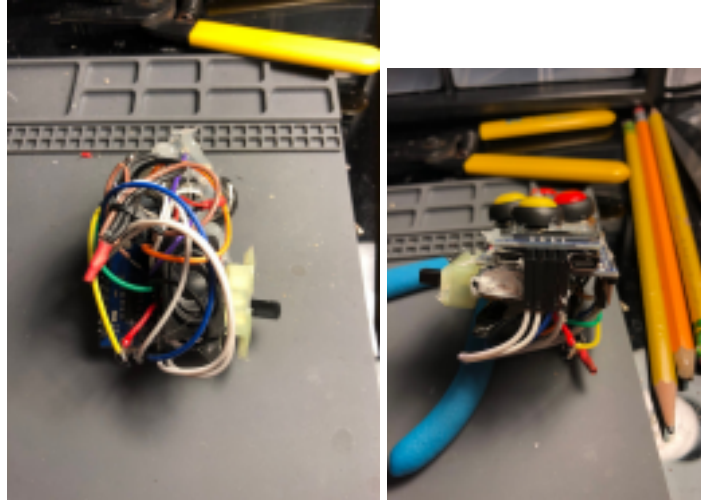
Complete the circuit in the diagram above. Since there's only 1 GND port available on the nano (other than the one for the PSU), so the solution is to twist all the components' ground wires into 1 and solder it together. The group of cables with the red heat shrink tubing is the ground cable joint.

### STEP 3:



Glue everything together in the way this diagram represents. I used hot glue to glue the side of the lipo charger directly to the side of the arduino nano. The buttons and LED are held together by copious amounts of glue. I then glued the OLED screen directly on top of the nano/charger, making sure the GPIO wires don't block the ports. Below are pictures of the circuit glued together.





#### STEP 4:



Place the glued circuit in the case, glue the top down on top.

#### STEP 5:

Use the provided USB adapter to upload the code using the Arduino IDE. If you are using a knockoff Arduino nano, click Tools>Processor>ATmega328P (Old Bootloader). Also, if you're still having trouble uploading code, download the CH34x drivers for your operating system and install it, then restart your computer and it should work. If it doesn't work after that, it might be a faulty cable, the cheap knockoffs come with broken cables sometimes.



You're done! Enjoy and modify the code to make your Poket Pal do whatever you want!