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# Crash Detection System





## Why?

Automated crash alarm systems are already implemented in most of the vehicles today. Our project is just a try at understanding at the basic level how these small but crucial systems work.

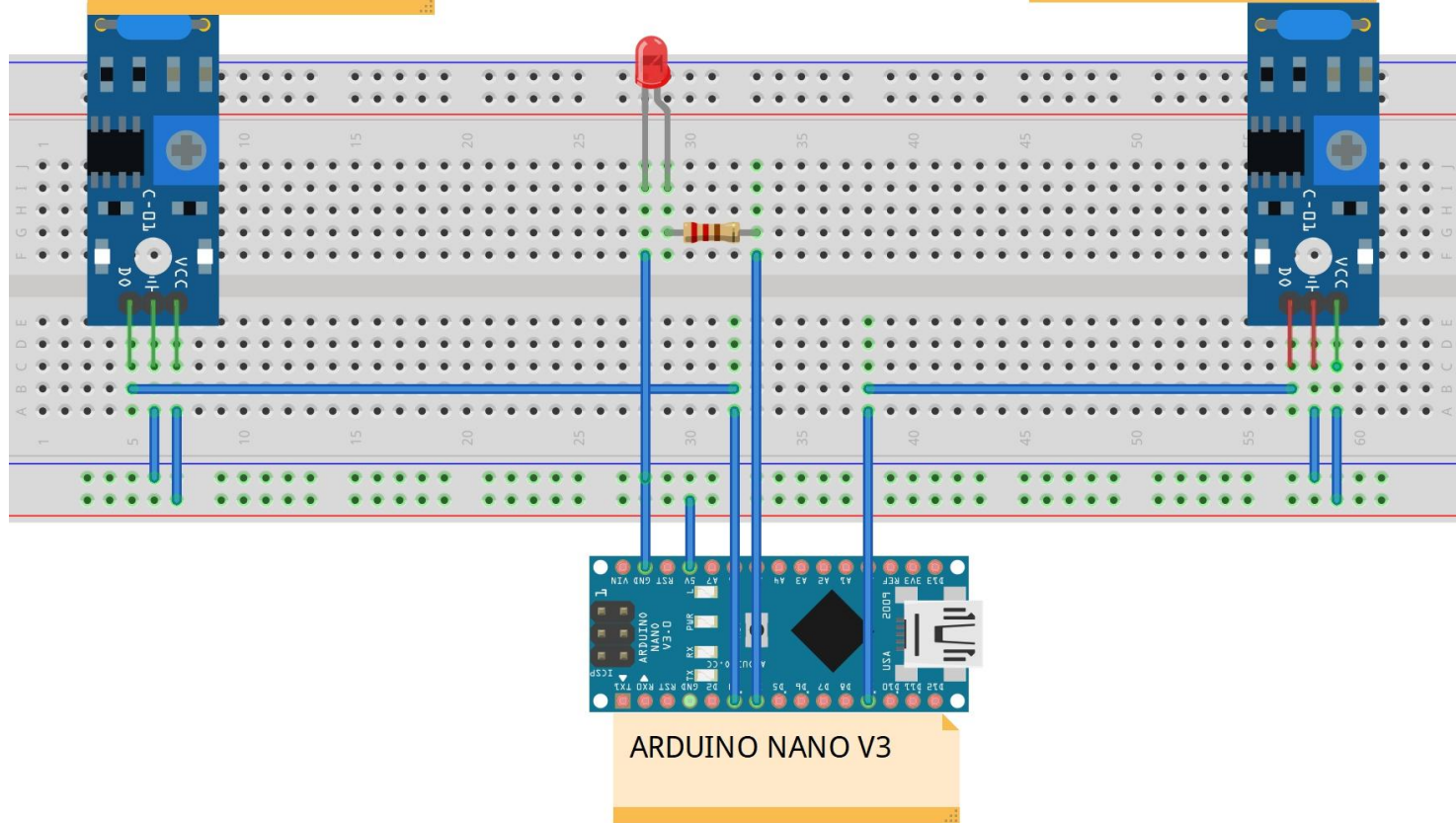


# Components:

- **Arduino Nano.** Used as a controller and to read values from the accelerometer.
- **Vibration and Shock Sensor.** Detection of any kind of abnormal vibration/shock and sends this data to the nano, which then triggers the LED.
- **LED.** To alert once crash is detected.
- **Breadboard and Wires**

SHOCK SENSOR  
KY-002

VIBRATION SENSOR  
SW-420

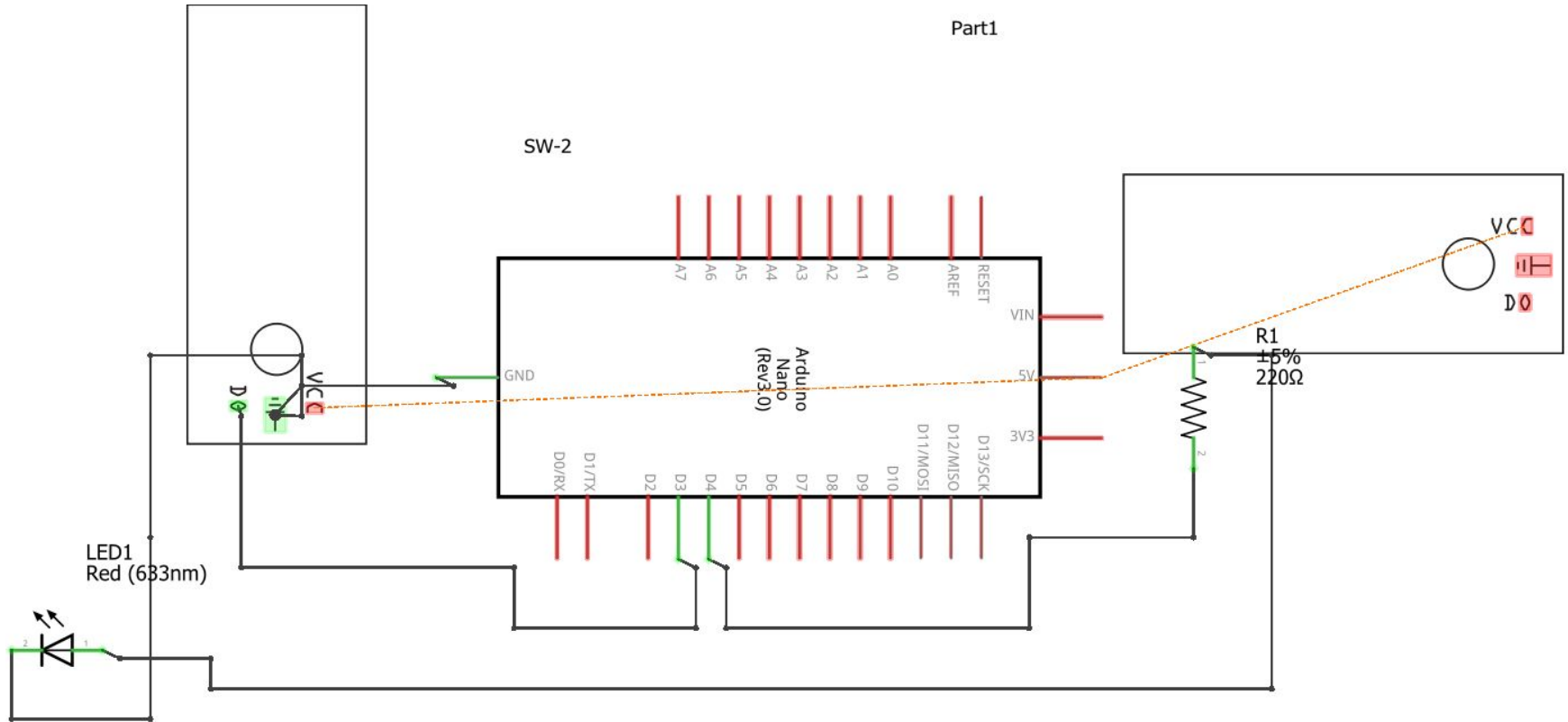


ARDUINO NANO V3

Part1

SW-2

SW-1



fritzing

# Bill of Materials: sketch.fzz

C:/Users/Mukund Kalra/Documents/4thsem/ELproject/sketch.fzz

Tuesday, February 19 2019, 01:10:17

## Assembly List

Label	Part Type	Properties
LED1	Red (633nm) LED	package 3 mm [THT]; leg yes; color Red (633nm)
Part1	Arduino Nano (Rev3.0)	type Arduino Nano (3.0)
R1	220 $\Omega$ Resistor	tolerance $\pm 5\%$ ; resistance 220 $\Omega$ ; package 0603 [SMD]
SW-1	Vibration sensor module	variant v1; pins 3; voltage max 12V
SW-2	Vibration sensor module	variant v1; pins 3; voltage max 12V

## Shopping List

Amount	Part Type	Properties
1	Red (633nm) LED	package 3 mm [THT]; leg yes; color Red (633nm)
1	Arduino Nano (Rev3.0)	type Arduino Nano (3.0)
1	220 $\Omega$ Resistor	tolerance $\pm 5\%$ ; resistance 220 $\Omega$ ; package 0603 [SMD]
2	Vibration sensor module	variant v1; pins 3; voltage max 12V