

## Project Development Phase

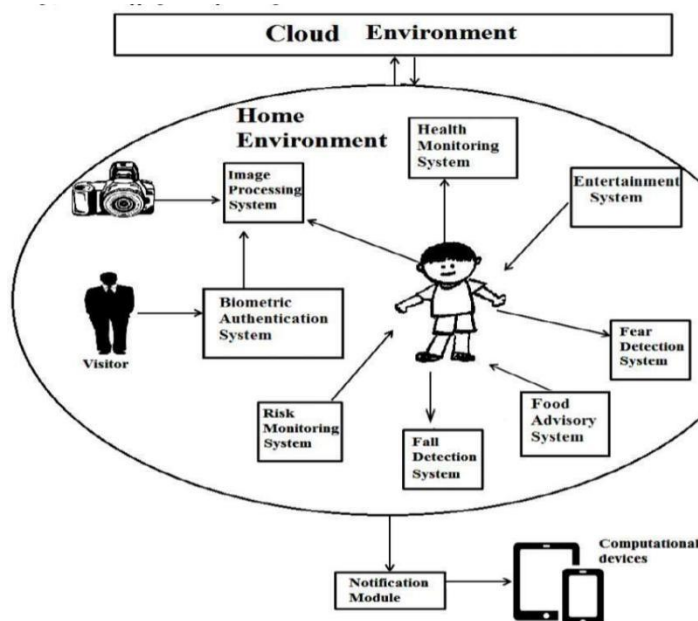
### Sprint 3

Date	07 November 2022
Team ID	PNT2022TMID29237
Project Name	IOT based device for child safety monitoring and notification
Maximum Marks	4 marks

- 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 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 fxn
ser = 0

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

#you must specify a timeout (in seconds) so that the serial port
#doesn't hang
ser.timeout = 1
ser.open() #open the serial port

# print port open or
# closed
if ser.isOpen():
    print 'Open: ' + ser.portstr
else:
    print 'Closed'

#####SETUP#####
#this is a good spot to run your initializations
init_serial()

#####MAIN LOOP#####
while 1:
    #prints what is sent in on the serial port
    print ser.read(1)

    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:

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.