

Component	Description	Notes
Arduino Nano Every	Microcontroller	Controls sensors, LEDs, sound
LSM6DSV32XTR	Accelerometer + Gyroscope	Detects motion and impact
Li-Po Battery (3.7V 450 mAh)	Rechargeable power source	Powers entire system
Linear Battery Charger (1-cell, 8-pin IC)	Charging circuit	Connects to USB-C port
Boost Converter (5V 3A TO-263)	Voltage regulator	Steps up battery voltage to 5V
Piezo Buzzer	Sound output	Responds to impact force
RGB LEDs (x3 or x5)	Visual feedback	Placed in hammer head
Female Jumper Wires	Wiring	Used for breadboard/prototyping
Resistors	220 Ω for LEDs, 10 k Ω for pull-ups	Prevent overcurrent
Breadboard	For testing	Full-size (830-point) recommended
3D-Printed Hammer Body	Structural shell	Printed in PLA, ABS, or PETG
Heat-shrink tubing & tape	Insulation	For final wire management