Gas Leak Monitoring System - Project Report

Project Title: Gas Leak Monitoring System

Description:

The Gas Leak Monitoring System is designed to detect hazardous gases such as methane, LPG, and carbon monoxide using specialized sensors.

The data is processed by a microcontroller, and when gas levels exceed safe limits, the system triggers alarms to alert nearby users.

Technologies Used:

- Arduino
- IoT
- C/C++

Responsibilities:

- Sensor Selection and Integration:

  Responsible for choosing suitable gas sensors (e.g., MQ series) and integrating them with the microcontroller to ensure accurate gas detection.

- Testing and Safety Validation:

  Conducted thorough testing of the system to ensure it functions correctly in real-world scenarios, ensuring the reliability and safety of the gas leak detection process.

Objective:

This system ensures safety in environments such as homes, factories, and laboratories by preventing accidents caused by undetected gas leaks.

Benefits:

- Early detection of gas leaks

- Real-time alerts

- Improved safety

- Cost-effective solution