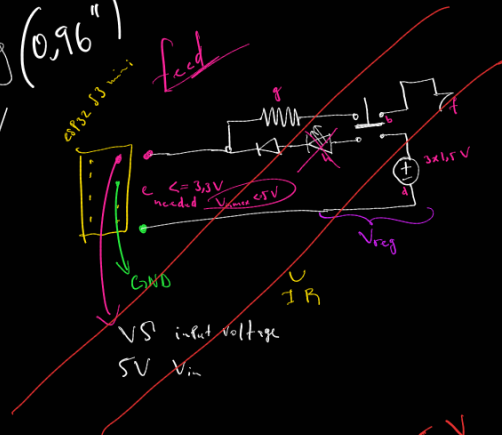circuit components!

- buzzer ✓
- push button, 4 bacakli ✓
- normal press button, 2 bacakli ✓
★ - esp32 s3 mini
? - RGB LED ✓
✗ - ~~green, red led.~~
? - Resistors (10k ve 330) ✓
- 3x adet 1,5 V kucuk yuvarlik pil (or any other small battery)
✗ - ~~2 adet diyot~~ (ideal olmazsa [Si])
- ince zil teli (5m) ✓
- erkek dişi jumper (if necessary)
- oled display (0,96")
- BPM sensor ✓

a = ___ ohm resistor
b = double push button
c = zener Vreg
d = voltage source
e = output voltage
f = ground
g - half wave rectifier
~~h = led~~

esp32 s3 mini

led

e < 3,3V needed Vsource 5V

GND

IR

VS input voltage
5V Vin

Vreg

3x1,5V

✗ unnecessary? (you need to ground 5 V while uploading code)

4,5v

5V GND 3V3(OUT) GP1 GP2 GP3 GP4 GP5 GP6 GP7 GP8

5V G 3V3 1 2 3 4 5 6 7 8 9 10 11

C3 RGB

TX RX 18 17 16 15 14 13 12

TX RX GP18 GP17 GP16 GP15 GP14 GP13 GP12 GP11 GP10 GP9

GND VCC SCL SDA

0,96" oled display

$5V_{in}$

Vcc: 4,5V

• diode voltage drop 0,7V

$V_z <= 3,3V$
needed

c

d

$3 \times 1,5 V$

V_{reg}