


# Ideation Phase

## Brainstorm & Idea Prioritization Template

Date	17 September 2022
Team ID	PNT2022TMID46169
Project Name	IOT BASED SAFETY GADGET FOR CHILD MONITORING AND NOTIFICATION
Maximum Marks	4 Marks

### 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



### 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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### 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 STATEMENT

The main issues nowadays are children trafficking. Parental care is majorly missing since both of them are working. Child Health condition has to be taken care and to solve these problems this child safety monitoring and notification came into account. Child tracker helps the parents in continuously monitoring the child's location. They can simply leave their children in school or parks and create a geo fence around the particular location. By continuously checking the child's location notifications will be generated if the child crosses the geo fence. Notifications will be sent according to the child's location to their parents or caretakers. The entire location data will be stored in the database.



### Key rules of brainstorming

To run a 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

**R.MADHAN DEEPAK**

Now-a-days attacks on children are increasing at an unprecedented rate where they are not allowed to contact the family members

The key idea planned in this research work is an advanced technology that offers "Smart Child Safety" for the children.

Therefore, the awareness of this method is to send an SMS from children's wear device to their parent or guardian

Thus, the proposed method will be highly effective when compared to the other existing techniques

In the existing structure there is no monitoring method for child. It should create many problems for them and the no protection mechanism to protect the child from the misbehaviour

In addition, there is no aware device for the child's protection

**V.C PRAVEEN**

Therefore, the wearable device implemented in this project will be effectively communicating with the parent via SMS through GSM

This assumes that there is a secure communication along, customisation of the wearable can be provided to cater the needs by reprogramming the system

In future, the wearable devices can be integrated to built on the SOC platform that helps to work more efficiently comparing with now

The wearable device acquires collection of data from the various modules that are connected to it

The latitude and longitude coordinates received are stored in the cloud Database which can be saved for future references

The parent can find out the location of the child by alarm sound in a very loud alarm using this wearable device

**I. STEPHEN HEART**

This project recommends a new, budgeted technology for child protection by using GSM so that the children will not feel discomfort while being with their social partners

The key idea planned in this research work is an advanced technology

Moreover, it doesn't need any manual operation.

The problems experienced have using Arduino UNO, GSM, sensors, MEMS, temperature and pressure by using IOT

The secondary research implemented was using a high 300 light and sensors were housed inside the wearable device which when activated by the sensors via SMS

In such cases, Microsoft Sensor track the best rate for children and sends the emergency message by using the GSM to save contacts

**DHARMARAJ**

This Bluetooth module is a low power module. The major disadvantage for the module is that it requires Bluetooth as the way of communication between parent and the child

Next should display the SOS signal brightly and sound an alarm which a bystander can easily spot as a sign of distress

This utilizes an Arduino system along with a Sensor system and Bluetooth 4.1 module

The project focuses on a smart wearable device used for children. The main benefit of this wearable compared to other wearable is

The main idea of this wearable safety system is to aid the parents in finding their child very easily

Hence this paper aims at providing parents with a sense of security for their child in today's time

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

With this motivation, a smart IoT device for child safety and tracking is developed to help the parents to locate and monitor their children

The system is developed using Linkit ONE board programmed in embedded C

Interfaced with temperature, heart rate, breath sensors and also GPS, GSM & digital camera modules

**TIP** Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

## 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

