

# Lumi

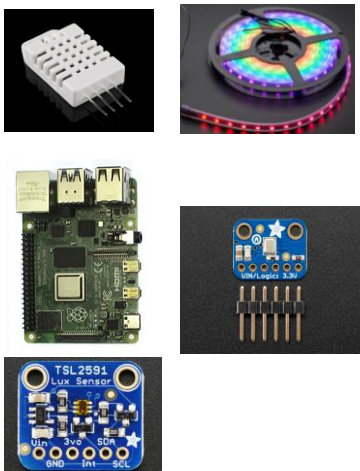
Lumi Monitor - Humber College – Computer Engineering Technology – CENG355 – April 2020

## INTRODUCTION

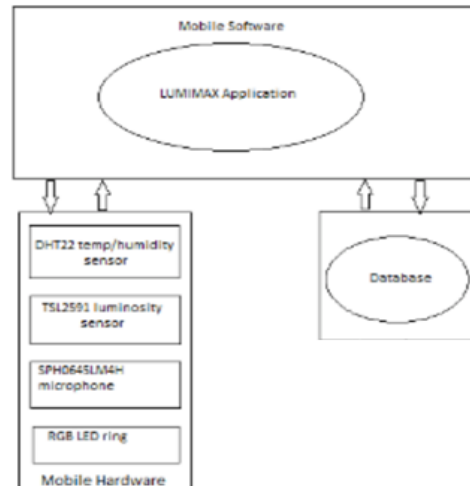
**Goal: Making parenting easier**

The Lumi monitor application is designed to help overwhelmed parents by easing the hardships of parenting. Simple GUI allows you to easily monitor the baby by communicating with a hardware installed in the baby's room.

## End Devices

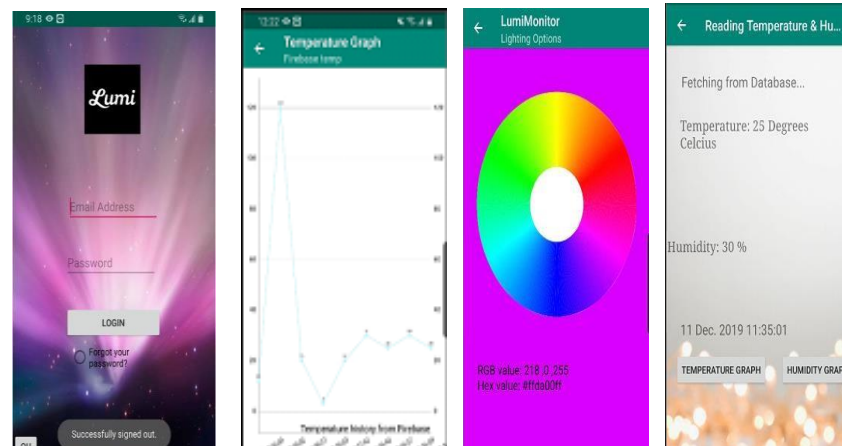


## Block diagram and interaction with devices

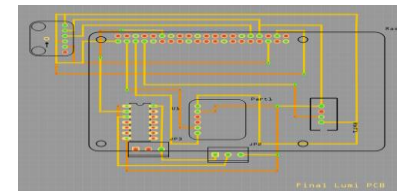
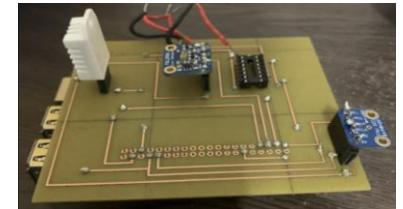


- Get JSON file from firebase's website after creating database.
- Configure gradle files in android studio to get the app to work in real time with firebase.
- On the hardware, install python firebase library firebase
- Import firebase in python code

## MOBILE APPLICATION OVERVIEW



## PCB & Testing



PCB designed with fritzing software and testing done with multimeter.

## FEATURES

- Temperature & Humidity Monitoring
- 2-way communication channel
- Light & Sound Detection
- Signal Processing Circuit
- Android Mobile Remote Control
- RGB light controlled by color wheel

Ref.: Lumi Monitor Capstone Project report