

Setup guide

August 15, 2019

What parts are needed for the project?

Minimal Raspberry Pi set



Raspberry Pi

For the project was used the version 4 B+, but it's also possible with version 3 B.

Power adapter

From the 4th version is needed a special power adapter.

MicroSD

For the Project used MicroSD 32 GB, but it can be 16 GB.

At the laptop was not able to connect LAN, so was used the SD-slot and SD-Adapter for the activation.

It's also good to buy a Raspberry Pi box to keep it clean and the fan, because Raspberry Pi 4 gets hot. Below is an example for project Raspberry Pi set.

Artikelnummer	Bezeichnung	Anzahl
RPI PS 15W WT EU	Raspberry Pi - Netzteil, 5,1 V, 3,0 A, USB Type-C, EU-Stecker, w	1
RASP PI 4 B 2GB	Raspberry Pi 4 B, 4x 1,5 GHz, 2 GB RAM, WLAN, BT	1
RASP OS 32GB	Raspberry Pi - OS 3.1 32GB microSD-Karte, vorinstalliert	1

Minimal environment set



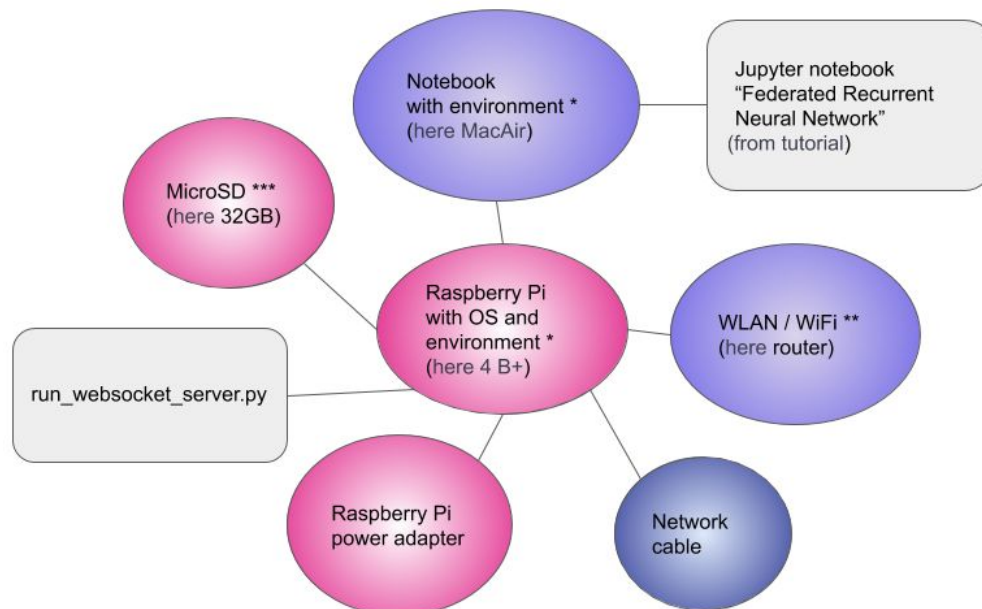
Hardware

- **Laptop or computer** with installed PySyft, PyTorch, Python 3.6. Current python version is 3.7.4 and 3.8(pre), 3.9(dev), but for this project referenced not more as 3.6.8.
- **Connection to the internet.** In the project will used a router and the Raspberry Pi will connected with network cable with it.

Software

- On the laptop will working **jupyter notebook** "Federated Recurrent Neural Network" from PySyft/examples/tutorials/advanced/
- At the Raspberry Pi you will need to start **run_websocket_server.py** with the ip adresse, port, id.

One more time all components together on the diagram.



* Environment
- PySyft
- PyTorch
- Python, etc.

** There are no any LAN port at the laptop, that why used WLAN.

*** Micro SD to SD Adaptor used here to do some settings on MicroSD by SDport on mac

MicroSD card activation



Ssh... TODO

