

Ideation Phase

Brainstorm & Idea Prioritization Template

Date	07 October 2023
Team ID	PNT2022TMID21245
Project Name	Industry-specific intelligent fire management system
Maximum marks	4 marks

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

As per the rules of the template we have done the following as first step:

- Team Gathering
- Collaboration
- Identified the problem statement

1. Define your problem statement:

Design of intelligent fire management system that generates alerts regarding the fire accidents:

- Due to sudden occurrences of fire accidents at the industries, without any fire managements system we may face loss of life and property.
- The problem will affect the industry workers.
- When sudden fire accidents break out in industries the problem occurs.



Step-2: Brainstorm, Idea Listing and Grouping

As per the rules of the template we have done the following as second step:

- Brainstorming
- Grouping ideas

2.Brainstorming

Person1 (Bhagyalakshmi T)

- A voice alert system that announces danger with a pre-recorded message.

Person 3 (Lakshmi sree S)

- A central alarm system where all the detectors can be connected to a central controller and send the signal directly to this controller.

- An IOT Based system with arduino(microcontroller),smoke sensor and temperature sensor to monitor the temperature and gas levels.

Person 2 (Harsini A.M)

- Remote monitoring: cloud uploading of information can be set up to offer alarms on-site to collect sensor details.

Person 4 (Madhumitha P.R)

3.Grouping ideas:

By grouping the ideas of the team members, we have proposed a solution to the problem.

- The smart fire management system includes a Gas sensor, Flame sensor and temperature sensors to detect any changes in the environment.
- Based on the temperature readings and if any Gases are present the exhaust fans are powered ON.
- If any flame is detected the sprinklers will be switched on automatically.
- Emergency alerts are notified to the authorities and Fire station.

Step-3: Idea Prioritization

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