

Ideation Phase

Brainstorm & Idea Prioritization Template


Date	19 September 2022
Team ID	PNT2022TMID52232
Project Name	Gas Leakage Monitoring and Alerting System
Maximum Marks	4 Marks

Brainstorm & Idea Prioritization Template:

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

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

Template




Brainstorm & idea prioritization

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

- 10 minutes to prepare
- 1 hour to collaborate
- 2-8 people recommended

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Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

10 minutes

A

Team gathering

Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B

Set the goal

Think about the problem you'll be focusing on solving in the brainstorming session.

C

Learn how to use the facilitation tools

Use the Facilitation Superpowers to run a happy and productive session.

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1


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

How might we [your problem statement]?



Key rules of brainstorming

To run an smooth and productive session:

- Stay in topic.
- Encourage wild ideas.
- Defer judgment.
- Listen to others.
- Go for volume.
- If possible, be visual.

Step-2: Brainstorm, Idea Listing and Grouping

2 Brainstorm

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

10 minutes

Manish T

- Device must be capable of working in all environments.
- Data should be made available only to the authenticated users.
- Log must be maintained for monitoring the users who have accessed the data.

Mohammad Umar M

- Messaging service should be made available.
- Latency in delivering the message should be minimal.

Athinarayanan B

- Network must be available at all times.
- Product should be made of high-quality materials.
- Small amount of gas should be enough to detect.
- Wide range of gases should be detected.
- Cost of sensor should be economical.
- Ease of installation and maintenance.

Anto Nidhish M

- Ease of Mobility.
- The proposed system must be affordable.
- Secure communication via Internet.
- Rate of detection must be high.

Arun Priyan

- Constant power source should be available.
- Backup power should be readily available in case of emergency.
- Backup data should be made available.
- Accuracy of detection must be high.

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 can break it up into smaller sub-groups.

20 minutes

Environment

- Device must be capable of working in all environments.
- Constant power source should be available.
- Ease of Mobility.
- Backup power should be readily available in case of emergency.

Authentication

- Data should be made available only to the authenticated users.
- Modifications on device configurations can only be done by an authenticated user.

Data

- Log must be maintained for monitoring the users who have accessed the data.
- Messaging service should be made available.
- Backup data should be made available.

Network

- Network must be available at all times.
- Latency in delivering the message should be minimal.
- Secure communication via Internet.

Cost

- Cost of sensor should be economical.
- The proposed system must be affordable.
- Ease of installation and maintenance.

Quality

- Product should be made of high-quality materials.

Performance

- Accuracy of detection must be high.
- Rate of detection must be high.
- Wide range of gases should be detected.
- Small amount of gas should be enough to detect.

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.)