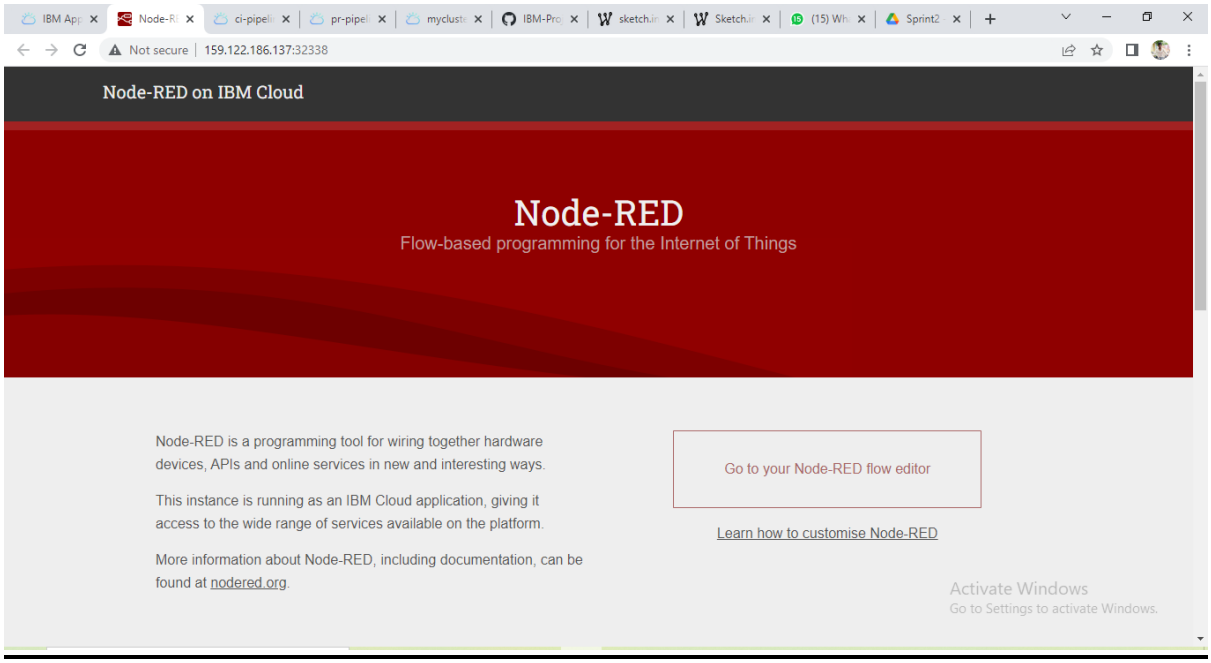
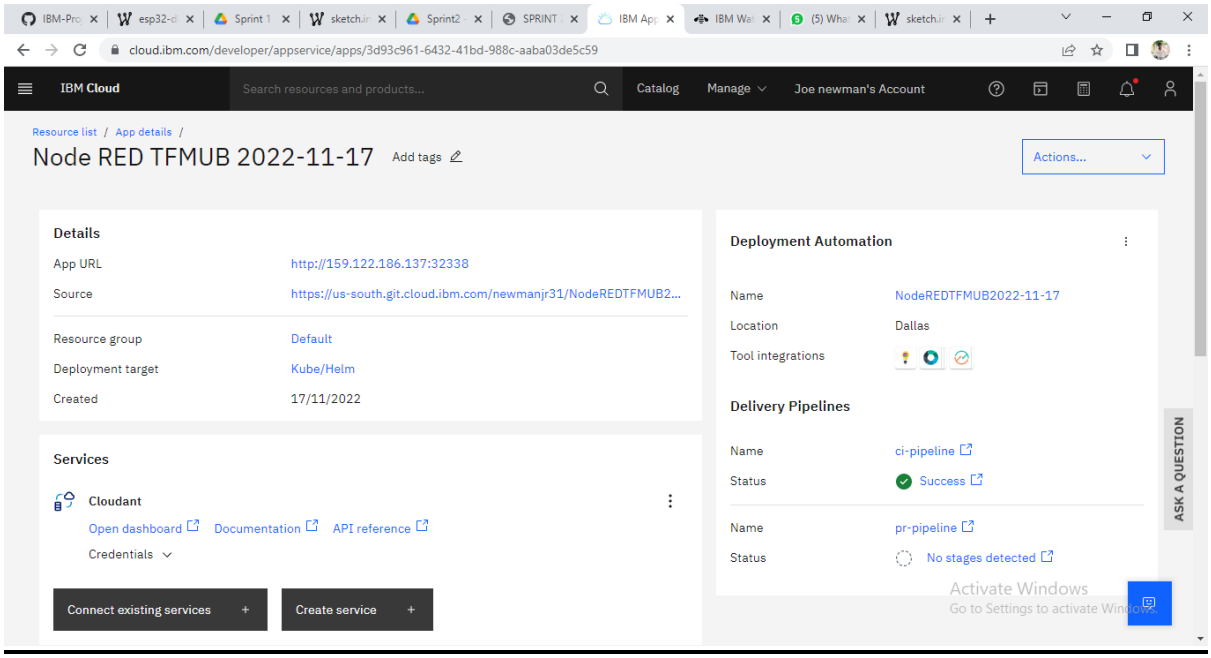
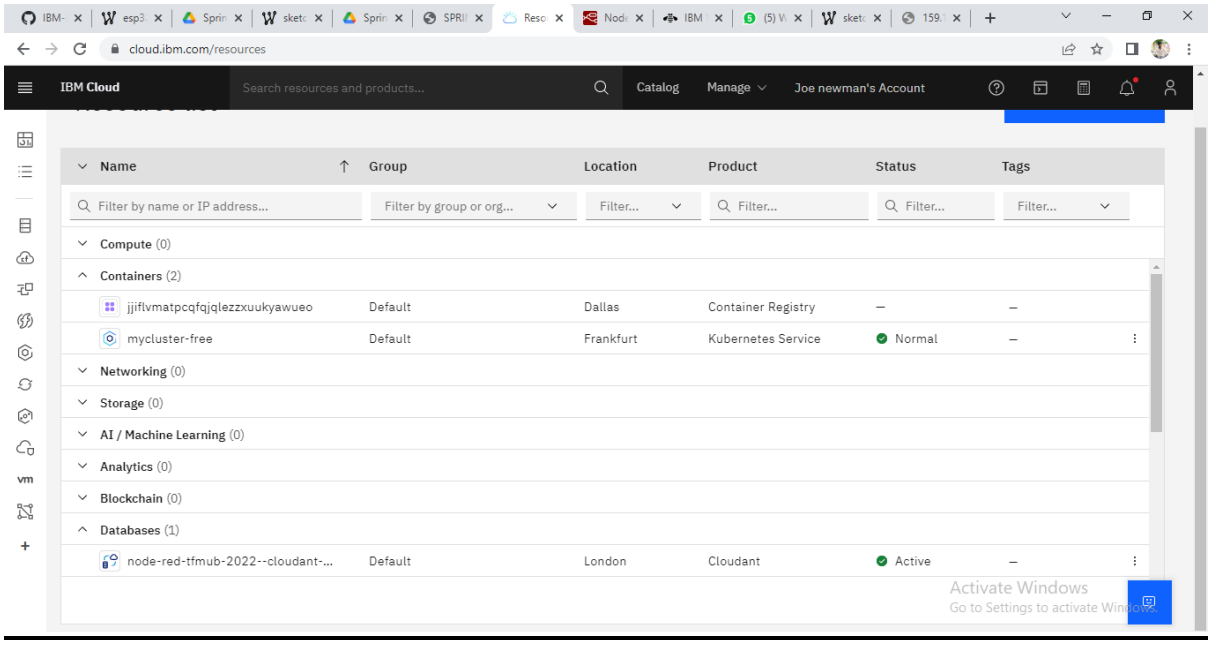
SPRINT – 2

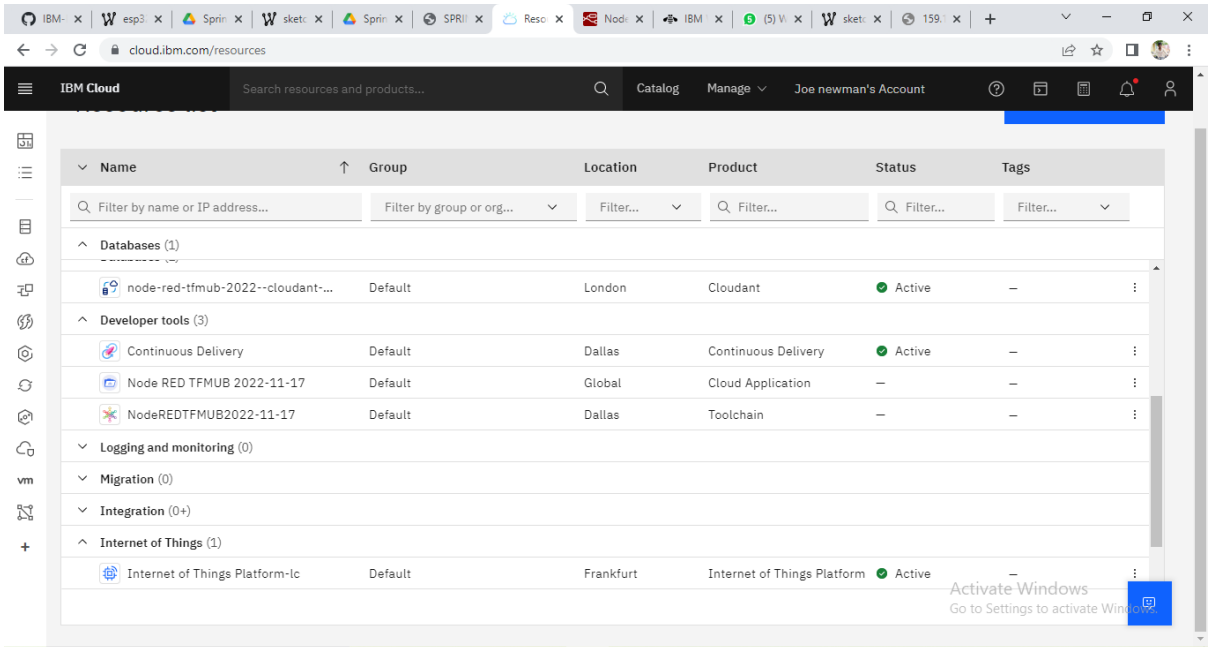
DATE	01 November 2022
TEAM ID	PNT2022TMID24952
PROJECT NAME	Industry specific intelligent fire management system

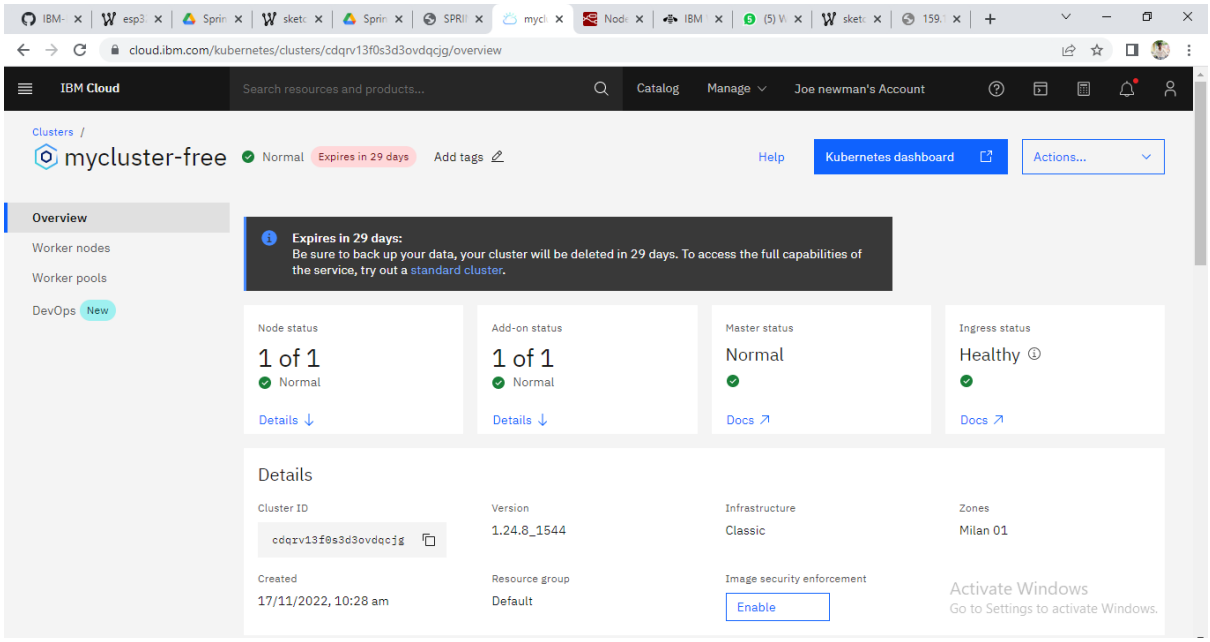
IMAGES OF CLOUD NODE-RED SERVICE:

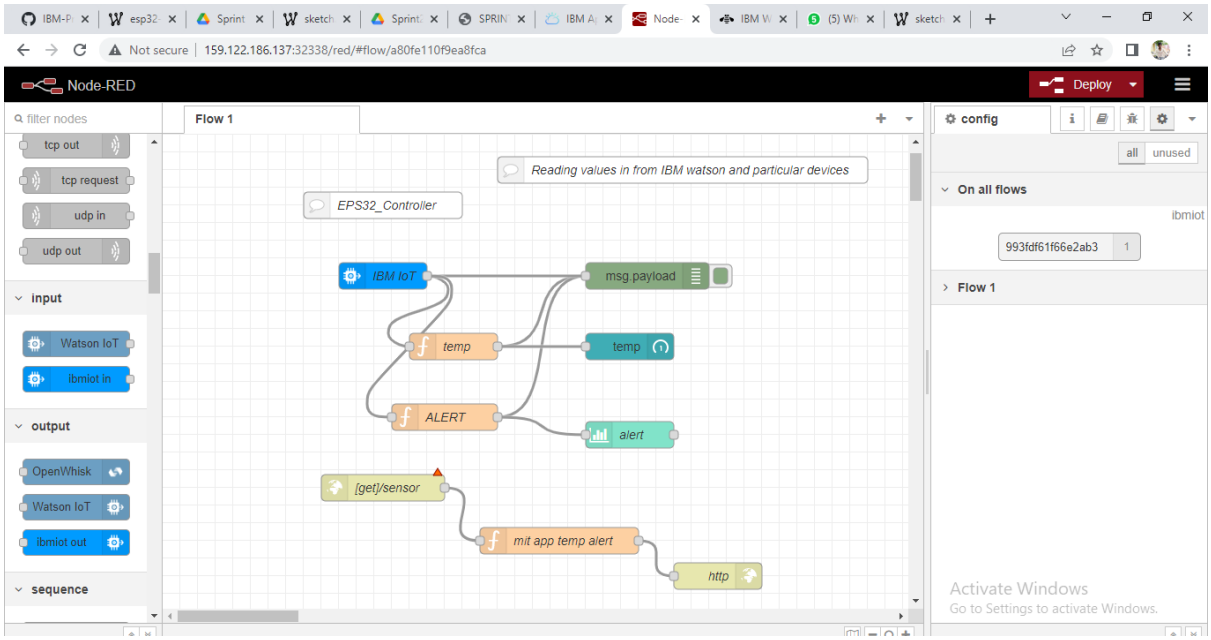



cloud.ibm.com/developer/appservice/apps/3d93c961-6432-41bd-988c-aaba03de5c59
IBM Cloud
Search resources and products...
Catalog
Manage
Joe newman's Account
Resource list / App details /
Node RED TFMUB 2022-11-17
Add tags
Actions...
Details
App URL
http://159.122.186.137:32338
Source
https://us-south.git.cloud.ibm.com/newmanjr31/NodeREDTFMUB2...
Resource group
Default
Deployment target
Kube/Helm
Created
17/11/2022
Services
Cloudant
Open dashboard
Documentation
API reference
Credentials
Connect existing services
Create service
Deployment Automation
Name
NodeREDTFMUB2022-11-17
Location
Dallas
Tool integrations
Delivery Pipelines
Name
ci-pipeline
Status
Success
Name
pr-pipeline
Status
No stages detected
ASK A QUESTION
Activate Windows
Go to Settings to activate Windows.

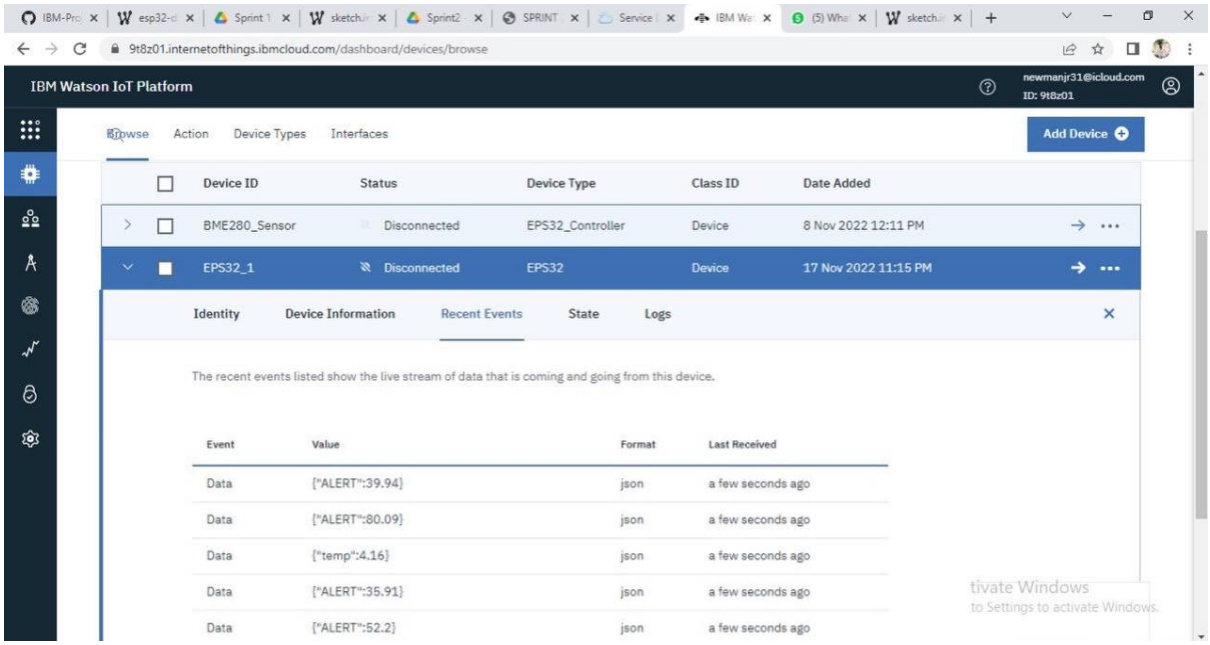

cloud.ibm.com/resources
IBM Cloud
Search resources and products...
Catalog
Manage
Joe newman's Account
Name
Group
Location
Product
Status
Tags
Filter by name or IP address...
Filter by group or org...
Filter...
Compute (0)
Containers (2)
jjiflvmatpcqfqjqlezzxuukyawueo
Default
Dallas
Container Registry
mycluster-free
Default
Frankfurt
Kubernetes Service
Normal
Networking (0)
Storage (0)
AI / Machine Learning (0)
Analytics (0)
Blockchain (0)
Databases (1)
node-red-tfmub-2022--cloudant-...
Default
London
Cloudant
Active
Activate Windows
Go to Settings to activate Windows.

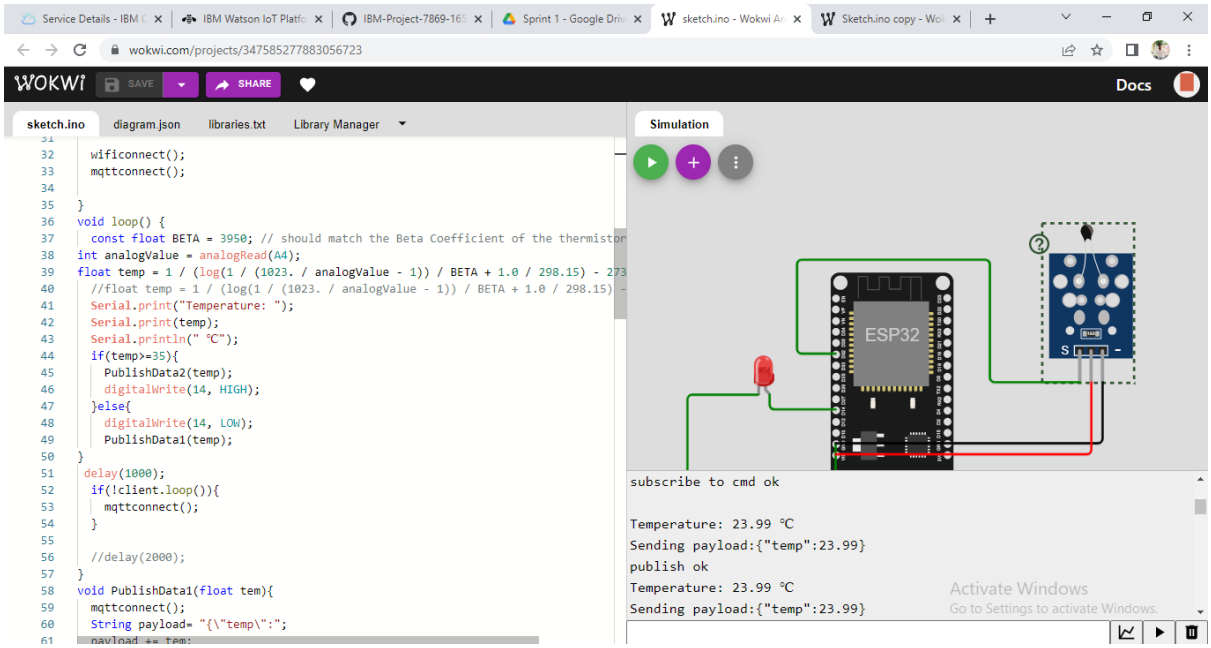

cloud.ibm.com/resources
IBM Cloud
Search resources and products...
Catalog
Manage
Joe newman's Account
Name
Group
Location
Product
Status
Tags
Filter by name or IP address...
Filter by group or org...
Filter...
Databases (1)
node-red-tfmub-2022--cloudant-...
Default
London
Cloudant
Active
Developer tools (3)
Continuous Delivery
Default
Dallas
Continuous Delivery
Active
Node RED TFMUB 2022-11-17
Default
Global
Cloud Application
NodeREDTFMUB2022-11-17
Default
Dallas
Toolchain
Logging and monitoring (0)
Migration (0)
Integration (0+)
Internet of Things (1)
Internet of Things Platform-lc
Default
Frankfurt
Internet of Things Platform
Active
Activate Windows
Go to Settings to activate Windows.


cloud.ibm.com/kubernetes/clusters/cdqrv13f0s3d3ovdqcjg/overview
IBM Cloud
Search resources and products...
Catalog
Manage
Joe newman's Account
Clusters /
mycluster-free
Normal
Expires in 29 days
Add tags
Help
Kubernetes dashboard
Actions...
Overview
Worker nodes
Worker pools
DevOps
New
Expires in 29 days:
Be sure to back up your data, your cluster will be deleted in 29 days. To access the full capabilities of the service, try out a standard cluster.
Node status
1 of 1
Normal
Details
Add-on status
1 of 1
Normal
Details
Master status
Normal
Docs
Ingress status
Healthy
Docs
Details
Cluster ID
cdqrv13f0s3d3ovdqcjg
Version
1.24.8_1544
Infrastructure
Classic
Zones
Milan 01
Created
17/11/2022, 10:28 am
Resource group
Default
Image security enforcement
Enable
Activate Windows
Go to Settings to activate Windows.

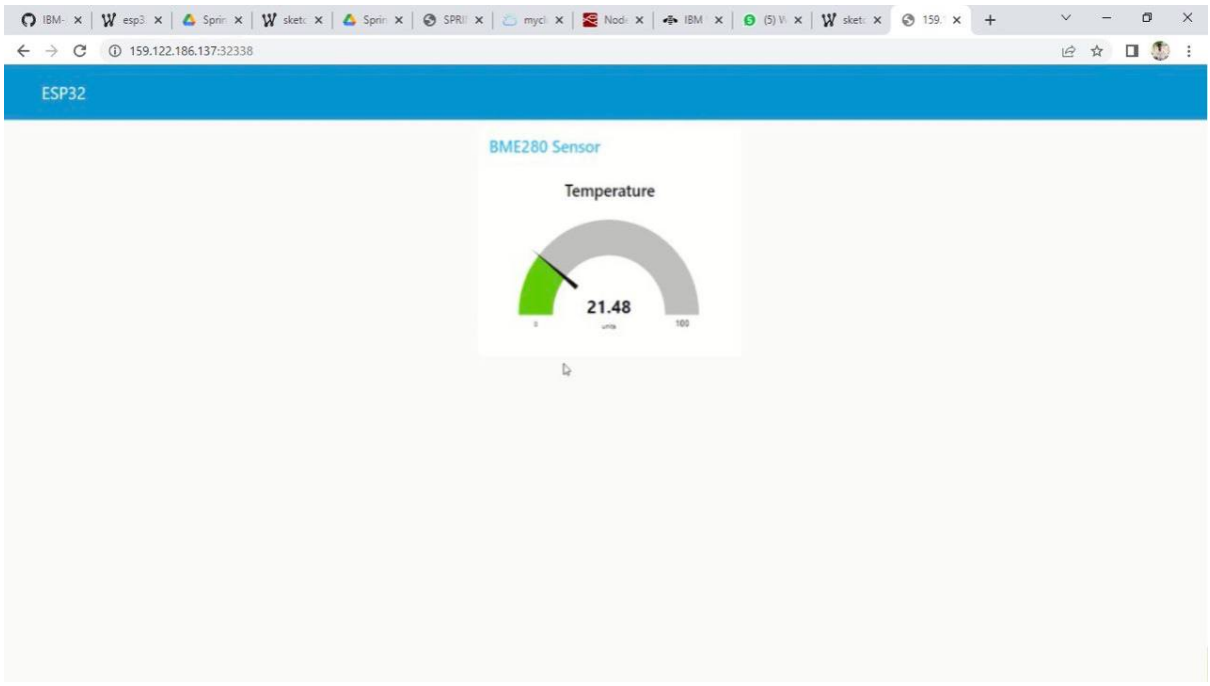


IMAGES OF IBM CLOUD:




wokwi.com/projects/347585277883056723
WOKWI
SAVE
SHARE
Docs
sketch.ino
diagram.json
libraries.txt
Library Manager
wificonnect();
mqttconnect();
}
void loop() {
const float BETA = 3950; // should match the Beta Coefficient of the thermistor
int analogValue = analogRead(A4);
float temp = 1 / (log(1 / (1023. / analogValue - 1)) / BETA + 1.0 / 298.15) - 273
//float temp = 1 / (log(1 / (1023. / analogValue - 1)) / BETA + 1.0 / 298.15) -
Serial.print("Temperature: ");
Serial.print(temp);
Serial.println(" °C");
if(temp>=35){
PublishData2(temp);
digitalWrite(14, HIGH);
}else{
digitalWrite(14, LOW);
PublishData1(temp);
}
delay(1000);
if(!client.loop()){
mqttconnect();
}
//delay(2000);
}
void PublishData1(float tem){
mqttconnect();
String payload= "{\"temp\":";
Simulation
ESP32
subscribe to cmd ok
Temperature: 23.99 °C
Sending payload:{"temp":23.99}
publish ok
Temperature: 23.99 °C
Sending payload:{"temp":23.99}
Activate Windows
Go to Settings to activate Windows.

OUTPUT:


159.122.186.137:32338
ESP32
BME280 Sensor
Temperature
21.48