GAS LEAKAGE & ALERTING SYSTEM FOR INDUSTRIES

TEAM ID: **PNT2022TMID05347**

This project helps the industries in monitoring the emission of harmful gases

In several areas, the gas sensors will be integrated to monitor the gas leakage

If in any area gas leakage is detected the admins will be notified along with the location

In the web application, admins can view the sensor parameters.

1.DEFINE YOUR PROBLEM STATEMENT

Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

⏱ 5 minutes

PROBLEM STATEMENT

Domestically we use natural gas and it is very useful for burning purposes. If this gas is leaked in our kitchens, offices or factories and not sensed in time, it may lead to a fatal disaster, and may cause human loss. For this purpose, we came forward with an idea of making such an electronic device to sense that leakage and alarm the respective persons to solve that leakage problem and save assets and human lives.

Key rules of brainstorming

To run a smooth and productive session

Stay in topic.

Encourage wild ideas.

Defer judgment.

Listen to others.

If possible, be visual.

2.BRAINSTORM:

Write down any ideas that come to mind that address your problem statement.

SRI RAM S

Monitor the amount of gases in our environment.	Response times are in the order 1 second.	Can easily be conformed to be 'Intrinsically Safe'
Because of the internal reference cell, the system is self calibrating.	Only one gas can be measured with each instrument.	Reliable technology.

YOGESWARAN k

Prevent free hazards and explosions	Supervise gas concentration levels	Ensure worker's health
Real-time updates about leakages	Costeffective installation	Data analytics for improved decisions

SURYA S

Highest accuracy and repeatability	extended battery life and long life sensors enable low maintenance.	Easy of use with one-button operation and present alarm levels
Low sensor drift,	Easy to maintain. Servicing and calibration options.	Robust designs to withstand harsh and rugged environments, with dust filters and high resistance to Radio frequency Interference (RFI).

SWETHAA K

Inbuilt data and event logging capabilities reduce burden on plant controllers.	Preventing potentially explosive atmospheres	Simple, measures flammability of gases Low cost proven technology
Less sensitive to calibration errors.	Uses a physical rather than chemical technique.	Avoiding effective ignition sources

IDEAS:

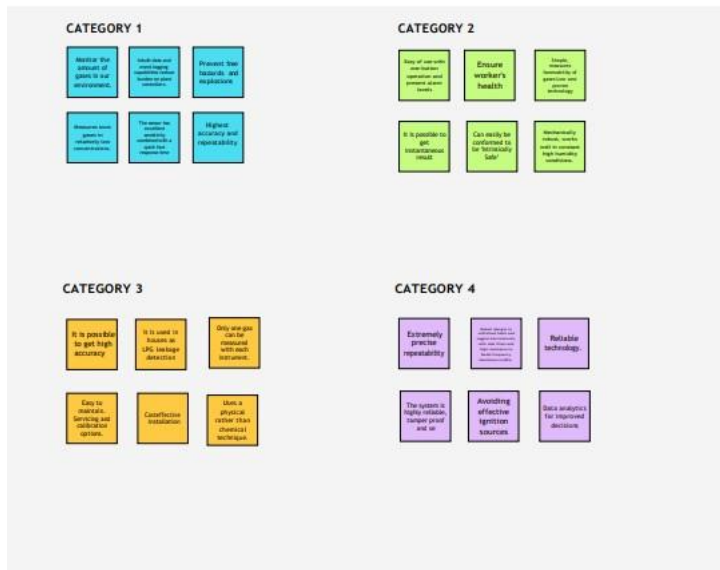|		
The sensor has excellent sensitivity combined with a quick fast response time	It also detects alcohol so it is used as liquor tester	It is possible to get instantaneous result
Extremely FAST RESPONSE time on changing parameters	It is possible to get high accuracy	Extremely precise repeatability

3.GROUP IDEAS:

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

⏱ 20 minutes

4.PRIORITIZE: