Ideation Phase
Brainstorm & Idea Prioritization Template

Date	19 September 2022
Team ID	PNT2022TMID04334
Project Name	Gas leakage monitoring and alerting system for industries
Maximum Marks	4 Marks

Step-1: Team Gathering, Collaboration and Select the Problem Statement

Step-2: Brainstorm, Idea Listing and Grouping

2

Brainstorm

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

🕐 **10 minutes**

Harish M

Diffculty in sensing small amount of gas leakage	Alerting the workers and preventing accidents
Proper Maintanance	Ability to dectect wide range of gases
Alerting through sound Alarm	Ignitions and Explosion

Bharani S

Alerting through Messages	Proper maintenance Gaslines
Safety Measures	Prevention of Explosion
Proper precaution methods should be maintained	Using IOT devices leakage of gas can be detected

Gomanishwaran S

Supply of gas should be monitered	Frequent monitering of data
recognition of particular gas	Alerting based on Toxicity
Frequent check for gas leakage	Data can be shared through Cloud

Bharani Dharan M

chances of failure	precautions should be taken
Complexities in detection	24/7 monitering
chances in failure of sensor	coverage of sensors

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**

Requirements		Caution	
	Sensors		Alerting through Sound Alarm
	Alarms		Alert by sending Messages
	Transmitters		Detecting Gas leak and give a buzzer sound

Maintenance		Actions	
	Frequent Checks		prevent Accidents
	PreSafty Measures		Avoid life losses
	Good equipments		Safety of Productions
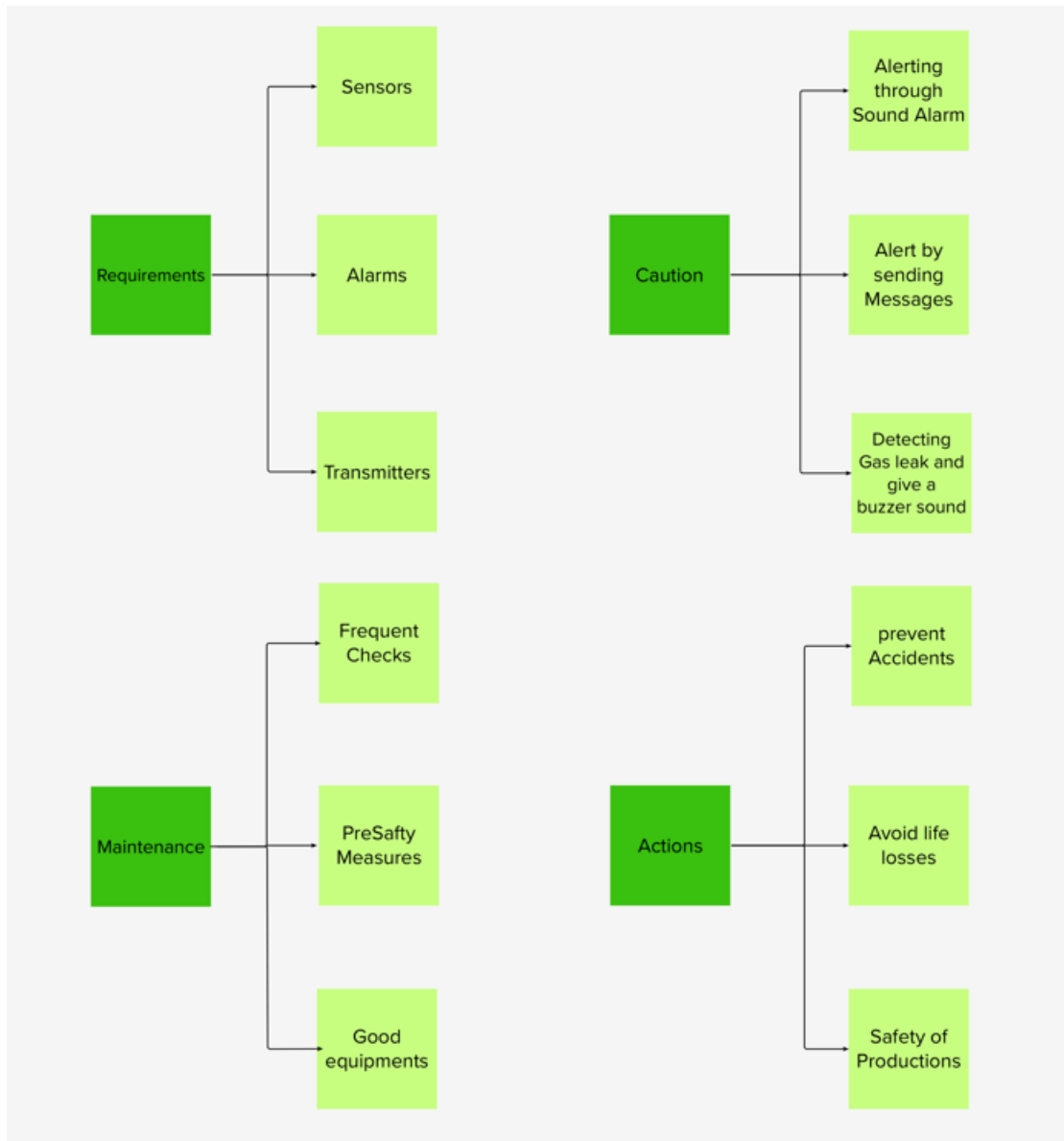
Step-3: Idea Prioritization

4

Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

⏱ 20 minutes

Importance

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

Feasibility

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

Recognition of particular gas

Preventing Explosions

prevent Accidents

Proper Sensors

Alert through messages

Alerting based on toxicity

Able to operate in real time

Regular Monitoring

safety Measures

Monitoring gas supplies

proper Maintenance

TIP

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H key** on the keyboard.

Collecting data for improvement