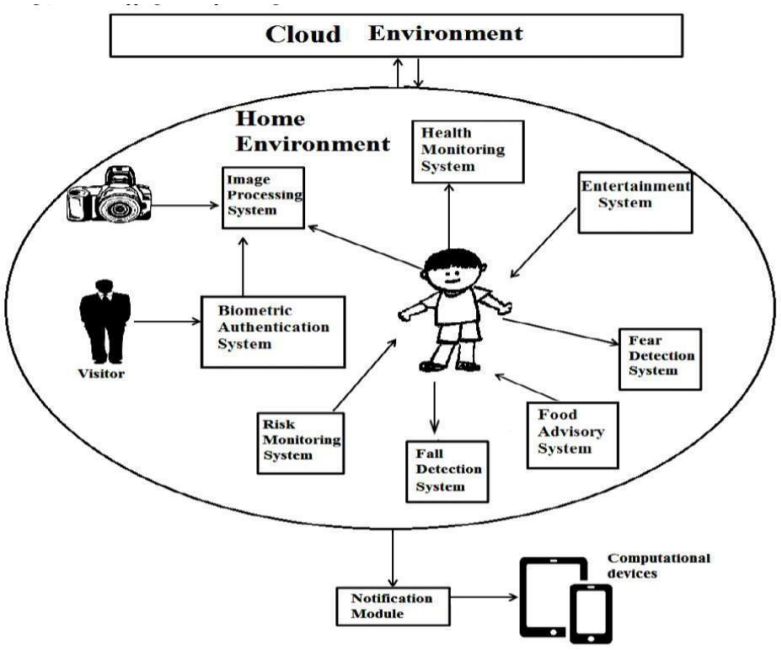
Project Development Phase
Sprint3

Date	11 November 2022
Team ID	PNT2022TMID47921
Project Name	IOT based device for child safety monitoring and notification

- The Smart Mom architecture thus eases their work and helps them in taking care of the child It is also assumed that this system is useful for children between ages five to fifteen years.
- Since, children below five years are years delicate to be taken care of 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–the cloud 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 device can be wired or wireless and may belong toeither the child, the governess,doctor or the mother of the child depending upon the needed application.



Python Serial Loopback Test

```
importserial

#####GlobalVariables#####################################
#besuretodeclarethevariableas'globalvar'inthefxnser=0

#####FUNCTIONS###########################################################
#initialize
serialconnectiondefinit_serial():
    COMNUM = 9 #set you COM port #
    hereglobal ser #must be declared in each
    fxnusedser=serial.Serial()
    ser.baudrate=9600
    ser.port=COMNUM-
    1#startsat0,sosubtract1#ser.port='/dev/ttyUSB0'#uncom
    mentforlinux

    #youmustspecifyatimeout(inseconds)sothatthe#serialportdoesn'thang
    ser.timeout=1
    ser.open()#opentheserialport

    # print port open
    orclosedifser.isOpen():
        print'Open:'+ser.portstr#####SETUP#######################
########################
#thisisagoodspottorunyourinitializationsinit_serial()

#####MAINLOOP############################################
while1:
    #printswhatis sentinontheserialport

    temp=raw_input('Type whatyouwanttosend,hitenter:\n\r')
```

```
        ser.write(temp)#writetotheserialport
        bytes = ser.readline() #reads in bytes followed by a
        newlineprint'Yousent:'+bytes#printtotheconsole
        break#jumpoutofloop
#hitctr-ctoclosepythonwindow
```

```
#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:

1. High-level language software design has long stayed in use for surrounded-systems growth.
2. Though, assemblage programming still overwhelms, mostly for digital-signal processor (DSP)based systems.
3. DSPs are frequency systems automatic in assembly language by computer operator who know the processor building inside out. The key incentive for this practice is performance, even with the disadvantages of assembly software design when linked to high-level programming.