Ideation Phase
Brainstorm & Idea Prioritization
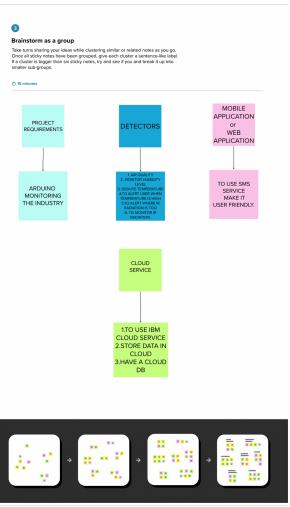
Date	22 OCTOBER 2022
Team ID	PNT2022TMID20612
Project Name	Hazardous Area Monitoring For Industrial Plant Powered By IoT
Maximum Marks	4 Marks

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

BRAINSTORM

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 are not sitting in the same room.

🕐 **15 minutes** to prepare
⧗ **1 hour** to collaborate
👤 **3-5 people** recommended

Need some inspiration?
See a finished version of this template to kickstart your work.

Open example →

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 will be focusing on solving in the brainstorming session.

C **Learn how to use the tools**

Use the tool to run a happy and productive session.

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

🕐 10 minutes

Hazardous Area Monitoring for industrial Plant powered by Iot

In this project, we create an IoT based hazard monitoring system specifically suited to requirements of mining, refining and manufacturing industries.

The system actively records, processes and analyzes the temperature of surroundings, which is a prime safety parameter in areas where molten metal is processed, manufacturing is done or welds are made

In hazardous Area, lots of accidents like explosion due to sudden increase of temperature and workers death due increase level of toxic gases etc. In this project we are going to give the solution for the problem

Step-2: Brainstorm, Idea Listing and Grouping

2

Brainstorm solo

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

⏱ 10 minutes

SWETHA S

Using Temperature Sensor to Monitor Temperature

To create IoT project using Arduino

To check Air Quality

VAISHNAVI K R

Workers need to wear a temperature sensor with band

continuously monitoring the workers temperature also

VENGATALAKSHMI B

Using Bluetooth based Sensor Monitoring in Industrial Iot Plants

Using Temperature Sensor to Monitor Temperature

To make it User Friendly

VISHALINI V

IoT typically requires a local, low power wireless communication to acquires data from sensor devices and local gateway that is connected to internet for local or remote monitoring and controm

Have a Cloud DB to store data

VISHWA PRIYA R V

Sensor-cloud handles sensor data efficiently

To Alert when there is high IR radiation

To monitor Humidity Level

Create web or mobile app Alert through SMS..

To use IBM CLOUD SERVICES

3

Brainstorm as a group

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.

⏱ 15 minutes

PROJECT REQUIREMENTS

DETECTORS

MOBILE APPLICATION or WEB APPLICATION

ARDUINO MONITORING THE INDUSTRY

1. AIR QUALITY
2. MONITOR HUMIDITY LEVEL
3. DEDUTE TEMPERATURE
4.TO ALERT USER WHEN TEMPERATURE IS HIGH
5.TO ALERT WHERE IR RADIATION IS TOO
6. TO MONITOR IR RADIATION.

TO USE SMS SERVICE MAKE IT USER FRIENDLY.

CLOUD SERVICE

1.TO USE IBM CLOUD SERVICE
2.STORE DATA IN CLOUD
3.HAVE A CLOUD DB

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?

LEARN ABOUT SENSORS

TO USE IBM CLOUD SERVICES

TO CHECK AIR QUALITY

MAKING SMART BEACONS

TO ALTER USER WHEN TEMPERATURE IS HIGH

TO MONITOR HUMIDITY LEVEL

TO CREATE IOT PROJECT USING ARDIUNO

TO CREATE MOBILE APP

HAVE A CLOUD DB

TO CREATE WEB APP

LEARN NEW SKILL

TO MONITOR IR

TO USE SMS

⚑ **Feasibility**

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

➔

After you collaborate

You can export the mural as an image or pdf to share with members of your company who might find it helpful.

Quick add-ons

Ⓐ **Share the mural**
Share a view link to the mural with stakeholders t keep them in the loop about the outcomes of the session

Ⓑ **Export the mural**
Export a copy of mural as PNG or PDF to attach to emails,including in slides , or save in drives.

Keep moving forward

Strategy blueprint
Define the components of new idea or strategy.

Open the template →

Customer experience journey map
Understand customer needs, motivations and obstacles for an experience.

Open the template →

Strengths,weakness,opportunities & threats
Identify strengths, weaknesses,opportunities and threats(SWOT) to develop a plan.

Open the template →