

PROJECT DEVELOPMENT DELIVERY OF SPRINT-2

Date	06 November 2022
Team ID	PNT2022TMID38131
Project Name	Project - SmartFarmer -IOT Enabled smart farming application
Team Leader	Manoj Kumar.S
Team Member	Surya.G
Team Member	Vignesh.E
Team Member	Surendar.K

SPRINT-2 : SOFTWARE

ABOUT SPRINT 2: To Create the device on IBM cloud platform and the node red platform to set the iot device workflow.

PROCEDURE FOR IBM CLOUD PLATFORM:

BM Watson IoT Platform is a managed, cloud-hosted service designed to make it simple to derive value from your Internet of Things devices. STMicroelectronics is an IBM Partner and provides development platforms allowing users to develop applications with direct connection to the IBM Watson IoT platform.

1. In Watson IoT Platform, go to the **Devices** menu and click the **Device Types** tab.
Click Add Device Type.
2. Enter a name and description for the device type and then click Next.
3. Optionally enter more information about the device type and then click Done.
4. Click Register Devices to register devices with this device type.
5. Enter a device ID in the Device ID field and then click Next.
6. Add information about the device and then click Next.
7. In the Authentication Token field, enter the Watson IoT Platform API token and then click Next.

You can get the Watson IoT Platform API token from the Maximo® APM - Predictive Maintenance Insights SaaS welcome letter.

8. Verify the information and then click Done.

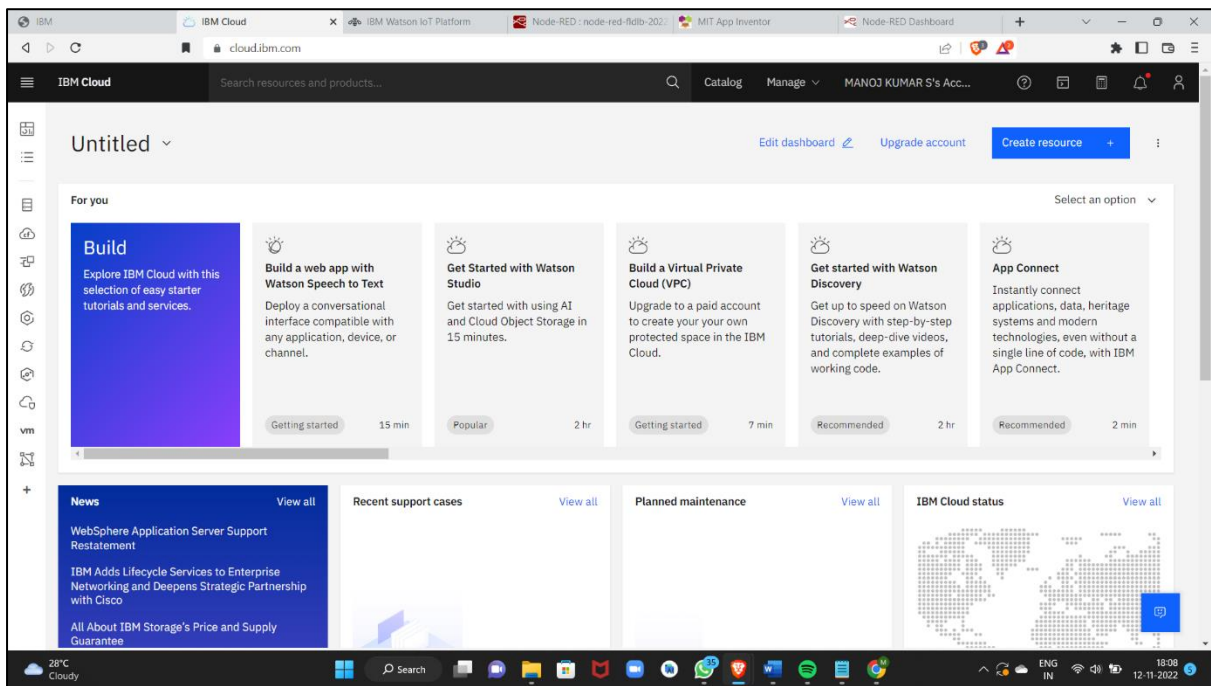


FIG 1:IBM CLOUD DASHBOARD

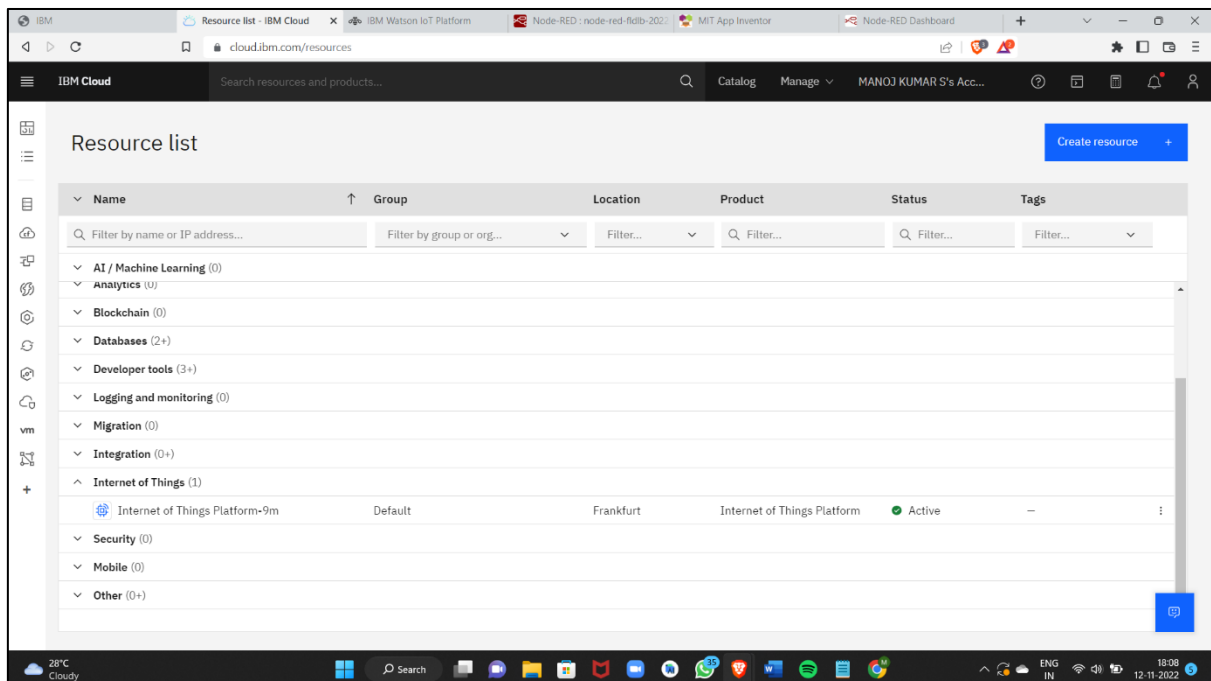


FIG 2: RESOURCE LIST TO VIEW CREATED RESOURCES ON IBM CLOUD

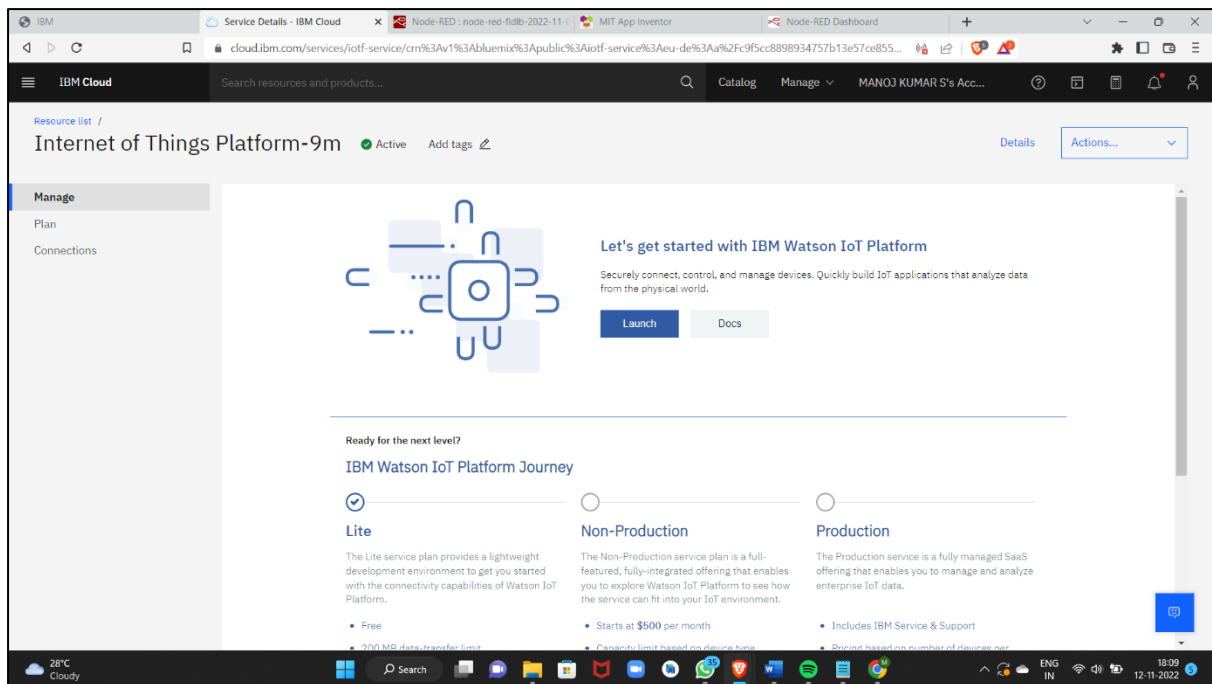


FIG 3: CLICK LAUNCH BUTTON TO ACCESS IBM WATSON IOT PALTFORM

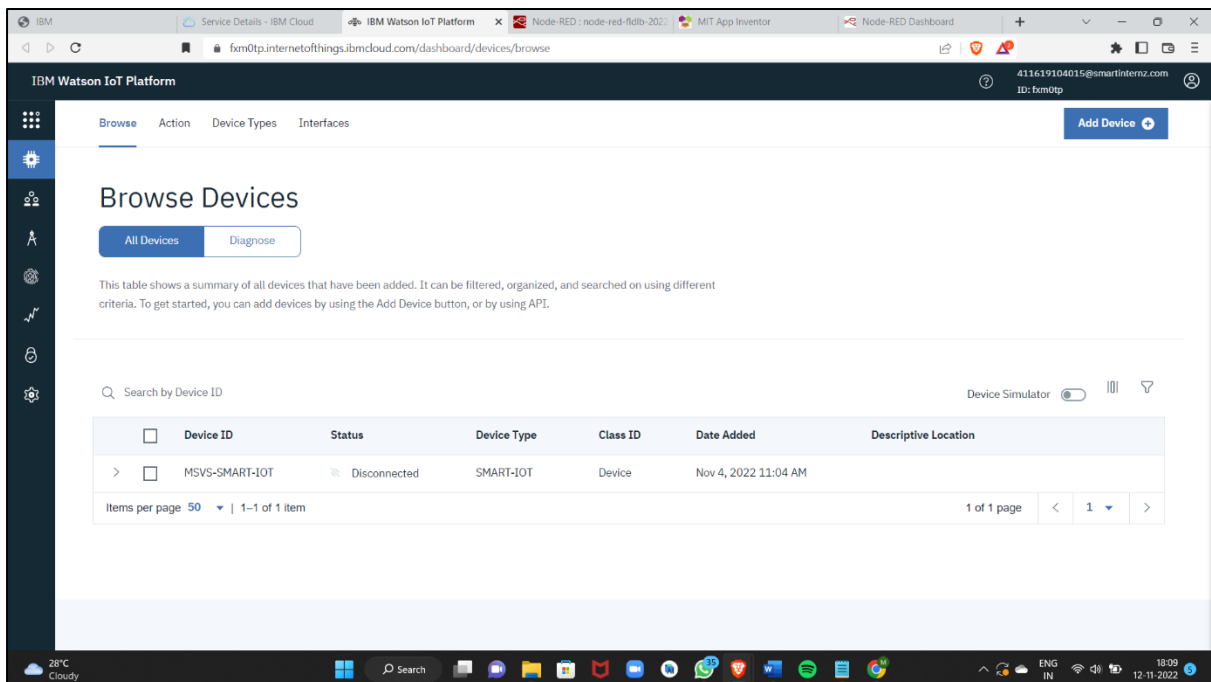


FIG 4: IBM WATSON IOT PLATFORM

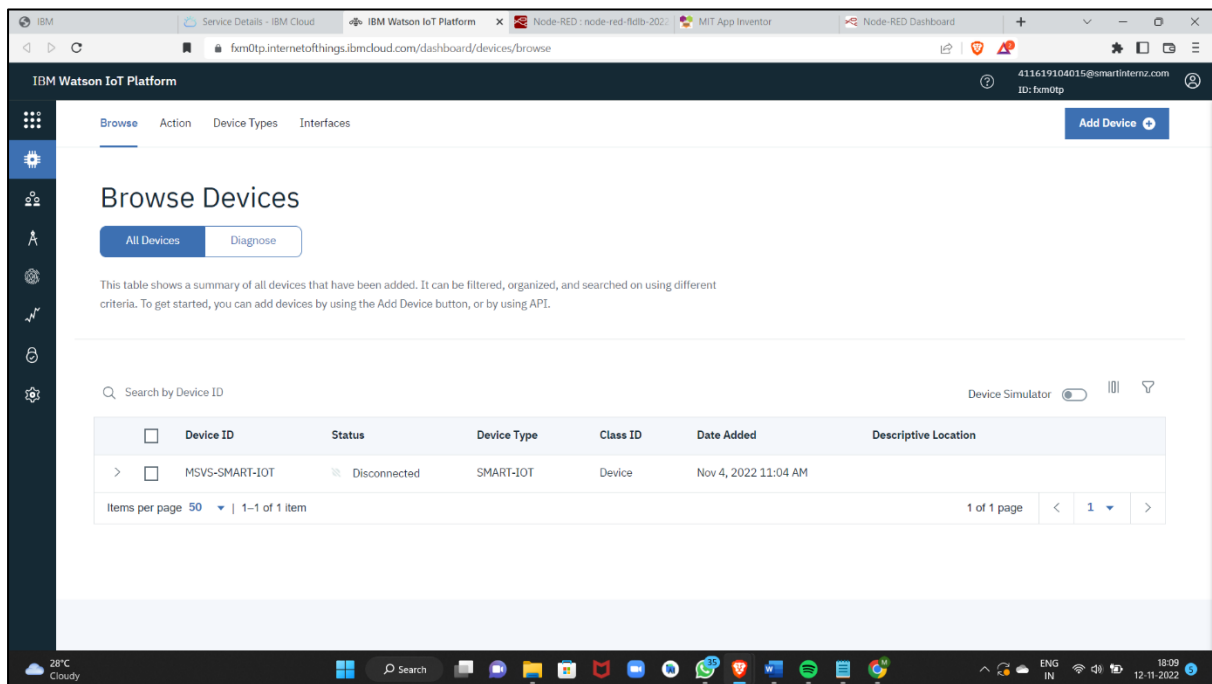


FIG 5: CLICK ADD DEVICE TO CREATE NEW DEVICE

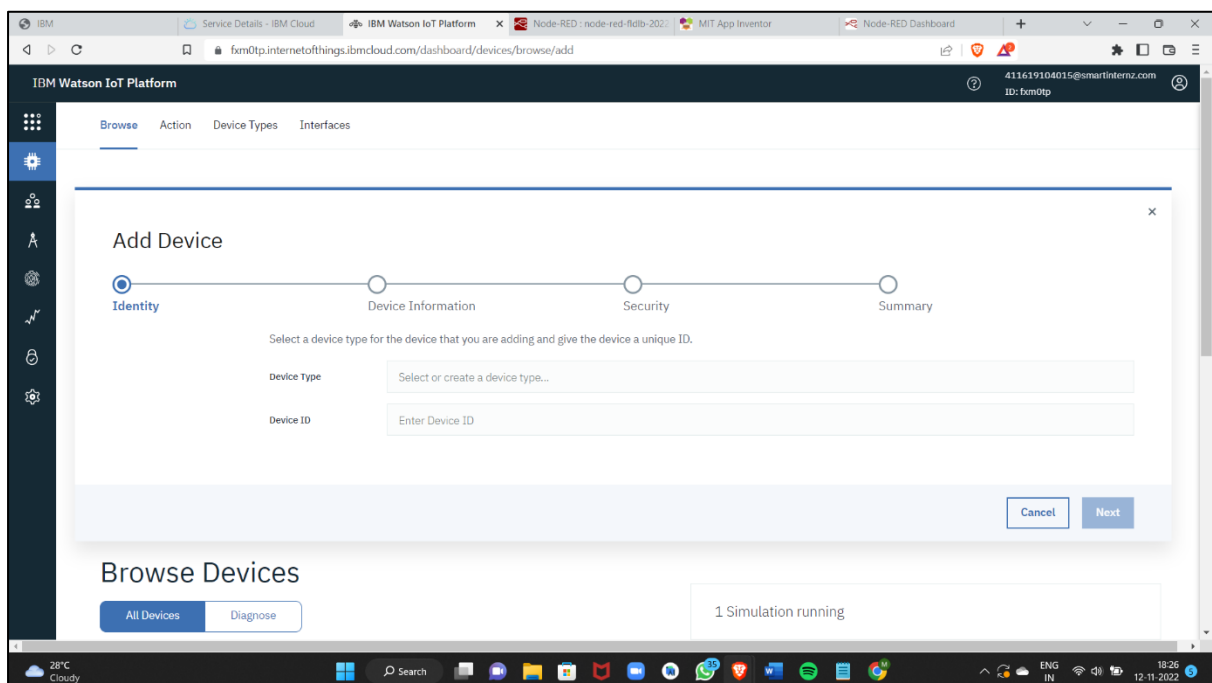


FIG 6: FILL ALL THE REQUIRED DETAILS TO CREATE THE DEVICES

DEVICE DETAILS:

Organization ID :fxm0tp

Device Type :SMART-IOT

Device ID :MSVS-SMART-IOT

Authentication Method :use-token-auth

Authentication Token :R&-B5p)HZ!e3_@Lt6B

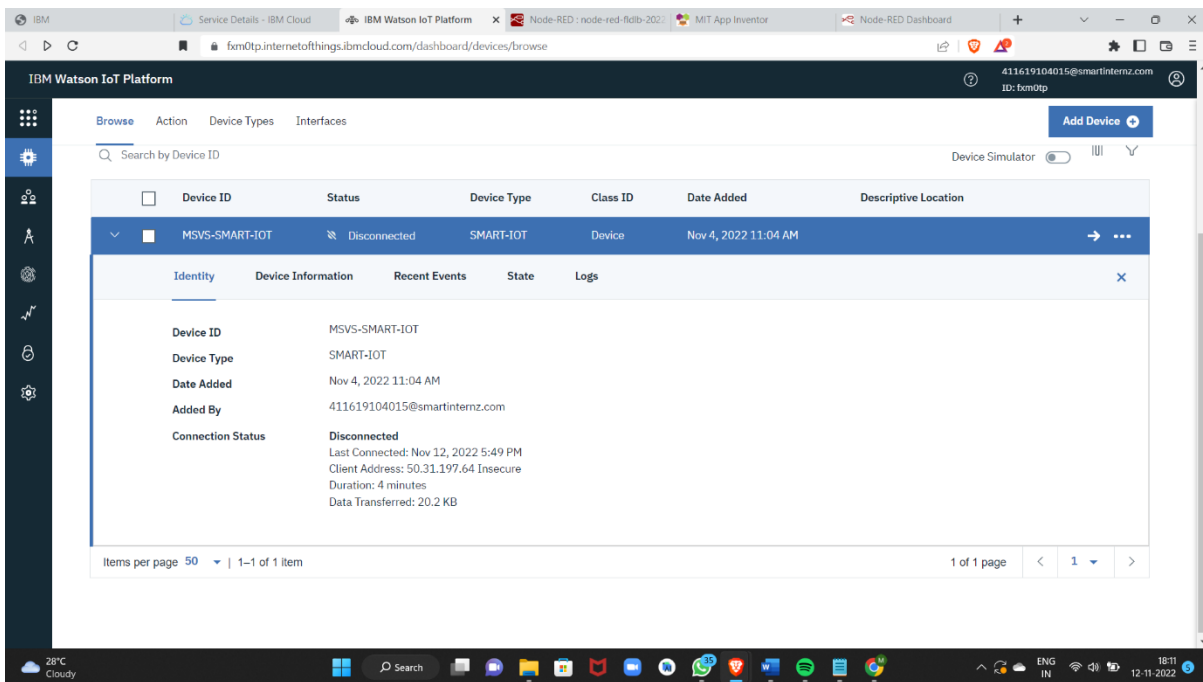


FIG 7:CREATED DEVICE ON IOT WATSON PLATFORM

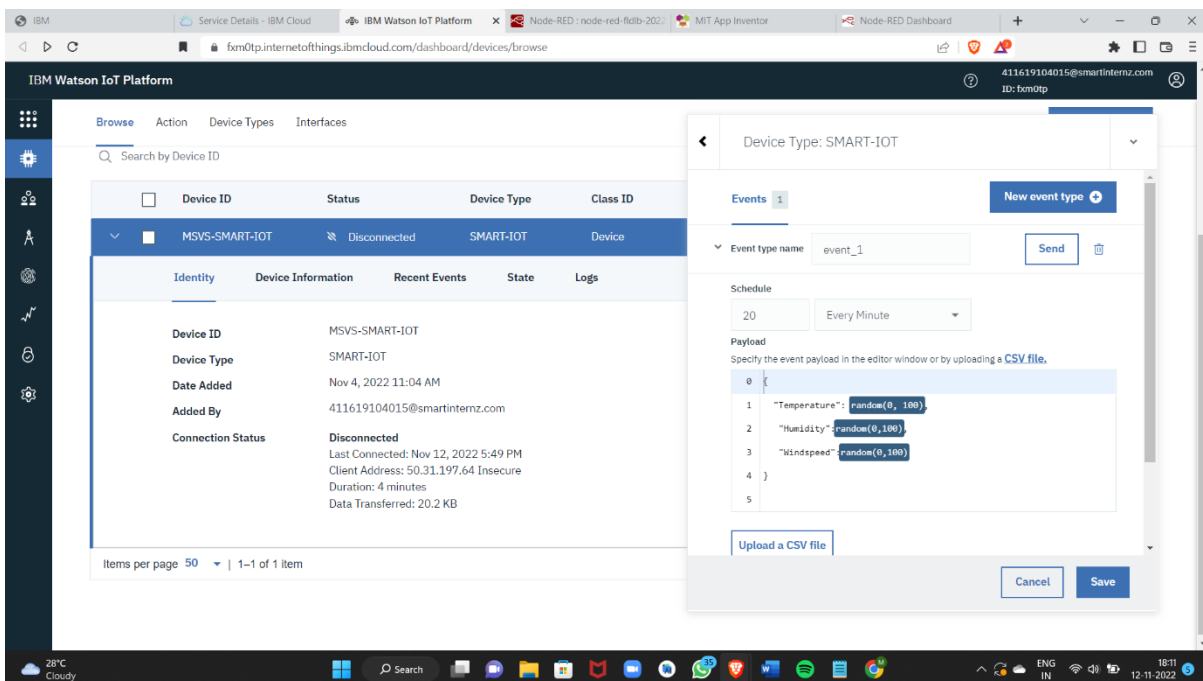


FIG 8:SIMULATION ON WATSON IOT PLATFORM

NODE RED PLATFORM TO SET THE IOT DEVICE WORKFLOW.

Node-RED is a **programming tool for wiring together hardware devices, APIs and online services in new and interesting ways**. It provides a browser-based editor that makes it easy to wire together flows using the wide range of nodes in the palette that can be deployed to its runtime in a single-click.

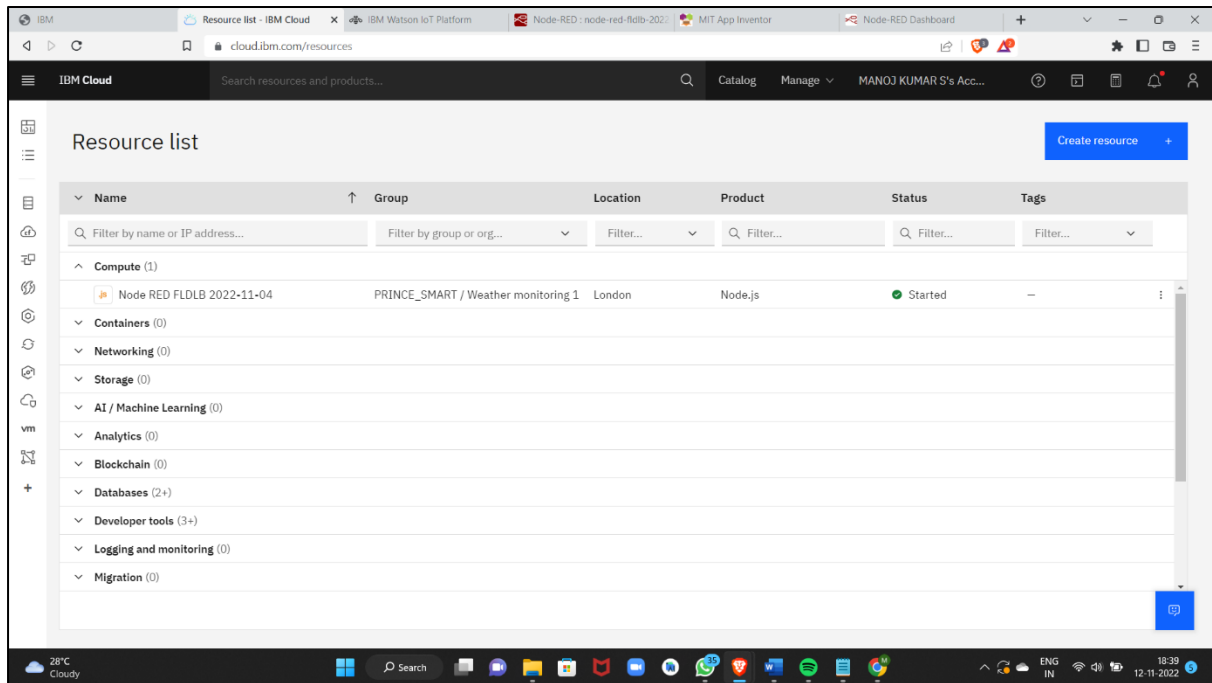


FIG 9:ACCESSING NODE RED IN IBM CLOUD RESOURCES LIST

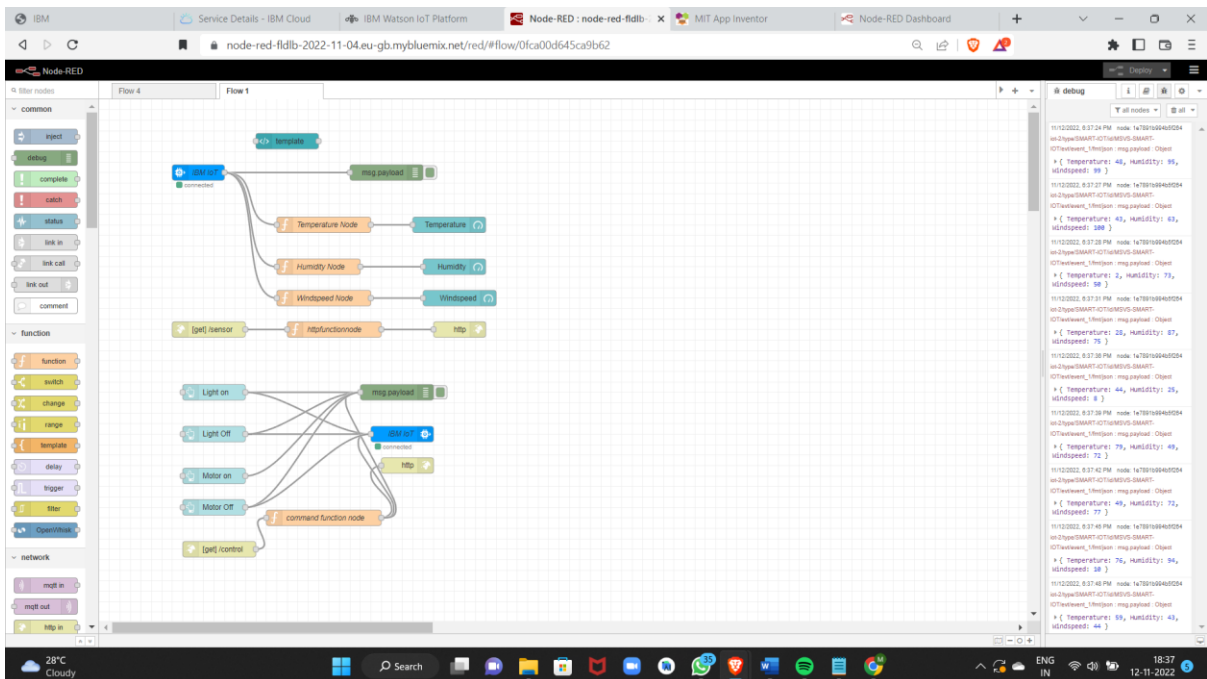


FIG 10: WORK FLOW IN NODE RED

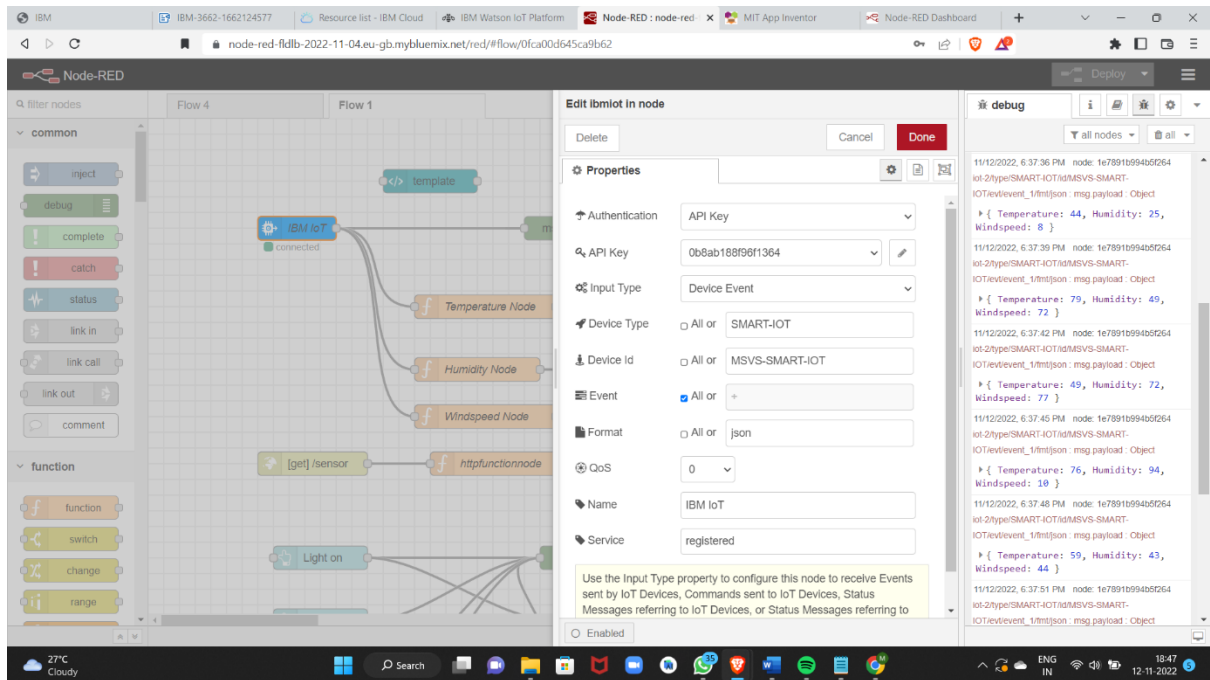


FIG 11:CONNECTING IBM WATSON TO NODE RED BY API KEY