

COURSE 1: UNPACKING THE INTERNET OF THINGS.

PRODUCT: FOOBOT: INDOOR AIR QUALITY MONITOR

DESCRIPTION:

1. PHYSICAL: (HARDWARE + ELECTRICAL):

- Usb power cord not very long around 2 meters.
- Usb to wall dock.

Device Hardware:

The hardware is designed in Luxemburg, with sensors from Europe, Japan and US which are then assemble in china. Sensors act as embedded systems and continuous connectivity allows constant monitoring.

2. SMART: (SENSORS, MICROPROCESSORS, AND ANALYTICS)

- Store data on cloud every 5 mins

Air quality:

- Fine particles
- Total VOC ()
- Temperature
- Humidity
- Carbon-dioxide
- Carbon monoxide

Device Software:

The software is a key component between the Hardware and the cloud. It manages Recalibration Instructions, Software Updates Installation, Sensor Data Processing, Real Time behavior.

Cloud Platform:

Storing data in our Cloud includes many benefits:

- **Retrieve the data remotely.** Before, retrieving data implied having a technician plug via USB to each device to download the data.
- **It's secure.** If your sensor goes out of service for any reason, there's no problem; data is securely stored and encrypted from the first day it's turned on

- **Be updated when needed.** If a measurement needs your attention, you know it instantly via notifications sent under your custom parameters.
- **Do in-depth analysis.** To perform an analysis on big datasets, we take advantage of the unlimited CPU power of the Cloud. Consequently, we need very little CPU power in the devices themselves which keeps them cost-effective.
- **Integrate with your existing tools.** Since the data is stored on the Cloud, you can retrieve it from anywhere, from any device. Our API is developer-friendly so you can display your data the way you want.

The server infrastructure is deployed in the US, in Europe, China and Japan.

3. CONNECTIVITY: (PORTS AND ANTENNA)

- Wifi 802.11 B/G/N; SECURITY: OPEN/WEP/WPA/WPA2 PERSONAL

4. CAPABILITIES:

Monitors the air quality of the home or office and tells the user on app on smart phone. Beneficial for those who want to study about the air quality surrounding and specially those who have any kind of allergies to fight against the germs.

It has a capability to work as a ventilation or air purifier system that enables to clean the air as well.

REFERENCES:

www.foobot.io

www.iotlist.co