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Title of the Project: Industrial Pollution Monitoring and Alerting system (IP-MAAS)

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ABSTRACT:

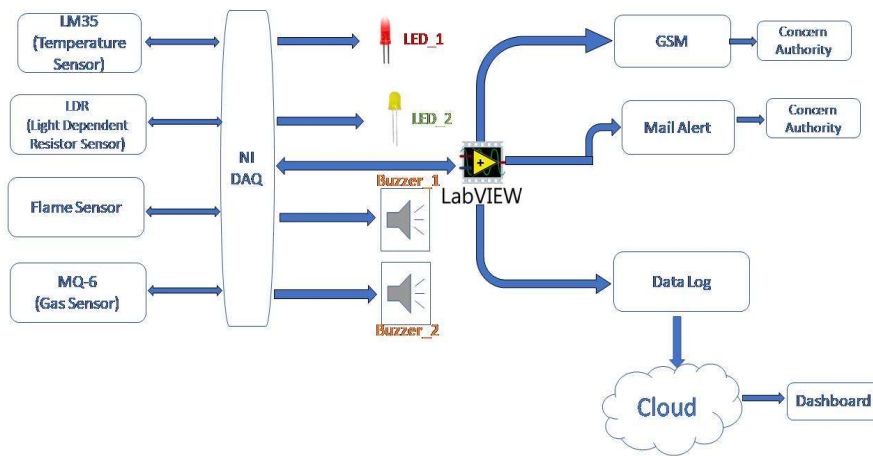
Industrial Pollution Monitoring and Alerting system (IP-MAAS)

The main objective of this project is to design an efficient and robust system to monitor the parameters which are causing the pollution in the working environment of an industry and by alerting system minimize the effect of these parameters without affecting the plant or working environment. The proposed methodology is to model an electronic system to read and monitor pollution parameters to find out any leakages or damages in the industry. Development of an electronic system using GSM and LabVIEW is introduced in this proposed project, this system will acquire data from various sensors and keep a track of real time data. The system investigates level of gases released during industry process, temperature of the machineries, detection of light using LDR, detection of flames, respected alerting systems are also included. Each process will have a separate data acquiring and alerting mechanism. Here LabVIEW provides operation interface and manipulation of data and GSM is suitable for interactive environment for signal transfer to the concern authority. The main idea behind the project is to make a real time fully automated monitoring and alert system using LabVIEW and GSM.

Methodology

To design an electronic system to read and monitor pollution parameters to find out any leakages or damages in the industry. Development of an electronic system using GSM and Lab VIEW is introduced in this proposed project, this system will acquire data from various sensors and keep a track of real time data. The system investigates level of gases released during industry process, temperature of the machineries, detection of light using LDR, detection of flames, respected alerting systems are also included. Each process will have a separate data acquiring and alerting mechanism. Here Lab VIEW provides operation interface and manipulation of data and GSM is suitable for interactive environment for signal transfer to the concern authority. Lab VIEW (Laboratory Virtual Instrumentation EngineeringWorkbench) is a graphical programming language that

uses icons instead of lines of text to create applications. LabVIEW uses dataflow programming,



The block diagram includes the LM35, LDR, FLAME SENSORS, MQ-6 sensors are connected to the NI DAQ and the input data is taken and processed by the Labview software and the Led and the Buzzers are the output's, if the values exceeds more than the threshold values given in the program the outputs will give the indication and the Alert will be send through the GSM or Mail to the concerned Authority and the data log is connected to the cloud it is appeared on the Dash board it can be accessed by the concerned authority

Expected Out comes

To obtain a robust system to monitor the parameters which are causing the pollution in the working environment of an industry and alerting system.

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[1] Kunja Bihari Swain G. Santamanyu, “Smart Industry Pollution Monitoring and Controlling using LabVIEW based IoT 2017 IEEE 3rd International Conference on Sensing, Signal Processing and Security (ICSSS)

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