


# Ideation Phase

## Brainstorm & Idea Prioritization

Date	17 September 2022
Team ID	PNT2022TMID35665
Project Name	Industry-specific intelligent fire management system
Maximum Marks	4 Marks

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



## 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

➔

### 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.

[Open article](#) ➔

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**

Fire accidents have become a major hazard to the industries and to many other domestic areas. The Fire should be extinguished as soon as it started



### 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

**TIP**  
You can select a sticky note and hit the pencil icon to start drawing!

#### Sakthi Dasan

- App to monitor the industry or get notified as a fire starts
- Temperature sensor to identify the rapid increase in temperature
- Send alert messages to the authorized persons in case of fire
- Turn on water sprinkler as soon as fire is detected

#### Jagadish

- Flame sensor to instantly detect the fire
- IBM cloud services to make the system efficient
- SMS alert to the people for awareness of fire incident
- automatically on the fans when gas is detected

#### Niranjaan

- Gas sensor for detection of gas leakage
- water level sensor on the sprinklers
- Set manual threshold values for each sensor
- user must be able to monitor the location remotely

#### Abinesh

- Humidity Sensor to check humidity
- Automatically detect defect in the sprinklers and report to authorized person
- Set manual threshold type for different region of industrial
- Usage of system and adjusting value according to the location of industry

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

#### Apps Related

- App to monitor all sensor value from any where in the world
- Set manual threshold value to each sensor
- Set manual threshold values to industry according to the location
- Send alert messages to the authorized person on fire accident
- Admin must be able to remotely turn off the sprinkler whenever needed

#### Fire and Industry Related

- Detection of Fire using Flame sensor
- Turn on sprinkler on detection of Fire
- Detection of explosive gases like methane, ethane etc
- Detection of Gas with gas sensor and turning on the exhaust fans
- Monitoring of temperature rise in case of Fire
- Regular Monitoring of humidity according to the industry location

#### Set up and Expansion

- The Fire management system will be expanded by integrating thermal cameras
- The set and working of the application must be educated to the handling person
- Instant message to the user by fire station for immediate action

#### Other Sensor

- Temperature Sensor for constant monitoring of temperature rise
- Flame sensor based on IR used to detect the flame
- Gas Sensor to detect the explosive gases
- Humidity Sensor to adjust the values according to the location of the industry

## 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

