IoT Based Safety Gadget for Child Safety Monitoring and Notification

Smart IOT Device for Child Safety and Tracking

Objective

Child safety and tracking is a major concern as the more number of crimes on children are reported nowadays. With this motivation, a smart IoT device for child safety and tracking is developed to help the parents to locate and monitor their children.

Methodology

Smart IOT Device for Child Safety and Tracking was shown by operating the microcontroller which uses ARM-7 LPC2148 and then system is developed using LinkIt ONE board programmed in embedded C and interfaced with temperature, heartbeat, touch sensors and also GPS, GSM & digital camera modules.

The novelty of the work is that the system automatically alerts the parent/caretaker by sending SMS, when immediate attention is required for the child during emergency.

Outcome

The research demonstrates Smart IoT device for child safety and tracking helping the parents to locate and monitor their children. If any abnormal values are read by the sensor then an SMS is sent to the parents mobile and an MMS indicating an image captured by the serial camera is also sent.

Future Scope

The future scope of the work is to implement the IoT device which ensures the complete solution for child safety problems.

IoT Based Smart Gadget for Child Safety and Tracking

Objective

Mainly streamed towards child safety solutions by developing a gadget which can be tracked via its GPS locations and also a panic button on gadget is provided to alert the parent via GSM module calling for help. Parental android app is developed to manage and track the device anytime.

Methodology

It consists of inbuilt Wi-Fi, GSM, GPS and Bluetooth modules. The link it one board is similar to the Arduino board and it is termed as all-in-one prototyping board for safety and IoT devices.

The system is connected to cloud via Wi-Fi technology and hence the GPS location is updated to the cloud at regular intervals or on request, whenever parent want to monitor the location of safety device then parental app can be used which fetches all the data from the updated cloud and also display the current/live location of the safety gadget.

Outcome

The research demonstrates Smart IoT device for child safety and tracking, to help the parents to locate and monitor their children.

Future Scope

The system can be further enhanced by installation of mini camera inside smart gadget for better security so that live footage can be seen on parental phone during panic situations. The system can be modified by installation of small solar panels for charging the battery of smart gadget to gain maximum battery backup.

IoT-based Child Security Monitoring System

Objective

Nowadays, crime rate associated with children keeps increasing due to which draws peoples' attention regarding child safety. The research is conducted to propose a child security smart band utilizing IoT technology.

Methodology

Internet of things (IoT) refers to networked interconnection of objects featured with ubiquity intelligence . In IoT, objects are connected via internet for communication, interaction, exchanging data and making decisions automatically at anywhere and anytime.

Sensor known as a device measuring physical value and converts it into data.

Cloud computing helps in sharing the computing resources (networks, servers, storages, applications, services) are delivered as a service over the Internet from cloud to customer.

Outcome

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.

Future Scope

The future enchantments will be adding more features, software, applications, hardware to make the proposed system capable of working more intelligently, meanwhile guarantee the safety of children.