Ideation Phase Brainstorm & Idea Prioritization Template

Date	19 September 2022
Team ID	PNT2022TMID47486
Project Name	Gas leakage monitoring and alerting system for industries
Maximum Marks	4 Marks



Brainstorm & idea prioritization

TEAM ID : PNT2022TMID47483 PROJECT NAME: Gas leakage monitoring and alerting system for industries

10 minutes to prepare

1 hour to collaborate

2-8 people recommended



Define your problem statement

How to overcome the gas leakage in industries by controlling and monitoring?

① 5 minutes

PROBLEM

Gas leakage monitoring and alerting system for industries?





Pooja Lakshmi T A

(910019106030)

Alarm can be placed for alerting the workers to move out safely

Sensors like MQ3(CO), MQ131(Ozone), MQ137(NH4), MQ136(Sulphide gas) and MQ9 can be used for detecting the toxic gases

Sensors like MQ3(Alcohol), MQ5(Hydrogen LPG, Methane) can be used for detecting the gas leakage

Instead of blind alarm, a speaker can be placed so that it indicates which gas is leaking

Sheeba Lourdes Angeline H (910019106038)

gas leakage and fire accidents, a notification car begiven to the fire station and hospital through software application When gas gets leaked, a notification can be passed to hospital

Level of gas in the industry can be informed through speakers periodically Sensor can be placed in the entrance for counting the workers who have been moved out in case of emergency

Thirunavukarasu M

(910019106046)

Sensor can be placed in the entrance for counting the workers who

entrance for counting the workers who have been moved out in case of fire accidents

fan can be
placed to
spread air, so
that the gas
gets oxidized
and causes
less damages

For internal gas leakages from the machines or turbines in the process manufacturing, we can place these sensors in the machines so that it detects and alerts the workers

Automatically doors and windows should be closed if gas leaks

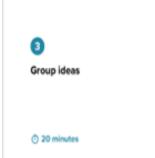
Venkatesh T

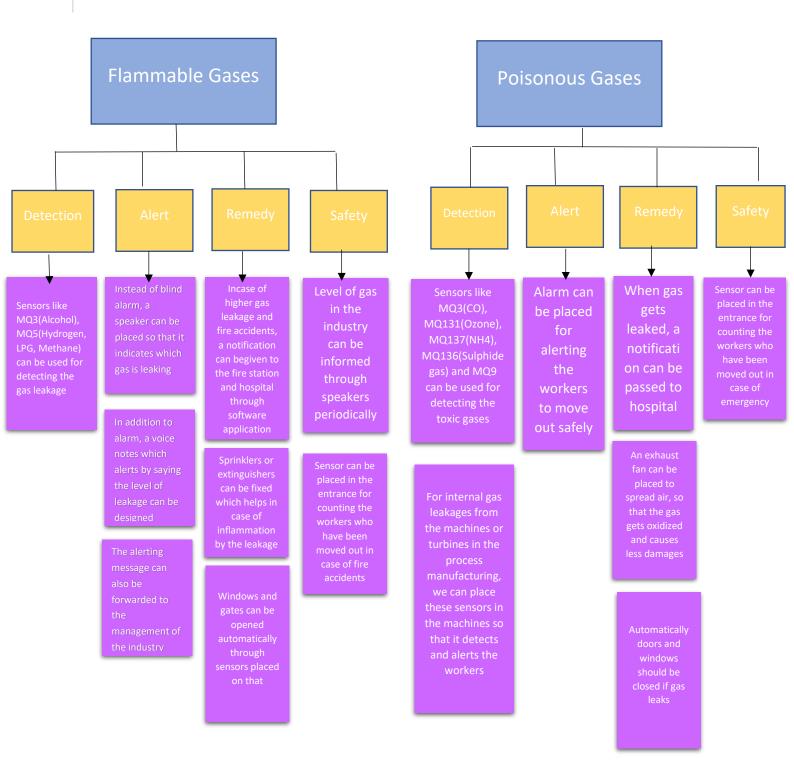
(910019106301)

alarm, a voice notes which alerts by saying the level of leakage can be designed The alerting message can also be forwarded to the management of

Sprinklers or extinguishers can be fixed which helps in case of inflammation

gates can be opened automatically through sensors placed on that

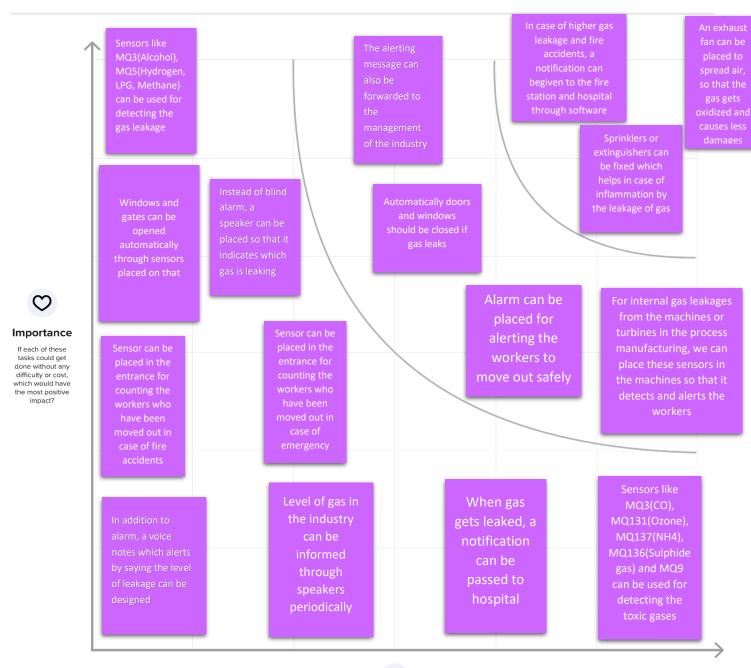






Prioritize

() 20 minutes





Feasibility

Regardless of their importance, which tasks are more feasible than others? (Cost, time, effort, complexity, etc.)