

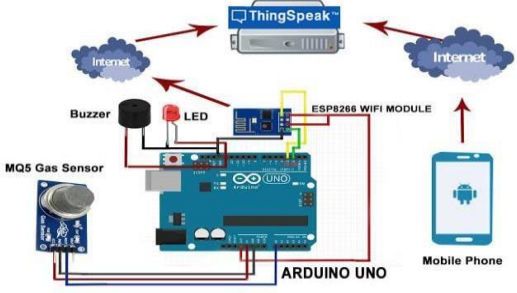
Project Design Phase-I
Proposed Solution Template

Team ID	PNT2022TMID49734
Project Name	Gas leakage alerting and monitoring system
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S. No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	To detect the gas leakage to alert the user through notification
2.	Idea / Solution description	In order to have a control over such conditions we proposed system that uses sensors which is capable of detecting the gases such as CO ₂ , CO and CH ₄ (Methane). This system will not only able to detect the leakage of gas but also alerting through audible alarms.
3.	Novelty / Uniqueness	<ul style="list-style-type: none">• Ability to predict the hazardous situation• Low cost• It will monitor Methane Gas Leakage
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none">• This model is vital for the society as there are lot of people unable to detect the gas leakage prior the fire accident.• We used the IoT technology to make a Gas Leakage Detector for society which having an Alerting techniques involving sending text message to the concerned authority and an ability performing data analytics on sensor readings.

5.	Business Model (Revenue Model)	 <p>The diagram illustrates a smart gas detection system. At the center is an Arduino Uno microcontroller board. It is connected to several components: an MQ5 Gas Sensor for detecting gas levels, a Buzzer for audible alerts, and an LED for visual indication. An ESP8266 WiFi Module is also connected to the Arduino. The system is connected to the Internet via a router and a Mobile Phone, which is also connected to a ThingSpeak cloud service for data logging and remote monitoring.</p>
6.	Scalability of the Solution	<p>Develop a proposed system which include some safety factors. If there is no motion detection, the doors will lock automatically.</p>