Interfacing with LEDs and DHT12

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MAIN OBJECTIVES

- Improve our knowledges about how the DHT12 and the Arduino microcontroller work.
- Use the knowledges we learned in the subject to create a system to prevent the DHT12 sensor crashing.
- Know how to use the UART communication and improve our programming skills.

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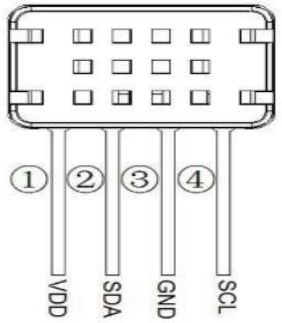
COMPONENTS USED

- DHT12 sensor



- Coloured LEDs (blue, green and red)

- Arduino UNO board (ATmega328/P)

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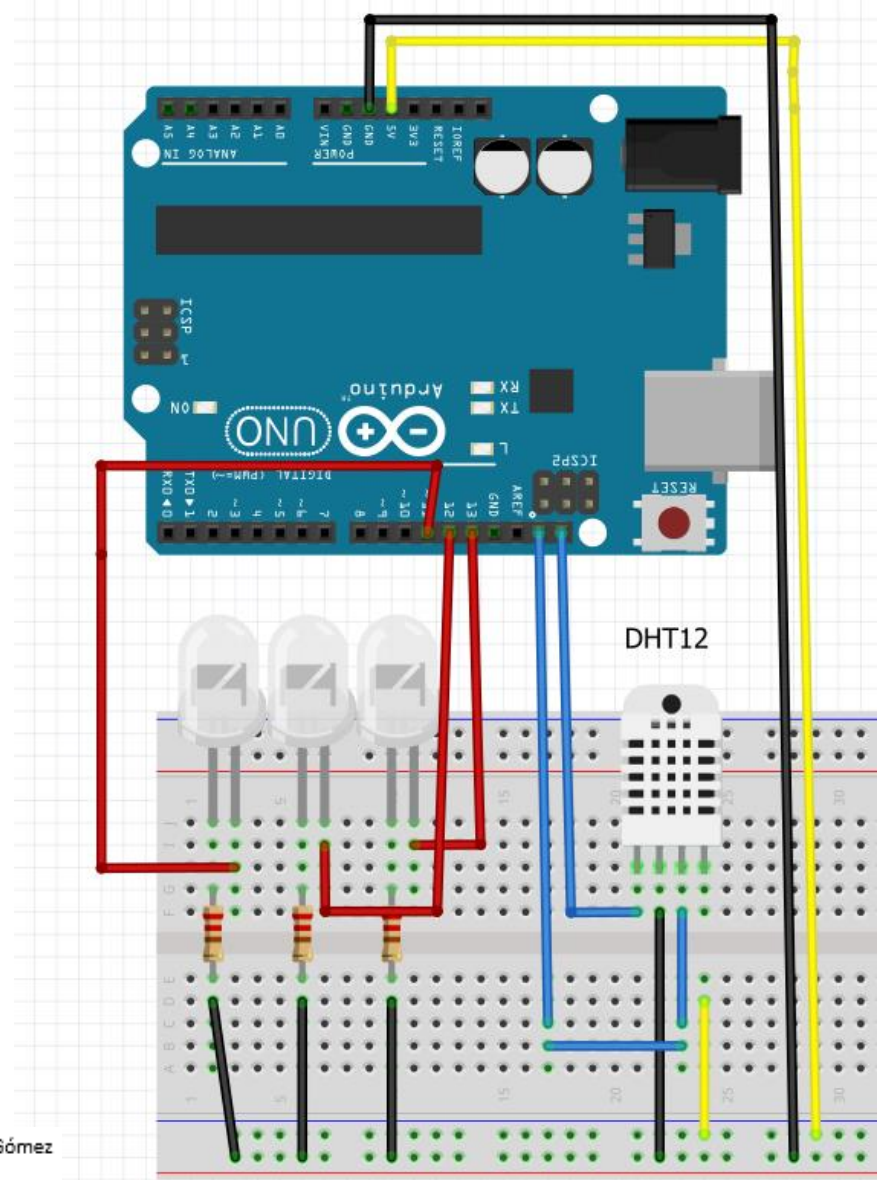

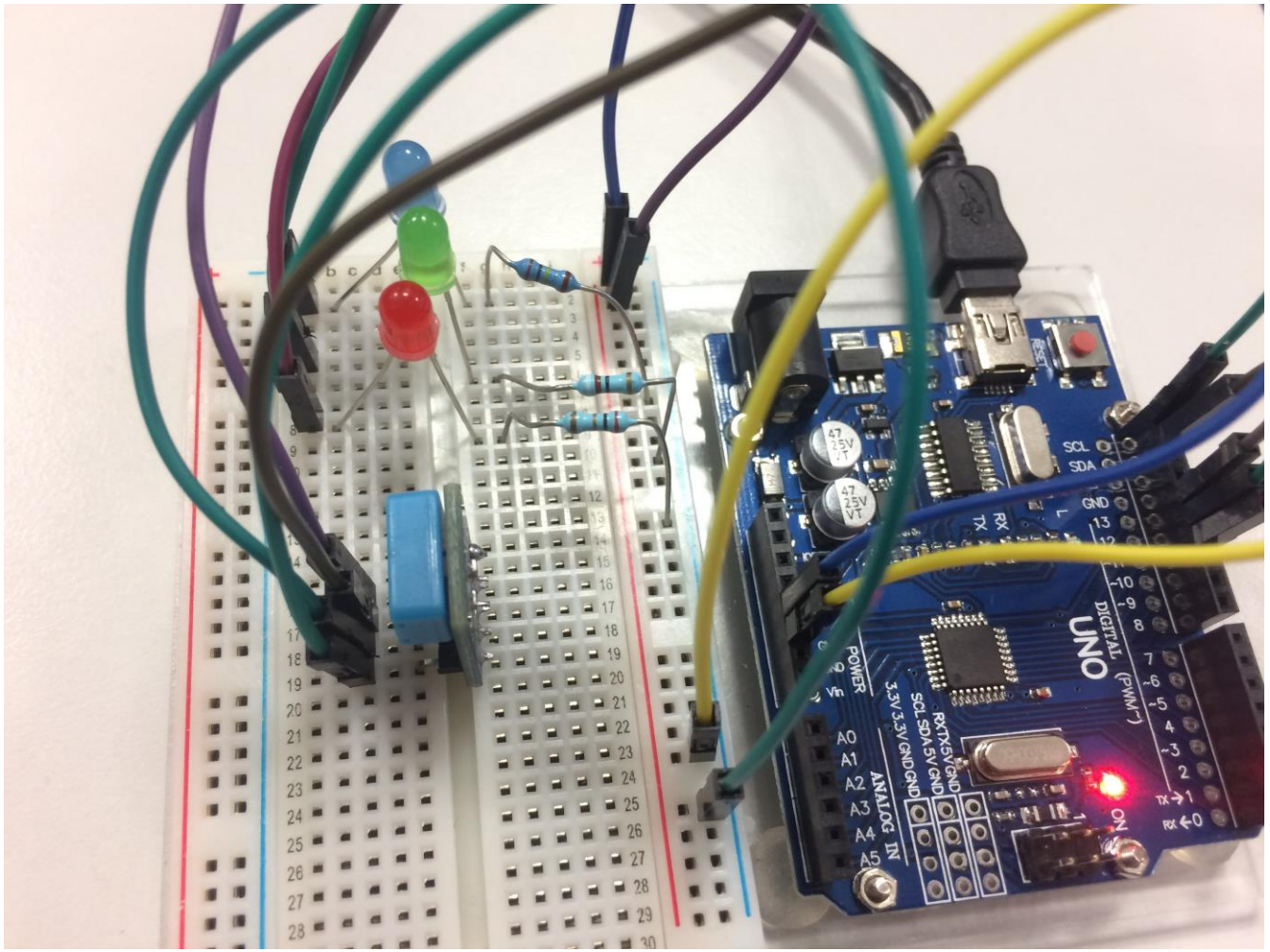

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THE APPLICATION

- We combinate the DHT12 detection with the activation of different pins in the microprocessor in a C code.

- We also use the UART communication to see the temperature and humidity and how they change

- Finally if the temperature gets close to 60 degrees, the maximum temperature that DHT12 can measure, the red LED would shine and it would be advisable to get it colder.

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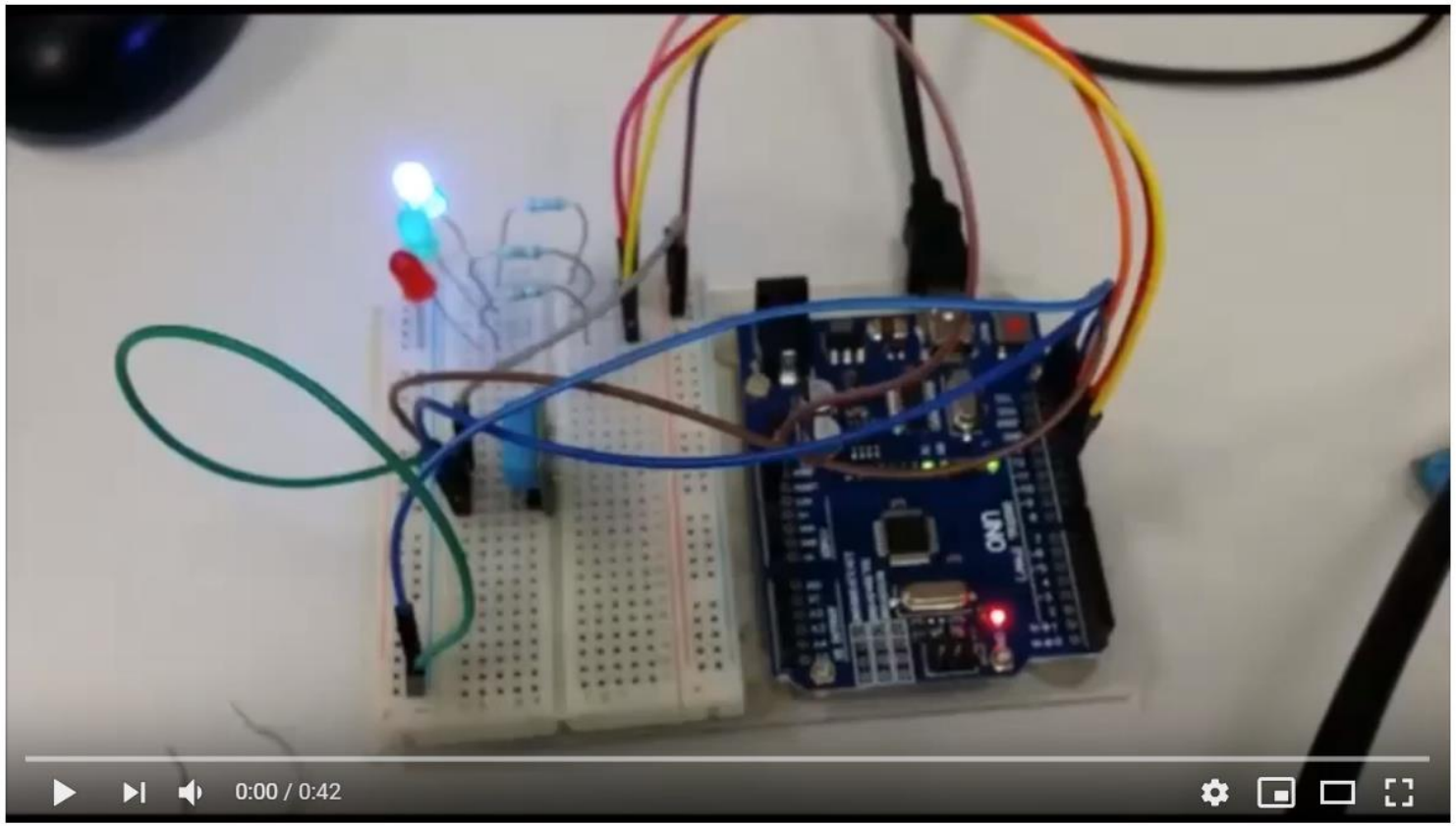
YouTube

https://www.youtube.com/watch?v=DZBRfU3uvDU



CMPT project