CREATION OF NODE-RED SERVICE

TEAM ID	**PNT2022TMID51293**
PROJECT NAME	IoT Based Smart Crop Protection System for Agriculture
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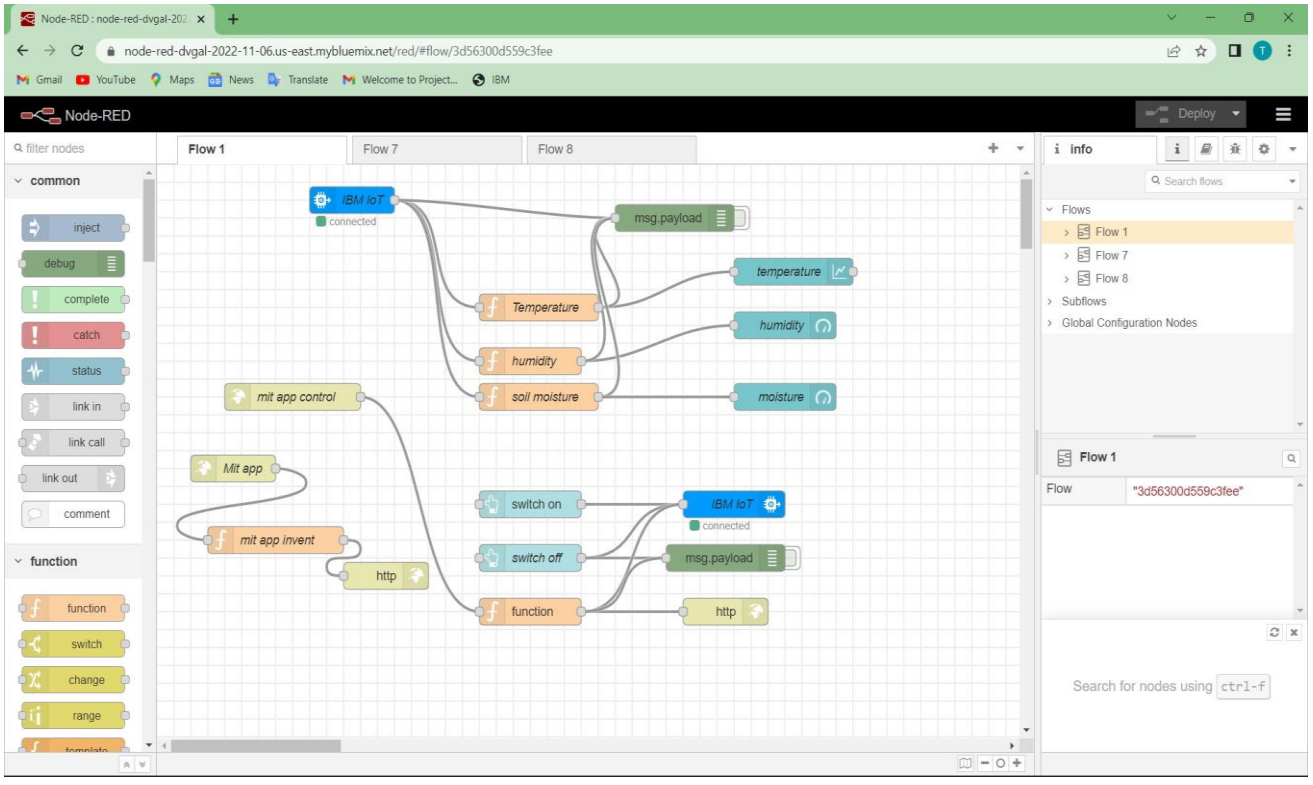
Interfacing with Node-RED

Node-RED based browser editor and IBM Cloud have been made major use of to implement this project. In order to access IBM Cloud, one must register and create an account first. The browser-based editor allows you to drag and drop nodes which can be wired together and deployed by a single click. A Node-RED service is created using the IBM Cloud platform in

order to connect the IBM IoT sensors and also to store the data in the cloud. The Node-RED app is created and the Continuous Delivery feature is enabled once the app has been deployed into the Cloud Foundry space. It is essential to create an IBM Cloud API key to be able access one's resources.



Automating the processes using Node-RED

The optimal ranges of different parameters required for the healthy growth of Lettuce are:

- Temperature -18.3 degree Celsius to 23 degree Celsius
- Humidity - 50% to 70%
- Soil pH - 6 to 7
- Light intensity - 400 µmol/m2s to 600 µmol/m2s
- Machine overheating temperature - over 70 degree Celsius