Ideation Phase
Brainstorm & Idea Prioritization Template

Date	19 SEPTEMBER 2022
Team ID	PNT2022TMID43472
Project Name	IOT BASED SAFETY GADGET FOR CHILD SAFETY MONITORING & NOTIFICATION
Maximum Marks	4 Marks

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Brainstorm & Idea Prioritization

[1] https://www.ijitee.org/wp-content/uploads/papers/v8i8/H6836068819.pdf
Child Safety and Monitering Syestem
Pros:

The Safety wearable device consists of various IOT sensors that provide information about parameters like temperature, UV, location etc. and the values recorded by these sensors are stored on the cloud. In summary, the parents or guardians will be alerted if abnormal values are read by the sensor or if values on these sensors cross a given threshold value, alerting them that the child could be in danger. This helps the parents to locate and monitor their child's safety.
Cons: This easy acces can be really dangerous for kids.Who don't have an idea which information is appropriate or not.

[2] https://iopscience.iop.org/article/10.1088/1742-6596/1362/1/012012/pdf
Child Safety Monitoring System Based on IoT
Pros:

we automatically monitor the child in real time using Internet of Things, with the help of GPS, GSM, and Raspberry Pi. This system requires network connectivity, satellite communication, and high-speed data connection when we use web camera and GPS to lively monitor. It is difficult to monitor when there occurs any hindrance to satellite communication or any network issue. There also occurs time delay in video streaming through the server. Hence in the future, these issues can be overcome by using Zigbee concept or accessing the system without internet and using high-speed server transmission.

Cons:

Gadgets release a from of radiation referred to as electro magnetic frequency(EMF),Which has been cited as a form of carcinogen-a substance capable of causing in living tissue.

[3] https://www.researchgate.net/publication/354877554_

IoT-based_Child_Security_Monitoring_System

Pros:

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.

Cons:

Higher Cost(Time and Money).

[4] https://www.slideserve.com/eldon/child-safety-monitoring-system
child safety monitoring system iot based

Pros:

Easy availability and affordability,Tracking of missing kids can be made easily,High data Accuracy,High Realiablity,Effieiency.

Cons:

Technical Complexity,Highly debendent on the Internet.

[5] https://patents.google.com/patent/US20170169688A1/en
Internet of things (iot) child tracking system

Pros:

a monitor to provide instructions to parents for registering and de-registering children with the security system; an input device to receive input from the parents during a registration process and a de-registration process to register and de-register the children, respectively; a camera to capture a photo of a child to be registered with the security system; an IoT hub to establish a first set of local wireless communication channels with the IoT devices of the security bracelets, the IoT hub to further provide connectivity among each of the kiosks through a second set of one or more communication channels; the IoT hub to associate the photo of the child with an IoT device of a security bracelet provided to the child, the association being stored in one or more of the kiosks or in a network service; an IoT device of an attachable security device to transmit a first alarm to a first kiosk responsive to the switch triggering upon detachment of the attachable security device; the first kiosk to communicate the first alarm with other kiosks and the plurality of kiosks to display the photo.

Cons:

Security and privacy,keeping the data gathered and transmittend by iot device is not safe.