Ideation Phase
Ideation Solution

Team ID	PNT2022TMID18536
Project Name	Gas leakage alerting and monitoring system

- There have been many incidents like explosions and fire due to LPG gas leakage.
- Such incidents can cause dangerous effects if the leakage is not detected at an early stage.
- Arduino and IOT based LPG leakage detection system is a project which will help in determining gas leakage in the surrounding and send data to an IOT module.
- We can sense the leakage using gas sensor, when the leakage is detected location will be shared through application which is used to prevent from various dangers.
- Internet of Things (IoT) is the networking of 'things' by which physical things can communicate with the help of sensors, electronics, software, and connectivity.
- These systems do not require any human interaction and same is the case with IOT based gas detection system.
- It does not require human attention.
- In the proposed system, the sensor which is used to sense many gases is MQ-2 sensor.
- After the detection of leakage in the gas, the sensor sends the signal to the Arduino UNO for the further process where other hardware components are connected to each other.
- Through Arduino UNO, it sends the signal to the LCD display for displaying the alert message as GAS Detected, accordingly, the buzzer be on so that the surrounding people will the alerted.
- When the gas/air level in a room exceeds 50, the detection system's buzzer and servo motor will be activated.