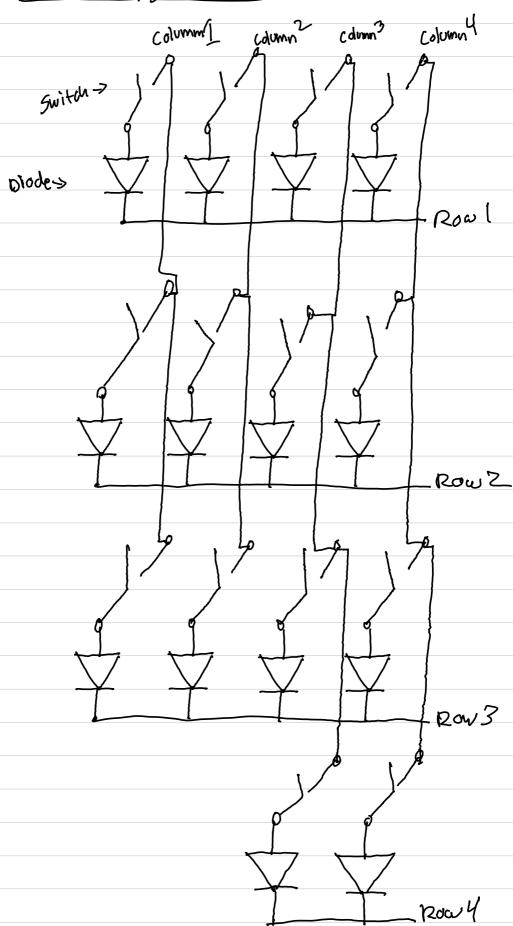
Biometric Lock

Objective: the objective of this project is to create a door lock Utilizing fingle puint scanning in addition to a solenoid bot type lock. This will be powered and Controlled with an ESP32-Sogla-1R (brover), and lithium-polymer bafferies.

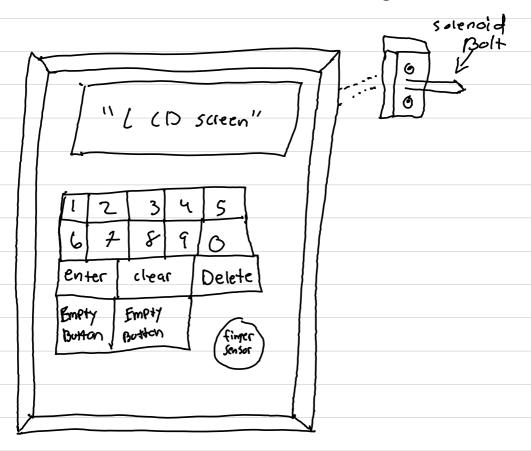
B. O.M.

- · MX1A-11NN: Switch
- · 1 N4004 DO41-10: diode
- · ESP32-WROVER/ESB32-52-Sa01a-R1 1/
 · IZ C GLED DISPLAY (DM-OLED 096-636) V
- · Battery holder (18650)
 - · Low dropout regulator (LDO) (AP2112K-3.3TR G.1) V 600mA, 250mV
 - · Solenoid bolt
 - · Finger Print sensor (RS58-5 module) V
 - · N-Channel Powe Mosfet (IRL540N) V
- · ZOOKOhm SR Resistor (5-2176245-4) N
- · Case Designed in Fusian 360

Connectivity, schematic example (keyPad)



Proto Type (Biometric Bolt Lock)



use cases

propad/key Pad use case c011 e C+ access password granted User access denied again finger print sensor use case access granted correct finger Print scanned User .access denied Incorrect finge scanned try again memory storage ruse RAM -Anger Print User/ storage Stored Pin humber Stored factory Reset case User (awheticate trisser via Cactory PM Pass Reset 05 i.e "Button Hold" Einger scan Correct miond Pin PW 20 ting er finger scan scan Haton match cannot forctory

> all erasc

nomary

peboot

tresh

Set up

Reser