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1.INTRODUCTION

1.1 PROJECT OVERVIEW:

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 geofence around the particular location. By continuously checking the child's location notifications will be generated if the child crosses the geofence. 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. The internet of things (IoT) refers to the set of devices and system that stay interconnected with real-world sensor and to the internet. During years' Child safety is under threat and it is very important to provide a technology-based solution which will help them under panic situations and monitor them using a smart gadget. The proposed system is equipped with GSM and GPS modules for sending and receiving call and SMS between safety gadget and parental phone, the proposed system also consists of Wi-Fi module used to implement IoT and send all the monitoring parameters to the cloud for android app monitoring on parental phone. Android application can be used to track the current location of safety gadget using its location coordinates on parental phone android app and also via SMS request from parent phone to safety gadget. Panic alert system is used during panic situations and automatic SMS alert and phone call is triggered from safety gadget to the parental phone seeking for help and also monitored for plu/g and unplug from hand, as soon the gadget is unplugged from hand a SMS is triggered to parental phone and the alert parameter is also updated to the cloud. the overall percentage of child abasements worldwide is about 80% nowadays, out of which 74% are girls and the remaining are boys. For every 40 seconds, a child is gone missing in the world. Due to that, parents are worried for their children and perhaps, a hard challenge for them to guarantee safety of their children when they are out.

1.2 PURPOSE:

The aim of this device is to provide safety to the child by allowing the parent to locate the child and view their surroundings. This device can be used to monitor the temperature and motion of the child. If any problem persists, the GSM mobile communication module automatically sends a text message to the parent as SMS. The other features of the device

are emergency light and alarm buzzer which are activated when the button is pressed by the child in a distress situation to seek the attention of the bystanders. The accelerometer and vibration sensors are used to detect the motion of the child. The camera is used to capture the environment of the child. The image taken is processed using convolutional neural network (CNN) which predicts the background like play area, railway station, beach, road, or classroom. The GPS module is used to record current location of the device which is used to track the device if the child is missing. Hence, this device provides a security cover to the child in today's time. Reduces the likelihood of a child entering into an unsafe situation. Clearly demonstrates how to respond to an unsafe situation. Increases a child's sense of confidence and in doing so increases their resiliency. The main benefit of this wearable compared to other wearable is that it can be used in any of smart mobile phones and does not need a very costly mobile phone and not a highly technical human. The main idea of this wearable safety system is to aid the parents in finding their child very easily. In the current scenario, there are lot of wear able that monitors the routine behavior and activities of children and also help to find the child using Wireless Fidelity (Wi-Fi) and Bluetooth services that are available on the device. But both of them seems to be an unsecured communication in between the parent and the child. Therefore, the objective of this paper is SMS (Short message service) text enabled link in between the child's wearable and the respective parent. The main idea for achieving this is Global System of Mobile Communication (GSM). The parent has to send a text message in the form of SMS using words like "Temperature", "SOS", "Location", "Buzz" etc., to the wearable system. The wearable device sends an acknowledgement in the form of a text showing the location of the child and will provide the atmospheric temperature, so that the parents can have a track if the temperature does not suit the child. The next measure that can be taken is by using a SOS Light that is bright. Distress alarm buzzer present on the wearable device can also be activated by the parents through SMS text to display the SOS signal very clearly and rings an alarm which the nearby public can immediately react to the safety of the child till the parents come or they can try to reach he parents and assist in locating the child.

2.LITERATURE SURVEY

2.1 EXISTING PROBLEM:

Child safety itself goes further than some might conceive, encompassing the prevention of all types of injury: physical, emotional and psychological as well as interventions to promote resilience to harm. We believe child safety is a ‘call to action’ to paediatricians, government and society in general to advocate for children who remain vulnerable and often voiceless. We have chosen to take a narrative approach examining one particular case and have identified different preventable safety issues that occurred throughout her childhood. Acknowledging that early events have an impact later in the life course, we emphasise the importance of prompt early intervention and reflect on ‘missed’ opportunities for action. In particular, we have tried to use a holistic lens to view the case, exploring issues in the system around the child, in their family, school and the wider environment. In exploring the solutions to these issues, we look at three key areas (the 3 R approach): firstly, effective communication between professionals (relationships) and how this might be practically facilitated at ground level; secondly, how to best ensure protocols (roadmaps) are followed wisely within an organisational and human behaviours framework; and finally, by putting the child at the centre (recognition), we can address the multiple issues affecting them and identify factors that build his/her own resilience. Child safety is a complex far reaching public health priority, which requires holistic ways of identifying safety issues, as well as practical solutions that support professionals and empower children and their families.

2.2 REFERENCES:

- M Nandini Priyanka, S Murugan, K. N. H. Srinivas, T. D. S Sarveswararao, E. Kusuma Kumari, ‘Smart IoT Device for Child Safety and Tracking’ International Journal of Innovative Technology and Exploring Engineering, Volume 8, Issue 8, June 2019.
- Anwaar Al-Lawati, Shaikha Al-Jahdhami, ‘RFID-based System for School Children Transportation Safety Enhancement’, Proceedings of the 8th IEEE GCC Conference and Exhibition, Muscat, Oman, 1-4 February 2015
- Anand Jatti, Madhvi Kannan, Alisha, RM Vijayalakshmi, P Shrestha Sinha (May 20-21, 2016), ‘Design and Development of an IoT based wearable device

for the Safety and Security of women and girl children'IEEE International Conference on Recent Trends in Electronics Information Communication Technology, India, pp. 1108-1112.

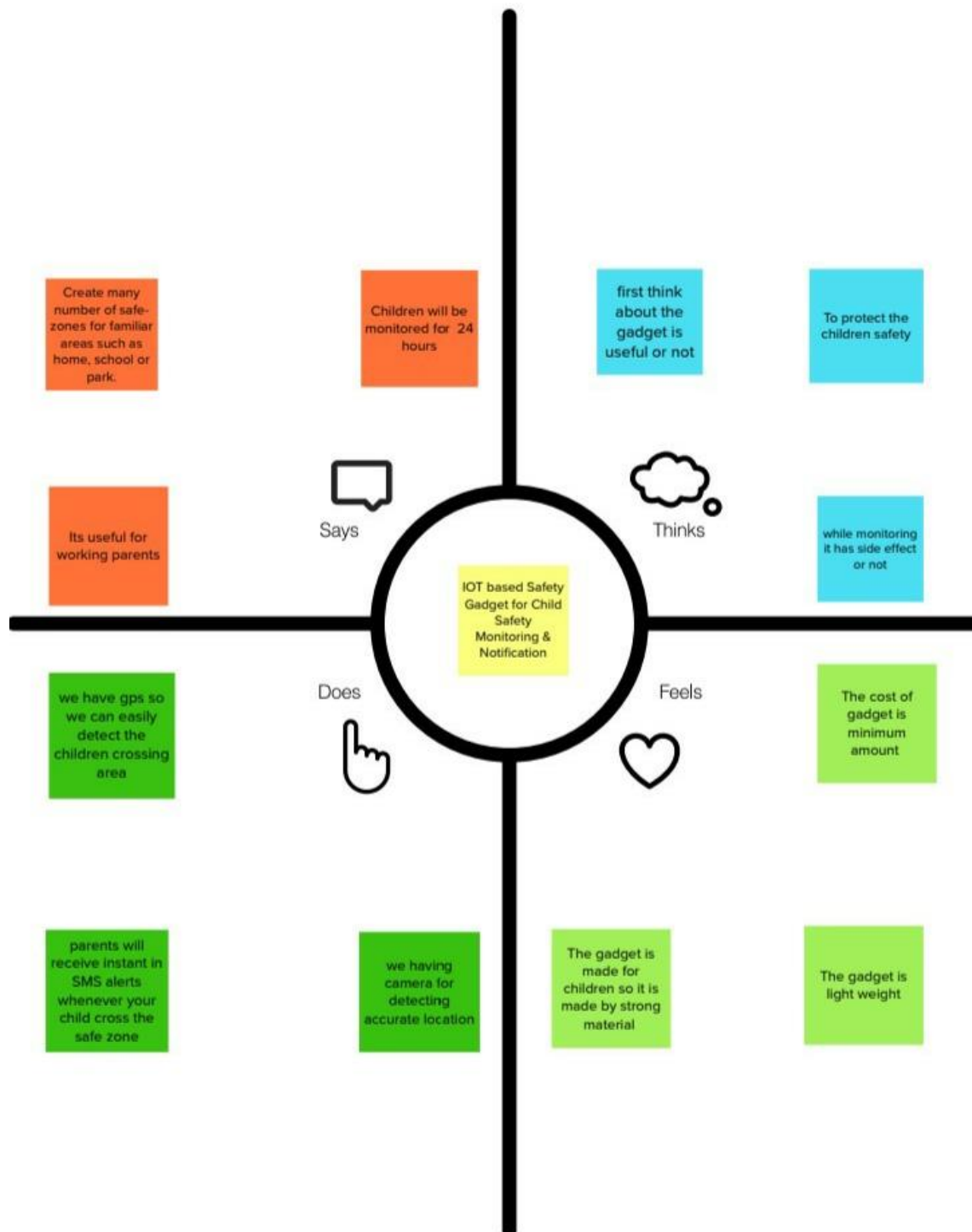
- Arun Francis G, Janani I, Kavya S and Ramiyadevi K. Child Safety Wearable Device Using Raspberry Pi. Waffan-UND Kostumkunde Journal. 11(2). 2020. pp.135-137.
- A. Helen, Kalaiselvi V.K.G, M. Fathima Fathila and R. Rijwana. A smart watch for women security based on iot concept 'watch me', International Conference on Computing and Communications Technologies (ICCCT). 2017

2.3 PROBLEM STATEMENT DEFINITION:

More families are now spending time on work and social duties, hence away from their children. This causes increased concerns towards their safety and whereabouts, and has made keeping a track of their activities quite challenging. Crimes against children are increasing Year on Year. According to a study, roughly 60,000 children go missing in India every year . There is an assumption that every 10 minutes, a child goes missing. Mumbai and Delhi have the highest rate when compared to other metro cities. With the lack of availability of affordable child monitoring systems it is hard to monitor the whereabouts of Children . Safety of children is very critical since children cannot protect themselves. A momentary lack in parental supervision should be combated with an appropriate IT solution in context .Therefore, it is necessary for the proposed system to alert the parents when the child walks too far away and/or outside the “circle of safety” when they are away .In case of an emergency, or in a situation of panic, the child must be able to communicate with their parents. This can be done via live transmission of audio from the device with the child, to the parent’s device. If in case the child does go missing or has a fall, the aid of technology can increase efficiency and decrease the time necessary to locate and reach the child. The poor performance of family's and school to monitor the children's by Collaboration. The use of manual system to connect family's and there students most of time teachers or other persons are intermediate between the students and family. In our country families and their children have no direct contact in school when they need to contact their children if the families came to school.

3.IDEATION &PROPOSED SOLUTION

3.1 EMPATHY MAP CANVAS:



3.2 IDEATION & BRAINSTORMING:

3.2.1 DEFINE PROBLEM STATEMENT:

Nowadays In the busy world the parents are not monitoring the children activities regularly and health state.

3.2.2 BRAINSTORM:

ANANTHI

- Parents can monitor the children for 24 hours
- Parents will receive instant SMS alerts whenever the child cross the safe zone
- It monitor the children temperature level
- The gadget is made for children so it is made by strong material

KARTHICK

- Track the live location of the children
- Collect the children activities data and store in the cloud for future purpose
- It useful for working parents in their busy scheduling
- The gadgets made for children so it is made by light weight

LOGESHBARANI

- Create many number of safe zone for familiar area such as home school, park
- We having camera for detecting accurate location
- When we press the panic button it will be intimate the parents
- The cost of the gadget is minimum amount

PRASANTH

- To protect the children safety
- In the gadget the battery life has long period
- when the children crossing the safe it intimate the parents

3.2.3 GROUP IDEAS

NOTIFICATION:

- 1) A Panic button it will notifies the parents
- 2) when the children crossing the safe it intimate the parents
- 3) It notifies the lives location

LOCATION TRACKING:

- 1) we are having camera to find the accurate location
- 2) we are having **GPS** to track the live location
- 3) It track the all activities doing by the children

MONITOR:

- 1) It monitor the temperature level
- 2) It monitor the blood pressure
- 3) It monitor the heart beat level

SAFE ZONE:

- 1) We create a safe zone
- 2) Safe zone like school ,park ,home
- 3) When we cross the safe zone it will intimate the parents

DATA:

- 1) We are storing the data in cloud
- 2) The data are safe and secure
- 3) We can use the data for emergency purpose

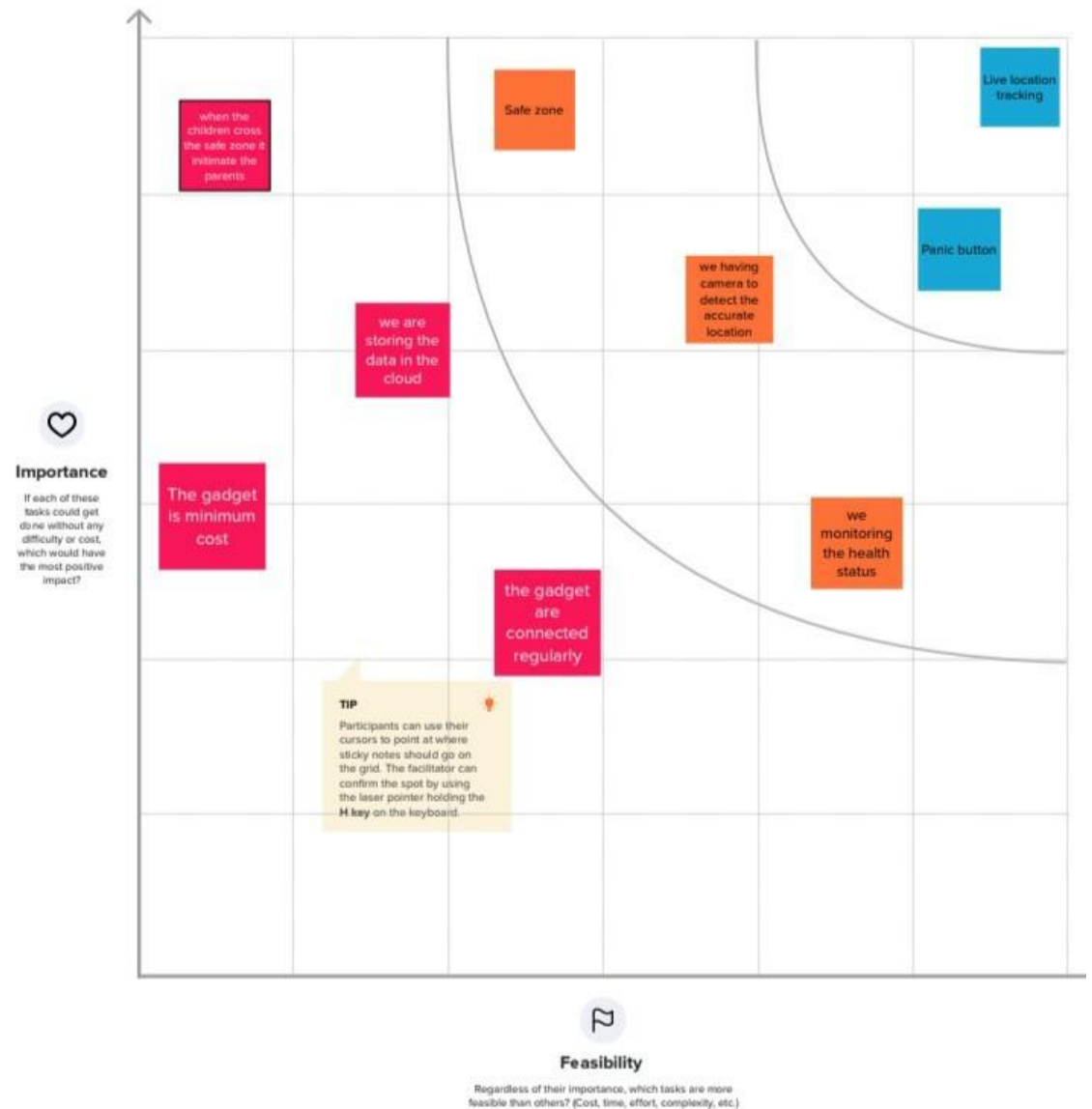
3.2.4 PRIORITIZE:

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



3.3 PROPOSED SOLUTION:

S.NO	PARAMETER	DESCRIPTION
1.	Problem Statement	Now a days due to the digital world, In most of the houses the parents will be going to work. So, they can't monitor their children activity regularly. When the children is missing means we can easily find the location of the children by gps.
2.	Idea / Solution description	For this problem we are create a safe zone around the location of the child to continuously check whether the child is within the range of the safe zone. If the child crosses the range of the safe zone a notification will be automatically generated and The notification of the location of the child will be sent to the parents.
3.	Novelty / Uniqueness	when the children the cross the safe zone the alerts message will be send to the parents and caretakers. We also monitor the health status of the children and intimate to their parents
4.	Social Impact / Customer Satisfaction	when the children the cross the safe zone the alerts message will be send to the parents and caretakers.
5.	Business Model (Revenue Model)	The gadget is easy to use and the cost of the low so all parents can buy the gadgets. Its is weightless for wear by the children. It is comfortable to wear
6.	Scalability of the Solution	Gadget ensure the safety the safety the children. Parents need not worry about their children

3.4 PROBLEM SOLUTION FIT:

Problem-Solution Fit canvas Purpose / Vision TEAM ID: PNT2022TMD32019 Version:

1. CUSTOMER SEGMENT(S) CS Define CS. Fit into CL. parents want to monitor the children activities regularly	6. CUSTOMER LIMITATIONS CL EG. BUDGET, DEVICES 1) have a Mobile phone 2) have the sufficient money	5. AVAILABLE SOLUTIONS AS PROS & CONS They use GSM module to send notification to the parents, so it needs a simcard which needs to be recharged regularly
2. PROBLEMS / PAINS PR + ITS FREQUENCY Focus on PR. Tap into BE, understand BE. People want to monitor the location of the child every time. Parents want to know whether the child is within the location (school premises, house etc)	9. PROBLEM ROOT / CAUSE RC Due to the busy schedule/work for the parents they can't take care of their child	7. BEHAVIOR BE + ITS INTENSITY Focus on BE. Tap into RC, understand RC. The working parents can't concentrate on their work and also can't take care of their children.
3. TRIGGERS TO ACT TR Identify strong TR & EM. Parents want to monitor their children every time, when it is monitor means they feel relax	10. YOUR SOLUTION SL Create a safezone around the location of the child for example around a house or school and send a notification to the parents if the child gets out of the safezone. Tracking the child's location and send the location information to the parents.	8. CHANNELS of BEHAVIOR CH Extract online & offline CH of BE. ONLINE: Through online the customer can lively track the location of the child OFFLINE: In offline mode the customer can see the location the child has went or visited.
4. EMOTIONS EM BEFORE / AFTER Identify strong TR & EM. People do not feel good to buy the product as it is very costly. They feel more relaxed as they monitor their child and can concentrate on their work.		

Problem-Solution Fit canvas is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. Designed by Daria Nesporkina / @daria_nesporkina - we tailor ideas to customer behaviour and increase solution adoption probability.

IdeaHackers .NL

4. REQUIREMENT ANALYSIS:

4.1 FUNCTIONAL REQUIREMENT:

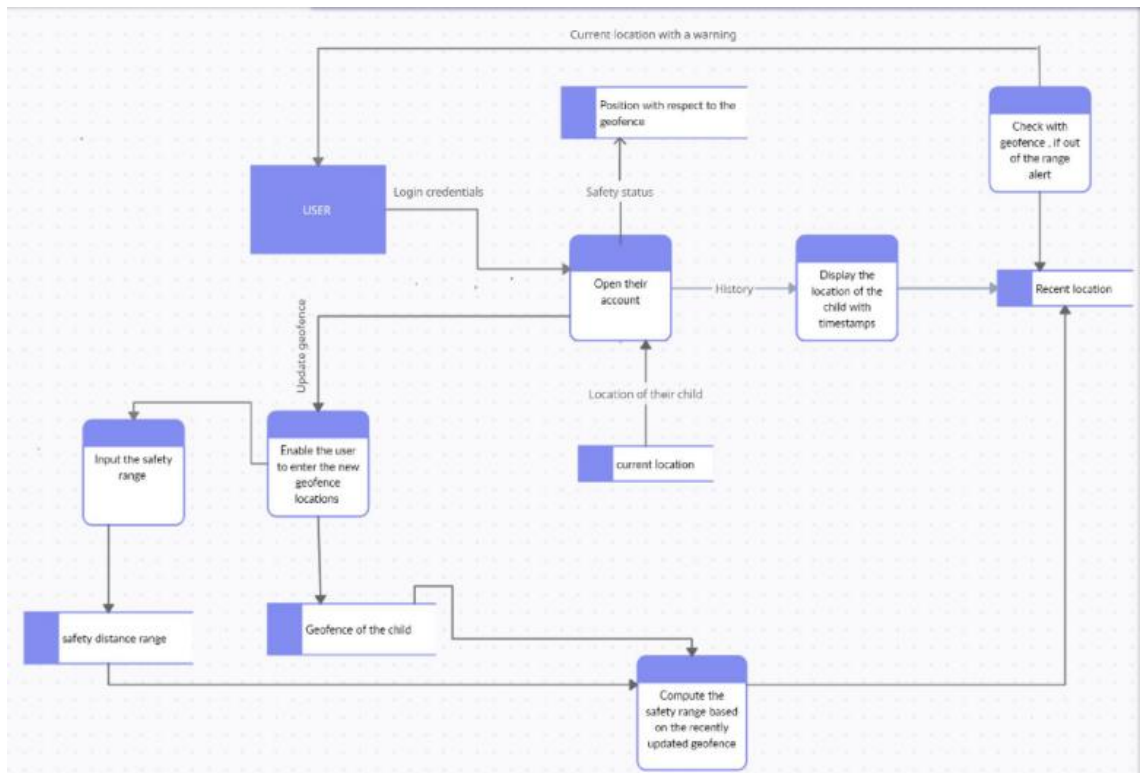
FR NO	FUNCTIONAL REQUIREMENT	SUB-REQUIREMENT (STORY/SUB-TASK)
FR-1	User Registration	Registration through website
FR-2	User Confirmation	Confirmation via Email
FR-3	User login	Setting up User Id and password
FR-4	Interface with the devices	Connecting the device with the registered website with the device ID
FR-5	Setting Geo-location	Creating the Geo-location area in the map
FR-6	Database	Location history is stored in the cloud. Can be accessed from the dashboard.
FR-7	Tracking location	Tracking the location through website.

4.2 NON-FUNCTIONAL REQUIREMENT:

FR NO	NON-FUNCTIONAL REQUIREMENT	DESCRIPTION
NFR-1	Usability	The device and its applications are user-friendly. The device is portable and easy to use
NFR-2	Security	Providing permission for some information can only be decided by the user. Location data can only be viewed by the user.
NFR-3	Reliability	An update will be provided if any errors are found in the device.
NFR-4	Performance	The performance of the device decreases in a network less area. No interference between users. Location tracking will be accurate
NFR-5	Availability	If there is any update then the device won't be able to operate for a amount of time.
NFR-6	Scalability	A single device can be monitored by two users.

5.PROJECT DESIGN:

5.1 DATA FLOW DIAGRAM:



5.2 USER STORIES:

USER TYPE	FUNCTIONAL REQUIREMENT	USER STORY NUMBER	USER STORY, TASK	ACCEPTANCE CRITERIA	Priority
Customer (Mobile user) and (Web user)	Registration	USN-1	As a user, I can register my account by entering my email, password, and confirming my password.	I can access my account / dashboard	High
		USN-2	As a user, I will receive confirmation email once I have registered myself	I can receive confirmation email & click confirm	High
		USN-3	As a user, I can register for the application through apple account	I can register & access the dashboard with apple account Login	High
	Login	USN-4	As a user, I can log into the application by entering user id & password		High
Customer Care Executive	Login		As I enter I can view the working of the application and scan for any glitches and monitor the operation and check if all the users are authorized.	I can login only with my provided credentials	Medium
Administrator	Login		Maintaining and making sure the database containing the locations are secure and accurate	I can login only with my provided credentials	High

6.PROJECT PLANNING & SCHEDULING

6.1 SPRINT PLANNING & ESTIMATION:

SPRINT	FUNCTIONAL REQUIREMENT	USER STORY NUMBER	USER STORY,TASK	POINT	PRIORITY
Sprint-1	Registration	USN-1	As a user, I can register for the application by entering my email, and password, and confirming my password	4	High
Sprint-1	Confirmation Email	USN-2	As a user, I will receive a confirmation email once I have registered for the application	4	High
Sprint-1	Authentication	USN-3	As a user, I can register for the application through Gmail and mobile app.	4	High
Sprint-1	Login	USN-4	As a user, I can log into the application by entering email & password	4	High
Sprint-1	Dashboard	USN-5	As a user, I need to be able to view the functions that I can perform	4	High
Sprint-2	Notification	USN-1	As a user, I should be able to notify my parent and guardian in emergency situations	10	High
Sprint-2	Store data	USN-2	As a user, I need to continuously store my location data into the database.	10	Medium
Sprint-3	Communication	USN-3,1	I should be able to communicate with my parents	6	Low
Sprint-3	IoT Device – Watson communication	USN-1,4	The data from IoT device should reach IBM Cloud	7	Medium

Sprint-3	Node RED-Cloudant DB communication	USN-5,2	The data stored in IBM Cloud should be properly integrated with Cloudant DB	7	High
Sprint-4	User – WebUI interface	USN-1,4	The Web UI should get inputs from the user	6	High
Sprint-4	Geofencing	USN-2,3,5	The geofencing of the child should be done based on the geographical coordinates	7	High

6.2 SPRINT DELIVERY SCHEDULE:

SPRINT	TOTAL STORY POINT	DURATION	SPRINT START DATE	SPRINT END DATE
Sprint-1	20	6 days	24 Oct 2022	29 Oct 2022
Sprint-2	20	6 days	05 Nov 2022	10 Nov 2022
Sprint-3	20	9 days	06 Nov 2022	14 Nov 2022
Sprint-4	20	9 days	06 Nov 2022	14 Nov 2022

7.CODING & SOLUTIONING

7.1 FEATURE-1:

PANIC BUTTON CODE:

```
#include <ESP8266WiFi.h>
```

```
#define WLAN_SSID "CircuitLoop"
```

```
#define WLAN_PASS "circuitdigest101"
```

```
char server[] = "mail.smtp2go.com";
```

```
WiFiClient Client;
```



```
const int button = 2;

void setup() {
    pinMode(button,INPUT);

    Serial.begin(9600);
    delay(10);

    Serial.print("Connecting to ");
    Serial.println(WLAN_SSID);
    WiFi.mode(WIFI_STA);
    WiFi.begin(WLAN_SSID, WLAN_PASS);
    while (WiFi.status() != WL_CONNECTED) {
        delay(500);
        Serial.print(".");
    }
    Serial.println();
    Serial.println("WiFi connected");
    Serial.println("IP address: ");
    Serial.println(WiFi.localIP());
}

void loop() {
    int pressed = digitalRead(button);
```

```

Serial.println(pressed);

if(pressed == 0)
{
    sendEmail();

    Serial.print("Mail sent to:");

    Serial.println(" The recipient");

    Serial.println("");
}
}

byte sendEmail()
{
    if (Client.connect(server, 2525) == 1)    // connect to smtp server with port
address 2525
    {
        Serial.println(F("connected to server"));
    }
    else
    {
        Serial.println(F("connection failed"));

        return 0;
    }

    if (!emailResp())    // if connection failed return now

        return 0;

    //

    Serial.println(F("Sending EHLO"));

```

```
Client.println("EHLO www.example.com"); // Send command EHLO
previosly it was HELO*****
```

```
if (!emailResp())
```

```
return 0;
```

```
Serial.println(F("Sending auth login"));
```

```
Client.println("AUTH LOGIN");
```

```
if (!emailResp())
```

```
return 0;
```

```
//
```

```
Serial.println(F("Sending User"));
```

```
Client.println("c2VuZGVyQHh5ei5jb20="); //base64, ASCII encoded SMTP
Username
```

```
if (!emailResp())
```

```
return 0;
```

```
Serial.println(F("Sending Password"));
```

```
Client.println("cGFzc3dvcmQ="); //base64, ASCII encoded SMTP Password
```

```
if (!emailResp())
```

```
return 0;
```

```
Serial.println(F("Sending From"));
```

```
Client.println(F("MAIL From: sender@xyz.com"));
```

```
if (!emailResp())
```

```
return 0;
```

```
// change to recipient address
```

```
Serial.println(F("Sending To"));

Client.println(F("RCPT To: receiver@xyz.com"));

if (!emailResp())

    return 0;


Serial.println(F("Sending DATA"));

Client.println(F("DATA"));

if (!emailResp())

    return 0;

Serial.println(F("Sending email"));

Client.println(F("To: receiver@xyz.com "));


Client.println(F("From: sender@xyz.com "));

Client.println(F("Subject: Panic Button - Alert !!!\r\n"));

Client.println(F("This is a alert message from your grandfather."));

Client.println(F("He is not well. Please take him to hospital immediately"));

//Client.println(F("Third line of the test e-mail."));

//

Client.println(F("."));

if (!emailResp())

    return 0;

//

Serial.println(F("Sending QUIT"));
```

```
Client.println(F("QUIT"));

if (!emailResp())

    return 0;

//

Client.stop();

Serial.println(F("disconnected"));

return 1;

}


byte emailResp()

{

    byte responseCode;

    byte readByte;

    int loopCount = 0;


    while (!Client.available())

    {

        delay(1);

        loopCount++;

        // Wait for 20 seconds and if nothing is received, stop.

        if (loopCount > 20000)

        {

            Client.stop();

            Serial.println(F("\r\nTimeout"));

            return 0;
```

```

    }
}

responseCode = Client.peek();
while (Client.available())
{
    readByte = Client.read();
    Serial.write(readByte);
}

if (responseCode >= '4')
{
    // efail();

    return 0;
}

return 1;
}

```

7.2 FEATURE 2:

GEOFENCE CODE:

```

import json

import wiotp.sdk.device

import time

myConfig={ "identity
":{ "orgId": "hj5fmy", "typeid": "NodeMCU", "deviceId": "12345"
}

```

```
"auth": { "token": "12345678"
}
}

client = wiotp.sdk.device.DeviceClient (config=myConfig, logHandlers=None)

client.connect()

while True:

name= "Smartbridge" #in area location

#latitude- 17.4225176 longitude 78.5450842 #out area location

latitude = 17.4219272

longitude =70.5400783

myData = {'name':name, 'lat':latitude, 'lon': longitude} client.publishEvent

(eventId="Status", msgformat="json", data=myData, qos=0, onPublish=None)

print ("Data published to IM IoT platfrom: ",myData) time.sleep(5)

client.disconnect()
```

8.TESTING

8.1 TEST CASE:

SPRINT-1

*Registration-100%

*Login-100%

*Dashboard-100%

TEST LINK: <https://fastidious-douhua-50a321.netlify.app/>

SPRINT-2

*Notification-80%

*Store data-90%

TEST LINK: <https://wokwi.com/projects/348375771188822610>

SPRINT-3

*Communication-90%

*Node Red-90%

SPRINT-4

*Geo fence -90%

*Node Red-90%

9.RESULTS

9.1 PERFORMANCE METRICS:

The device has IoT monitoring and a GSM module that allows the child to be monitored at all times. It also has numerous sensors that are connected to a CPU and are used to detect exact signals such as temperature , and other dangers and alert the parents.

10.ADVANTAGES:

1) Easy Availability& Affordability Gone are the days when buying a GPS enabled Wearable Device for kids was considered a luxury. Today, however, the scenario is different. There are plenty of options readily available. It is easy to buy a smart watch for kids of your choice online. What's more, these magnificent tech gadgets don't burn a big hole in your pockets and make up for an affordable buy. Now a smart watch is just a click away! Besides ,these smart-watches lend a style statement to your fashion conscious kids.

2) Tracking Made Easy Fueled by IOT, the GPS enabled Wearable Device act as a saviour for parents who are always clouded with worries about their kids. Tracking a child was never this easy. These Wearable Device allow parents to track their children in crowded/public places or when they are out of sight say at school, picnic or an outing. Parents can use these smart-watches to track the location of their lost kids.

3) Smart watch is Technology in Disguise No matter how tech advanced the smart watches are, they hardly look like one. Most manufacturers have worked hard to mold their tech wonders in a time piece that looks everything but a tech piece!

Their childish designs and bright colour combination is perfect to disguise them. This is precisely why most people can hardly spot the difference between a smart watch and an ordinary watch. Good for kids who use them, as their adorable designs keep these watches safe from the prying eyes.

4) Watches Over Your Kids GPS tracker watches are a boon for parents as they help in watching over your kids when either they are away or you are away from them.

DISADVANTAGE:

- 1) High cost but once it is implemented the expense can be reduced.
- 2) This device cannot be used in rural areas.
- 3) The amount of data storage depends on memory size of your smart watch.
- 4) Every piece of technology has drawbacks when utilised excessively. The constant usage of smartwatches might have certain unique negative impacts. The first and most frequent problem if you wear a smartwatch or band all day is skin discomfort. Your skin may be sensitive under some circumstances, which might result in rashes or other skin problems.

11.CONCLUSION

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. However, the proposed device is not robust enough and does not contain sufficient functions to operates like a Atlantis Highlights in Computer Sciences. Hence, the future enchantments will be adding more features, software, applications, hardware to make the proposed system capable of working more intelligently, meanwhile guarantee the safety of children Panic alert system is used during panic situations alerts are sent to the parental phone, seeking for help also the alert parameters are updated to the cloud. The system is equipped with GSM and GPS modules for sending and receiving call,

SMS between safety gadget and parental phone. The system also consists of Wi-Fi module used to implement IoT and send all the monitored parameters to the cloud for android app monitoring on parental phone.

12.FUTURE SCOPE

This system can be further enhanced by installation of minicamera inside smart gadget for better security so that live footage can be seen on parental phone during panic situations. The system can be modified by installation of small solar panels for charging the battery of smart gadget to gain maximum battery backup.

13.APPENDIX

SOURCE CODE:

HTML INDEX CODE FOR REGISTRATION LOGIN PAGE:

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
    <meta charset="UTF-8">
```

```
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
```

```
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
    <title>ChildSafety.com</title>
```

```
    <script src="js/safe.js"></script>
```

```
    <style>
```

```
        body{
```

```
            margin: 0;
```

```
padding: 0;

display: flex;

justify-content: center;

align-items: center;

min-height: 100vh;

font-family: 'Jost', sans-serif;

background: linear-gradient(to bottom, #0f0c29, #302b63, #24243e);
}

.main{

width: 350px;

height: 500px;

background: red;

overflow: hidden;

background: url("https://doc-08-2c-
docs.googleusercontent.com/docs/securesc/68c90smiglihng9534mvqmq1946dm
is5/fo0picsp1nhiucmc0l25s29respgpr4j/1631524275000/0352236096092229837
4/03522360960922298374/1Sx0jhdpEpnNIydS4rnN4kHSJtU1EyWka?e=view
&authuser=0&nonce=gcrocepgbb17m&user=03522360960922298374&hash=tf
hgbs86ka6divo3llbvp93mg4csvb38") no-repeat center/ cover;

border-radius: 10px;

box-shadow: 5px 20px 50px #000;
}
```

```
#chk{

    display: none;

}

.signup{

    position: relative;

    width:100%;

    height: 100%;

}

label{

    color: #fff;

    font-size: 2.3em;

    justify-content: center;

    display: flex;

    margin: 60px;

    font-weight: bold;

    cursor: pointer;

    transition: .5s ease-in-out;

}

input{

    width: 60%;
```

```
height: 20px;

background: #e0dede;

justify-content: center;

display: flex;

margin: 20px auto;

padding: 10px;

border: none;

outline: none;

border-radius: 5px;

}
```

```
button{

width: 60%;

height: 40px;

margin: 10px auto;

justify-content: center;

display: block;

color: #fff;

background: #573b8a;

font-size: 1em;

font-weight: bold;
```

```
        margin-top: 20px;

        outline: none;

        border: none;

        border-radius: 5px;

        transition: .2s ease-in;

        cursor: pointer;
    }

    button:hover{

        background: #6d44b8;

    }

    .login{

        height: 460px;

        background: #eee;

        border-radius: 60% / 10%;

        transform: translateY(-180px);

        transition: .8s ease-in-out;

    }

    .login label{

        color: #573b8a;

        transform: scale(.6);
```

```
}
```

```
#chk:checked ~ .login{
```

```
    transform: translateY(-500px);
```

```
}
```

```
#chk:checked ~ .login label{
```

```
    transform: scale(1);
```

```
}
```

```
#chk:checked ~ .signup label{
```

```
    transform: scale(.6);
```

```
}
```

```
body {
```

```
--s: 25vmin;
```

```
--p: calc(var(--s) / 2);
```

```
--c1: pink;
```

```
--c2: dodgerblue;
```

```
--c3: white;
```

```
--bg: var(--c3);
```

```
--d: 4000ms;
```

```
--e: cubic-bezier(0.76, 0, 0.24, 1);
```

```
background-color: var(--bg);
```

```
background-image:
```

```
    linear-gradient(45deg, var(--c1) 25%, transparent 25%),
```

```
    linear-gradient(-45deg, var(--c1) 25%, transparent 25%),
```

```
    linear-gradient(45deg, transparent 75%, var(--c2) 75%),
```

```
    linear-gradient(-45deg, transparent 75%, var(--c2) 75%);
```

```
background-size: var(--s) var(--s);
```

```
background-position:
```

```
    calc(var(--p) * 1) calc(var(--p) * 0),
```

```
    calc(var(--p) * -1) calc(var(--p) * 1),
```

```
    calc(var(--p) * 1) calc(var(--p) * -1),
```

```
    calc(var(--p) * -1) calc(var(--p) * 0);
```

```
animation:
```

```
    color var(--d) var(--e) infinite,
```

```
    position var(--d) var(--e) infinite;
```

```
}
```

```
@keyframes color {
```



```
0%, 25% {  
  
    --bg: var(--c3);
```

```
}
```

```
26%, 50% {  
  
    --bg: var(--c1);
```

```
}
```

```
51%, 75% {  
  
    --bg: var(--c3);
```

```
}
```

```
76%, 100% {  
  
    --bg: var(--c2);
```

```
}
```

```
}
```

```
@keyframes position {
```

```
0% {
```

```
    background-position:
```

```
        calc(var(--p) * 1) calc(var(--p) * 0),
```

```
        calc(var(--p) * -1) calc(var(--p) * 1),
```

```
        calc(var(--p) * 1) calc(var(--p) * -1),
```

```
    calc(var(--p) * -1) calc(var(--p) * 0);  
}
```

```
25% {
```

```
    background-position:
```

```
    calc(var(--p) * 1) calc(var(--p) * 4),  
    calc(var(--p) * -1) calc(var(--p) * 5),  
    calc(var(--p) * 1) calc(var(--p) * 3),  
    calc(var(--p) * -1) calc(var(--p) * 4);  
}
```

```
50% {
```

```
    background-position:
```

```
    calc(var(--p) * 3) calc(var(--p) * 8),  
    calc(var(--p) * -3) calc(var(--p) * 9),  
    calc(var(--p) * 2) calc(var(--p) * 7),  
    calc(var(--p) * -2) calc(var(--p) * 8);  
}
```

```
75% {
```

```
    background-position:
```

```
    calc(var(--p) * 3) calc(var(--p) * 12),  
    calc(var(--p) * -3) calc(var(--p) * 13),
```

```
        calc(var(--p) * 2) calc(var(--p) * 11),  
  
        calc(var(--p) * -2) calc(var(--p) * 12);  
  
    }  
  
    100% {  
  
        background-position:  
  
            calc(var(--p) * 5) calc(var(--p) * 16),  
  
            calc(var(--p) * -5) calc(var(--p) * 17),  
  
            calc(var(--p) * 5) calc(var(--p) * 15),  
  
            calc(var(--p) * -5) calc(var(--p) * 16);  
  
    }  
}
```

```
@media (prefers-reduced-motion) {  
  
    body {  
  
        animation: none;  
  
    }  
}
```

```
</style>
```

```
</head>
```

```
<body>
```

```
<div class="main">
```

```
<input type="checkbox" id="chk" aria-hidden="true">
```

```
<div class="signup">
```

```
<form nmae="Form" method="post">
```

```
<label for="chk" aria-hidden="true">Sign  
up</label>
```

```
<input Id="username" type="text"  
name="txt" placeholder="User name" >
```

```
<input Id="number" type="number"  
name="number" placeholder="Number" >
```

```
<input Id="password" type="password"  
name="pswds" placeholder="Password" >
```

```
<button type="submit"  
onclick="Signup()">Sign up</button>
```

```
</form>
```

```
</div>
```

```
<div class="login">
```

```
<form name="myForm" method="post">
```

```
<label for="chk" aria-  
hidden="true">Login</label>
```

```

                                <input      Id="name"      type="email"
name="email" placeholder="User name" >

                                <input      Id="pass"      type="password"
name="pswd" placeholder="Password" >

                                <button                                type="submit"
onclick="Submit()">Login</button>

                                </form>

                                </div>

                                </div>

```

```
</body>
```

```
</html>
```

DASHBOARD CODE(JAVASCRIPT CODE):

```
<!DOCTYPE html>
```

```
<!-- Coding by CodingLab | www.codinglabweb.com-->
```

```
<html lang="en" dir="ltr">
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<!--<title> Website with Customize Color Theme | CodingLab </title>-->
```

```
<link rel="stylesheet" href="style.css">
```

```
<!-- Fontawesome CDN Link -->
```

```
<link                                rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/fontawesome/5.15.4/css/all.min.css"
/>
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
<style>
```

```
@import
```

```
url('https://fonts.googleapis.com/css2?family=Poppins:wght@200;300;400;500;
600
```

```
;700&display=swap');
```

```
*{
```

```
margin: 0;
```

```
padding: 0;
```

```
box-sizing: border-box;
```

```
font-family: 'Poppins',sans-serif;
```

```
transition: all 0.3s ease;
```

```
}
```

```
:root{
```

```
--white: #fff;
```

```
--black: #24292d;
```

```
--nav-main: #4070f4;
```

```
--switchers-main: #0b3cc1;
```

```
--light-bg: #F0F8FF;

}

nav{

position: fixed;

height: 70px;

width: 100%;

background: var(--nav-main);

box-shadow: 0 5px 10px rgba(0,0,0,0.1);

}

nav .navbar{

display: flex;

align-items: center;

height: 100%;

max-width: 1300px;

margin: auto;

padding: 0 30px;

justify-content: space-between;

}

nav .navbar a{

font-size: 30px;
```

```
font-weight: 500;

color: var(--white);

text-decoration: none;

}
```

```
.navbar .nav-links{

display: flex;

}
```

```
.navbar .nav-links li{

margin: 0 8px;

list-style: none;

display: flex;

}
```

```
.navbar .nav-links a{

font-size: 18px;

font-weight: 400;

opacity: 1;

}
```

```
.navbar .nav-links a:hover{

opacity: 1;

}
```



```
.navbar .appearance{

display: flex;

align-items: center;

}

.appearance .light-dark,

.appearance .icons{

height: 50px;

width: 50px;

border-radius: 6px;

line-height: 50px;

text-align: center;

color: var(--white);

font-size: 20px;

background: var(--switchers-main);

cursor: pointer;

}

.appearance .light-dark i,

.appearance .icons i{

opacity: 1;

}
```

```
.appearance .light-dark:hover i,  
  
.appearance .icons:hover i{  
  
opacity: 1;  
  
}  
  
.appearance .light-dark:hover{  
  
box-shadow: 0 5px 10px rgba(0,0,0,0.1)  
  
}  
  
.appearance .light-dark i{  
  
height: 100%;  
  
width: 100%;  
  
}  
  
.appearance .color-icon{  
  
position: relative;  
  
}  
  
.appearance .icons{  
  
width: 70px;  
  
height: 50px;  
  
margin-left: 14px;  
  
}  
  
.appearance .color-box{
```

```
position: absolute;

bottom: -133px;

right: 0;

min-height: 100px;

background: var(--white);

padding: 16px 20px 20px 20px;

border-radius: 6px;

box-shadow: 0 5px 10px rgba(0,0,0,0.2);

opacity: 0;

pointer-events: none;

}
```

```
.color-box::before{

content: "";

position: absolute;

top: -10px;

right: 20px;

height: 30px;

width: 30px;

border-radius: 50%;

background: var(--white);
```

```
transform: rotate(45deg);
```

```
}
```

```
.color-icon.open .color-box{
```

```
opacity: 1;
```

```
pointer-events: auto;
```

```
}
```

```
.color-icon.open .arrow{
```

```
transform: rotate(-180deg);
```

```
}
```

```
.appearance .color-box h3{
```

```
font-size: 16px;
```

```
font-weight: 600;
```

```
display: block;
```

```
color: var(--nav-main);
```

```
text-align: left;
```

```
white-space: nowrap;
```

```
margin-bottom: 10px;
```

```
}
```

```
.appearance .color-box .color-switchers{
```

```
display: flex;
```

```
}

.color-box .color-switchers .btn{

display: inline-block;

height: 40px;

width: 40px;

border: none;

outline: none;

border-radius: 50%;

margin: 0 5px;

cursor: pointer;

background: #4070F4;

}

.color-switchers .btn.blue.active{

box-shadow: 0 0 0 2px #fff,

0 0 0 4px #4070F4;

}

.color-switchers .btn.orange{

background: #F79F1F;

}

.color-switchers .btn.orange.active{
```

```
box-shadow: 0 0 0 2px #fff,
```

```
0 0 0 4px #F79F1F;
```

```
}
```

```
.color-switchers .btn.purple{
```

```
background: #8e44ad;
```

```
}
```

```
.color-switchers .btn.purple.active{
```

```
box-shadow: 0 0 0 2px #fff,
```

```
0 0 0 4px #8e44Ad;
```

```
}
```

```
.color-switchers .btn.green{
```

```
background: #3A9943;
```

```
}
```

```
.color-switchers .btn.green.active{
```

```
box-shadow: 0 0 0 2px #fff,
```

```
0 0 0 4px #3A9943;
```

```
}
```

```
.home-content{
```

```
height: 100vh;
```

```
width: 100%;
```

```
background: var(--light-bg);
```

```
display: flex;
```

```
flex-direction: column;
```

```
justify-content: center;
```

```
padding: 0 60px;
```

```
}
```

```
.home-content h2{
```

```
color: var(--black);
```

```
font-size: 50px;
```

```
}
```

```
.home-content h3{
```

```
color: var(--black);
```

```
font-size: 42px;
```

```
margin-top: -8px;
```

```
}
```

```
.home-content h3 span{
```

```
color: var(--nav-main);
```

```
}
```

```
.home-content h3 span.darkMode{
```

```
color: var(--black);
```

```
}
```

```
.home-content p{
```

```
color: var(--black);
```

```
font-size: 16px;
```

```
width: 45%;
```

```
text-align: justify;
```

```
margin: 4px 0 30px 0;
```

```
}
```

```
.home-content a{
```

```
color: #fff;
```

```
font-size: 20px;
```

```
padding: 12px 24px;
```

```
border-radius: 6px;
```

```
text-decoration: none;
```

```
background: var(--nav-main);
```

```
}
```

```
.home-content a i{
```

```
transform: rotate(45deg);
```

```
font-size: 16px;
```

```
}
```



```
.home-content a:hover{

background: var(--switchers-main);

}

@media (max-width: 1050px) {

.home-content p{

width: 70%;

}

}

.price-section{

padding: 40px 0;

}

.price-box{

background: radial-gradient(ellipse at center, #5fb3fc 0%, #0089ff 100%);

border-radius: 0 0 15px 0;

padding: 45px 30px;

position: relative;

z-index: 1;

margin-right: 30px;

margin-bottom: 60px;

}
```

```
.price-box .ribbon-wrap {
```

```
position: absolute;
```

```
width: 100%;
```

```
height: 100%;
```

```
left: 0;
```

```
top: 0;
```

```
z-index: -1;
```

```
overflow: hidden;
```

```
}
```

```
.price-box .ribbon {
```

```
background: #ffd08d;
```

```
background: radial-gradient(ellipse at center, #ffd08d 0%, #fdb143 100%);
```

```
position: absolute;
```

```
height: 50px;
```

```
display: inline-flex;
```

```
justify-content: center;
```

```
align-items: center;
```

```
width: 200px;
```

```
top: 18px;
```

```
right: -48px;
```

```
transform: rotate(45deg);
```

```
text-transform: uppercase;
```

```
font-size: 13px;
```

```
font-weight: 600;
```

```
}
```

```
.price-box:after {
```

```
position: absolute;
```

```
z-index: -2;
```

```
content: "";
```

```
background-color: rgba(0, 137, 255, 0.12);
```

```
width: 100%;
```

```
height: 100%;
```

```
border-radius: 0 0 15px 0;
```

```
top: 30px;
```

```
left: 30px;
```

```
}
```

```
.price-box .price-head {
```

```
margin-bottom: 24px;
```

```
position: relative;
```

```
padding-bottom: 20px;
```

```
}

.price-box .price-head:before {

width: 5px;

left: -30px;

top: 0;

height: calc(100% - 20px);

background-color: #FEB747;

position: absolute;

content: "";

}

.price-box .price-head:after {

width: 100%;

left: 0;

bottom: 0;

height: 1px;

position: absolute;

background: #fff;

opacity: 0.07;

content: "";

}
```

```
.price-box .price-head p {
```

```
font-size: 24px;
```

```
margin-bottom: 15px;
```

```
line-height: 1;
```

```
font-weight: 600;
```

```
}
```

```
.price-box .price {
```

```
line-height: 1;
```

```
padding-bottom: 7px;
```

```
font-size: 14px;
```

```
}
```

```
.price-box .price .currency {
```

```
vertical-align: top;
```

```
font-size: 22px;
```

```
font-weight: 700;
```

```
}
```

```
.price-box .price .value {
```

```
font-size: 42px;
```

```
font-weight: 700;
```

```
}
```

```
.price-box .price .duration{
```

```
font-weight: 600;
```

```
}
```

```
.price-box .price-body {
```

```
margin-bottom: 30px;
```

```
position: relative;
```

```
padding-bottom: 8px;
```

```
}
```

```
.price-box .price-body:after {
```

```
width: 100%;
```

```
left: 0;
```

```
bottom: 0;
```

```
height: 1px;
```

```
position: absolute;
```

```
opacity: 0.07;
```

```
content: "";
```

```
background: #fff;
```

```
}
```

```
.price-box .price-body-top-content {
```

```
margin-bottom: 16px;
```

```
}
```

```
.price-box .price-body .save, .price-box .price-body .billed {
```

```
margin-bottom: 2px;
```

```
}
```

```
.price-box .price-body .billed {
```

```
margin-bottom: 2px;
```

```
}
```

```
.price-box .price-body ul {
```

```
padding: 0;
```

```
margin: 0;
```

```
list-style-type: none;
```

```
margin-bottom: 20px;
```

```
}
```

```
.price-box .price-body ul li {
```

```
margin-bottom: 4px;
```

```
opacity: 0.75;
```

```
}
```

```
.btn {
```

```
padding: 20px 34px;
```

```
color: #0089FF;
```

```
font-size: 12px;

text-transform: uppercase;

overflow: hidden;

font-weight: 600;

border-radius: 50px;

line-height: 1;

border: none;

display: inline-flex;

align-items: center;

position: relative;

background-color: #ffffff;

z-index: 1;

}

.btn svg {

margin-left: 10px;

fill: #0089FF;

}

.btn:after {

position: absolute;

content: "";
```



```
z-index: -1;

left: 0;

top: 0;

width: 0;

height: 100%;

background: #ffd08d;

transition: 0.3s ease-in-out;

background: radial-gradient(ellipse at center, #ffd08d 0%, #fdb143 100%);

}

.btn:hover{

color: #fff;

}

.btn:hover svg{

fill: #fff;

}

.btn:hover:after {

width: 100%;

}

</style>

</head>
```

<body>

<nav>

<div class="navbar">

<div class="logo">Childrensafety</div>

<ul class="nav-links">

Home

About

Locations

Services

Contact

<div class="appearance">

<div class="light-dark">

<i class="btn fas fa-moon" data-color="#e4e6eb #e4e6eb #24292D

#24292D #242526"></i>

</div>

<div class="color-icon">

<div class="icons">

<i class="fas fa-palette"></i>

<i class="fas fa-sort-down arrow"></i>

</div>

<div class="color-box">

<h3>Color Switcher</h3>

<div class="color-switchers">

<button class="btn blue active" data-color="#fff #24292d #4070f4
#0b3cc1 #F0F8FF"></button>

<button class="btn orange" data-color="#fff #242526 #F79F1F
#DD8808 #fef5e6"></button>

<button class="btn purple" data-color="#fff #242526 #8e44ad
#783993 #eadaf1"></button>

<button class="btn green" data-color="#fff #242526 #3A9943
#2A6F31 #DAF1DC"></button>

</div>

</div>

</div>

</div>

</div>

</nav>

<section class="home-content">

<div class="texts">

<h2 class="text">Children Safety Website </h2>

<h3 class="text">Welcome This Website....</h3>

<p>With a GPS device, you always know where they are at any point in time. In case of mishaps like an accident or missing elderly parents or kids, you can easily find their location. There are many features in the device such as fencing, alert, etc. that allow you better and faster tracking.</p>

<div class="button">

Track Now

<i class="fas fa-location-arrow"></i>

</div>

</section>

<section class="price-section">

<div class="container">

<h1 style="color: rgb(199, 0, 0);">Tracking Device</h1>

<h2 style="color: rgb(199, 0, 0);">The Next Generation Child Safety

GPS Tracker</h2>

<div class="row">

<div class="col-md-4 col-sm-6 col-xs-12">

<div class="price-box">

```
<div class="price-head">
```

```
<p>Real-Time Tracking</p>
```

```
<div class="price">
```

```
<span class="currency">Live</span>
```

```
<span class="value">Map</span>
```

```
<span class="duration">Tracker</span>
```

```
</div>
```

```
</div>
```

```
<div class="price-body">
```

```
<div class="price-body-top-content">
```

```
<p class="billed">Stay connected to your kids when  
you are not with them. </p>
```

```
<p class="save">Gain peace of mind by following  
your kids exact location on a live map</p>
```

```
</div>
```

```
<ul>
```

```
<li>Real-time updates wherever they are, from  
anywhere you are.</li>
```

```
<li>The device fetches accurate location using GPS
```

```
(outdoors) and cellular network (indoors, no-GPS coverage areas).
```


</div>

Start Now

<svg width="13.539" height="11.283" viewBox="0 0

13.539 11.283" class="svg replaced-svg">

<path id="btn-svg"

d="M8.564,17.077H19.818l-4.309-

4.1a.564.564,0,0,1,.778-.817l4.921,4.688a1.128,1.128,0,0,1-

.01,1.605l4.912,4.678a.564.564,0,1,1-.778-.817l4.327-

4.1H8.564a.564.564,0,0,1,0-1.128Z"

transform="translate(-8 -12)"></path>

</svg>

</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12">

<div class="price-box">

<div class="ribbon-wrap">

<h4 class="ribbon">Safety</h4>

</div>

```
<div class="price-head">
```

```
<p>Safe-Zone Alert</p>
```

```
<div class="price">
```

```
<span class="currency">Safe</span>
```

```
<span class="value">Zone</span>
```

```
<span class="duration">Notification</span>
```

```
</div>
```

```
</div>
```

```
<div class="price-body">
```

```
<div class="price-body-top-content">
```

```
<p class="billed">Get notifications when your
```

```
child come or go from any place you choose on the Google map.</p>
```

```
<p class="save">Create custom safe-zones </p>
```

```
</div>
```

```
<ul>
```

```
<li>Make virtual safe boundaries on Google map.
```

```
Create any number of safe-zones for familiar areas such as </li>
```

```
<li>home, school or park.</li>
```

```
</ul>
```

```
</div>
```

Start Now

<svg width="13.539" height="11.283" viewBox="0 0

13.539 11.283" class="svg replaced-svg">

<path id="btn-svg"

d="M8.564,17.077H19.818l-4.309-

4.1a.564.564,0,0,1,.778-.817l4.921,4.688a1.128,1.128,0,0,1-

.01,1.605l4.912,4.678a.564.564,0,1,1-.778-.817l4.327-

4.1H8.564a.564.564,0,0,1,0-1.128Z"

transform="translate(-8 -12)"></path>

</svg>

</div>

</div>

<div class="col-md-4 col-sm-6 col-xs-12 col-md-offset-0 col-smoffset-3">

<div class="price-box">

<div class="price-head">

<p>Panic Button</p>

<div class="price">

Show

Notification

Exact Location

</div>

</div>

<div class="price-body">

<div class="price-body-top-content">

<p class="billed">Your child can get your
attention with a simple button click. </p>

<p class="save">Current Location</p>

</div>

 You will get child's exact location, no
matter how far and navigate to their

location on Google maps.

</div>

Start Now

<svg width="13.539" height="11.283" viewBox="0 0

13.539 11.283" class="svg replaced-svg">

<path id="btn-svg"

d="M8.564,17.077H19.818l-4.309-

4.1a.564.564,0,0,1,.778-.817l4.921,4.688a1.128,1.128,0,0,1-
.01,1.605l4.912,4.678a.564.564,0,1,1-.778-.817l4.327-
4.1H8.564a.564.564,0,0,1,0-1.128Z"

transform="translate(-8 -12)"></path>

</svg>

</div>

</div>

</div>

</div>

</section>

<script>

// Js code to make color box enable or disable

let colorIcons = document.querySelector(".color-icon"),

icons = document.querySelector(".color-icon .icons");

icons.addEventListener("click" , ()=>{

colorIcons.classList.toggle("open");

})

// getting all .btn elements

let buttons = document.querySelectorAll(".btn");

for (var button of buttons) {

```
button.addEventListener("click", (e)=>{ //adding click event to each  
  
button  
  
let target = e.target;  
  
let open = document.querySelector(".open");  
  
if(open) open.classList.remove("open");  
  
document.querySelector(".active").classList.remove("active");  
  
target.classList.add("active");  
  
// js code to switch colors (also day night mode)  
  
let root = document.querySelector(":root");  
  
let dataColor = target.getAttribute("data-color"); //getting data-color  
values of clicked button  
  
let color = dataColor.split(" "); //splitting each color from space and  
make them array  
  
//passing particular value to a particular root variable  
  
root.style.setProperty("--white", color[0]);  
  
root.style.setProperty("--black", color[1]);  
  
root.style.setProperty("--nav-main", color[2]);  
  
root.style.setProperty("--switchers-main", color[3]);  
  
root.style.setProperty("--light-bg", color[4]);  
  
let iconName = target.className.split(" ")[2]; //getting the class name
```

of icon

```
let coloText = document.querySelector(".home-content span");

if(target.classList.contains("fa-moon")){ //if icon name is moon

target.classList.replace(iconName, "fa-sun") //replace it with the sun

colorIcons.style.display = "none";

coloText.classList.add("darkMode");

}else if (target.classList.contains("fa-sun")) { //if icon name is sun

target.classList.replace("fa-sun", "fa-moon"); //replace it with the

sun

colorIcons.style.display = "block";

coloText.classList.remove("darkMode");

document.querySelector(".btn.blue").click();

}

});

}

</script>

</body>

</html>
```

GITHUBCODE-<https://github.com/IBM-EPBL/IBM-Project-13606-1659523522>

