Project Development Phase

Sprint 3

Date	07 November 2022
Team ID	PNT2022TMID48583
Project Name	IOT based device for child safety monitoringand notification
Maximum Marks	4 marks

- Children below five years are years delicate to be taken careof by an autonomous system and children above fifteen years are grown up enough to be taken care of by their mothers pervasively.
- Smart Mom architecture is divided into two domains namely−thecloud environment and the home environment. Each domain is subdivided into a number of modules depending upon the application system.

Notification module

The notification is responsible for sending notifications to the computing devices either at home or outside. The computing devicecanbe wired or wireless and may belong to either the child, the governess,doctor or the mother of the child depending upon the needed application.

Python Serial Loopback Test

```
import serial

#####Global      Variables#######################################
#be sure to declare the variable as 'global var' in the fxnser = 0

#####FUNCTIONS###################################################
#initialize serial
connectiondefinit_serial():
        COMNUM = 9 #set you COM port # here
        global ser #must be declared in each fxn
        usedser =serial.Serial()
        ser.baudrate = 9600
        ser.port = COMNUM - 1 #starts at 0, so subtract
        1#ser.port ='/dev/ttyUSB0' #uncomment for linux

        #you must specify a timeout (in seconds) so that the# serial port
        doesn'thang
        ser.timeout = 1
        ser.open() #open the serial port

        # print port open or
        closedifser.isOpen():
                print 'Open: ' + ser.portstr
#####SETUP########################################################
#this is a good spot to run your initializationsinit_serial()

#####MAIN      LOOP###############################################
while 1:
        #prints what is sent in on the serial port

        temp = raw_input('Type what you want to send, hit enter:\n\r')
```

```
    ser.write(temp) #write to the serial port
    bytes = ser.readline() #reads in bytes followed by a newline
    print 'You sent: ' + bytes #print to the console
    break #jump out of loop
#hit ctr-c to close python window
```

```
#adjust these values based on your location and m
TRX = -105.1621     #top right longitude
TRY = 40.0868       #top right latitude
BLX = -105.2898     #bottom left longitude
BLY = 40.0010       #bottom left latitude
```

Run the program by typing: