Pickcounter

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🧐 About

This repo contains firmware and configuration instructions for PickCounter Projects

🏁 Getting Started

These instructions will get you a copy of the project up and running on your local machine for development and testing purposes. See deployment for notes on how to deploy the project on a live system.

Prerequisites

What things you need to install the software and how to install them.

```
- Arduino IDE
- A PC with python3 installed
```

Installing

A step by step series that tell you how to get the Firmware and Backend running

ESP32 Configuration

You should have Arduino IDE Installed

1. Add ESP32 Board to your Arduino IDE 1. In your Arduino IDE, go to File> Preferences Installing ESP32 Add-on in Arduino IDE Windows, Mac OS X, Linux open preferences 2. Enter `https://dl.espressif.com/dl/package_esp32_index.json` into the “Additional Board Manager URLs” field then, click the “OK” button: Note: if you already have the ESP32 boards URL, you can separate the URLs with a comma as follows:

```
```https://dl.espressif.com/dl/package_esp32_index.json,
  http://arduino.esp8266.com/stable/package_esp8266com_index.json```
1. Open the Boards Manager. Go to Tools > Board > Boards Manager…
2. Search for ESP32 and press install button for the ESP32 by Espressif
Systems“:
3. That’s it. It should be installed after a few seconds.
```

2. Now copy the contents of the libs folder to the libraries directory of your Arduino 4. If you are using windows, the libraries directory will be Documents/Arduino/libraries

ESP32 Node FW Uploading

1. Select ESP32 Dev Module from Tools->Board->ESP32
2. Select the correct port from Tools->Port
3. Then open ESP32Firmware.ino file, and open WiFiCreds.h tab on line number 4 and 5, put your WiFi creds
4. Upload the Code to your ESP32 Wrover Module Gateway Board

🎈 PythonScript Configuration

1. Download and install Python3 from official website: https://www.python.org/downloads/
2. Go in the PythonScript folder and open the terminal
3. Execute `pip3 install -r requirements.txt`

Python Script running

- Run the python script using `python3 Script.py`
- The script will start running, you can enter the color and the values which will be instantly sent to the ESP32 and the ESP32 will send back the response.

⛏ Built Using

- Arduino - IDE
- Python - Programming Language

Demo Video

- PickCounter - PickCounter ESP32 and Python Script Demo Video

✍ Authors
```

- @Nauman3S - Development and Deployment