Smart Self Service

Lend, borrow, share. Easier, safer.

/AIM

Smart Self Service is a platform which helps lending objects by using connected lockers. The app gives the code to open them, meaning there is no need to meet up.

TECHNO!.

The webapp (client and server) are based on the MeteorJs framework.
Lockers are controlled by an ESP8266 micro-chip and communicate with the server through the WIFI using Arest.

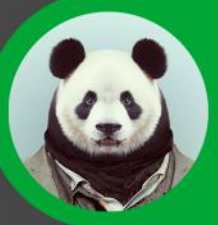
/COLLAB.

We were helped by the FabMSTIC to create the lockers. As they offered to build the lockers, we could focus on the web application.

TEAM

WE ARE TWO STUDENTS IN COMPUTER SCIENCE. AS A PART OF OUR STUDIES, WE HAD TO WORK ON A PREVIOUS YEARS PROJECT : THE SMART LOCKER.
WE DECIDED TO START ON NEW BASES GIVING US MORE POSSIBILITIES LIKE MAKING THE PROJECT EASIER TO IMPROVE.

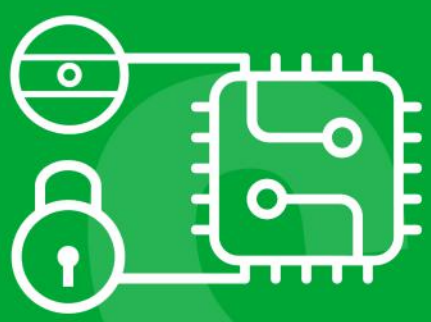
ALICIA ABONNENC



« I used to be a web designer, but I have no idea how CSS works »

GILLES BONHOURE

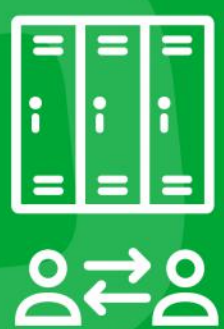
« Learning new technologies is my passion. Only on Saturday, from 8pm. to Sunday 4am. »



Step one :
Connect the pin 4 of the ESP8266-chip to the closing sensor and the pin 5 to the lock. Edit the provided arduino code to connect to a WI-FI network, to match the IP and unique chip ID. Load the code to the chip. It's ready to use.

Step two :
Update the lockers collection by using the new locker form in the administration area.

The IP adress must match this shape :
cloud.arest.io/chosen_locker_id



Step three :
Enjoy your freshly created locker !

Smart Self Service is fast to setup.

The only thing you need is a server able to host the Meteor application, and some lockers. Once your application is online, the only thing you need is to add the lockers in the database directly through the admin section. From this moment on, users can register, login and choose lockers where they can drop off items.

Easy to use.

The interface of the web-application is clean and airy. The user won't have tons of informations to analyse.
Once he is in front of a locker, the way to open it is simple : flash a QR Code and unlock by giving a 4-digit code.

Grow fast.

Of course, you can add as many lockers as you want.
But you can also easily expand the application with other functionalities. We have thought about a structured architecture to give anyone the scope to improve the app as they wish.

A 2016-2017 Polytech's students project

open source initiative

AIR

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