

python_serial_recorder

This file explains how to use the python_serial_recorder-program to capture data from a com-port. Included is an Arduino script for a esp32 to send data from a number of ports, to be specified in a list in the file `ADC_ttgo-t-display.ino`.

Prereq

The code is build in vs code, and the guide to running the program is written here below

Package-manager installation guides for windows and macos

Use the following guides to install a package manager if you do not already have one installed.

- for Windows : <https://chocolatey.org/install>
- for MacOS : <https://brew.sh/>

git

- Install Git on your system. This is a way to download other peoples projects.

```
brew install git  
choco install git
```

- Git gui: <https://desktop.github.com/download/>

Python

This program works with Python 3.13.2. However, it is very possible that it will also work with newer or older versions. I cannot garantee it however.

1. Option 1: download and use the installer from www.python.org
2. Option 2: Use package manager. Pick the package manager you have installed on your system. If you dont have it, you can install one from their respective websites.
 - MacOS
`brew install python`
 - Windows
`choco install python`

how to install python packages via pip

If you do not know how to install new python packages using pip, I suggest reading the following page: <https://packaging.python.org/en/latest/tutorials/installing-packages/>

Installation

For MacOS and Windows.

1. download git repository

```
git clone https://github.com/Anvendt-Programmering/python_serial_recorder.git  
cd python_serial_recorder
```

2. Install new python environment (will avoid problems in the future)

```
python -m ensurepip --default-pip  
python -m pip install --upgrade pip setuptools wheel  
python -m venv .venv
```

3. activate python environment

- Depending on if it is not already activated when you open a terminal in VS Code, you can do the following.

- MacOS
`source .venv/bin/activate`
- Windows
`source .venv/Scripts/activate`

4. install program requirements via requirements.txt bash
`-r requirements.txt` `pip install`

Updating The Repository

- In case of changes, the newest version of the repository can be updated using the following terminal text, from within the `python_serial_recorder` folder

```
git pull
```

that's it.

Run

The Python script is running the following code in the terminal, while inside the main `python_serial_recorder` folder.

```
python main.py
```