# Readme (Project4-Group10)

### **Prerequisites**

- Install Node.js on your Computer. https://nodejs.org/en/download/
- Install Node Red
  - o Open Terminal
  - o Run the command below
  - o npm install -g --unsafe-perm node-red
  - o Use sudo npm install -g --unsafe-perm node-red
- Open Github(URL). Download the .json file
- Open Terminal
  - o Type node-red
  - o Click on Settings & Click on manage palette
  - Go to install tab
  - o Search Dashboard
  - Click on install next to node-red-dashboard

### **Login to Aws Console**

- Find IoT core service
- Go to secure & click on policy
- Click on create policy
- Give any Name to your policy
- In Action type iot:\* & Resource ARN \*
- Check the Allow checkbox and click on create
- Go to Manage & create a thing
- Click on Create a Thing
- Give any Name to your thing
- Click on Next
- Click on create Certificate
- Download Certificate, Private key & RootCa
- Click on attach policy & attach the policy you created before
- Go to Manage & click on thing
- Click on Interact & Copy the Rest API Endpoint
- It should be something like instance.iot.region.amazonaws.com

Open Terminal & type node-red

Check the URL at which your Server is running. It should be something like <a href="http://127.0.0.1:1880/">http://127.0.0.1:1880/</a> Open the URL in the browser Node Red will open.

#### **Node-Red**

- Click on Settings button and click on Import Flows
- Upload the json files you downloaded before
- Flows will be created
- In Flow Subscribe, Click Temperature Node & click on edit

- Paste the Endpoint in the server & Click on edit next to TLS configuration
- Upload the certificate, private key & Root CA
- Go to flow Publish, Click on Temperature node and repeat the same process
- Open timestamp node. In Repeat field, select Interval from the dropdown. Every 5 seconds.
- Click on Deploy.

## **Open Aws console**

- IoT core service
- Click on Test
- In Field Subscribe to topic type Temperature and click on Subscribe to topic
- Click on Publish Topic
- Repeat the same step for Pacemaker, Glucose, Oxygen, Pressure, BloodP, Pedometer & Alcohol
- Click on bars at top right
- Open dashboard to see real time dashboard.