Ideation Phase

Empathize & Discover

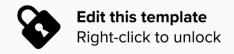| Date	23 September 2022
Team ID	PNT2022TMID17187
Project Name	IoT Based Safety Gadget for Child Safety Monitoring & Notification
Maximum Marks	4 Marks

Empathy Map Canvas:

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes.

It is a useful tool to helps teams better understand their users..

Creating an effective solution requires undersatanding the true problem and the person who is experiencing it.The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.
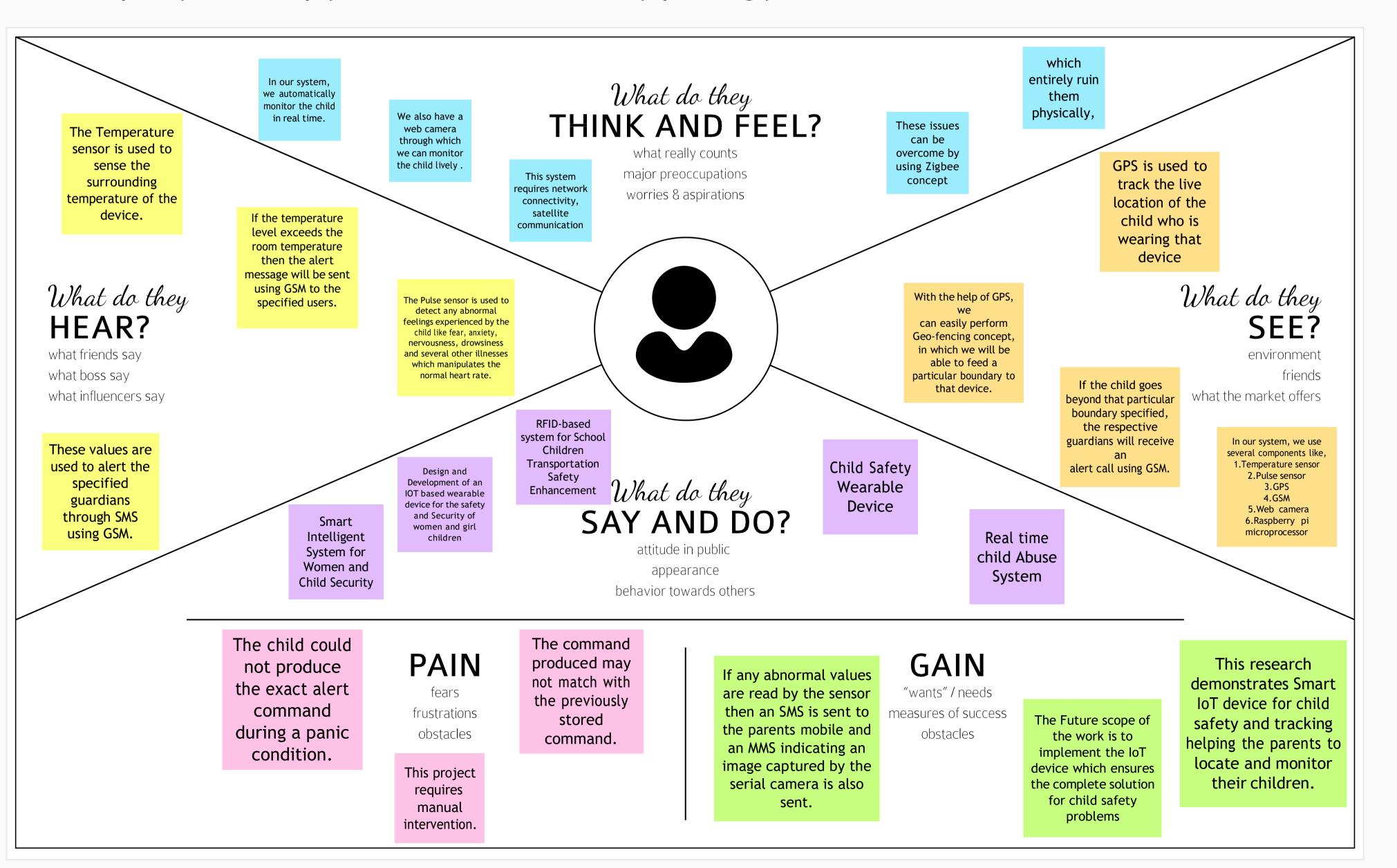
Example:

Empathy Map

Gain insight and understanding on solving customer problems.

1

Build empathy and keep your focus on the user by putting yourself in their shoes.

What do they THINK AND FEEL?
what really counts
major preoccupations
worries & aspirations

In our system, we automatically monitor the child in real time.

We also have a web camera through which we can monitor the child lively.

This system requires network connectivity, satellite communication

These issues can be overcome by using Zigbee concept

which entirely ruin them physically,

GPS is used to track the live location of the child who is wearing that device

What do they HEAR?
what friends say
what boss say
what influencers say

The Temperature sensor is used to sense the surrounding temperature of the device.

If the temperature level exceeds the room temperature then the alert message will be sent using GSM to the specified users.

The Pulse sensor is used to detect any abnormal feelings experienced by the child like fear, anxiety, nervousness, drowsiness and several other illnesses which manipulates the normal heart rate.

These values are used to alert the specified guardians through SMS using GSM.

With the help of GPS, we can easily perform Geo-fencing concept, in which we will be able to feed a particular boundary to that device.

If the child goes beyond that particular boundary specified, the respective guardians will receive an alert call using GSM.

What do they SEE?
environment
friends
what the market offers

In our system, we use several components like,
1.Temperature sensor
2.Pulse sensor
3.GPS
4.GSM
5.Web camera
6.Raspberry pi microprocessor

What do they SAY AND DO?
attitude in public
appearance
behavior towards others

RFID-based system for School Children Transportation Safety Enhancement

Design and Development of an IOT based wearable device for the safety and Security of women and girl children

Smart Intelligent System for Women and Child Security

Child Safety Wearable Device

Real time child Abuse System

PAIN
fears
frustrations
obstacles

The child could not produce the exact alert command during a panic condition.

The command produced may not match with the previously stored command.

This project requires manual intervention.

GAIN
"wants" / needs
measures of success
obstacles

If any abnormal values are read by the sensor then an SMS is sent to the parents mobile and an MMS indicating an image captured by the serial camera is also sent.

The Future scope of the work is to implement the IoT device which ensures the complete solution for child safety problems

This research demonstrates Smart IoT device for child safety and tracking helping the parents to locate and monitor their children.

Reference:

https://www.mural.co/templates/empathy-map-canvas