

Promoting social distancing in Polimi's libraries using FogFlow

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Why?

- Allow students to know how much people they will find
- Allow students to book and find their seat immediately (reducing contacts)
- Promote an equal distribution of time (some people leave their stuff for hours)
- Trace possible contacts people may have (respecting their privacy)

Why Affluence is not enough?

- Does not provide a real number of seats available (only a percentage)
- It manages only booking of rooms or desks
- It contains critical vulnerabilities

And also:

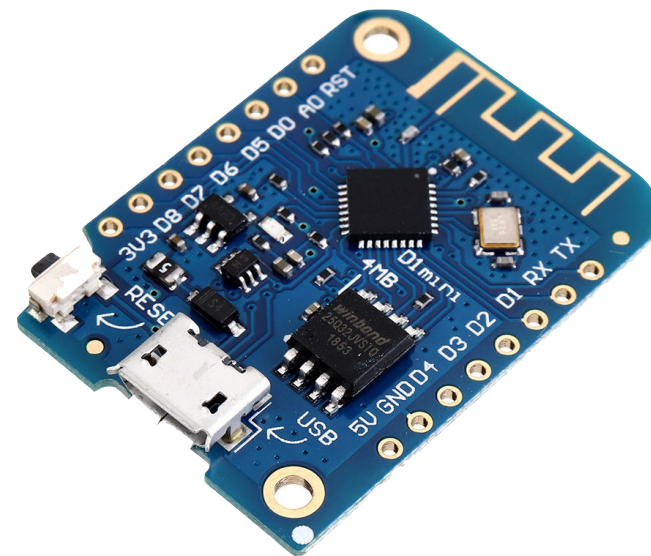
- It may be an opportunity to renew Polimi app (it's embarrassing)

How?

- It can be a test ground for FogFlow
- Deploying a sensor at each seat we can know if it is occupied
- Integrating it with Polimi's IT system we can provide an useful tool for students

The sensor

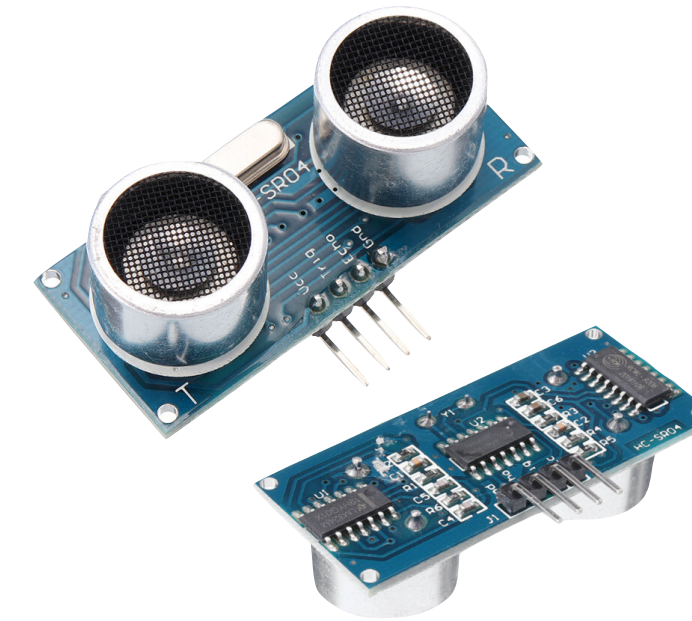
ESP8266



*Provides Wi-Fi connectivity,
forwarding data to FogFlow*

+

HC-SR04



*Verify if a seat is occupied
(it may differs wrt the seat
“type”)*

Cost under 5\$ per unit

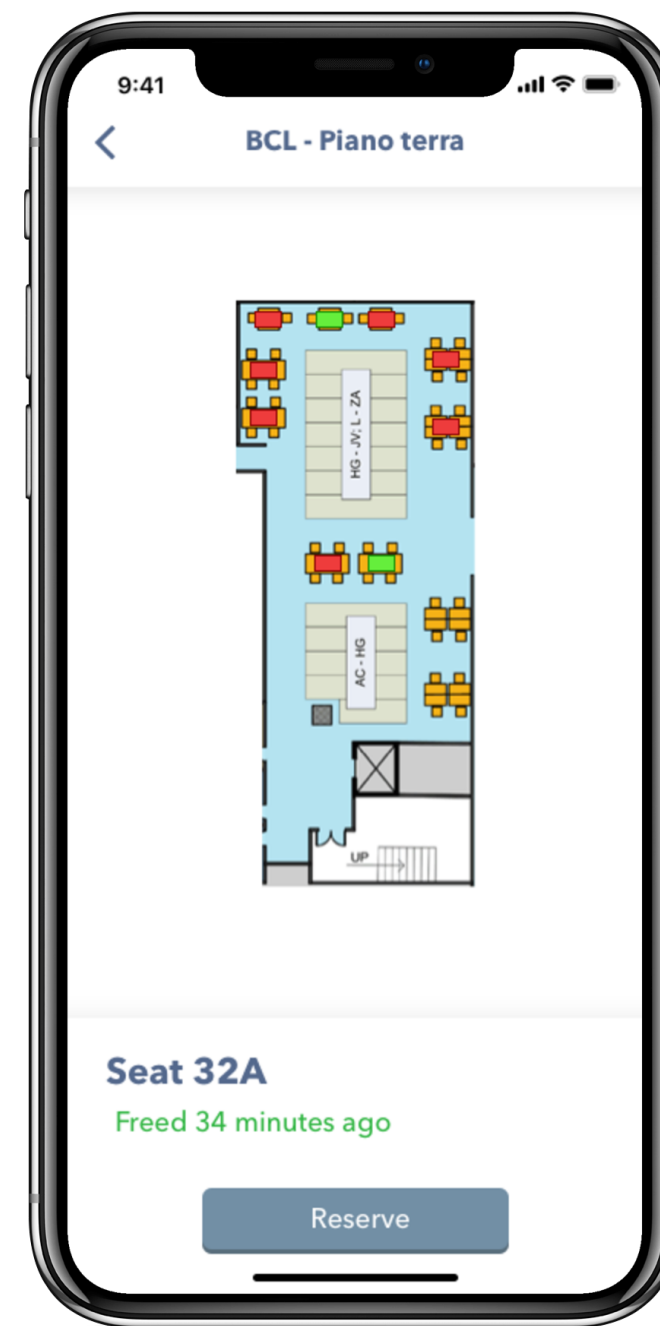
When?

- Using Leonardo campus as a test area, hopefully starting in September
- We can analyse FogFlow performances (maybe we can start by showing on a screen free seats)
- And know more about its potential, maybe also developing new features
- Then, if it will be a success, expand it in other Polimi's campuses and release it so others can implement a similar solution

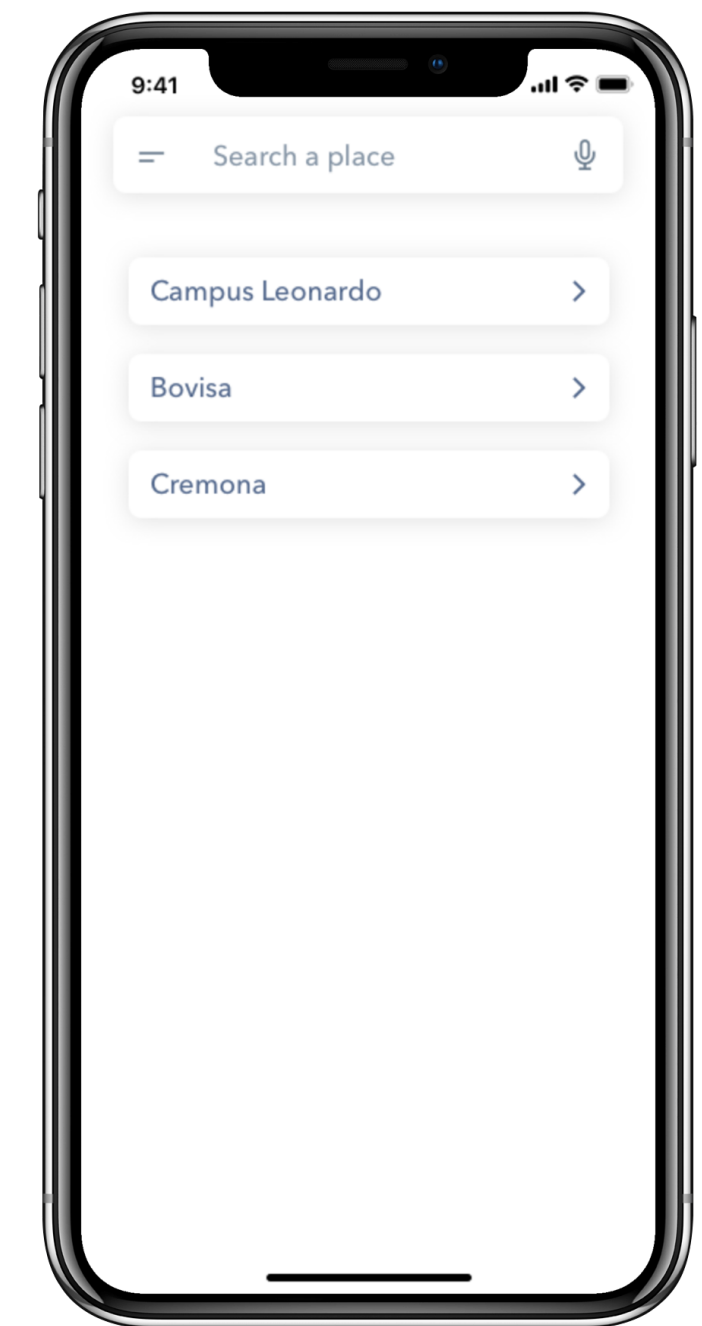
An example



Uses Polimi's SSO



Provides an immediate view



For each common area