

## **PROJECT DEVELOPMENT PHASE**

### **PROJECT DEVELOPMENT DELIVERY OF SPRINT 2**

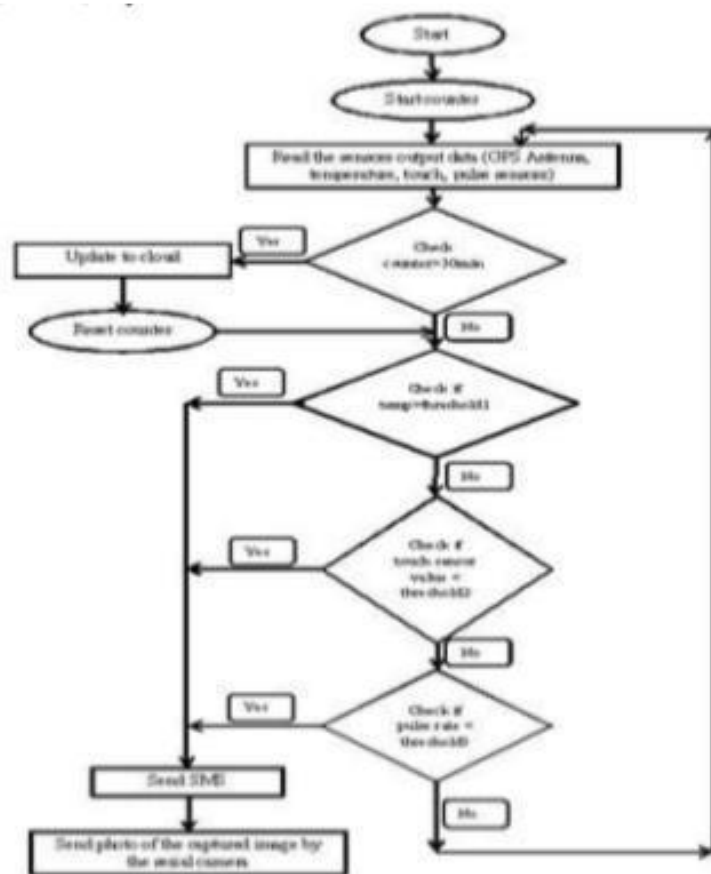
**Project Name: IOT based safety gadget for child safety monitoring and notification**

- Child as well as the surrounding temperature. If there occurs any abnormal rise or fall in temperature in the body of the child or in the surrounding it will notify the user as per the coded time delay as shown in the picture. It will show the temperature and humidity values notifies the user based on the predefined value abnormal fall or rise scenarios.
- 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. The future scope of the work is to implement the IoT device which ensures the complete solution for child safety problems.

### **FLOW CHART OF THE PROPOSED SYSTEM**

- The counter should be started for counting time. The sensors output data should be read from the child safety device. The counter time should be checked for time interval of 30minutes. For every 30minutes except serial camera, the data from GPS, temperature, touch, pulse rate data is pushed into the cloud. The monitoring parameters are displayed on webpage.
- The counter is reset to restart the timer. So as to post the data into the cloud for every 30minutes. The sensors data is continuously read by the controller. When the value of temperature read from the sensor crosses the threshold1, notification messages are sent.

- The threshold value of the temperature is considered here is 38 C. Similarly, when the touch sensor value is crocess threshold2, notification messages are sent. Threshold of the touch sensor is considered here is 100. The Pulse rate interval is analog value from the sensor, it is converted into the beats per minute (BPM) by formulae.



- 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.
- In case situations happen, notifications will be sent to parents so that actions can be taken through this, child safety can be ensured and crime rate will be reduced. However, the proposed device is not robust enough

and does not contain sufficient functions to operates like a mobile phone. Hence, 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.