### PROJECT IOT WORKSHOP

### Why are you making this product?

- We are making this product to teach the CMD student more about the possibilities of the internet of things.
- To reacquaint them with working with Arduino IDE, sensors and sensor data.
- To prepare them for their final course assignment.

### What have you made up till now?

- We have remade the box the project group from last year made. We made a new box, it's bigger than the ancient one because of the new button.
- We figured out how to use a variety of sensors.
- We also gave a workshop to teach the CMD students the basic workings of the box.
- We have also made some code assignments for the students to do during the workshop (a simple one regarding an LED strip and one regarding a binary counter).
- We have composed a library package containing the correct libraries

### How will you continue?

- We will continue by preparing a second workshop to teach the students how to attach sensors to the box they made in the first workshop.
- We will prepare a couple assignments which will let them analyse and process sensor data.
- We will also think of a way to improve the existing box and improve it that way.



### LET'S START

ASSEMBLE THE BOX

Assemble the box with all its components, connect your chip to the WiFi, configure the LED and give your ideas space to explore what you can do with it.

Get creative!

### CONNECT TO WIFI



the WiFi settings on your phone.

Plug your box into a power source and open

Select the WiFi network with the 4-digit code of your chip, sign in and configure your

# Assemble the box and glue all sides except the top, so that you can still open it. Sagarantee all sides except the top, so that you can still open it.

### CUSTOMIZE YOUR BOX

Feel free to use everything you find on the table and glue it to your box to customize it.

### PROGRAMMER MODE

Download the code of the GitHub project:

> https://github.com/palr001/iCu

Install the Arduino IDE:

> http://www.arduino.cc/en/Main/Software and try to reprogram the microcontroller.

Here you find the API calls:

> https://oege.ie.hva.nl/~palr001/icu/api\_help.php



## CONFIGURE THE BUTTON

Scan this QR-Code and enter the 4-digit code of your chip to log in or go here:

> https://oege.ie.hva.nl/~palr001/icu

Configure your LED by entering your code and pushing the button to let your box blink.

Try to socialize by addressing your neighbors button and send them a Sinterklaas message. Block anyone who spams your button or try to spam the others.