

PyLadies

IoT Workshop

checklist

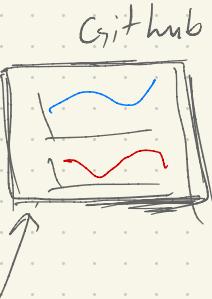


IoT WORKSHOP

building a mini weather station for home



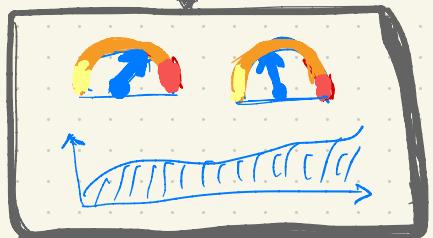
PubNub



BEHIND THE SCENES:

- Python → Yes! we will code in Python
- Supervisor → data has to be collected all the time
- PubNub → use of an event streaming platform
- GitHub Pages → make your own static website
- InfluxDB → time series DB → store your data
- Telegraf → stores data easily to InfluxDB
- Grafana → build dashboards to view your data
- Jupyter Lab → analyzing data in it
- LCD e data → 100 years of weather data
- Time Series → intro & small tutorial.

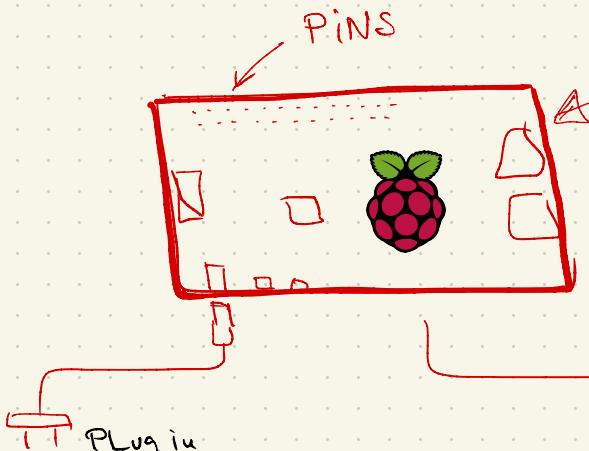
Time series analysis



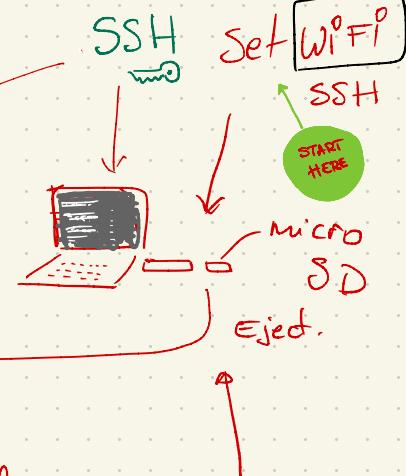
GRAFANA



RASPBERRY PI SETUP



login w/o password



WiFi → add local & home WiFi

THE END

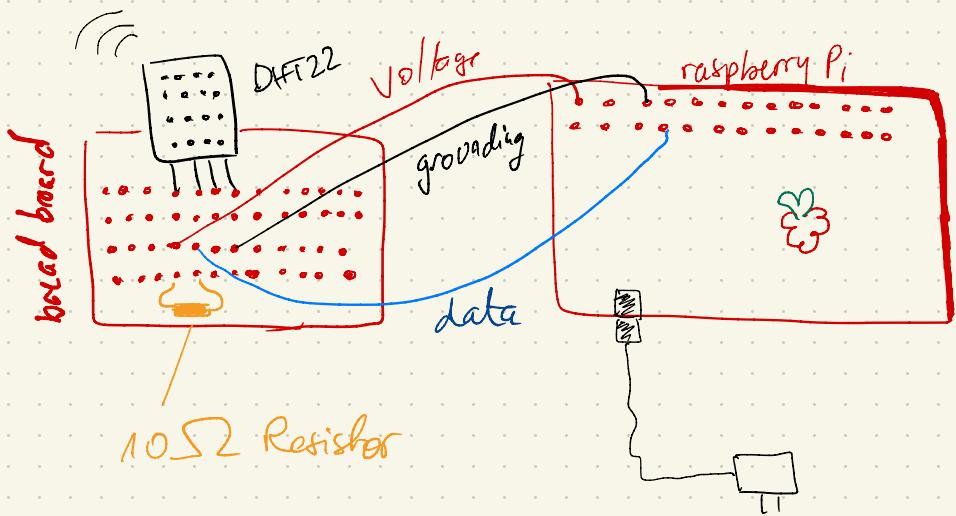
CHANGE Namespace

SSH
Pull/Push code
GithHub





SETTING UP THE SENSOR



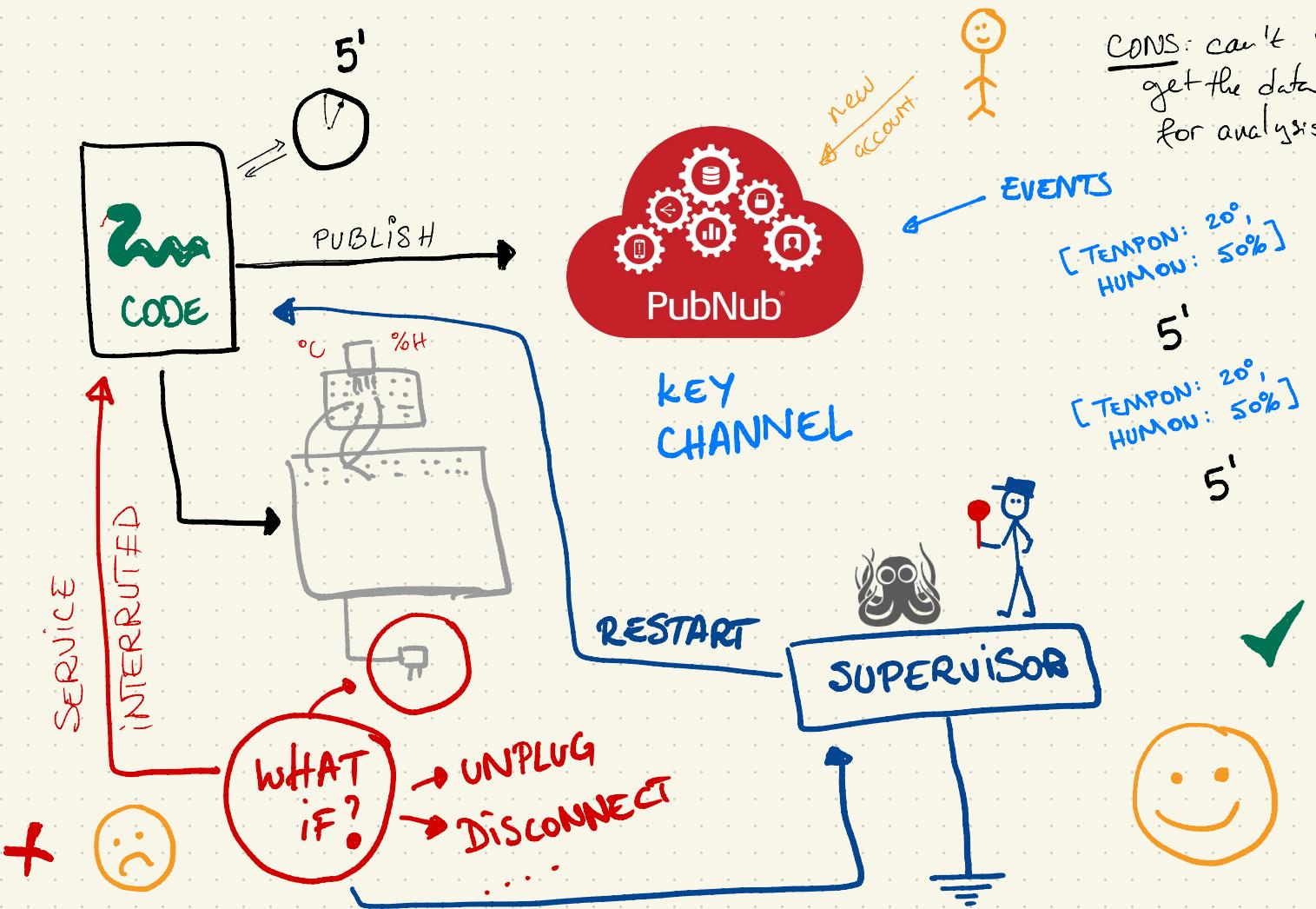
Temp : 17° humidity 50%

Temp : 17.5° humidity 51%

TERMINAL

```
install python3  
install adafruit  
...  
python3  
> import Adafruit  
while true:  
    collected temp  
    humidity.  
    print (+)
```

= COLLECTING DATA - THE EASIER WAY =





VISUALIZE

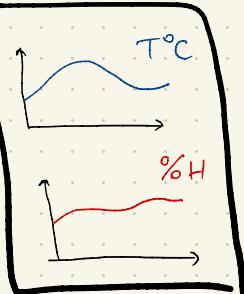


index.html JS

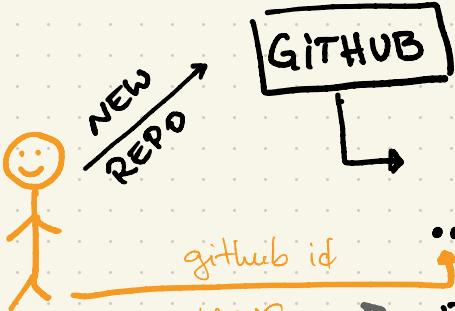
```
< JS >  
con: pubnub = ...  
for each tempeon  
...  
for each humon
```

→ RENDER →

localhost



! How will your data look when you're not home?



... .github.io

it's online!!!

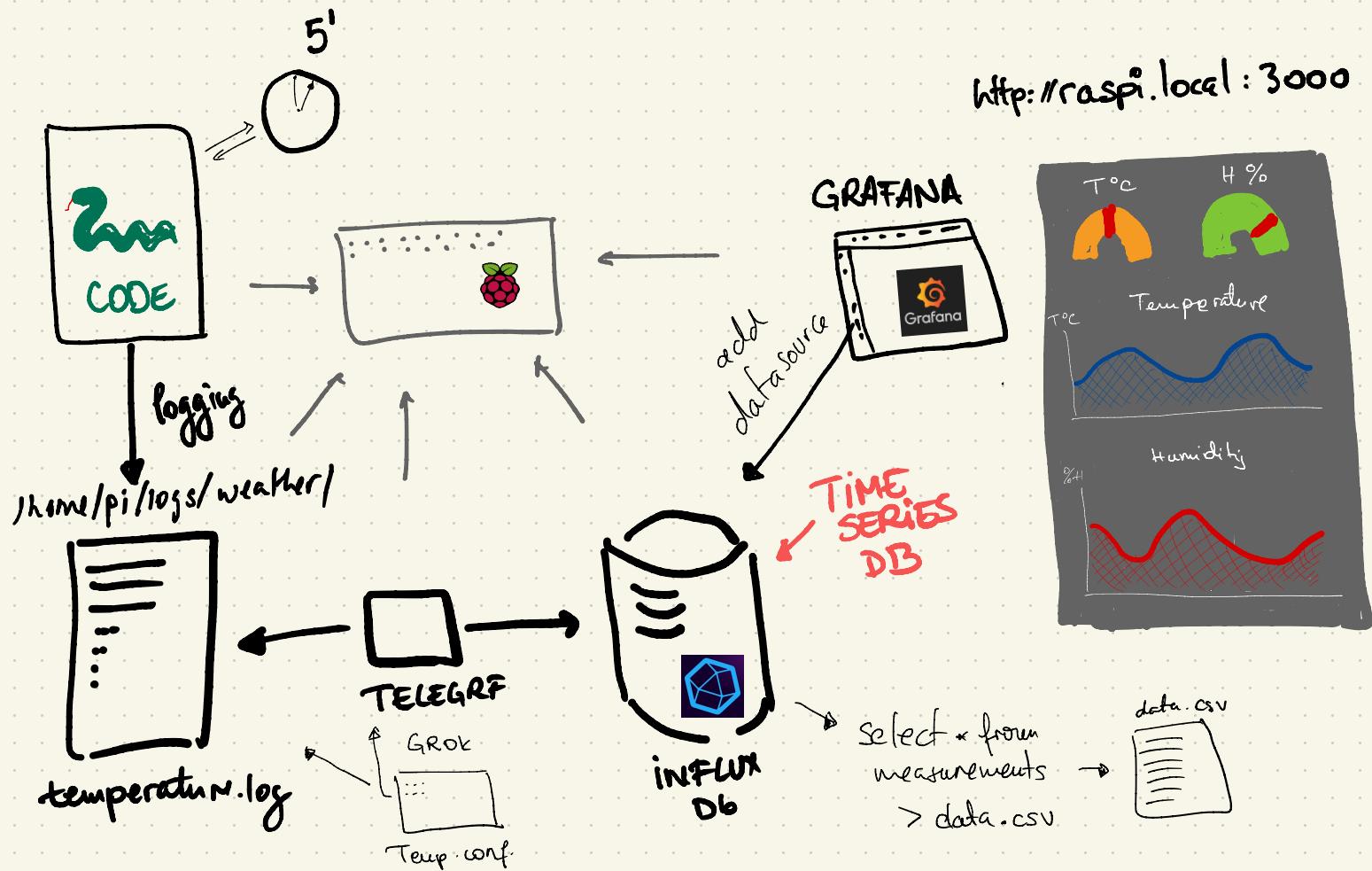
= GIT CHEAT SHEET =

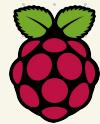
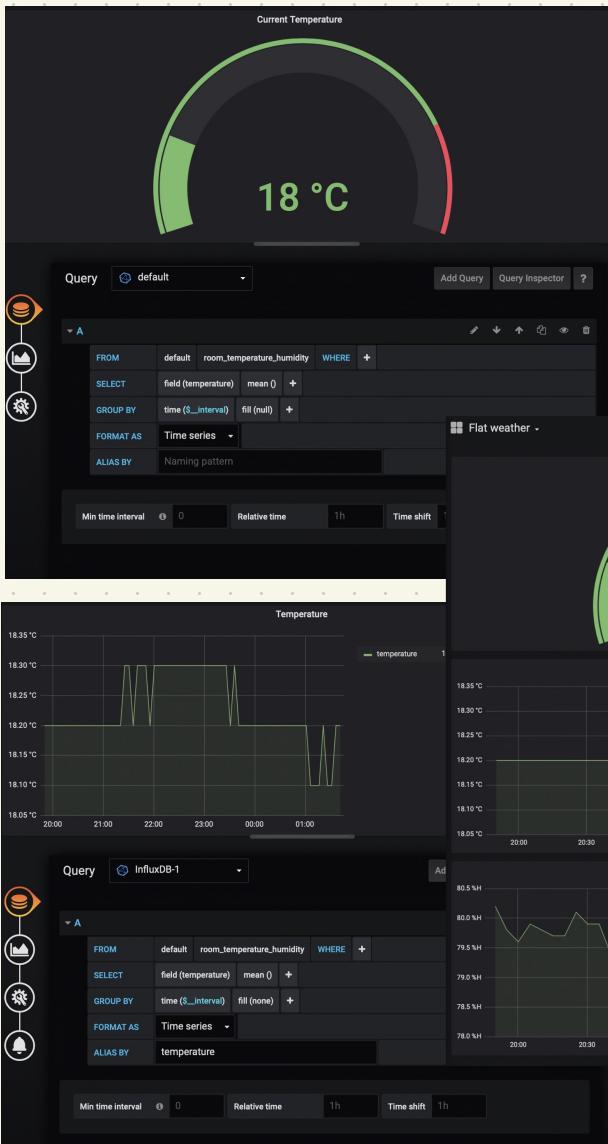
```
git clone  
git add index.html  
git commit -m "add my weather viz"  
git push
```



TERMINAL

= [COLLECTING DATA & MONITORING]





JS

