

OBJECTIVES

This study focuses on designing a device that can track a child's whereabouts using GPS, as well as having a panic button that can warn the parent by using a GSM module to call for help. Android parental software is created to control and track the device at any time. Smart gadget device is always linked to parental phone, which can receive and make calls as well as send and receive SMS on gadget via GSM module. Wireless technology is also implemented on device, which is useful to bind the gadget within a region of monitoring range; if gadget moves out of monitoring range, alert will be triggered on binding gadget, helping you keep a virtual eye on child. There is a health monitoring mechanism built into the device that uses parental app monitoring to check for characteristics like temperature and heartbeat/pulse rate. Using a contact switch, the gadget also keeps track of whether it is plugged in or not and notifies the parent if it is unplugged.

The term "internet of things" (IoT) describes a collection of gadgets and systems that are permanently connected to both the internet and physical sensors. The safety of children is in danger today more than ever, so it's critical to offer a technology-based solution that will support them in emergency circumstances and allow for smart device monitoring. The proposed system includes a Wi-Fi module that is used to implement IoT and send all the monitoring parameters to the cloud for Android app monitoring on the parental phone. The proposed system is also equipped with GSM and GPS modules for sending and receiving calls and SMS between the safety gadget and parental phone. Using its location coordinates on the Android app on the parent's phone as well as an SMS request from the parent's phone to the safety device, an Android application can be used to track the current location of the safety device. When a panic attack occurs, a panic alert system is used, and an automatic SMS alert and phone call are sent from the safety device to the parental phone, asking for assistance. The system also monitors for plug and unplug from hand, and as soon as the device is unplugged, an SMS is sent to the parental phone and the alert parameter is updated to the cloud. Heartbeats and temperature are tracked, with the numbers being regularly sent to the cloud for parental app monitoring. With the use of BEACON technology, a boundary monitoring system is established on a safety device, like an alert is given to the parent on the binding gadget as soon as the safety device moves far away from it. The technology is used to track a person's

location when necessary in cases of safety concern and to monitor health metrics.