

Project Design Phase 1

Solution Architecture

Team ID PNT2022TMID06812

Project Name IOT based safety gadget for child safety monitoring and notification

Maximum marks 2 marks

We have implemented the devices of child safety wearable devices. The devices help for child safety. A child wearable devices inside be the magnetic sensor. The work for analysis the child position, using four types of zones. The zones outside go to another location or unknown location for automatically send a alarm or SMS on the parent mobile. The programmed write the particular location of daily activity of child doing regular work.

Fig1 The devices possible to school student or child. Sensor is useful for tracking child and also provides the information where the child is currently located as well as it also informs the parents how long his child is far away from his parents. SMS services used when smart phones do not support internet connectivity in this case child is able to send a text message or exact location in the parents. This system is going to help the parents to track the location of their children without informing them because their movement is displayed on the parent mobile. Figure 1: Architecture Diagram for the device The application was implemented in PHP enable mobile devices which support Sensor. The application support two type of module these for child and parent. The application programmed for particular four or five zones, the child go to unknown location for send SMS or alarm on parent mobile with display for current location.

This application used to four zones in a single parent application. Parents can monitor their child moment as each five second as they are receiving the information of their child movement from their devices, because each five second automatically update the location on the parent mobile, so easy to analysis the current location. The devices are using the sensor, so we using the update the each five second. Then last zone using for unknown location, it not using track, because using the refresh the location. In developing this application for parents, we required sensor enable smart phones which are used to track the child's location and for developing Arduino based

applications. The child sends location coordinate by using sensor updates to the server and the updates saved in the database on the server. The reason for selecting Arduino operating system is that now days millions of users are using smart phones.

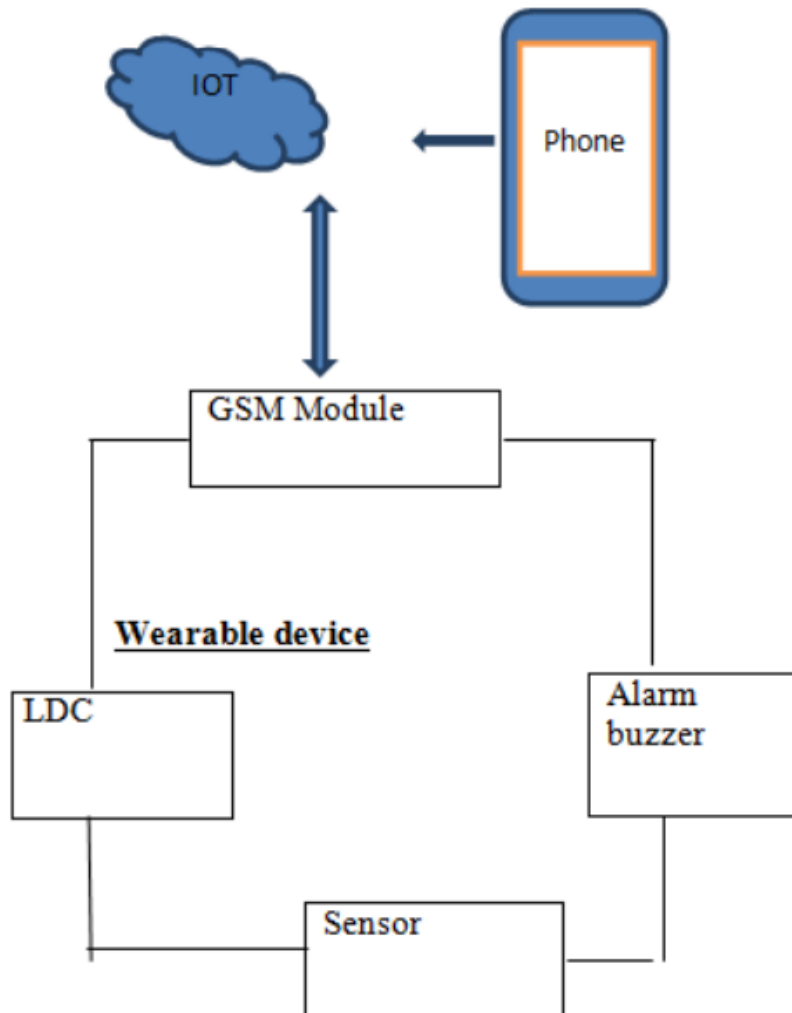


Figure 1: Architecture Diagram for the device