IOT Based Air Pollution Monitoring System

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PROBLEM STATEMENT

To demonstrate the working of the system in the presence of gases and to demonstrate the working of the system in an air-conditioned indoor atmosphere.

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INTRODUCTION

Air pollution is one of the biggest threats to the present-day environment. Everyone is being affected by air pollution day by day including humans, animals, crops, cities, forests and aquatic ecosystems. Besides that, it should be controlled at a certain level to prevent the increasing rate of global warming.

This project aims to design an IOT-based air pollution monitoring system using the internet from anywhere using a computer or mobile to monitor the air quality of the surroundings and environment. There are various methods and instruments available for the measurement and monitoring of air quality. The IoT-based air pollution monitoring system would not only help us to monitor the air quality but also be able to send alert signals whenever the air quality deteriorates and goes down beyond a certain level.

IDEA GENERATION

1. In this project, measurement and display of Air Quality of the atmosphere have been performed. From the information obtained from the system, it is possible that the system can detect Real Time data and alert users about sudden increases in air pollution levels or the presence of hazardous pollutants.
2. The advantage of MQ135 is that it is able to detect smoke, CO, CO2 and harmful gases. After performing experiments, it can be easily concluded that the setup is able to measure

the Carbon dioxide air quality in ppm, with considerable accuracy. The results obtained from the experiments are verified. Moreover, the MQ135 sensor indicators help us to detect the air quality level around the setup. Since it's an IOT-based project, it will require a stable internet connection for uploading the data to the BLYNK cloud. Therefore, it is possible to conclude that the designed prototype can be utilised for air quality of the surrounding atmosphere successfully.

PROTOTYPE IMAGES

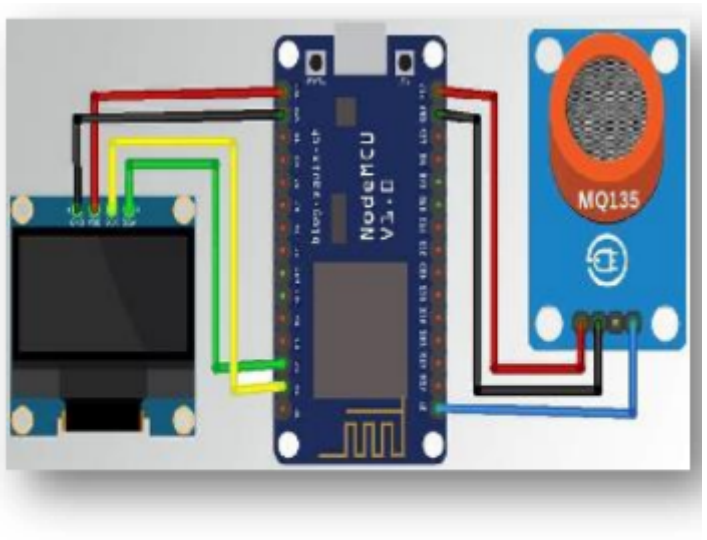

Fig 4.2. Circuit connection

Fig 4.3. Working Model