

Noise Alert

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Abstract: *The Noise Alert Project is a smart system designed to monitor and control noise levels in a specific area to reduce noise pollution. The system uses a sound sensor to continuously detect surrounding sound intensity and sends the data to an ESP32 microcontroller. The program, developed using Arduino IDE and Visual Studio Code (VS Code), compares the detected sound level with a predefined threshold value. When the noise exceeds the set limit, the system activates a buzzer and LED as alert indicators. A metal push button is provided to allow the authorized person to reset or stop the alert. All components are integrated using a Printed Circuit Board (PCB) for stable and efficient performance. This project provides a simple, cost-effective, and reliable solution for maintaining a peaceful environment in places such as schools, hospitals, libraries, and residential areas.*

Keywords: Noise Pollution, ESP32, Sound Sensor, Microcontroller, Noise Monitoring System

