## Project Design Phase-IPNT2022TMID29727-proposedsolution

Date	11 November 2022
TeamID	PNT2022TMID30354
ProjectName	IOTBASEDSAFETYGADGETFORCHILDSAFET
	YMONITORINGANDNOTIFICATIONS.
MaximumMarks	2Marks

## ${\bf Proposed Solution Template:}$

Project teams hall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	ProblemStatement(Problemtobeso lved)	Basically, children cannot complain aboutabusement which they face in their daily life totheir parents. They can't even realize whatactually happens to them at their age. It is also difficult for parents to identify their children are being abused. Since to prevent children before being attacked. Child goes missing in this world.  Toprotect them in school, outside the house, when crossing road and respective environment.
2.	Idea/Solutiondescription	In this system, the collected values from everysensor like temperature sensor, pulse ratedetection sensor, metal detection sensor, andthe location value from GPS are used to detectthestatusofthechildandalertstherespecti veguardiansusing GSMaccordingly.  This paper presents a system to monitor pick-up/drop-off of school children to enhance thesafety of children during daily transportationfrom and to school. The system consists of twomain units, a bus unit, and a school unit. Thebus unit the system is used to detect when achild boards or leaves the bus. This informationis communicated to the school unit thatidentifieswhichofthechildrendidnotboardor leave the bus and issues an alert messageaccordingly the aim of this work is to develop awearabledeviceforthesafetyandprotectionofw omenandgirls.  This objective is achieved by the analysis ofphysiological signals in conjunction with bodyposition. The physiological signals that areanalyzed are galvanic skin resistance and bodytemperature. Body position is determined byacquiringrawaccelerometerdatafromatriple axisaccelerometer.  Aportabledevicewhichwill haveapressureswitch.Assoonasanassailantis

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		attackthepersonorwhenthepersonsensesanyinse curity from a stranger, he/she can then putpressure on the device by squeezing orcompressing it. Instantly the pressure sensorsensesthispressureandaconventionalSMS, with the victim's location will be sent to theirparents/guardian cell phone numbers stored inthe device while purchasing it, followed by a call. If the call is unanswered for a prolonged time, acall will be redirected to the police and the samemessage will be sent. Additionally, if the personcrosses some area which is usually not accessed by the person then a message with the real-timelocationissenttothe parent/guardian'sphoneviaconventionalSMS.
3.	Novelty/Uniqueness	RFID-based System for School ChildrenTransportationSafetyEnhance ment. Design and Development of an IOT basedwearabledevicefortheSafetyandSecurityof womenandgirlchildren. Smart Intelligent System for Women and ChildSecurity
4.	SocialImpact/CustomerSatisfaction	increased fear, guilt and self-blame. distrust ofadults or difficulty forming relationships withothers. disrupted attachments with those whoaremeanttokeepthemsafe. mentalhealth disorderssuchasanxiety,attachment,post-traumaticstressanddepressiondisorders.
5.	BusinessModel(RevenueModel)	The model of the gadget is wearable device. Like watch, pendent and other models. That consist the GPS to track the location of the person. If it is business model we first considerabout cost and the gadget is not harmful to health. Because the device was used by the personin 24 hours.
6.	ScalabilityoftheSolution	The scalability we can use the gadget in 24hours. That sense and sends the information totheparentsand guardianstotherightways. Toensure that it works in the dayfull. This is the scalability of the gadget