IOT Based Safety Gadget for Child Safety Monitoring & Notification

Idea 1:

An IoT device is proposed that can be wearable and connected with application. Parents can create a Geo-fence from the child location. The IoT device contains GPS module so that parents or guardians can continuously monitor child's location. If they cross the Geo-fence the notification will sent to parents or guardians. If any emergency situation may occur to child, so that they can sent alert or message to parents or guardians.

Advantage:

- Able to create Geo-fence
- Small and comfortable
- Previously stored location will get updated when device cam the network coverage area

Disadvantage:

- If signal loss occur we can't able to track the device.
- The device was removeable, so child may remove the device
- Charge may dispense

Idea 2:

Abstract

Self-propelled mode solves real parents and baby needs. It applies state of the art technology through innovative, minimalist and safe design. Building new baby stroller with all the needed intelligence to provide new levels of child safety and comfort never before imagined together in a stroller. Providing safety, security, comfort and convenience-enhancing functions managed by Android and IOS smartphones and smart-watches. Minimalist device designed to fit every parent's needs and desires.

Advantage

- Comes with plenty of features.
- Can be used from childbirth to preschool years.
- Is sturdy and very safe for the child.

Disadvantage

- Bulky, feels like moving around furniture.
- The stroller might get worn out by the time it reaches toddlerhood and it is not advisable to use a worn-out stroller.
- Assembling can be complex, since there are a lot of parts.
- Also, moving through narrow doors and spaces would be a problem

Idea 3:

Abstract

In this Project, we are going to prevent the child from the movement of the baby stroller. Whenever the parent lets go of the stroller's handlebar, the front wheel locks preventing it from rolling away. Once the parent touches the handlebar, the lock on the front wheel disengages and the stroller is free to move. To indicate the stroller is free to move, LED strips will be active

Advantage

- Ensures safety.
- Automatic braking system.
- Preventing from Stoller.

Disadvantage

- Battery may finish
- Chance of skiting
- It may bulky due to heavy battery

Idea 4:

Abstract

Nowadays the child having low safety to their parents and it is unable to sense the voice of crying of the child and inform this to their parents. The proposed system includes a child module and a receiver module for getting the information about the missed child on Periodical basis. The child module includes Atmega328 Microcontroller, GSM, Voice playback circuit and the receiver module includes smart mobile device in parent's hand and the other as monitoring database in control room of the school. Thus this system tracking the child from source to destination i.e., from home to school anywhere

Advantages:

- The child present/absent status can be known to the school as well as to their parents
- It's also recording a child's cry and when it matches with crying of the child in school the text message containing the location of a child will be sent to the parent
- Location of child can be traced by using the app in their parent's mobile.

Disadvantages:

- Chargable device.
- If signal loss occur we can't able to track the device.