

Supervised work group

RECAP

Available materials and other useful
information



In LADISPE...

- From now up to the end of the semester
- Every Monday
 - From 16:00 to 17:30, supervised work group (with teachers)
 - Up to 18:30, unsupervised work group (with partial/no support in lab)
- Exception: next Monday (11/05)
 - Feedback on D3

Materials (currently available)



Wi-Fi

- For the course
- Without the limitation of Politecnico's Wi-Fi networks
- SSID: Aml Course
- Password: *please, ask*

Bench (in LADISPE)

- 3 Raspberry Pi
 - Bundled as development bench
 - Accessible through HTTP
 - Shared components
 - Pi-1 hosts a RazBerry module (Dog + Z-Wave)
 - 192.168.0.102
 - Pi-2 hosts an instance of Dog (almost empty)
 - 192.168.0.103
 - Pi-3 is customizable on request
 - 192.168.0.104

Hue (in LADISPE)

- 1 Philips Hue bridge
 - 192.168.0.101
- 3 (+4) Hue bulbs
- 1 Friends of Hue LED strip



Z-Wave

- 5 Metering Plugs
- 3 Multiple Sensors
 - Light
 - Humidity
 - Temperature
 - Movement



MyHome

- Demo case (an wall) with various components
 - sponsored by BTicino



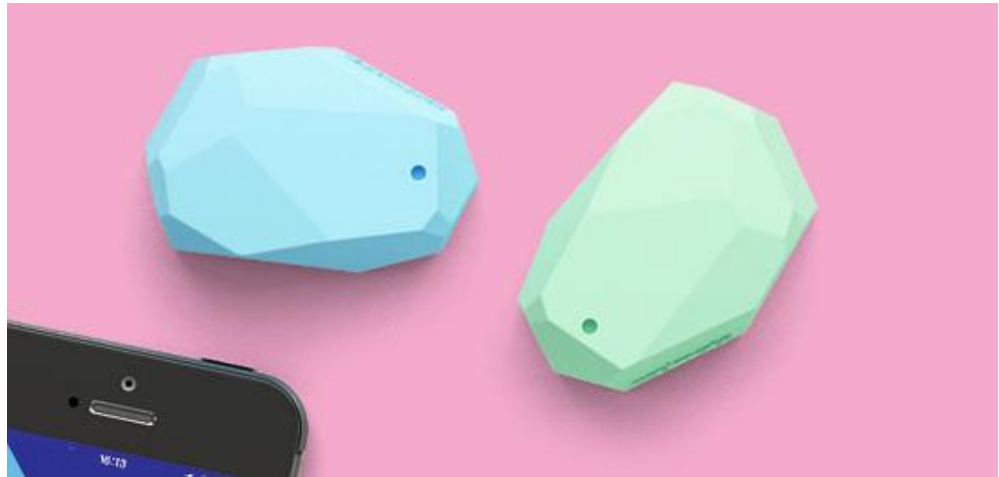
Pebble

- 2 Pebble smart watches
 - <http://getpebble.com>



Estimote beacons

- 6 Estimote Bluetooth beacons
 - <http://estimote.com>



Material on request

- 4+ Raspberry Pi
- 2 RaZberry (Z-Wave)
- 2 ZigBee dongle and 10-15 Zigbee metered plugs
- Arduino boards
- EnOcean devices (temperature sensor, rocker-switch)
- Spare hardware
 - Breadboards
 - LEDs
 - Resistors
 - ...

Available soon...

- 3 Z-Wave RazBerry modules
- 3 USB-Bluetooth adapters
- 3 USB-WiFi adapters
- 3 LCD Touchscreen 2.8"
- 2 USB Microphones for RPi
- 2 USB WebCams
- 2 Proximity sensors for RPi
- 5 Keyfob RFID/NFC
- 3 RFID/NFC Stickers
- 5 RFID/NFC cards
- 2 RFID/NFC bracelets
- 1 Active speakers
- 1 Mini Thermal printer

Need real data?

- A machine running Dog is publicly accessible via HTTP
 - *ask for the address*
 - REST API: <http://dog-gateway.github.io/rest-api.html>
- Installed in our office at Politecnico and manages 7 devices:
 - a door sensor
 - two metered plugs
 - a lamp
 - a movement sensor
 - an electricity meter (power + energy)
 - a humidity, movement and temperature sensor
- Please notice that, on the Politecnico wireless networks (polito and eduroam), the machine is unreachable.

Questions?

01PRD AMBIENT INTELLIGENCE: TECHNOLOGY AND DESIGN

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