Project Design Phase-I
Problem – Solution Fit Template

Date	19 September 2022
Team ID	PNT2022TMID27117
Project Name	Project - IoT Based Safety Gadget for Child Safety Monitoring & Notification
Maximum Marks	2 Marks

1. CUSTOMER SEGMENT(S) CS

This aids the parents/guardian to track the daily activity of their children and helps to find them using GPS location.

6. CUSTOMER CONSTRAINTS CC

➤ Expensive
➤ Poor Network
➤ Battery Consumption

5. AVAILABLE SOLUTIONS AS

In the previous method, the parents/guardians gave their children an awareness of the danger lurking in society.
SOLUTION:
The child's precise locations are found by parents through the Wearable gadget. This Wearable device signifies the child's enclosing audio & videos during a crisis. The wearable device accumulates the data constantly.
PROS: -(1) Live location tracing.
(2) panic vigilant methodology.
(3) Global Positioning System tracking helps us to track real-time locations
CONS: -(1) Improper connectivity
(2) Inadequate battery supply.
(3) This project requires physical arbitration

2. JOBS-TO-BE-DONE / PROBLEMS J&P

Child abductors continually abduct children from parents/legally appointed guardians to get the ransom for their benefit. Parents have no supplementary choice but to view the exact scenario of children's intuitions. The crisis out-turn of kidnapping can be highly cynical and perpetual, more measures must be taken to protect children against abduction and its impacts.

9. PROBLEM ROOT CAUSE RC

Child abductors often kidnap children from legally appointed guardians to get the ransom and for their personal benefit. The out-turn of abduction can be seriously pessimistic and enduring, more actions must be taken to protect children against abduction and its effects..

7. BEHAVIOUR BE

Application aside from conceding you to track down your children when they're within Bluetooth range, it also functions when your kids go farther afield. Its competence as a tracker is outstanding if you live in densely populated areas like cities or big towns.

3. TRIGGER TR

The software along with relinquishing it allows you to trace down your wards when they're within Bluetooth limit, it also works when your kids go farther afield. Its adroitness as a tracker is exceptional if you live in densely colonised neighbourhoods like cities.

4. EMOTIONS: BEFORE / AFTER EM

Before: As the crime rate is inflating day by day, Schools and public places require high surveillance for ensuring the safety of children. A psychological barrier is created between the abducted child and left-behind parent because both know that they survived this period of detachment and life without each other, and both have now lost faith in their reciprocal need.

After: The Wearable device proposes a model for child safety through smartphones that can track their children's location and give the precise coordinates of the child's location in real-time anywhere. By monitoring the activities the security state of the child is examined. It helps to diminish their vulnerability in harmful situations and also protects the children in emergency situations. It gives a sense of assurance and peace of mind to the parents.

10. YOUR SOLUTION SL

The motivation for this wearable comes from the increasing need for safety for little children in contemporary times as there could be scenarios of the child getting adrift in a major crowded sector. This project proposes the key aspect that a missing child can be assisted by the people around the child and can play a remarkable role in the child's safety until reunited with the parents. If any deviant readings are disclosed by the sensor, then an SMS and phone calls are set off to the parent's mobile. Also, it overhauls the parental app through the cloud.

8. CHANNELS of BEHAVIOUR CH

8.1 ONLINE

Children and their parents are veering around to digital solutions more than ever to support children's cognition and it notifies the information about the child in a web application.

8.2 OFFLINE

If the parents/guardians log out of the application, it displays the last information regarding the child's whereabouts.