

Project Design Phase- I Proposed Solution Template

Date	03/11/2022
TeamID	PNT2022TMID36626
ProjectName	IOTBasedSafetyGadgetforChildSafetyMonitoring &Notification
MaximumMarks	2Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Nowadays, crime rate associated with children keeps increasing due to which draws people's attention regarding child safety.
2.	Idea/Solution description	, IoT is applied to propose a wearable smart band which helps parents to monitor and get know of their child's condition at anywhere and anytime even if they are not by their child's side
3.	Novelty/Uniqueness	The IoT smart band increasing despite actions have been taken by the government. Revealed by [9], the overall percentage of child abuse worldwide is about 80% nowadays, out of which 74% are girls and the remaining are boys. For every 40 seconds, a child is going missing in the world
4.	Social Impact/Customer Satisfaction	Research methodology, a method for identifying, collecting, processing and interpreting data using some techniques, then drawing conclusions to address the problem. It is a significant section since it allows readers to evaluate overall validity and reliability of the research paper [20]. For this research, online questionnaire and semi-structured interview are employed.
5.	Business Model (Revenue Model)	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 operate like a mobile phone.

6.	ScalabilityoftheSolution	Thispaperismainlystreamedtowardschildsafety solutions by developing a gadget which canbe tracked via its GPS locations and also a panicbutton on gadget is provided to alert the parentvia GSM module calling for help. Parental androidapp is developed to manage and track the deviceanytime.Smartgadgetdeviceisalwaysconnec ted toparentalphonewhichcanreceiveandmake
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		<p>phone calls and also receive SMS on gadget via GSM module, also a wireless technology is implemented on device which is useful to bound the device within a region of monitoring range, if device is moving out of monitoring range then an alert will be triggered on binding gadget, this helps you keep a virtual eye on child.</p> <p>Health monitoring system on gadget checking for parameters like heart beat/pulse rate and temperature is included which can be monitored on parental app. Gadget also monitors whether it is plugged on hand or not using contact switch and alert the parent as soon as it is unplugged.</p>
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