1. I2C- inter-integrated circuits, is a serial communication protocol
2. Interrupts allows the software to respond quickly to changes in external environment.
   1. Pull up and pull down resistors are used to ensure a pins are at a known state. Pull up being Vcc amd pull down being ground.
   2. Hardware solution(using physical components) is connecting a resistor in series with the switch and microcontroller and connecting a capacitor to ground between the resistor and microcontroller, similar to a low pass filter.

A software solution(using code) is to ensure that the interrupt is more than a certain time period away from the previous interrupt.

* 1. Interrupts is where the device notifies the CPU that it needs its attention, in polling the cpu constantly checks the devices if they need its attention. An interrupt is more efficient and uses less computing power

Code:

Top of Form

Bottom of Form

Top of Form

Bottom of Form