



# COMMUNICATING DIGITAL DICE



## MATERIAL PART :

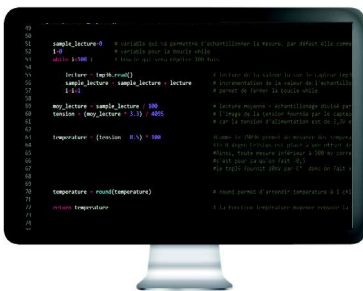
- a microcontroller board
- 5 digital RGB LEDs
- 2 analog RGB LEDs
- a vibrator
- a speaker
- a LiPo battery
- cables
- a set of screws
- USB cords

## ACCOMPANYING DIGITAL DOCUMENTS :

- 4 activities e
- an editable 3D model
- computer source documents

What better way to learn than to do?

The features of the dice are created by the students in **PYTHON language** : random dice, binary thermometer, binary clock, speed game, alarm clock...



The **communicating digital dice** kit is a set of components allowing you to carry out a **FABLAB** project intended for teaching explorations.

This Kit is delivered with accompanying documents in digital format including written activities, nomenclature, design procedures, 3D models...

For the hardware part, this kit includes all the components allowing the realization of the proposed solutions: electronic cards, sensors, actuators, cord, screws, battery...

The students will be left with the design and 3D printing of the outer envelope of the Dice.

*graphical tool for creating HMIs*

**pseudo random dice function**

**digital clock function**

**thermometer function**

**HMI for managing RGB LED colors**

