

## Project Design Phase-I

### Problem – Solution Fit Template

Date	02 October 2022
Team ID	PNT2022TMID39365
Project Name	IoT based safety gadget for child safety monitoring and Notification
Maximum Marks	2 Marks

#### Template:

Define CS, fit into CC	<b>1. CUSTOMER SEGMENT(S)</b> Working parents of children <span style="float: right; background-color: #f08080; padding: 2px;">CS</span>	<b>6. CUSTOMER CONSTRAINTS</b> Spending power, budget, lowest cost, Network connection, WIFI or Bluetooth connection, available devices.	<b>5. AVAILABLE SOLUTIONS</b> This method is to send an SMS from children wear tool to their parent or guardian. PROS: - (1) Live location tracking. (2) panic alert system. (3) Stay connected feature. CONS: - (1) The child could not produce the exact alert command during a panic condition. (2) The command produced may not match with the previously stored command. (3) This project requires manual intervention	Explore AS, differentiate
	<b>2. JOBS TO BE DONE / PROBLEMS</b> <span style="float: right; background-color: #f08080; padding: 2px;">JOB</span> Now-a-days attacks on children are increasing at an unprecedented rate and the victims are in dangerous conditions, where they are not allowed to contact the family Members and there is no Protection mechanism to protect the child from the misbehavior.	<b>9. PROBLEM ROOT CAUSE</b> <span style="float: right; background-color: #f08080; padding: 2px;">PRC</span> In the prevailing structure, there is no monitoring method for child, it should create many problems for them, device for child safety and tracking is developed to help the parents to locate and monitor their children.	<b>7. BEHAVIOUR</b> <span style="float: right; background-color: #f08080; padding: 2px;">BF</span> It is intended to use the SMS as the communication type between the parent and child's wearable device, as this has fewer chances of failing when compared to Wi-Fi and Bluetooth.	
Identify triggers & emotions	<b>3. TRIGGERS</b> <span style="float: right; background-color: #008000; color: white; padding: 2px;">TR</span> A trigger is set to generate when the child leaves the safe zone, and the location of the child is displayed in the app	<b>10. YOUR SOLUTION</b> <span style="float: right; background-color: #008000; color: white; padding: 2px;">SL</span> 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 Link It ONE board programmed in embedded C and interfaced with temperature, heartbeat, touch sensors and also GPS, GSM & digital camera modules	<b>8. CHANNELS of BEHAVIOUR</b> <span style="float: right; background-color: #008000; color: white; padding: 2px;">CH</span> <b>8.1 ONLINE:</b> All the information will be stored in cloud, so the employees can see the cloud storage or mobile application for referring the details of surroundings	Identify triggers
	<b>4. EMOTIONS: BEFORE / AFTER</b> It will be easy for employees to identify or to know about their environment			