NOISE POLLUTION MONITORING SYSTEM

Abstract ,

Cities and ecosystems worldwide face environmental and technological issues due to air and sound pollution and a shortage of sound pollution monitoring locations. To solve these issues, the industry has focused its efforts on building a flexible technology solution that allows for improved air quality assessment and the supply of reference values in network locations where traditional monitoring falls short. Unfortunately, existing items and their outcomes are not low-cost alternatives. IoT has proven itself in a variety of domains by aiding society, including defense, agriculture, safety, comfort, etc. Pollution is steadily increasing these days, having a severe impact on society. Different types of pollution cause different issues

KEYWORDS

Environmental science, Wireless network Communication system, Node MCU, Buzzer,

I. INTRODUCTION

Sound pollution is caused by the increased use of machinery and resources as a result of industrialization. Sound pollution hurts both humans and animals. Sound pollution is becoming a bigger problem, therefore it's important to keep an eye on it for a brighter future and a healthier lifestyle for everyone. In recent years, pollution has had a direct impact on people's health.

II. LITERATURE REVIEW

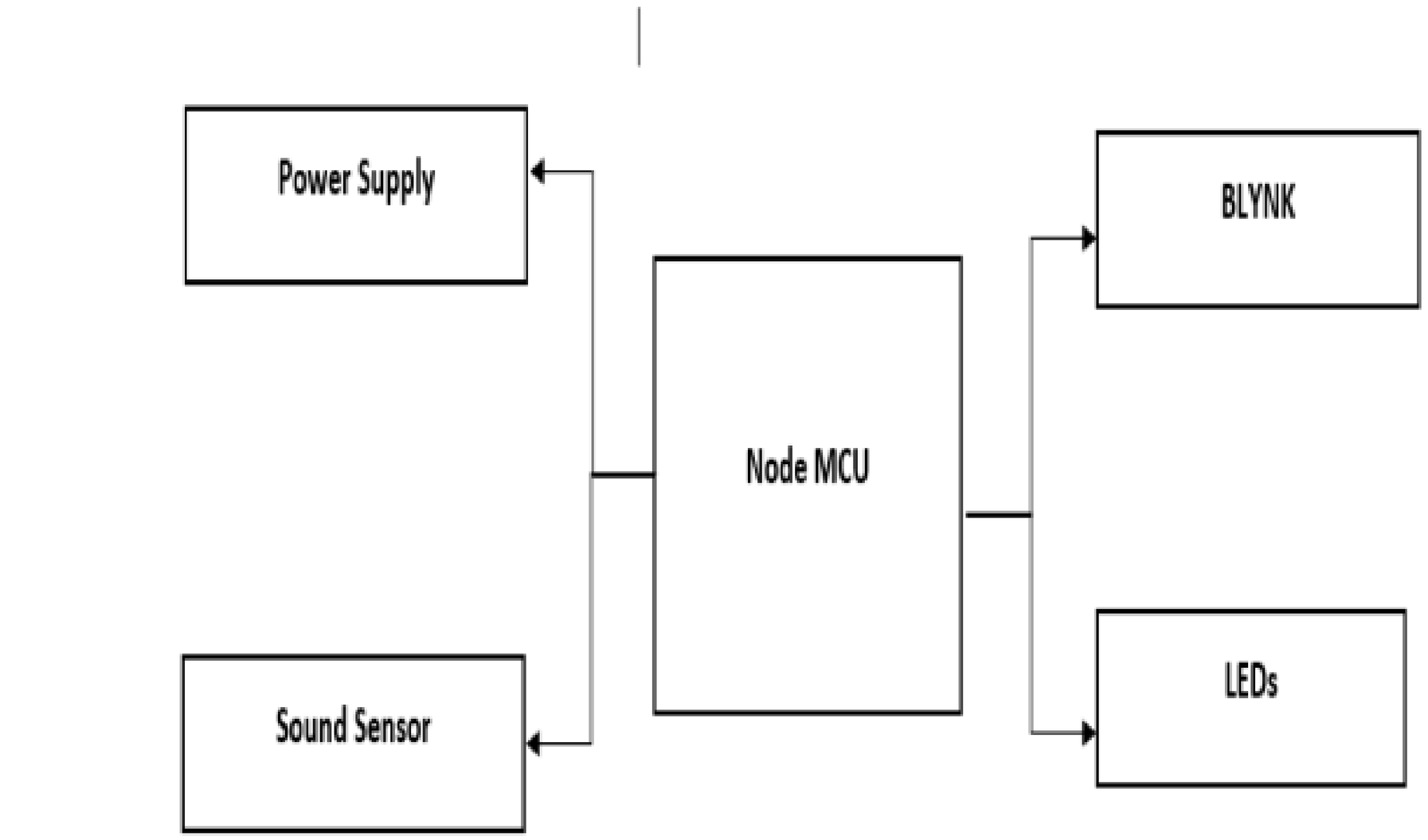
The air and sound pollution monitoring system is critical for detecting a wide range of gases; also, sensors have a long-life span, are readily available, are inexpensive, easy to use, and are compact. Air quality can be measured both indoors and outdoors. This system features a basic drive circuit, real-time operation, and visual output. The main goal of this document is to ensure that air and sound pollution are monitored and controlled by taking appropriate measures. The proposed paper has several limitations. 22 Humidity should be less than 95%, and precise measurements of harmful gases in ppm are impossible to detect. This

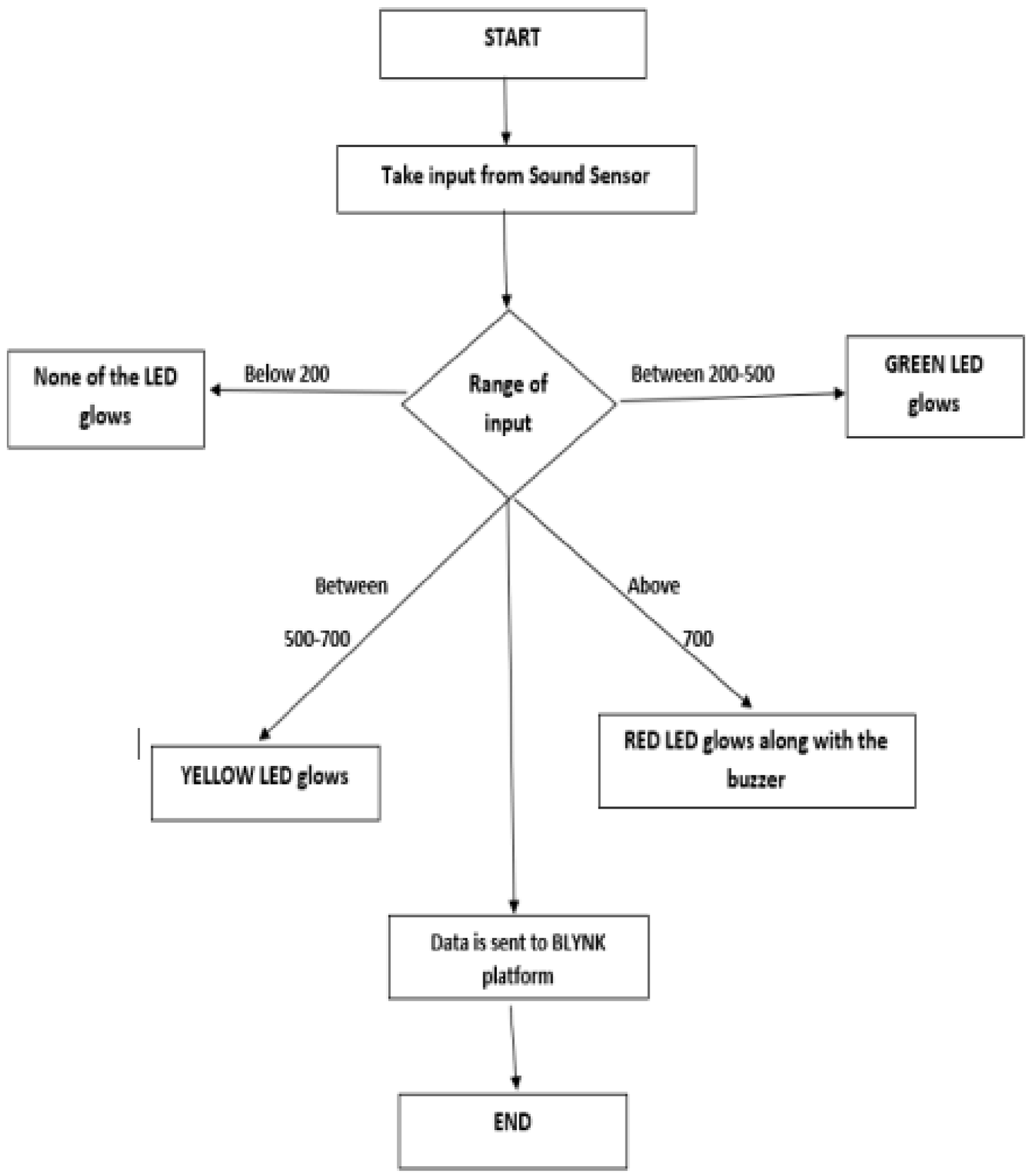
paper can be used to monitor pollution levels as well as to prevent excessive pollution, which could lead to major difficulties in the future.

III. METHODOLOGY/EXPERIMENTAL

The proposed system uses Sound Sensor, Microcontroller unit i.e., Node MCU which is also a data transmission module ESP8266 Wi-Fi module. The components used in this proposed system are shown in Table.1. along with their purpose in this proposed system

Component Nam	Purpose
Node MCU	Microcontroller boar
LEDs	Glows when sound is above the desired valu
LM393 (sound sensor)	To detect the soun
Breadboard	To connect all the components
Power Supply	To give power to mode
Buzzer	Beeps when sound is above the desired leve


Power Supply
BLYNK
Node MCU
Sound Sensor
LEDs


START
Take input from Sound Sensor
Range of input
None of the LED glows
Below 200
Between 200-500
GREEN LED glows
Between 500-700
YELLOW LED glows
Above 700
RED LED glows along with the buzzer
Data is sent to BLYNK platform
END