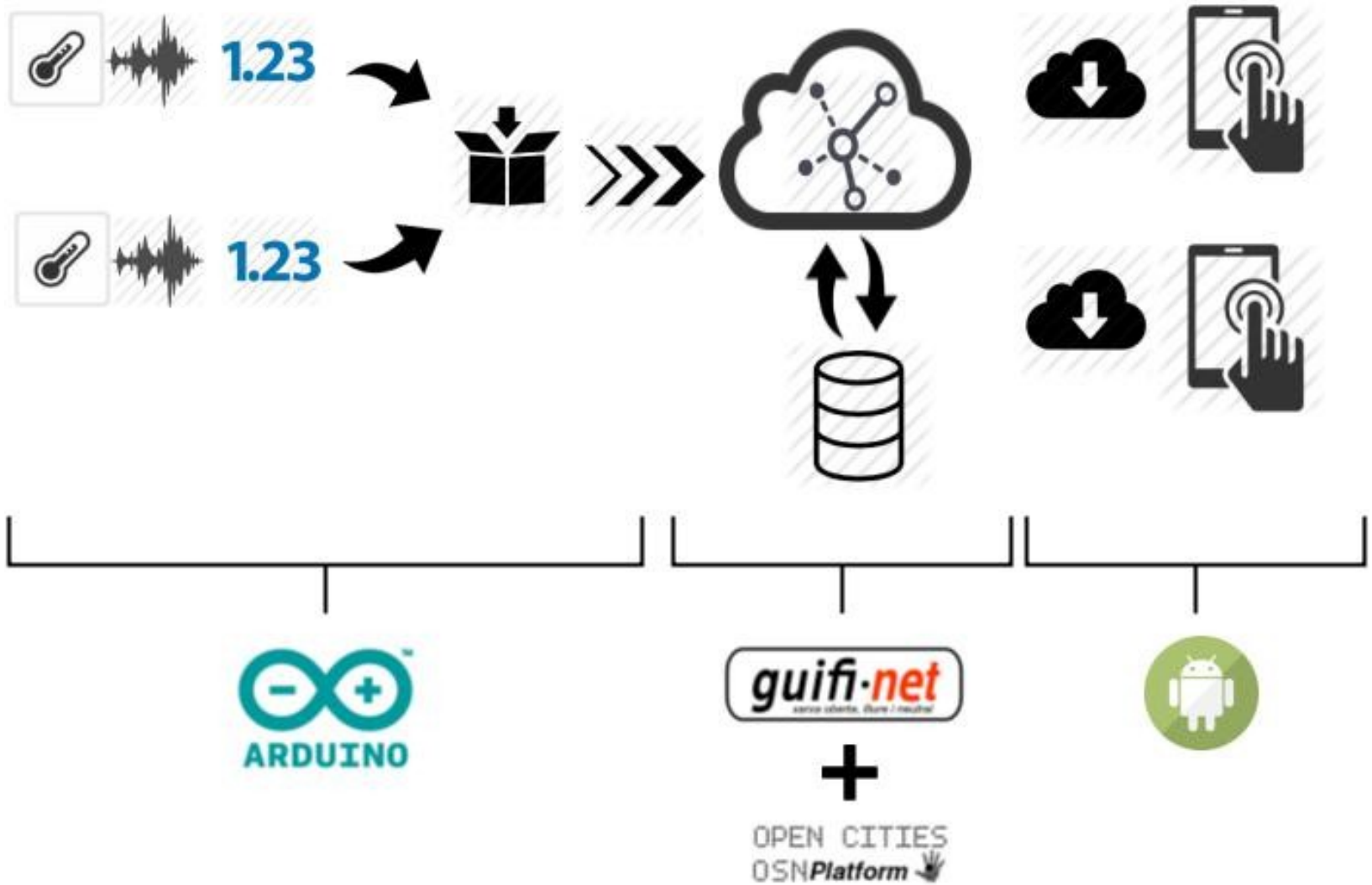# A BOTTOM UP SENSOR TESTBED
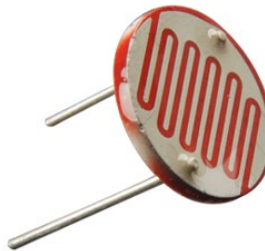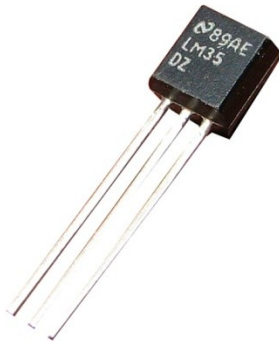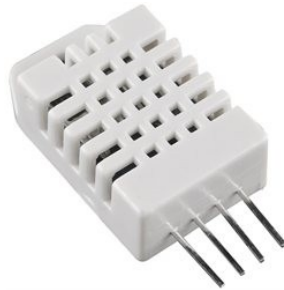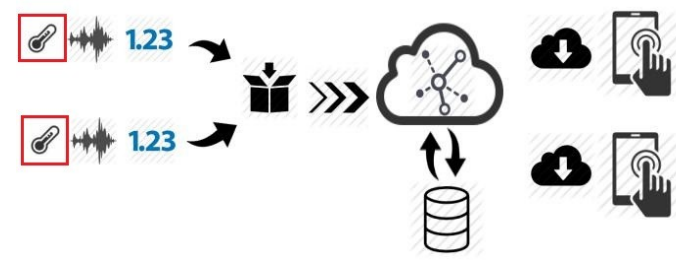
Alumno: Sergio Almendros Díaz

Tutor: Jaume Barceló

INTRODUCTION

SENSORS

ARDUINO

ATmega 32u4 → Rx → BRIDGE → Tx → Linino AR 9331 → USB HOST / SD CARD

ATmega 32u4 ← Tx ← BRIDGE ← Rx ← Linino AR 9331

USB Prog.

WiFi Interface   ETH Interface

ARDUINO ENVIROMENT

LINUX ENVIROMENT
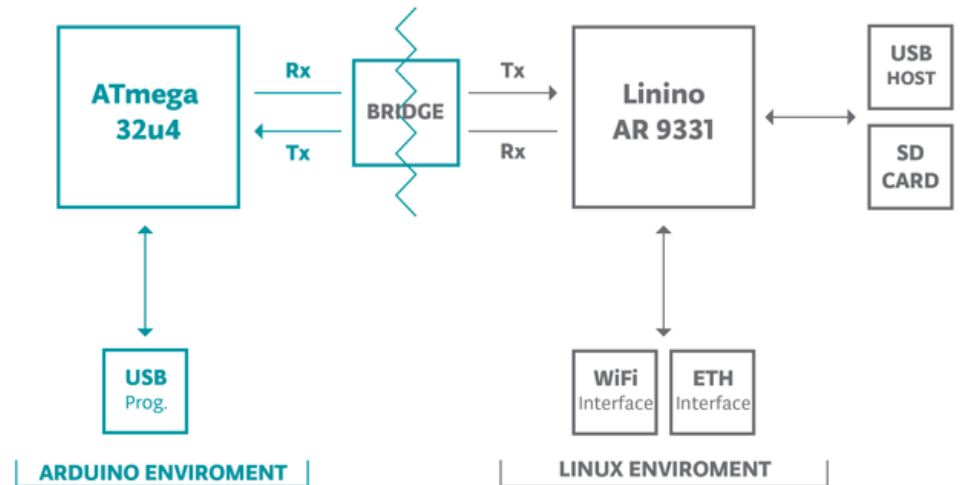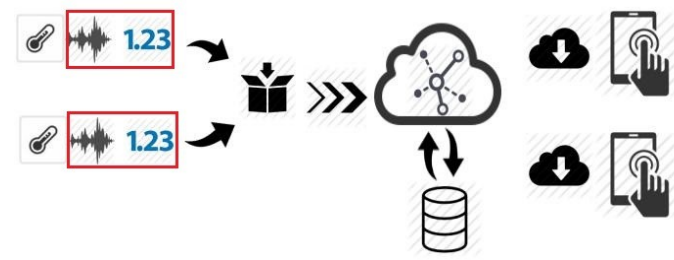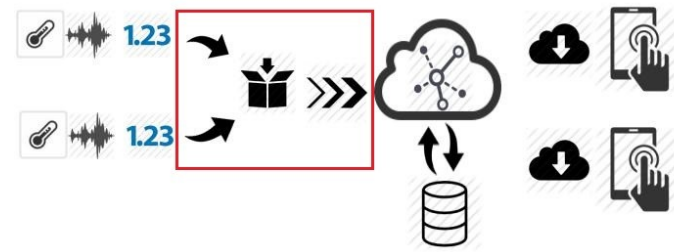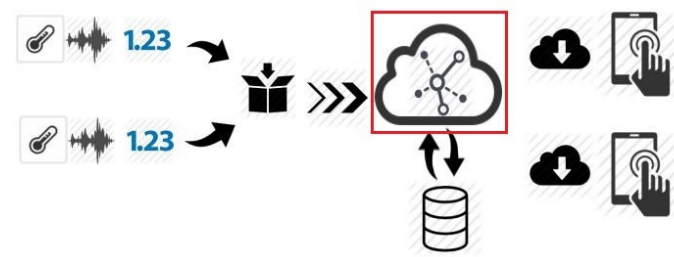
PYTHON

- **Modular**

- **Fast prototyping**

- **Easier to understand**

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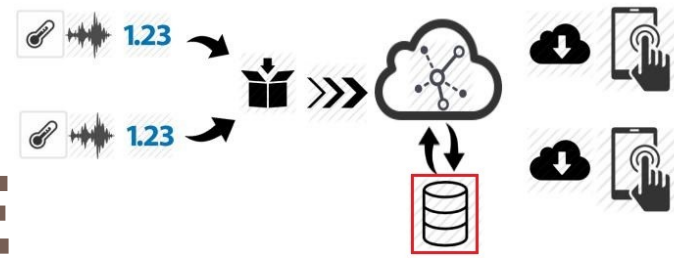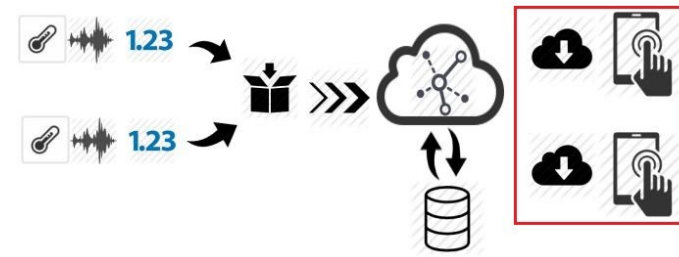
- **Guifi.**

-

Participation

philosophy

.
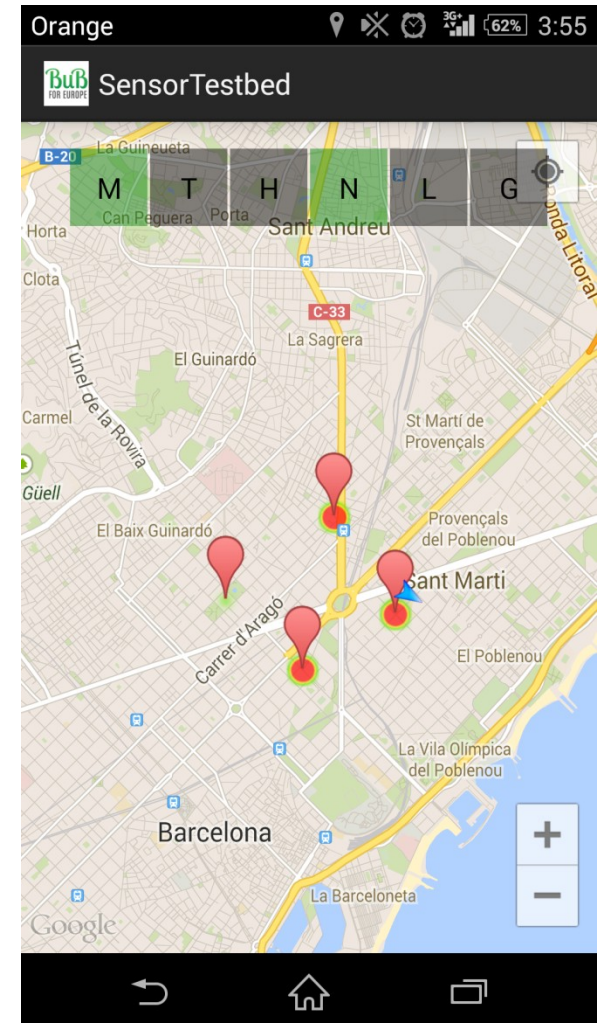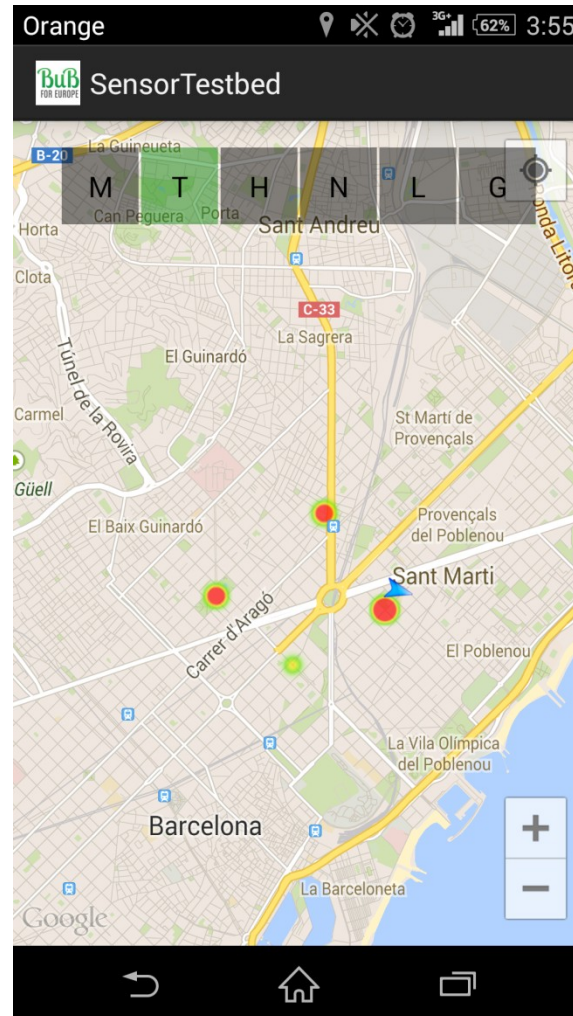
- **Opencities (at UPF)** OPEN CITIES OSN*Platform*
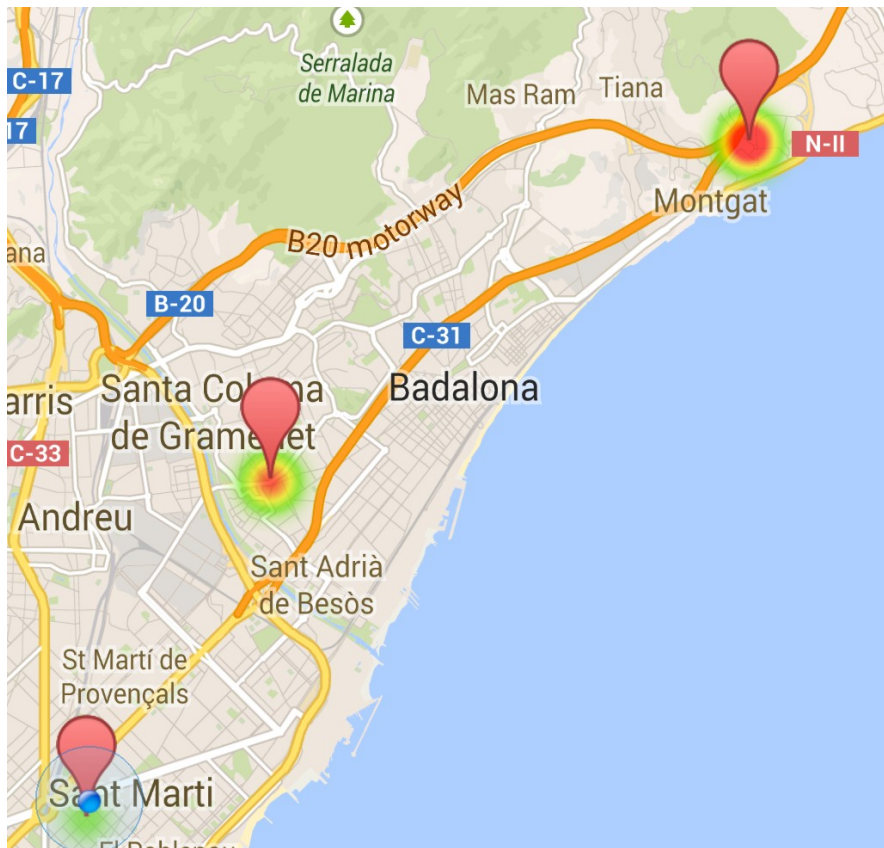
- **Improving both projects**

- **Intermediary**

VISUALIZATION PLATFORM

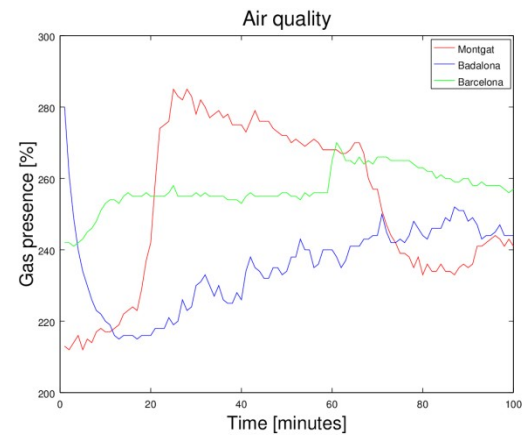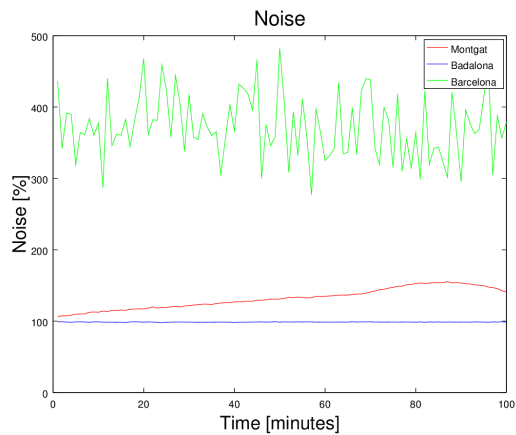- **Easy to understand**
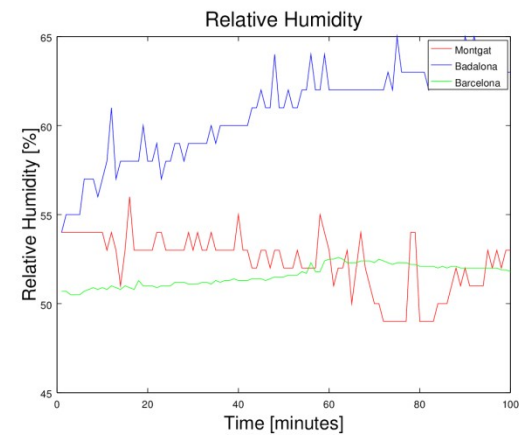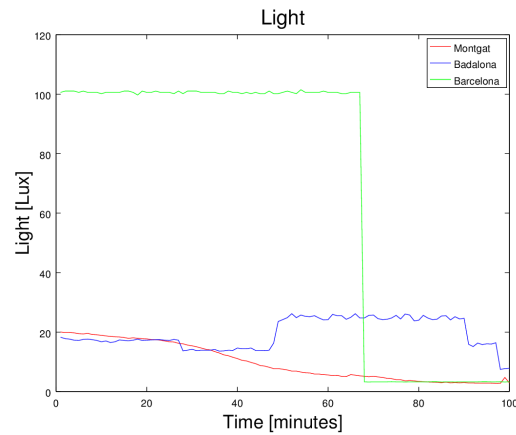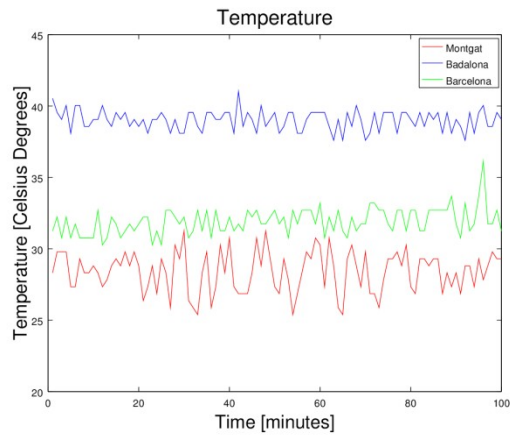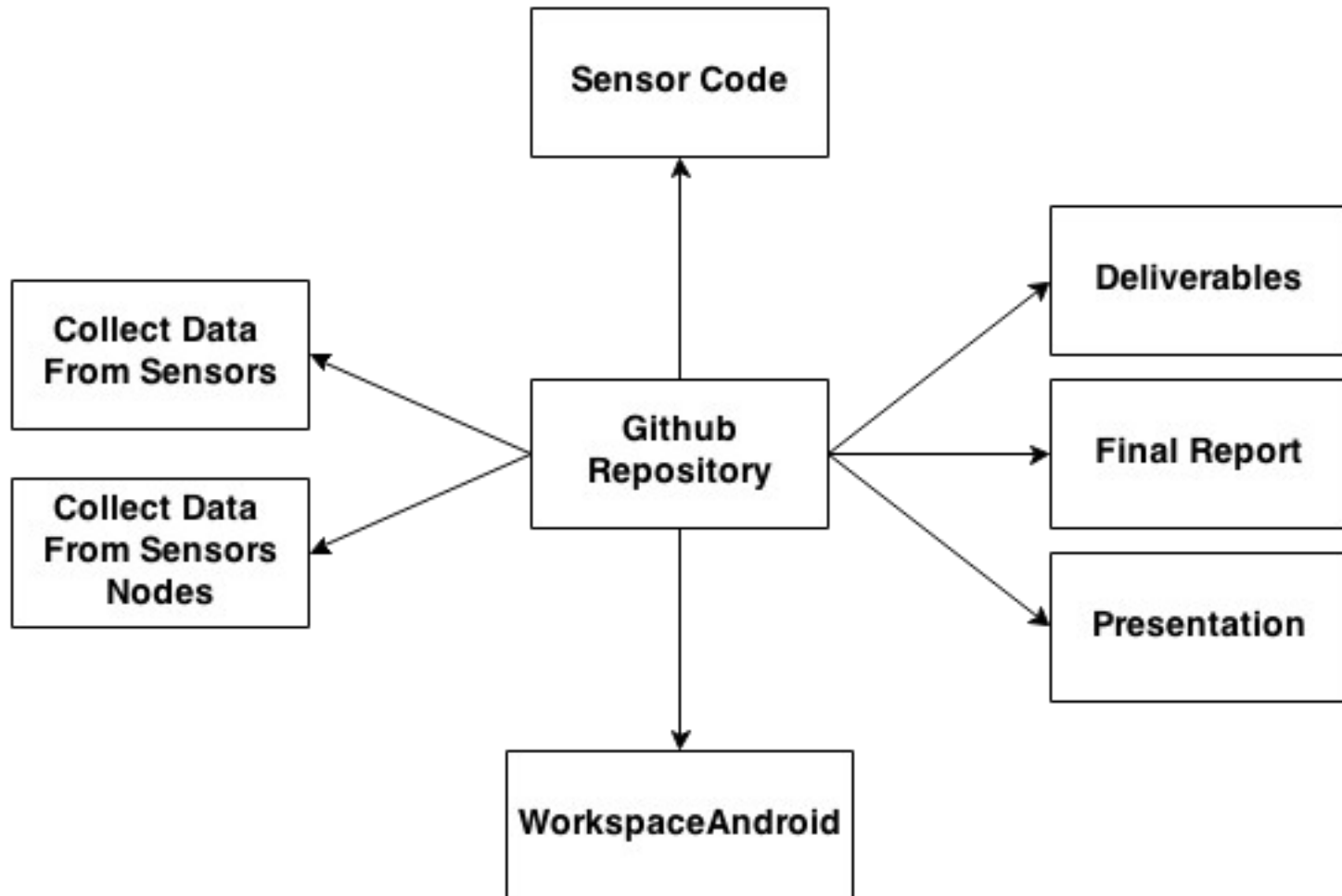- **Markers and Heatmap points**

TESTBED

- **Free space**

- **Different locations**

- **Display the data into some**

TESTBED RESULTS

REPOSITORY

CONCLUSIONS

- **Deployment**
- **Inexpensive**
- **Open source**
- **Mobile App**
- **Github Repository**
- **Goals Accomplished**

FUTURE WORK

- Can be improve
- Build a prototype
- PoE
- Improve Android App
- Diffuse