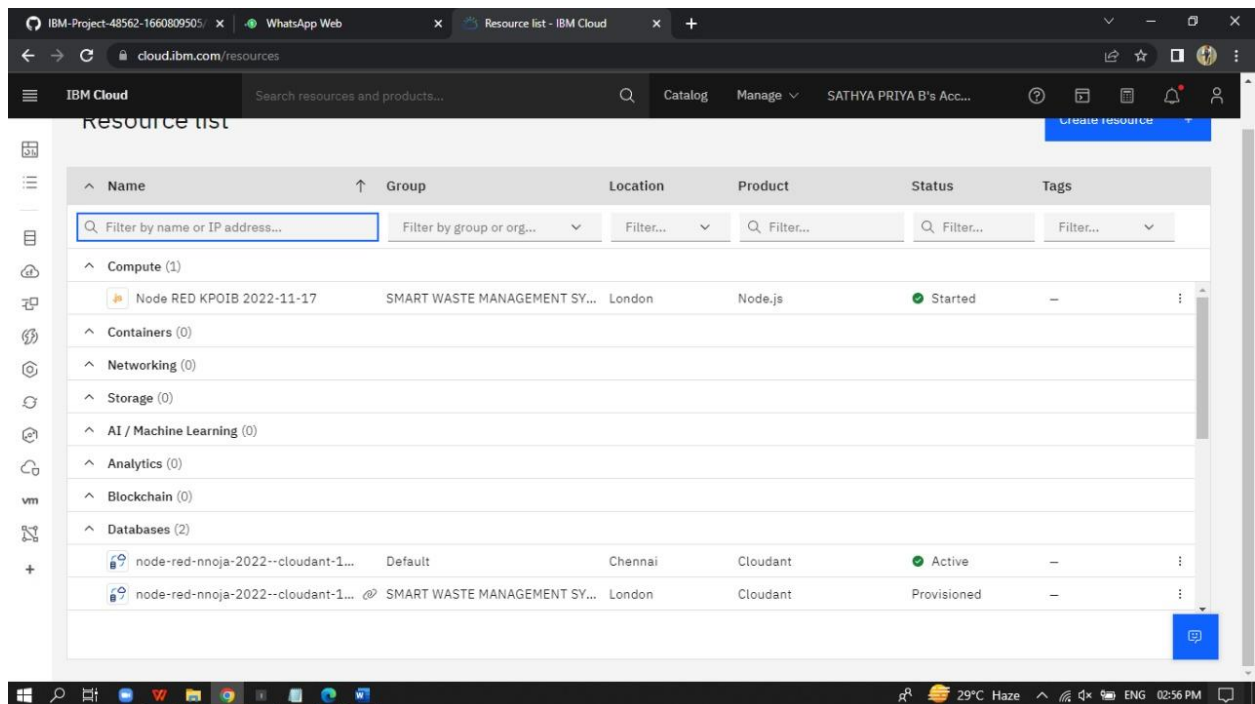


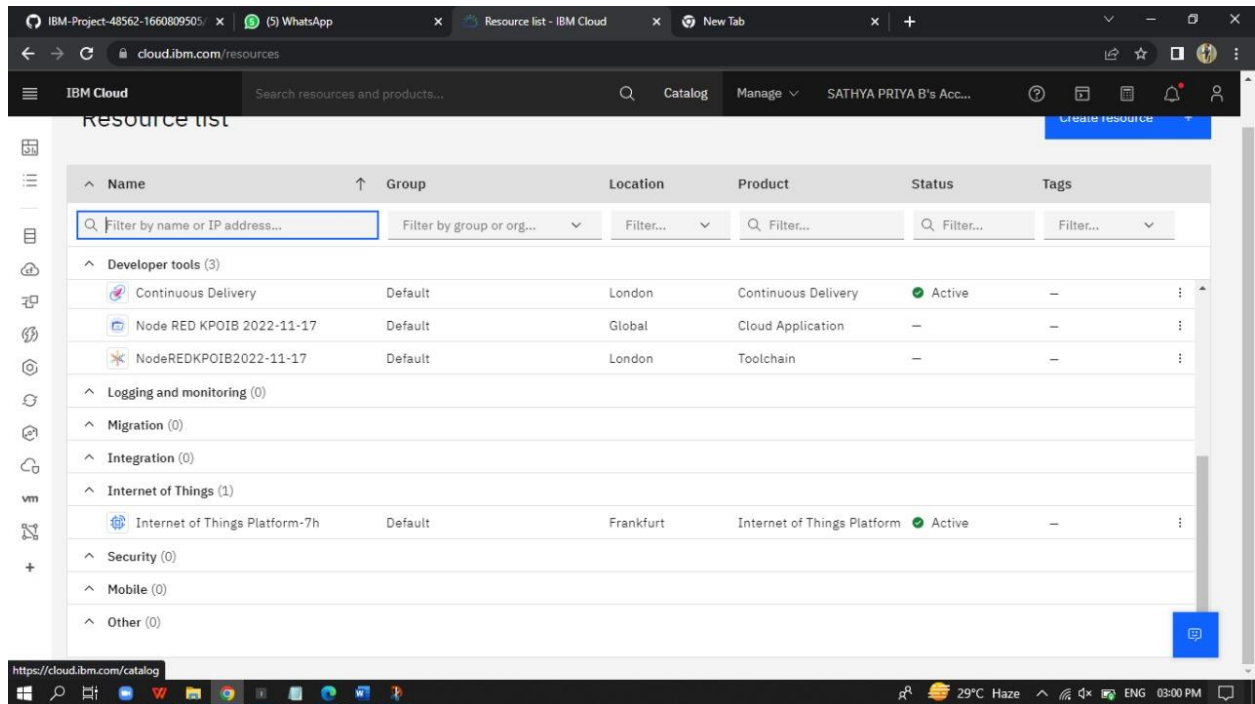
SPRINT 2

Date	16 November 2022
Team Id	PNT2022TMID36201
Project Name	Smart Waste Management System For Metropolitan Cities

CREATION OF NODE RED:



Create the resources list in IBM CLOUD:



- Upon launching the app you are redirected to the following page. Click on next

Welcome to your new Node-RED instance on IBM Cloud

We know you're eager to start wiring up your flows, but first there are a couple of tasks you should do:

- Secure your Node-RED editor
- Learn how to install additional nodes

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Welcome to your new Node-RED instance on IBM Cloud

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- In the next step, you are asked for securing the node-red app, if you want you can provide the credentials as your wish but remember forgetting those credentials leads to deleting the app and have to be started from the beginning. So better avoid giving credentials.
- Click the two checkboxes as shown in the below image. This step is for not securing the node-red editor

Secure your Node-RED editor

☒ Secure your editor so only authorised users can access it

Username

Password

Must be at least 8 characters

☐ Allow anyone to view the editor, but not make any changes

☒ *Not recommended:* Allow anyone to access the editor and make changes

Previous

Next

- Then after selecting the not recommended you are asked for confirmation proceed with that and click on next

Secure your Node-RED editor

☒ Secure your editor so only authorised users can access it

☒ *Not recommended: Allow anyone to access the editor and make changes*
Your editor will not be secured. Anyone with the URL will be able to access your flows, data and bound services.

1 ☐ Tick this box to confirm you want your editor to be insecure

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- Click on next and finish for the two further steps to finish the launch of node-red.
- This procedure is done only for the first time launch.
- For a returning user, you can directly browse from the cloud foundry apps in the dashboard. And click on the visit app URL after getting the app is awake/running.

Learn how to install additional nodes

Node-RED provides a **huge catalog of extra nodes** you can install into the editor.

Many of these nodes can be installed directly from the editor's palette manager feature. However that can cause issues due to the limited memory of the default Node-RED starter application.

The *recommended approach* is to edit your application's `package.json` file to include the additional node modules and then redeploy the application. This can be done using the Continuous Delivery feature on the application's IBM Cloud dashboard.

For more information, follow [this tutorial on IBM Developer](#).

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Finish the install

You have made the following selections:

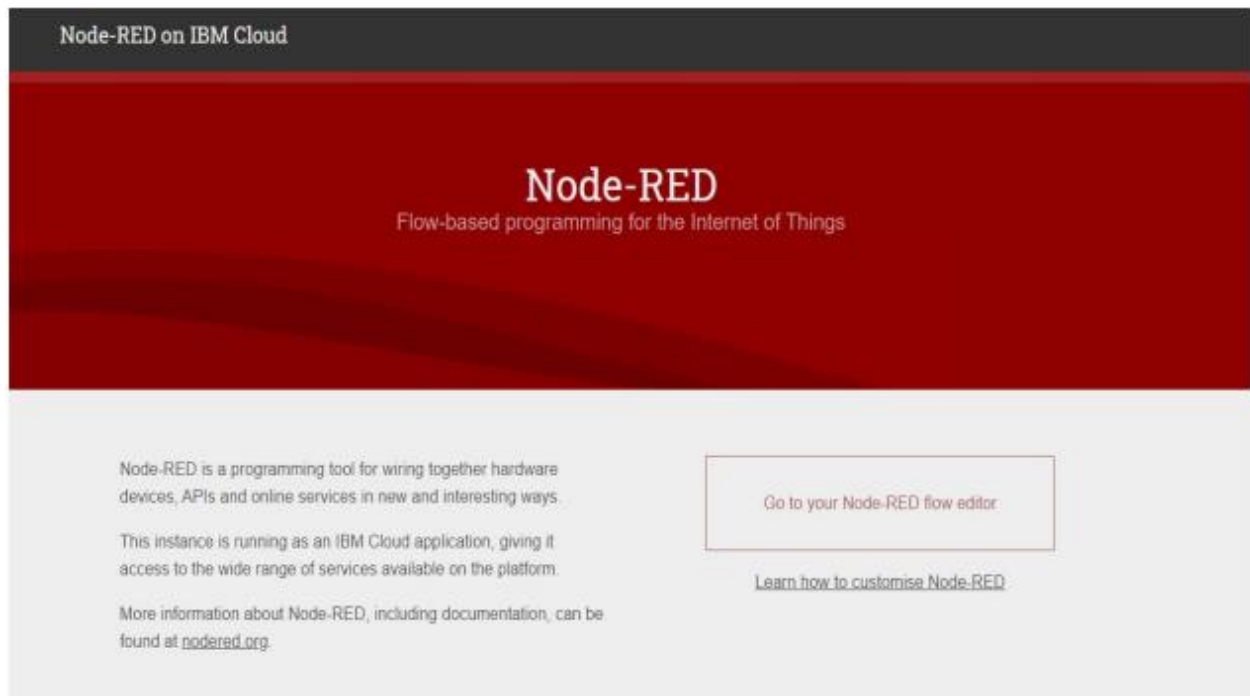
- *Not recommended:* Allow anyone to access the editor and make changes

You can change these settings at any time by setting the following environment variables via the IBM Cloud console:

- `NODE_RED_USERNAME` - the username
- `NODE_RED_PASSWORD` - the password
- `NODE_RED_GUEST_ACCESS` - if set to `true`, allows anyone read-only access to the editor

[Previous](#)[Finish](#)

- After completing the procedure of launching node-red you are asked to go to the editor. Click on go to the editor button to launch the application

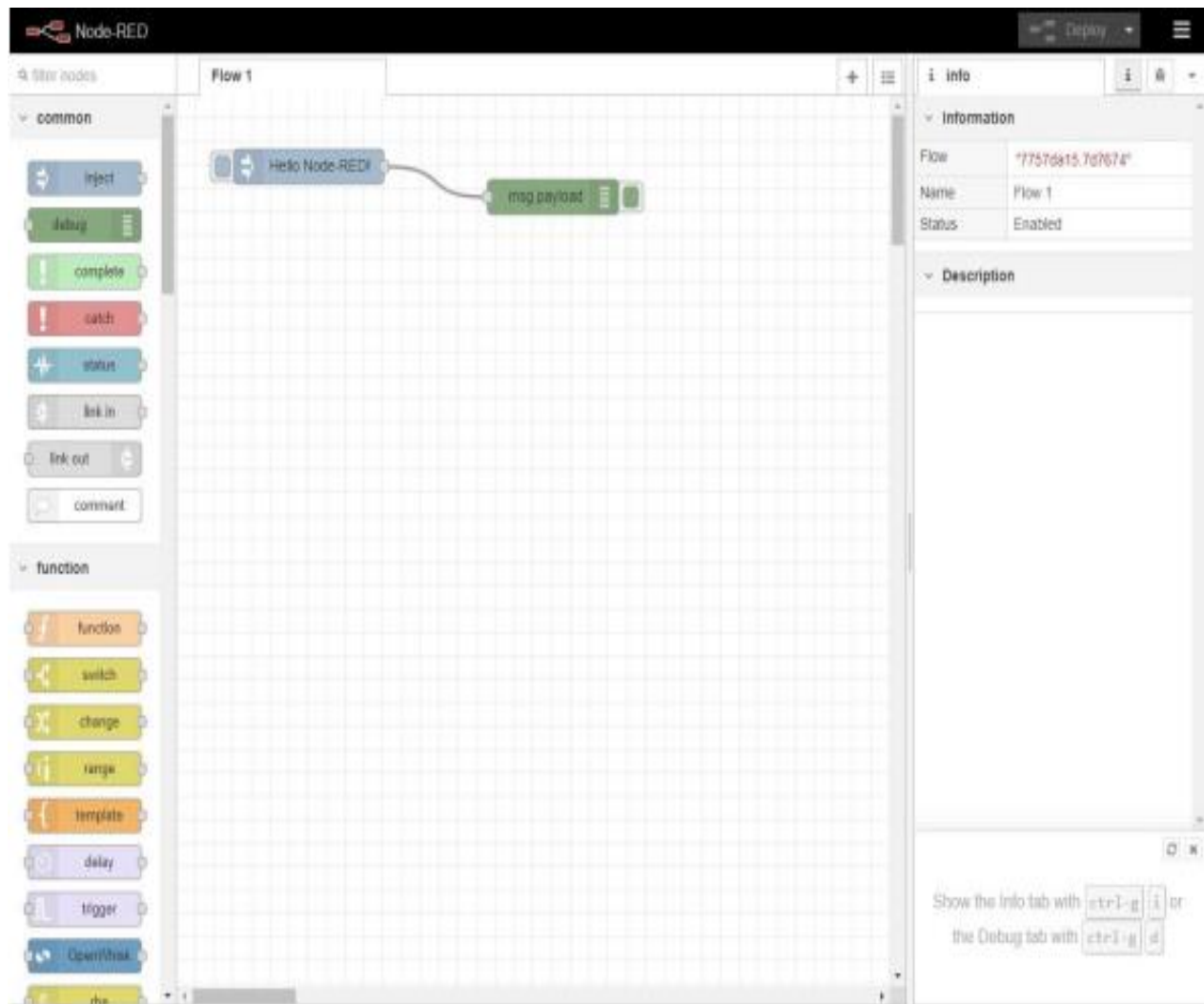


Basic Node-red flow:

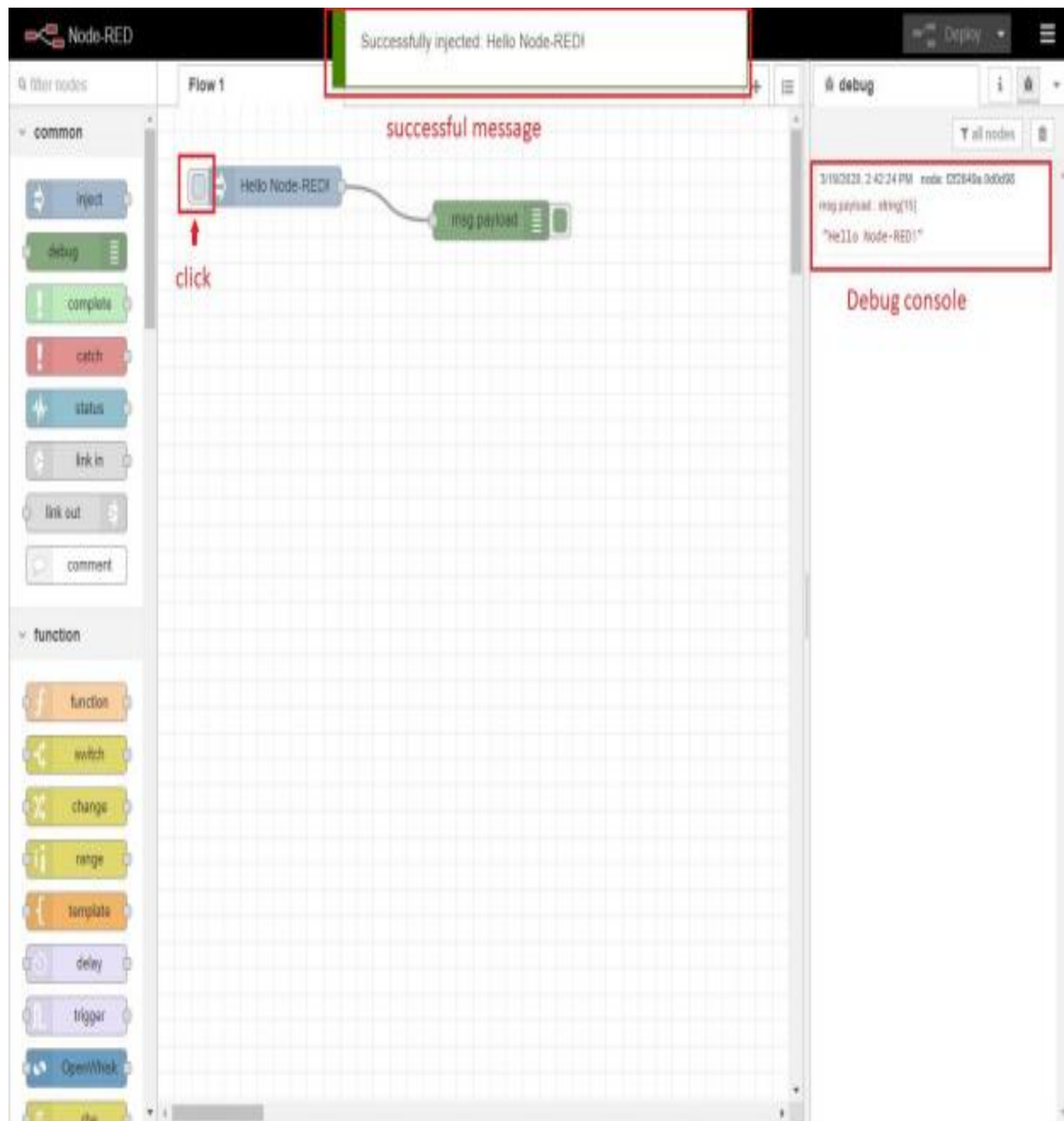
- On launching your node-red application you will be on the editor pane where one can drag and drop the nodes.



- From the palette, one can drag the nodes and drop them on the editor.
- The sidebar will be useful to know the info about nodes by selecting them and debug console helps us to debug the errors or the output is display on the console.
- The default node-red after launching the node-red application for a new user will contain two nodes connected to each other.
- The first node is the input used to inject the input for output.
- The debug node to display the output

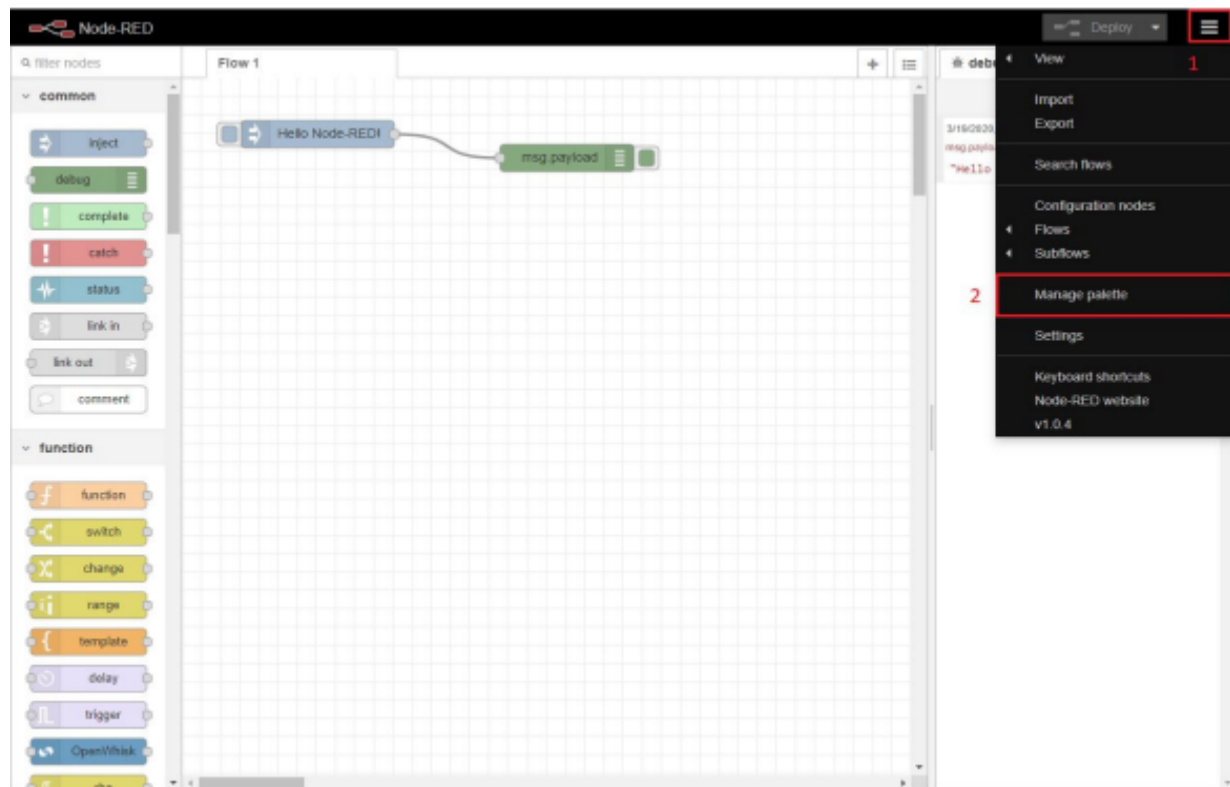


- Click on the inject node to inject the input to display on output.

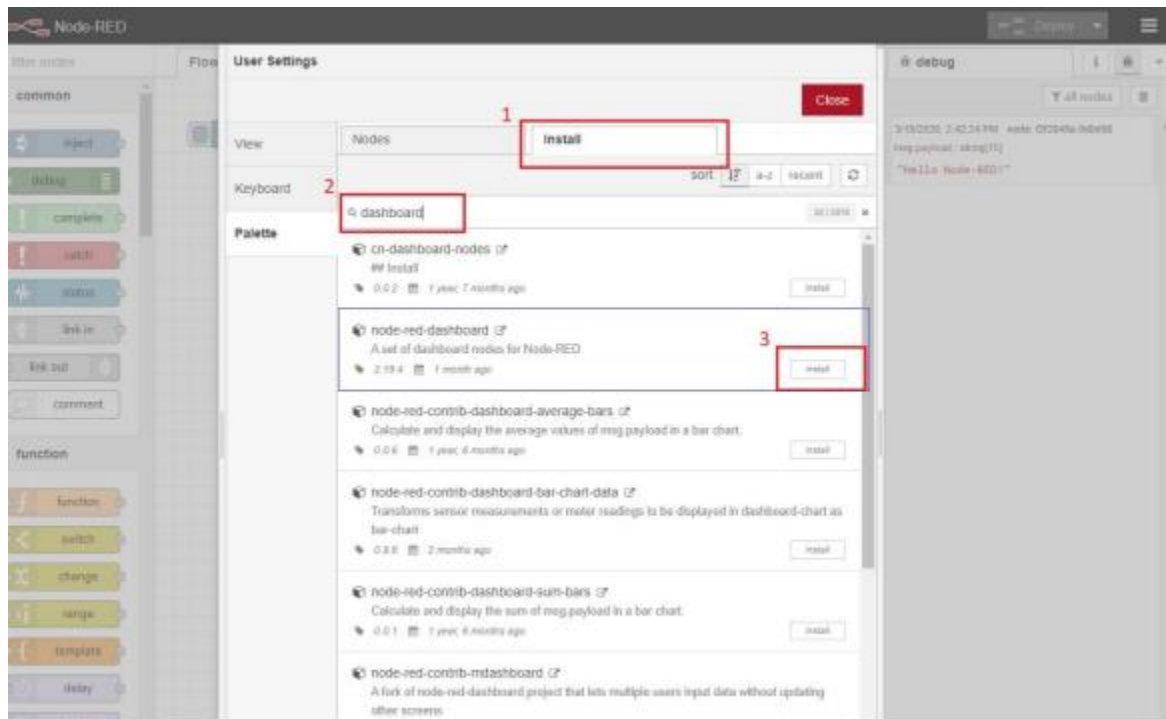


Dashboard nodes installation :

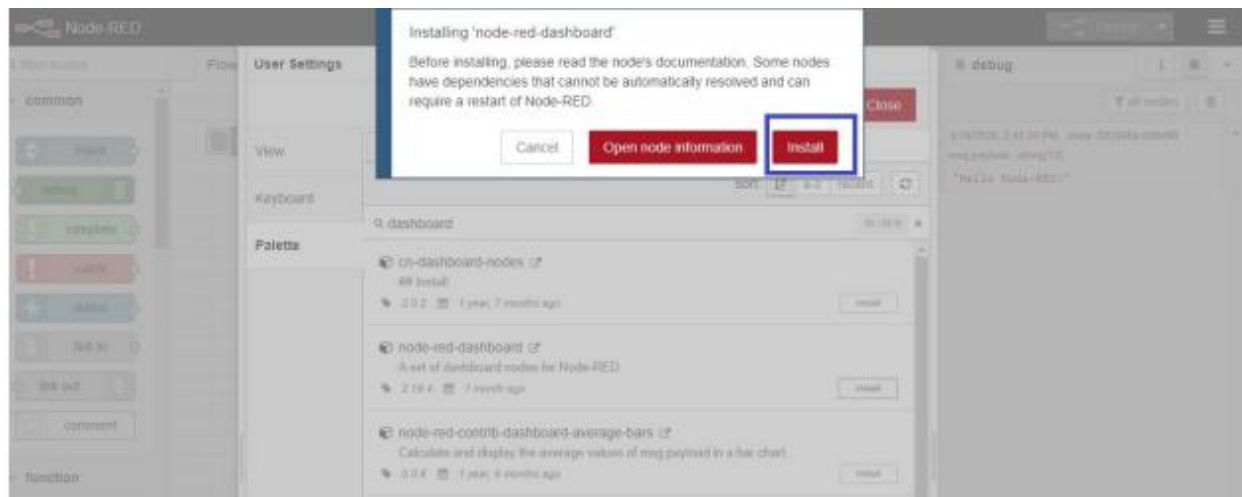
- Navigate to manage palette for installing the nodes require.



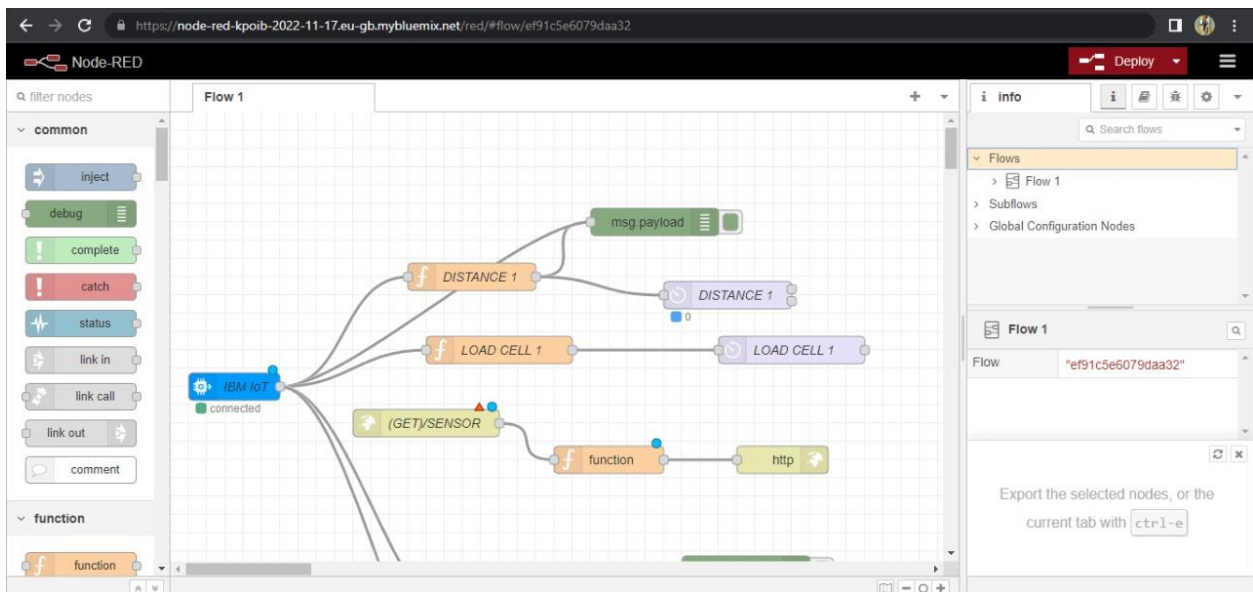
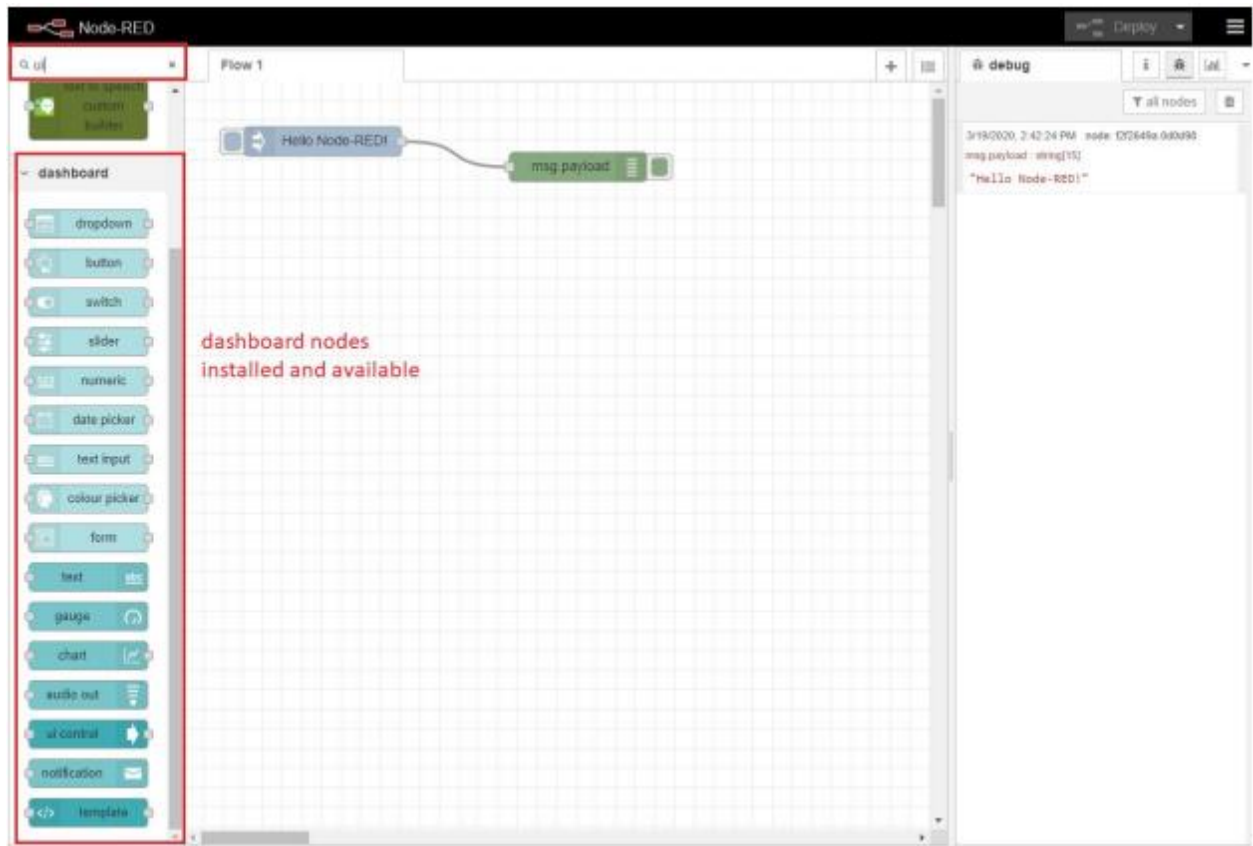
- Search for node-red-dashboard for installing the UI nodes used to create web App



- Click on Install in the confirmation popup to install the UI nodes



- Upon successful installation you are prompted with the list of nodes installed. To view the nodes installed search for UI in the palette



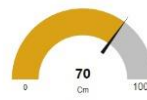
Distance 1



LOAD CELL 1



Distance 2



LOAD CELL 2



Distance 3



LOAD CELL 3



Distance 4



LOAD CELL 4



MITAPP:

