

Title : **Sound Level Indicator using IOT**

Document : **Requirement Specifications**

### **Functional Requirements**

- Sound Loudness level indication in dB on local display and mobile app
- dB level calculation based on peak-to-peak value within sample window
- Classification of sound level as Silent and Noisy based on Threshold level
- Display of sound level classification on local display and mobile app
- Display of current value of Threshold along with facility for setting new value for Threshold
- Update on cloud database should be accessible to user for debugging purposes
- Power supply: 5V (USB powered)

### **Non-functional requirements**

- Should have compact custom PCB
- Display and audio sensor modules to be connected using polarized cables
- Should have low power consumption. Should be capable of being USB powered for program upload and debugging from a laptop