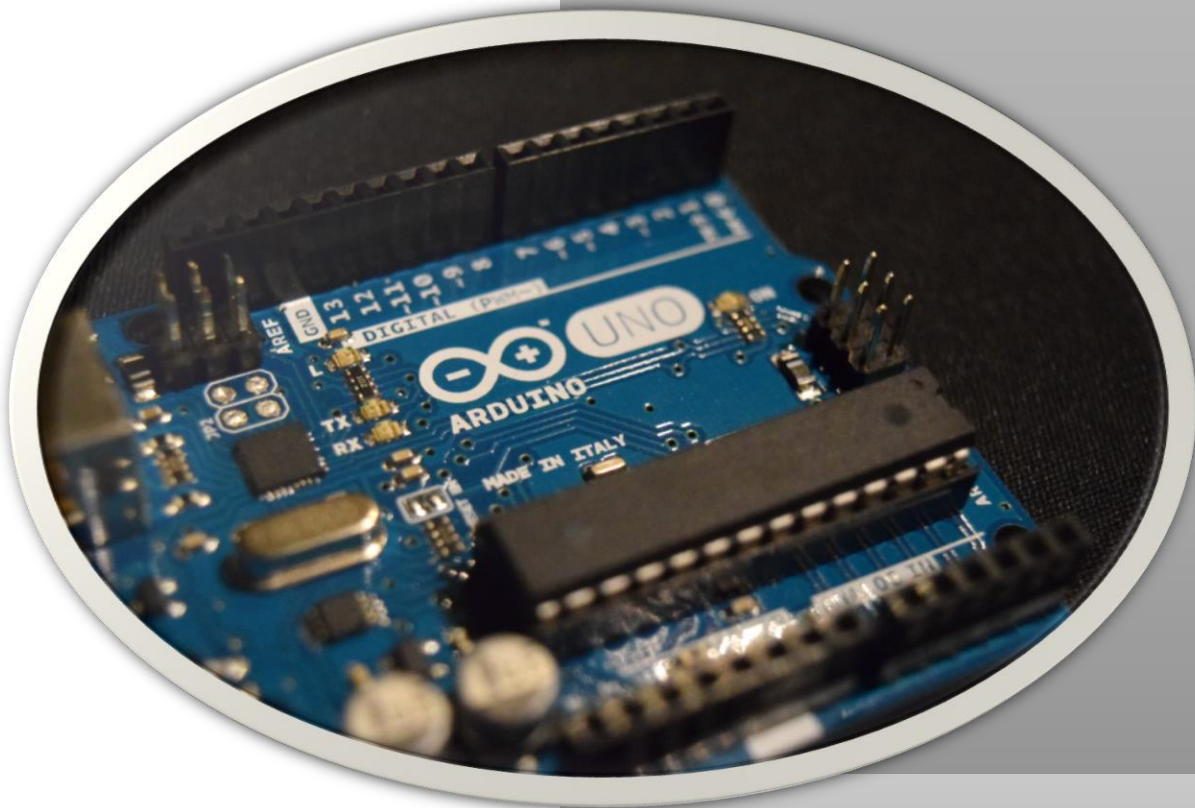


Debouncing issue in push buttons



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INTRODUCTION :

A common issue in the Arduino when dealing with push buttons is that most people think there are two states only (push , release) , when being applied in the circuit it implements a different behavior than the expected one !!

The internal infrastructure of the push button especially the mechanical parts once being used it creates what's close to vibrations , these vibrations act as the push button is being pushed unintentionally couple of times in just MILI SECONDS .

These alternate the circuit behavior and output different results .

SOLUTION : there is two approaches to this problem hardware and Software .

HARDWARE :

By using filter circuits that cuts out the bounces occurred in the switch or button

SOFTWARE:

By using delays to neglect that part of bounces occurred which will not exceed 20 ms whether in switches or bounces

Links to TINKERCAD circuits :

- <https://www.tinkercad.com/things/ipMvTwM2zy9-the-ldr-circuit->
- [https://www.tinkercad.com/things/eZF3il85OYQ-first-croco-
?sharecode=ZD69CtuDuPljuQUiopPyJcr9u0Q1lXkaO2zOpj4eQ30](https://www.tinkercad.com/things/eZF3il85OYQ-first-croco-?sharecode=ZD69CtuDuPljuQUiopPyJcr9u0Q1lXkaO2zOpj4eQ30)