



SARAN TEJA  
G V YAGNA

# EXPO PRESENTATION

PORTABLE BIOMETRIC ATTENDANCE SYSTEM

# CONTENT

**01**

PROBLEM STETMENT

**02**

STATE OF THE ART SOLUTIONS

**03**

OUR SOLUTION

**04**

HARDWARE

**05**

SOFTWARE

**06**

WORKING SNAPS

# PROBLEM



WITH THE INCREASING NUMBER OF STUDENTS  
MARKING ATTENDECE IS NOT AN EASY TASK.



IN A 45 MINS CLASS MARKING 200 STUDENTS  
ATTENDENCE IS TIME CONSUMING AND  
AFFETCS THE TIME SCHEDULE OF UPCOMING  
EVENTS



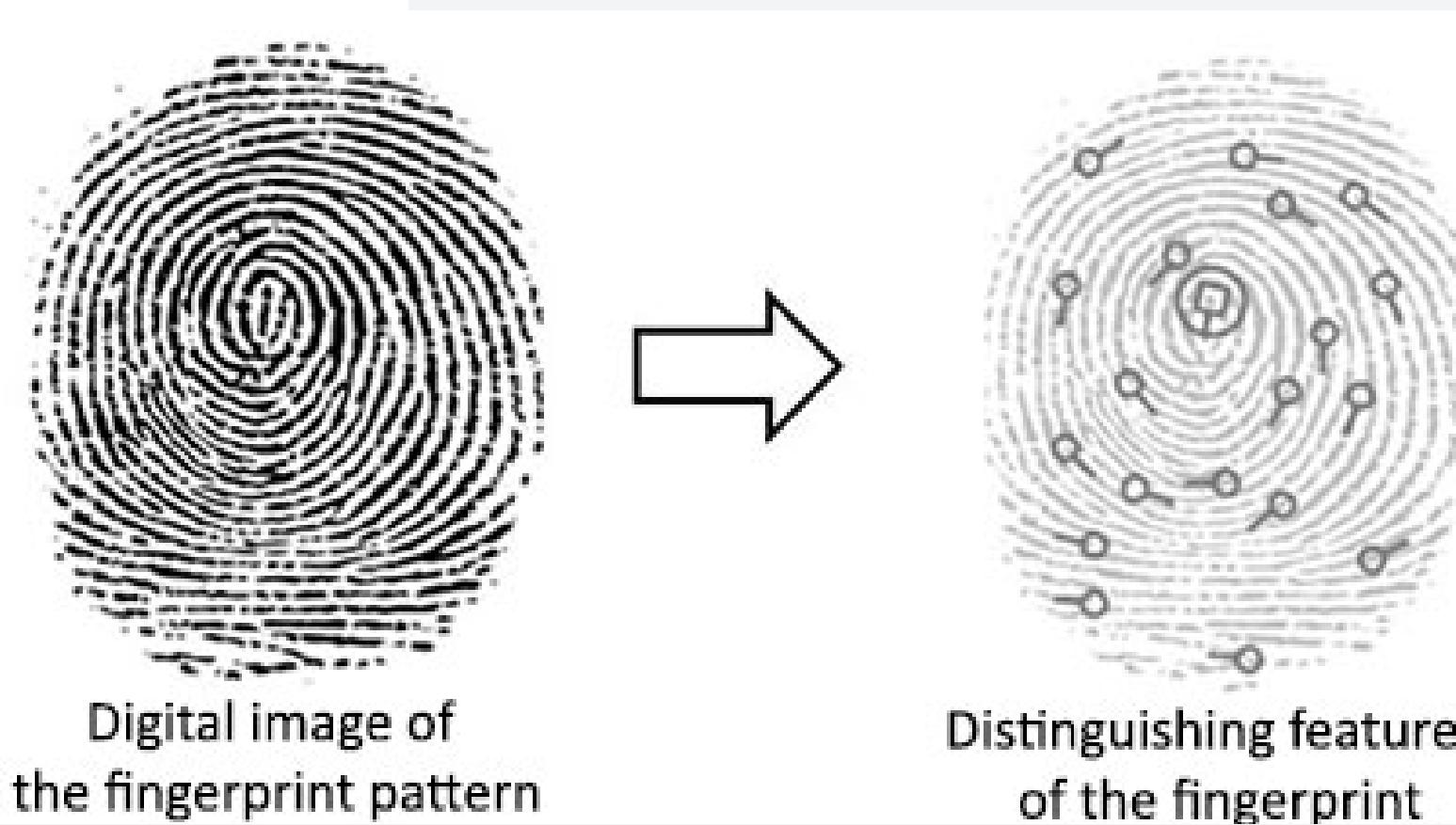
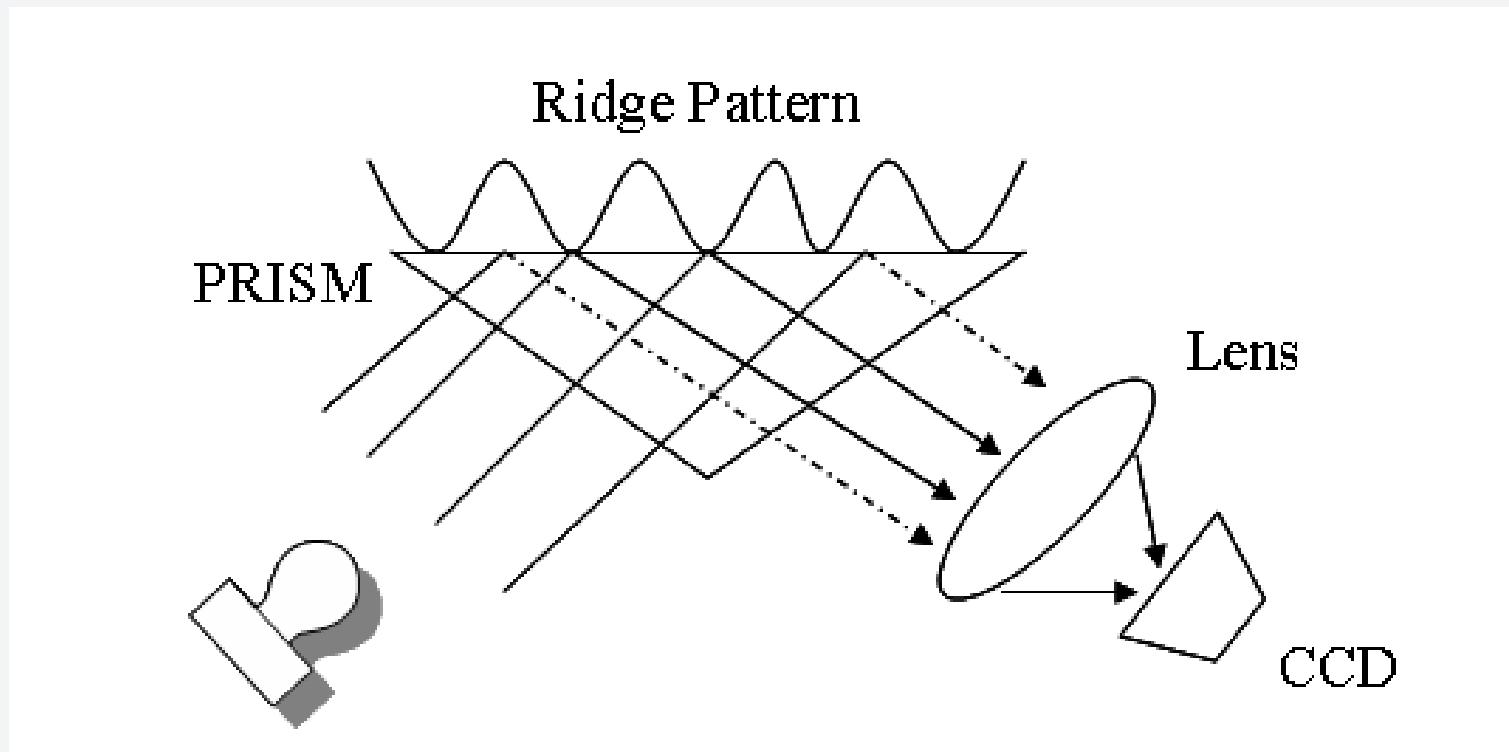
# SOLUTIONS



FINGERPRINT SCAN

FACIAL RECOGNITION

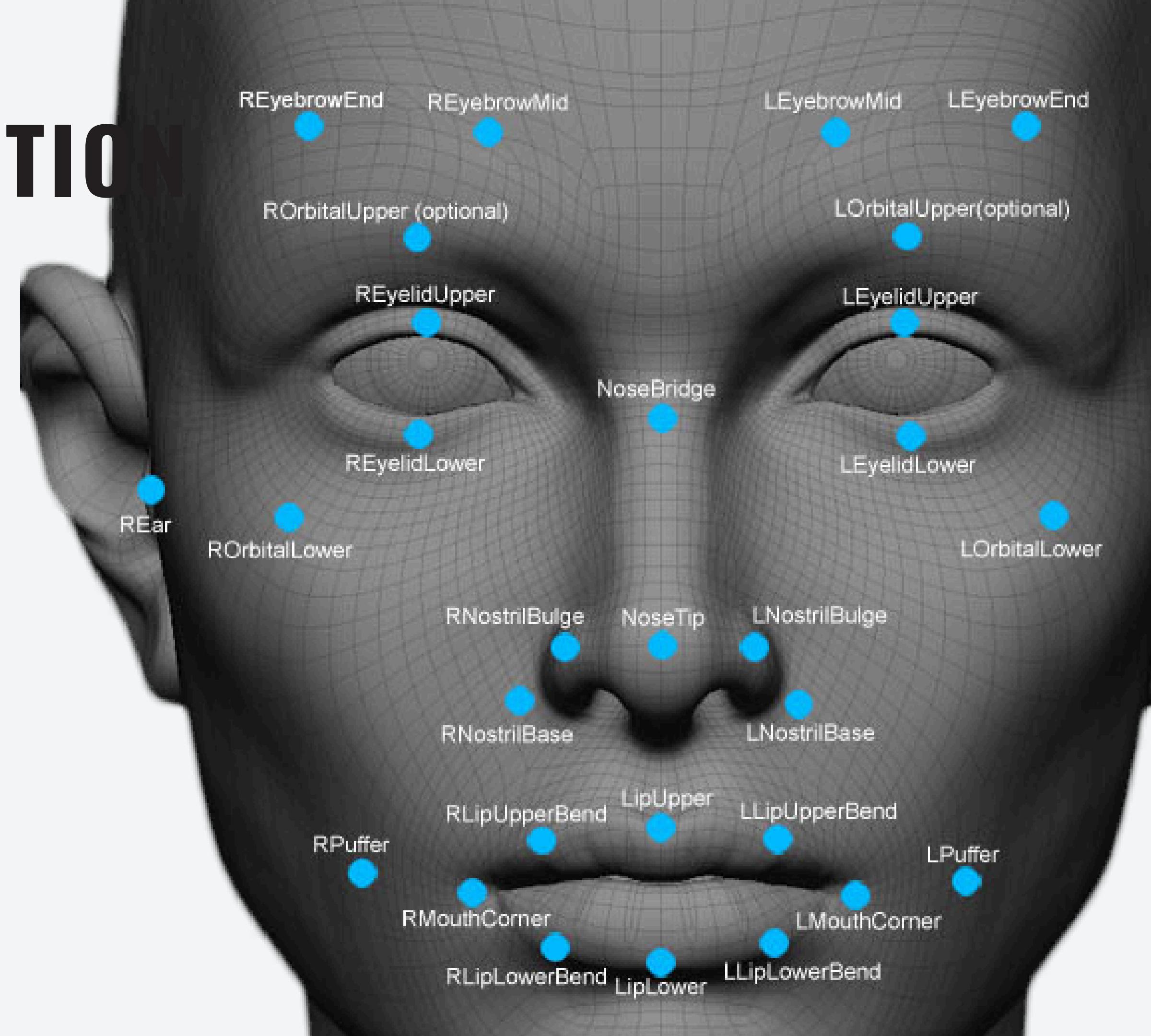
# FINGER PRINT RECOGNITION



101010111001  
000101001000  
100100111000  
101010101010  
100100110010  
010010101010  
101001101101  
Digital template of the fingerprint

# FACIAL RECOGNITION

FORMS A DIGITAL  
STRUCTURE OS A FACE AND  
STORES IT INTO A DATABASE.



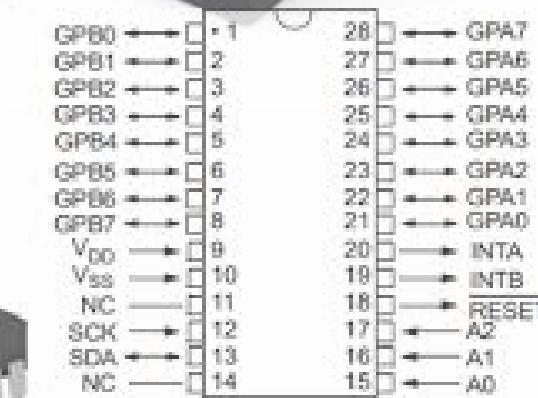
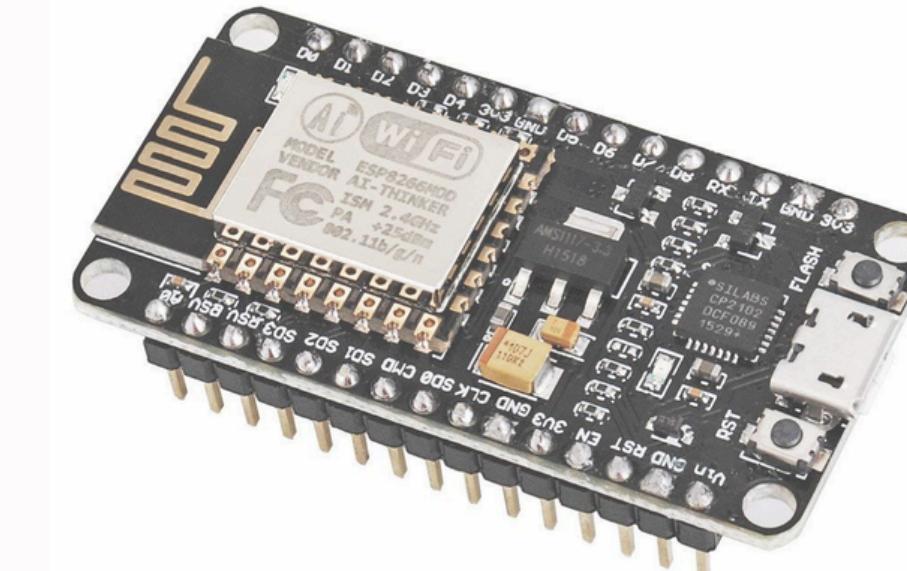
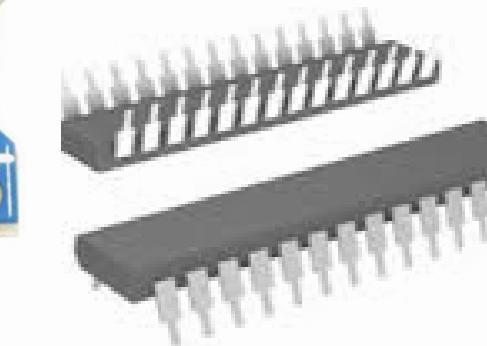
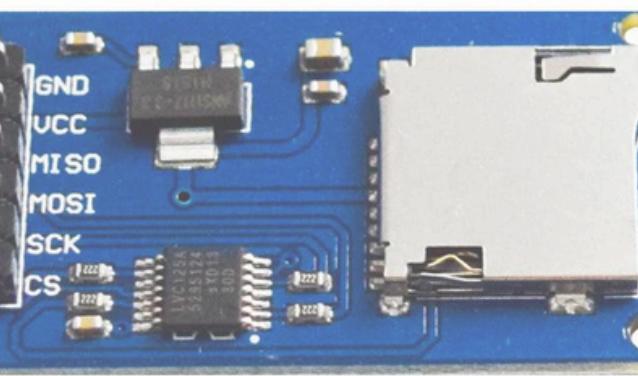
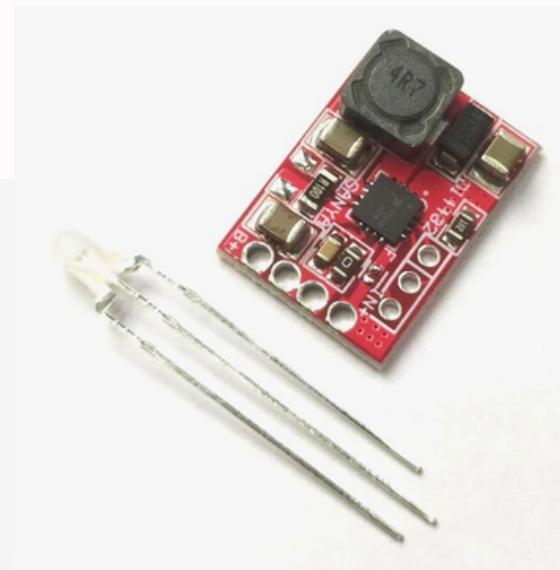
# OUR SOLUTION

## KEY FEATURES:

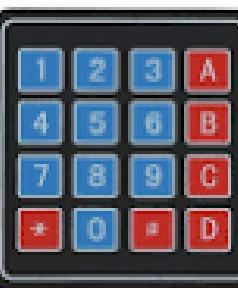
- PORTABLE
- EASY TO USE
- PORXY PROOF
- CLOUD CONNECT

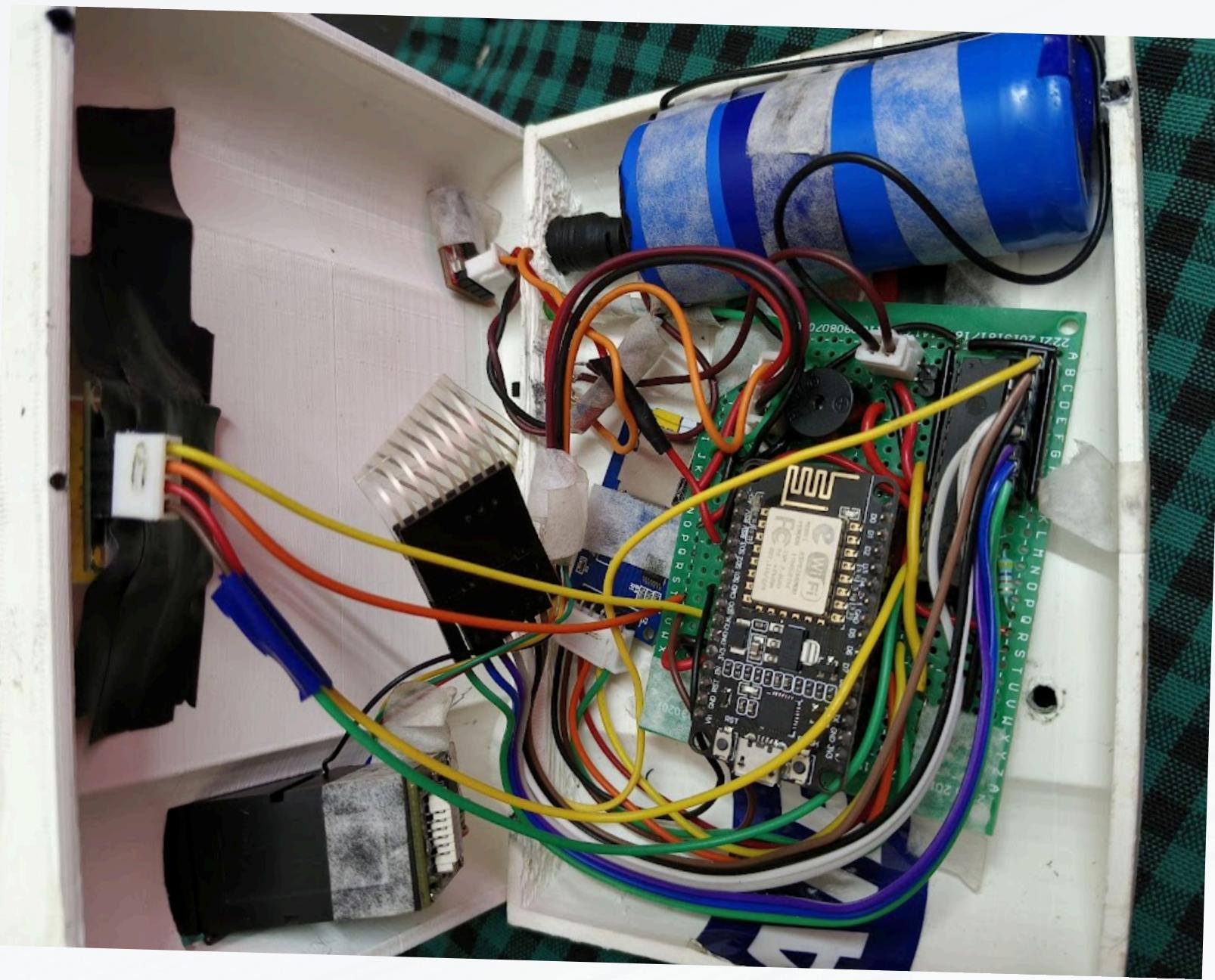
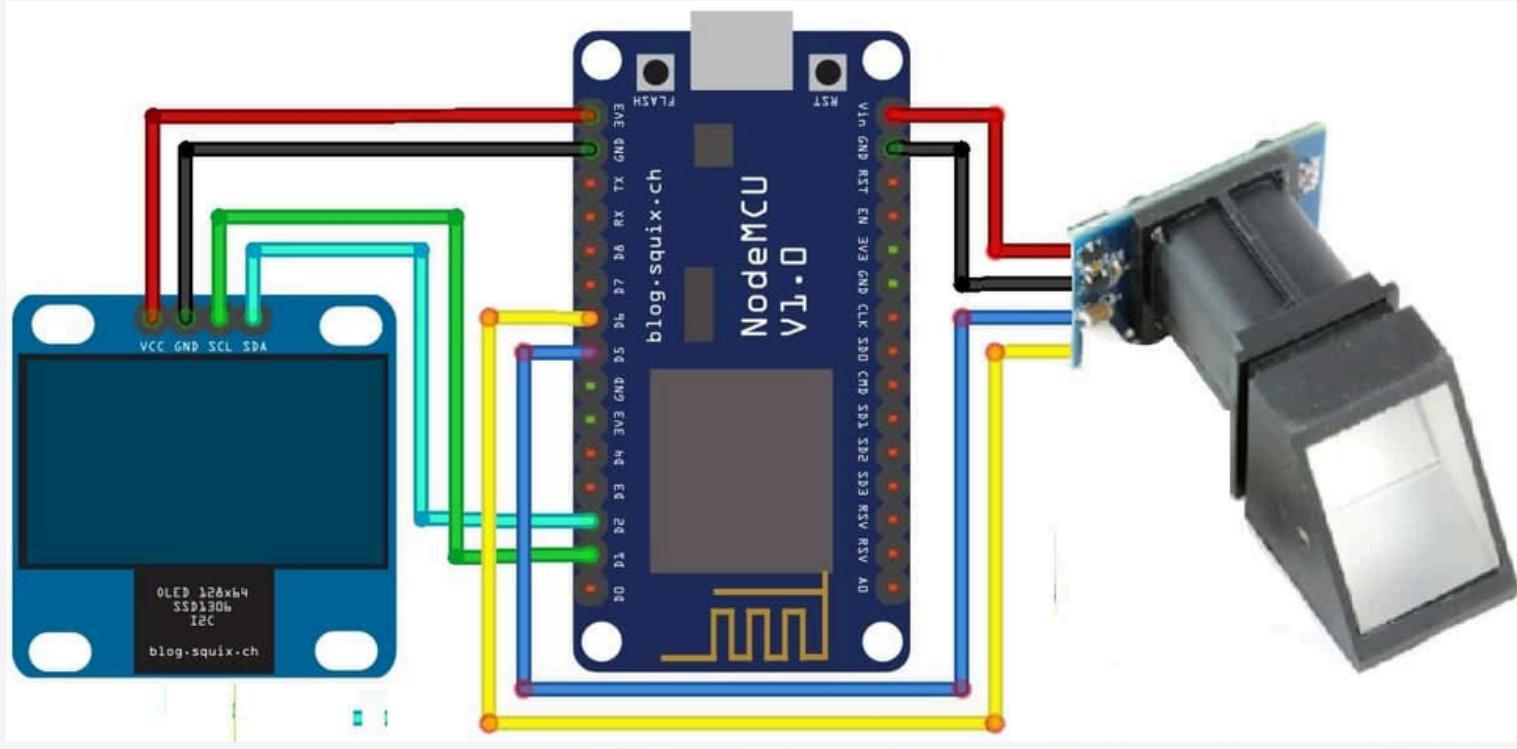
# HARDWARE

- FINGERPRINT SENSOR
- NODE MCU V3 ESP8266
- SD CARD MODULE
- MCP23017 GPIO EXTENDER
- OLED
- TP5000 CHARGING MODULE
- LIPOFE 3V2 RECHARGEABLE BATTERY
- Keypad.



**utmel**  
ELECTRONIC



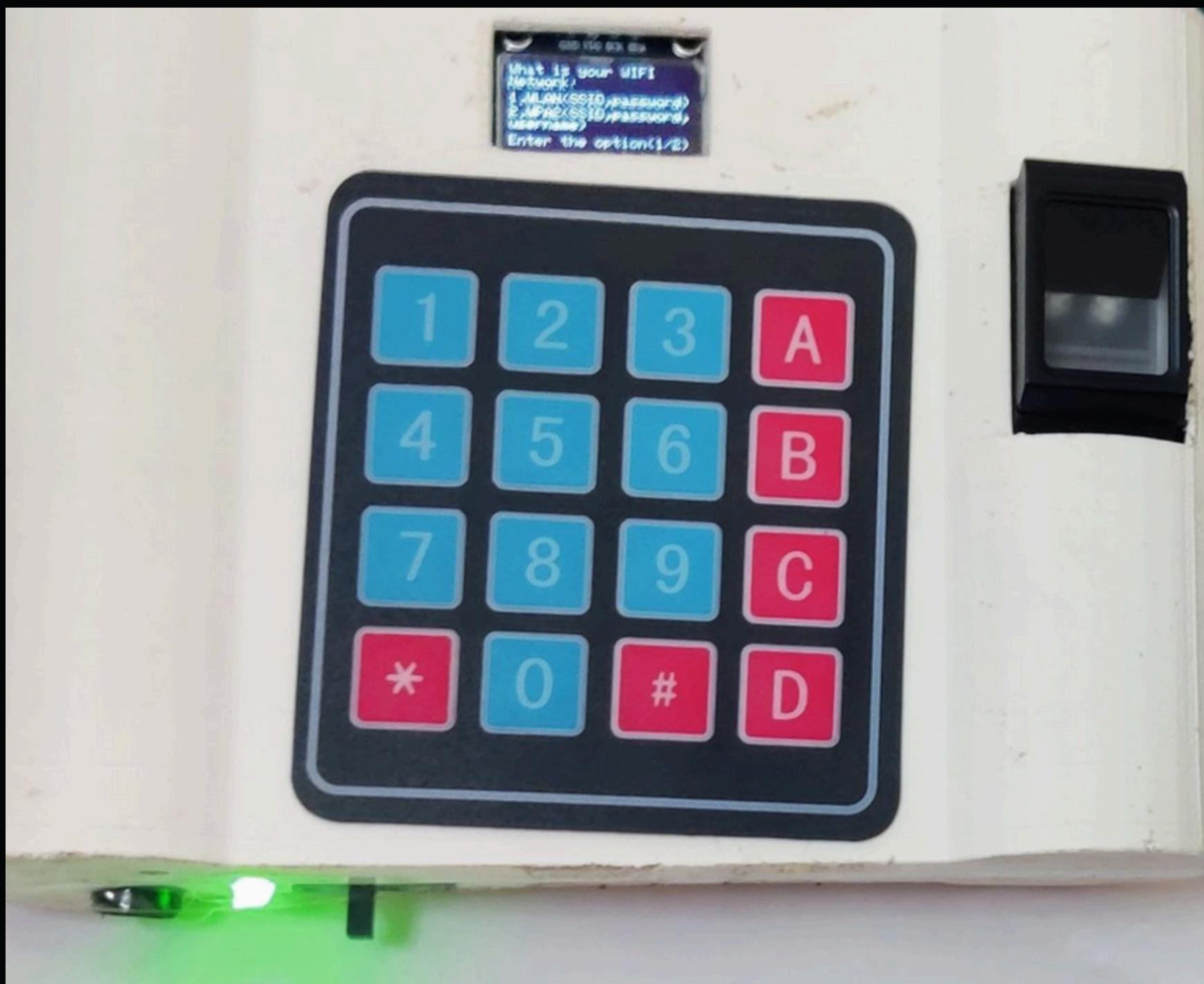




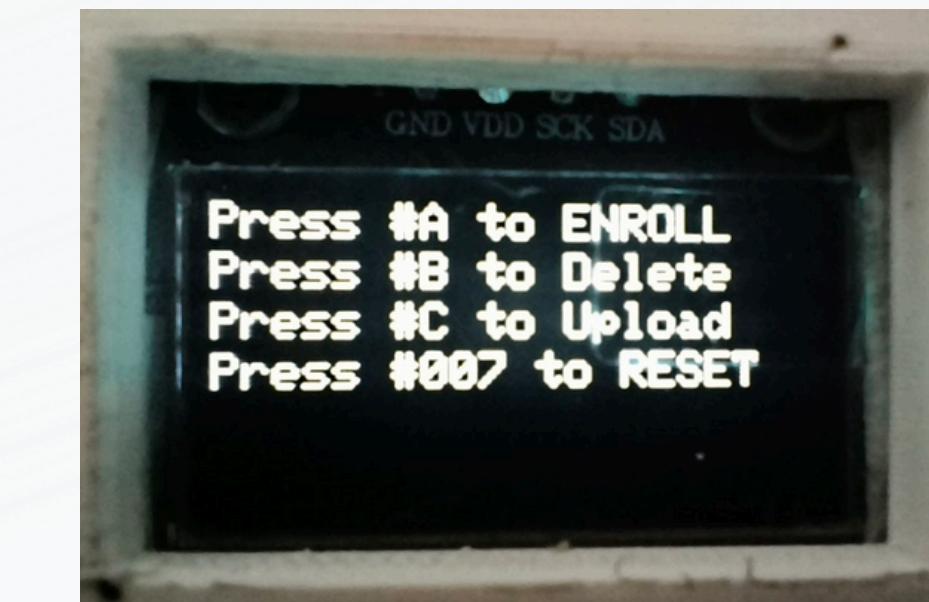
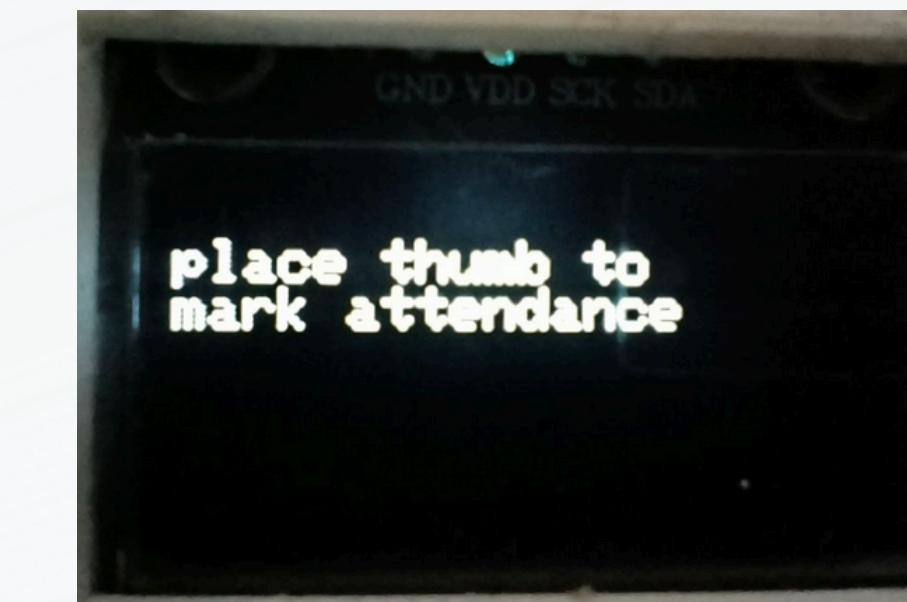
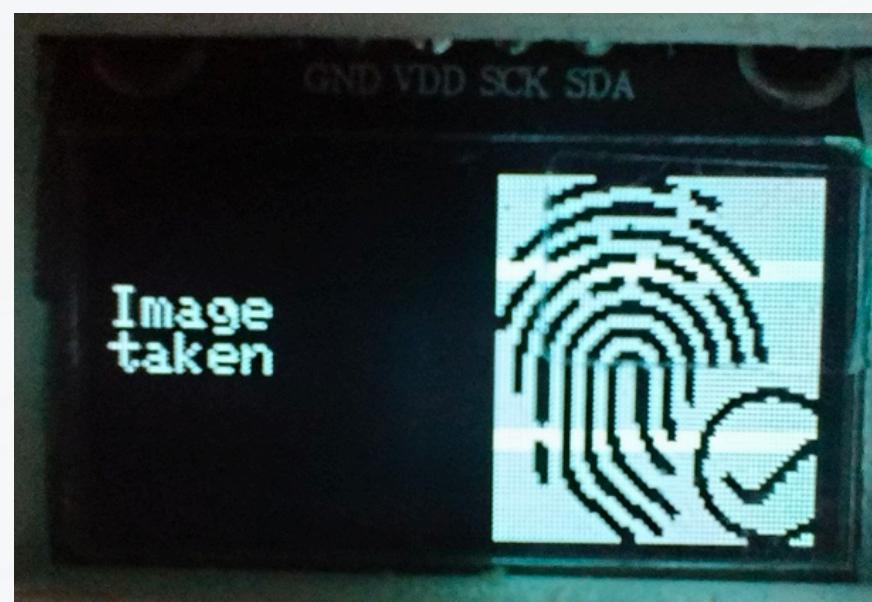
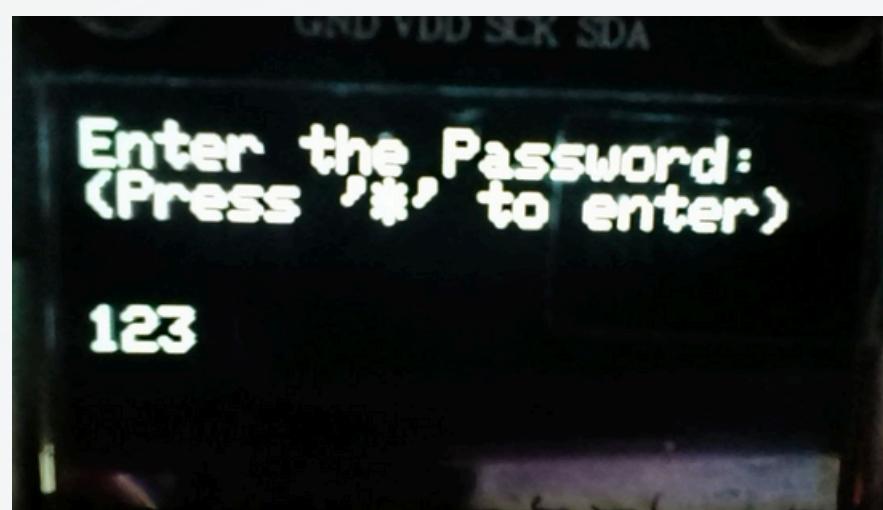
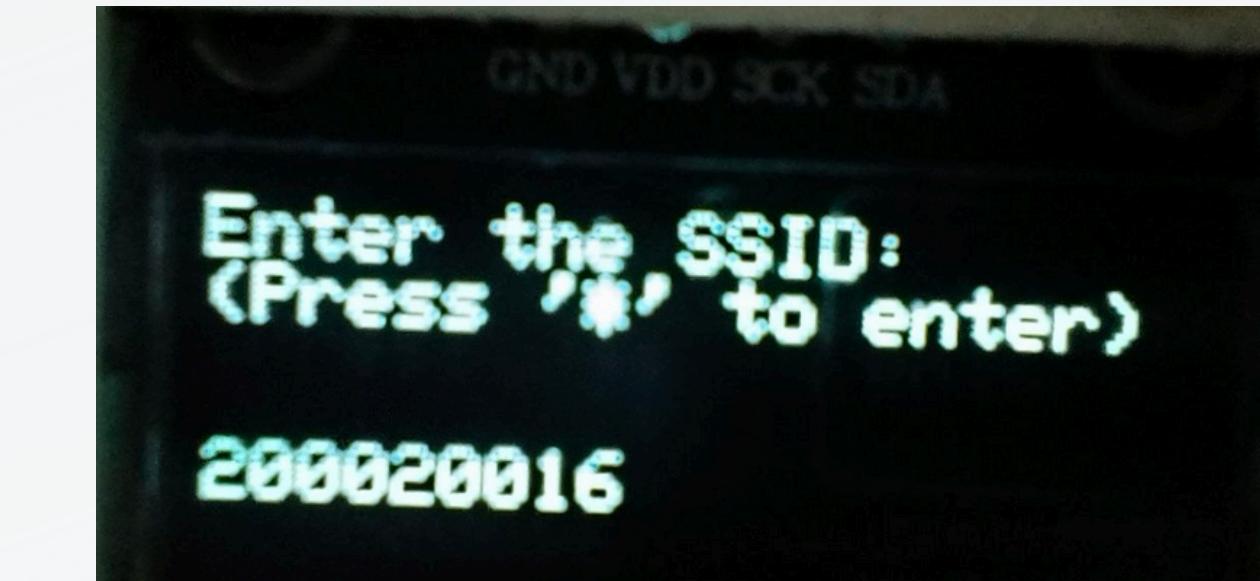
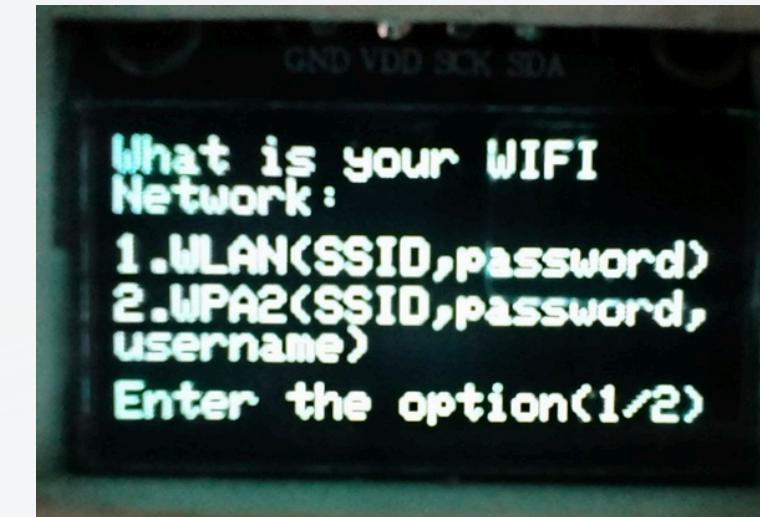
# SOFTWARE

- Main Functions
  - 1. Reading Fingerprint.
  - 2. Enroll.
  - 3. Fingerprint deletion.
  - 4. Uploading Fingerprint.
  - 5. Safe Mode.
  - 6. Keypad entry.
  - 7. Factory Reset.
- Remaining Activities
  - 1. Declaration.
  - 2. Initializations.
  - 3. Wifi Connection.
  - 4. Host Mode.
  - 5. Safe Mode.

# OUR MODEL



# PROJECT SNAPS



**THANK'S FOR  
WATCHING**

