Smart Band

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Contents

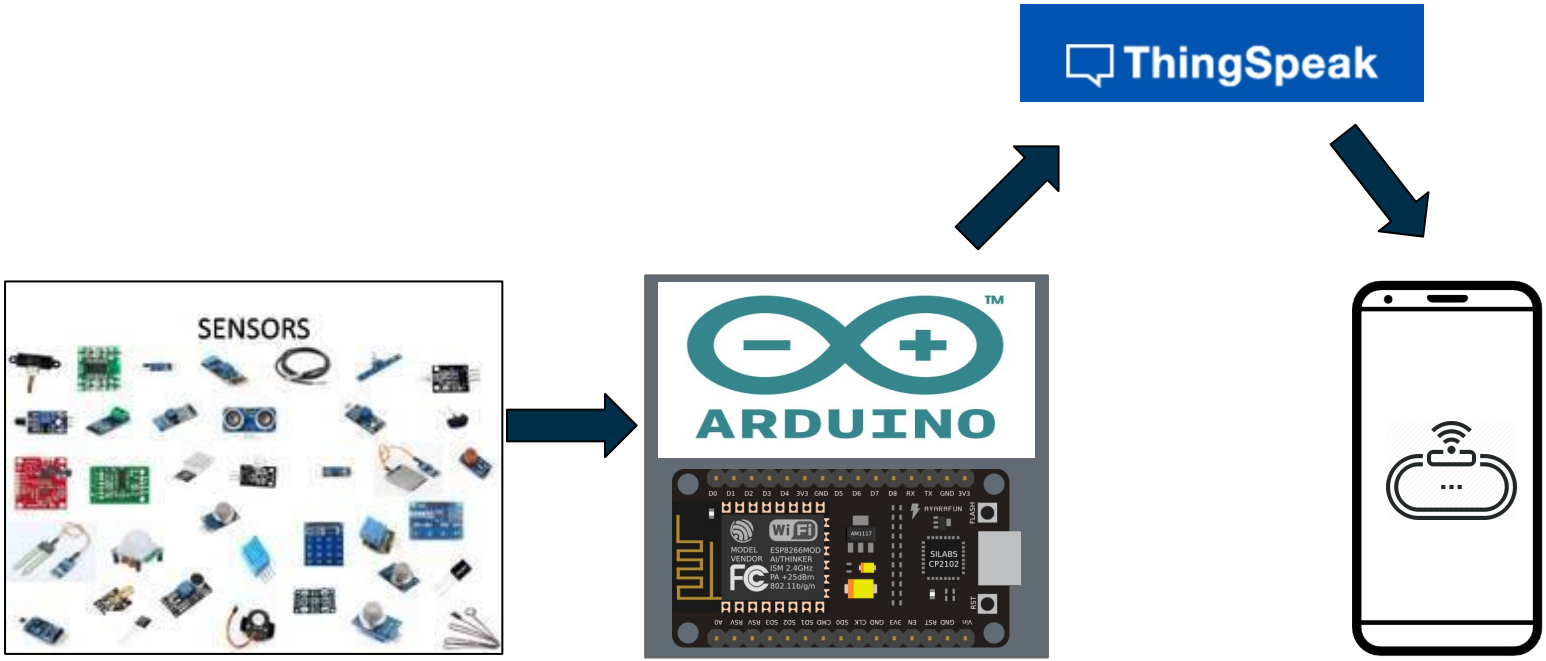
Why Do We Need Smart Band?

- Easy Access of Information
- Real Time Visualisations
- Notifications in Immediate Alerts
- Old Age Person Health Monitoring

Proposed Solution

- IoT device
- Cloud Platform
- App or Web App

Architecture

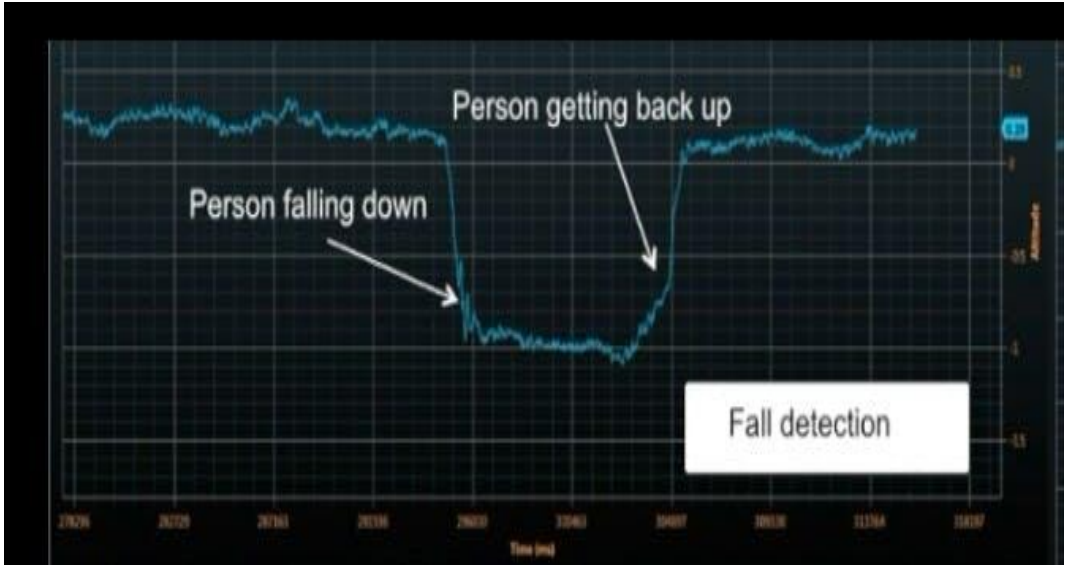


List Of Devices Needed

- Arduino Nano
- Node MCU
- BMP180
- Pulse Sensor
- 3.7 V Battery
- Mobile

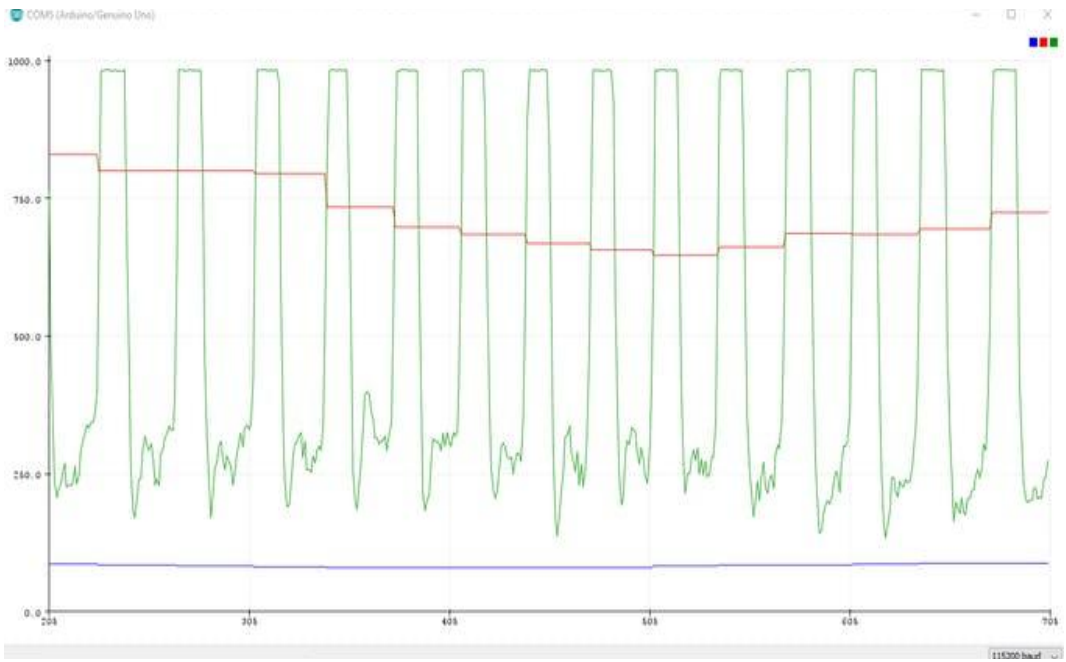
Results:
Fall Detection

Sensor sense the change of altitude. Thus by this efficiency of the sensor we can determine a fall has occurred.



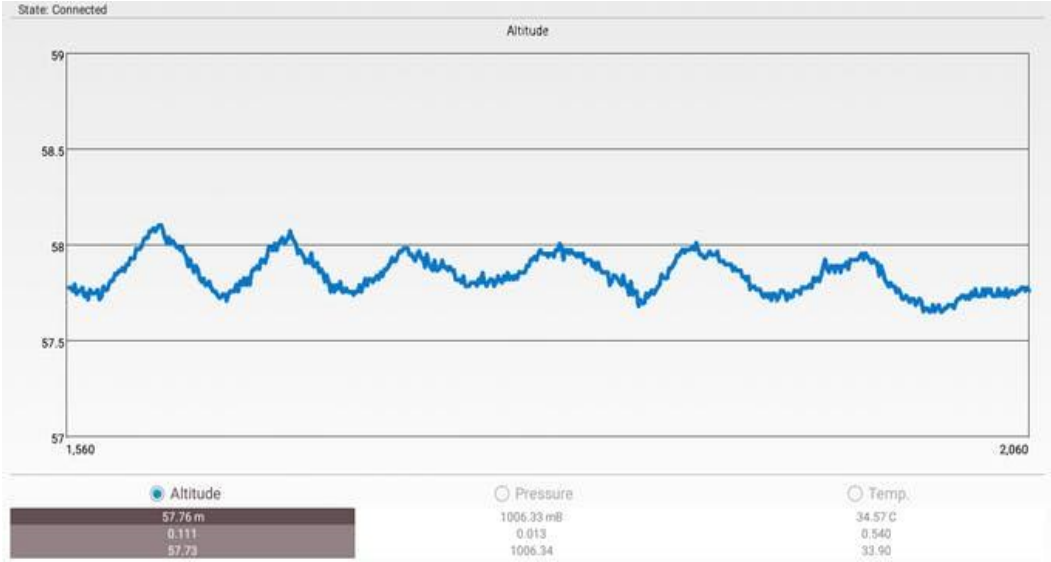
Results:
Pulse Monitor

Sensor sense the change of BPM. Thus by this efficiency of the sensor we can determine pulse fall or rise.



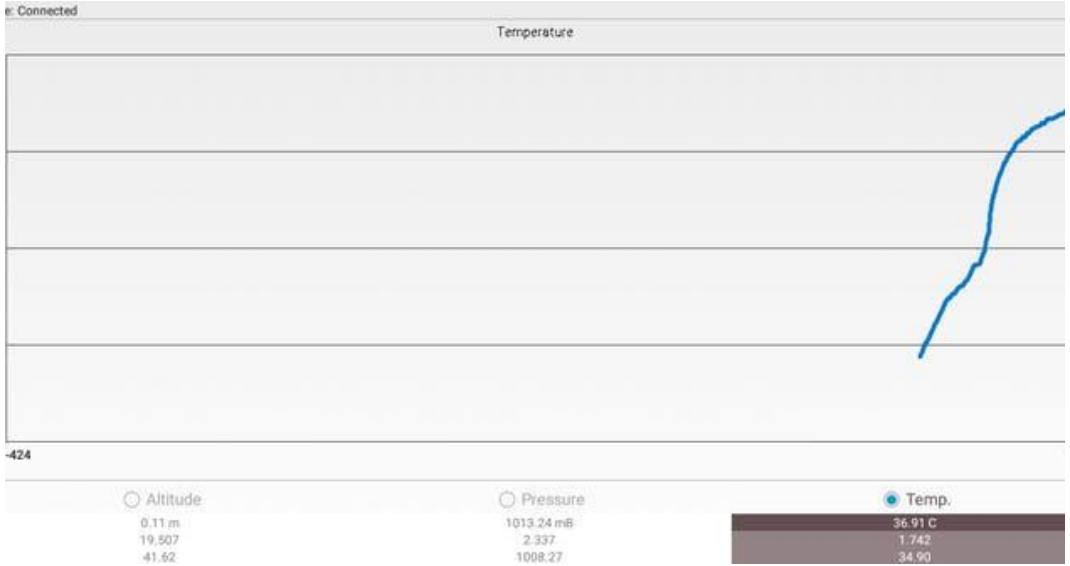
Results:
Steps Count

Once the Health Band detects a "wave" motion it deducts that the patient has begun his/her exercise. Crest to crest or trough to trough marks one cycle.



Results: Temperature

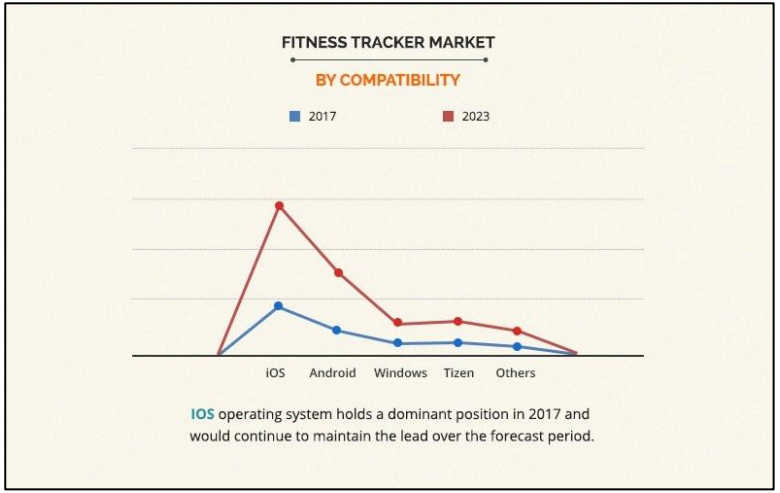
The sensor gives the temperature. The band being in contact with the arm gives the live temperature of the patient. Any spikes or drops will be alerted again automatically via message to relatives.

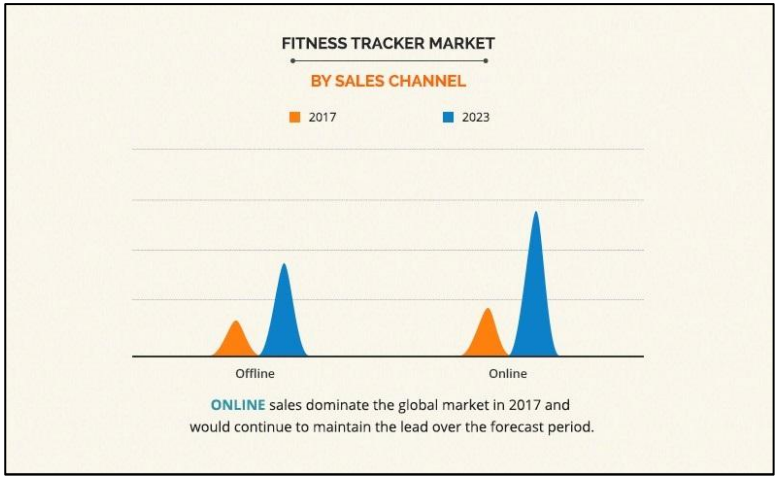


Future Versions: NFC

Future Versions: GPS Tracker

Market Value





Costing

- Total Cost of Working Model: Rs. 1000/-
- Total Estimated Cost of Model as a Finished Product: Rs. 3000/-

Conclusion

- Meaningful devices and applications make world a better place
- Collection of Health Data and Analysis for a better future
- World Wide Health Data Management

Time For Working Model