Project Design Phase-I
Solution Architecture

Date	15.10.2022
Team ID	PNT2022TMID09820
Project Name	Gas Leakage Monitoring and Alerting System using IoT
Maximum Marks	4 Marks

Solution Architecture:

- Safety for all must be insured in today's world and it is necessary that efficient and proactive safety systems should be implemented in public places and households.

- The main objective of this IOT based work is designing micro-controller based toxic gas detecting and alerting system.

- The hazardous gases like LPG and propane were sensed.

- If the hazardous gases exceed the normal level then an alarm is triggered immediately at the incident place.

- An alert message (i.e. Push Notification) is sent to the authorized person through the INTERNET with the help of used **ESP8266 module** incorporating **IoT device.**

- The advantage of this IOT based automated detection and alerting system over the manual method is that it provide **real time response** and accurate detection of an emergency and in turn leading faster control over the critical situation.

- Hardware Required for IOT based Project are :
  1) Arduino Uno
  2) ESP8266 Wifi Module
  3) Jumper Wires
  4) LED
  5) Buzzer
- Steps for Creating IOT based Project:
  1)Hardware Connection.
  2)Configuring Iota Cloud foruploading Sensor Values.
  3)Make changes to Code & Upload.
  4)Posting to Pushbullet via Iot cloud.
  5)Getting push Notification on Android.

Example - Solution Architecture Diagram:

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