## Ideation Phase
## Brainstorm & Idea Prioritization Template

| Date | 22 OCTOBER 2022 |
|---|---|
| Team ID | PNT2022TMID50691 |
| Project Name | IOT Based Safety Gadget for Child Monitoring and Notifications |
| Maximum Marks | 4 Marks |

**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.
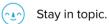
⏱ **5 minutes**

**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.

# 2

## Brainstorm

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

🕐 **10 minutes**

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### VELMURUGAN

Nowadays, crime rate associated with children keeps increasing due to which draws peoples' attention regarding child safety. This research is conducted to propose a child security smart band utilizing IoT technology.

Online questionnaire and semi-structured interview are methodologies used to collect data. The online questionnaire gains feedbacks by sending questions electronically, where answers need to be submitted online. In the semi structured interview, researcher meets and asks respondents some predetermined questions while other being asked are not planned in advanced.

Through information obtained, a smart band have been proposed to monitor the safety of children. By this, parents know what is happening remotely and can take actions if something goes wrong.

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### SIVAMURUGAN G

Throughout the research, it is clearly explained the IoT concept, child safety issues and the need of using child security system. Some previous studies have been included for designing the IoT-based child security smart band.

It assists parents to monitor their children remotely. In case situations happen, notifications will be sent to parents so that actions can be taken. Through this, child safety can be ensured and crime rate will be reduced

Tracking system is used so that the child's location and activities can be tracked and reported to the parent's device. We have used WFPS which means Wi-Fi Positioning System

it does not connect to the internet but takes the signal of the networks around it. It triangulates the signals of the network and shows us the location of the child with latitude and longitude.

### KALI SATHISH N

For implementing the IOT devices which ensures the complete solution for baby safety problems. A new idea to implement an automatic system for baby monitoring to remove the anxiety of the parents.

This project proposes Smart IOT Devices for child safety and tracking helps the guardian/parents to locate and monitor the baby. If any abnormal values are read by the sensors then an SMS is sent to the guardian/parents mobile.

IOT is getting upgraded day by day simultaneously its security is also upgraded. In this proposed system, we are mainly focusing on child remote monitoring system also we are using the radar devices as well as obstacle sensors which will detect the alert when the child enters the danger zone or else he/she is approaching towards harmful object then alert will be given to the caretaker through the mobile using an alarm or notification

For sensing purpose we are using Waterproof Ultrasonic Obstacle Sensor which are placed in the simple locket that is given to the baby so that locket will give alert to the caretaker through the mobile and for battery backup we are using solar panel through which the energy will get stored in the care taker's shoes and this energy will be dependent on the steps covered by the care taker

### MARIYA SAMSON SANDEEP

Enable tracking of the child's location and capturing of data remotely such as temperature, pulse, respiratory rate, quality of sleep and many more.

To show the child's actual data with reference values. Enable sending of notification if the child is out of location or when the device realizes abnormal conditions/situations

To trigger the alarm and enable automatic video recording whenever the emergency button is pressed. Then, emergency notification along with real-time video will be sent to and display in the

Develop a prototype of IoT wearable smart band connected to parents' mobile apps so that they can monitor the actual condition of children at anytime

**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**

## AIM OF THE PROJECT

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**TIP** 💡

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

**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?

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**TIP**

Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H key** on the keyboard.

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