# 3.THEORITICAL ANALYSIS:

BLOCK DIAGRAM:

HARDWARE/SOFTWARE DESIGNING:

- Create a IBM account and in that create node red, cloudant, Watson IoT platform .
- After creating the above services go to IBM cloud dashboard, click on Cloud Foundary apps
- A new window appears where we need to NODE-RED app created before.
- After opening the node red service, take the nodes which are required for representing Garbage level, Garbage weight , debug nodes, function nodes etc.
- Connect the nodes to IBM IoT nodes to get the values to Garbage level, Garbage weight etc.
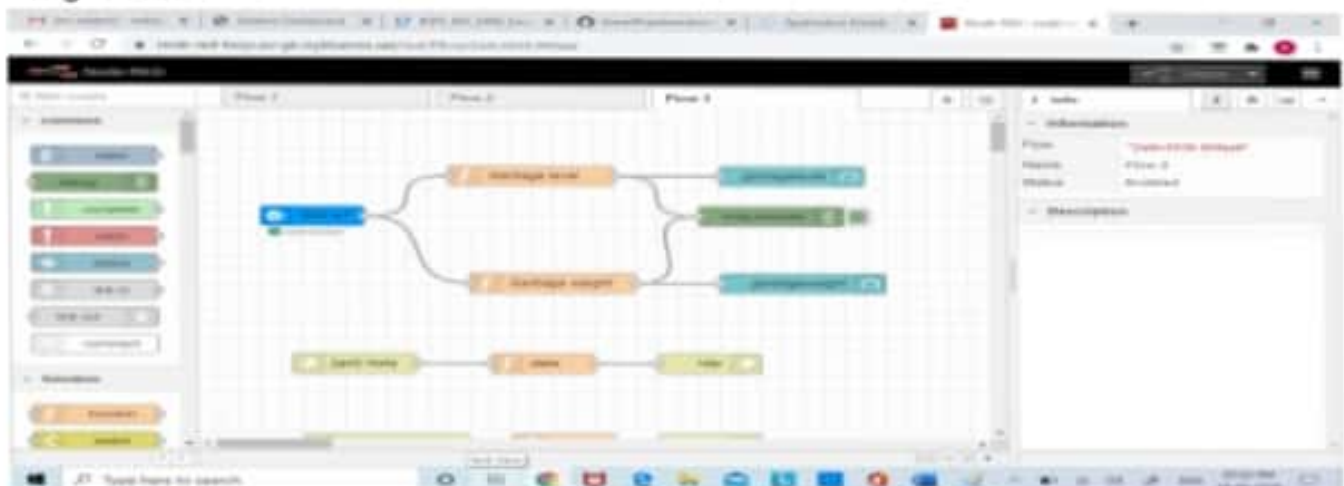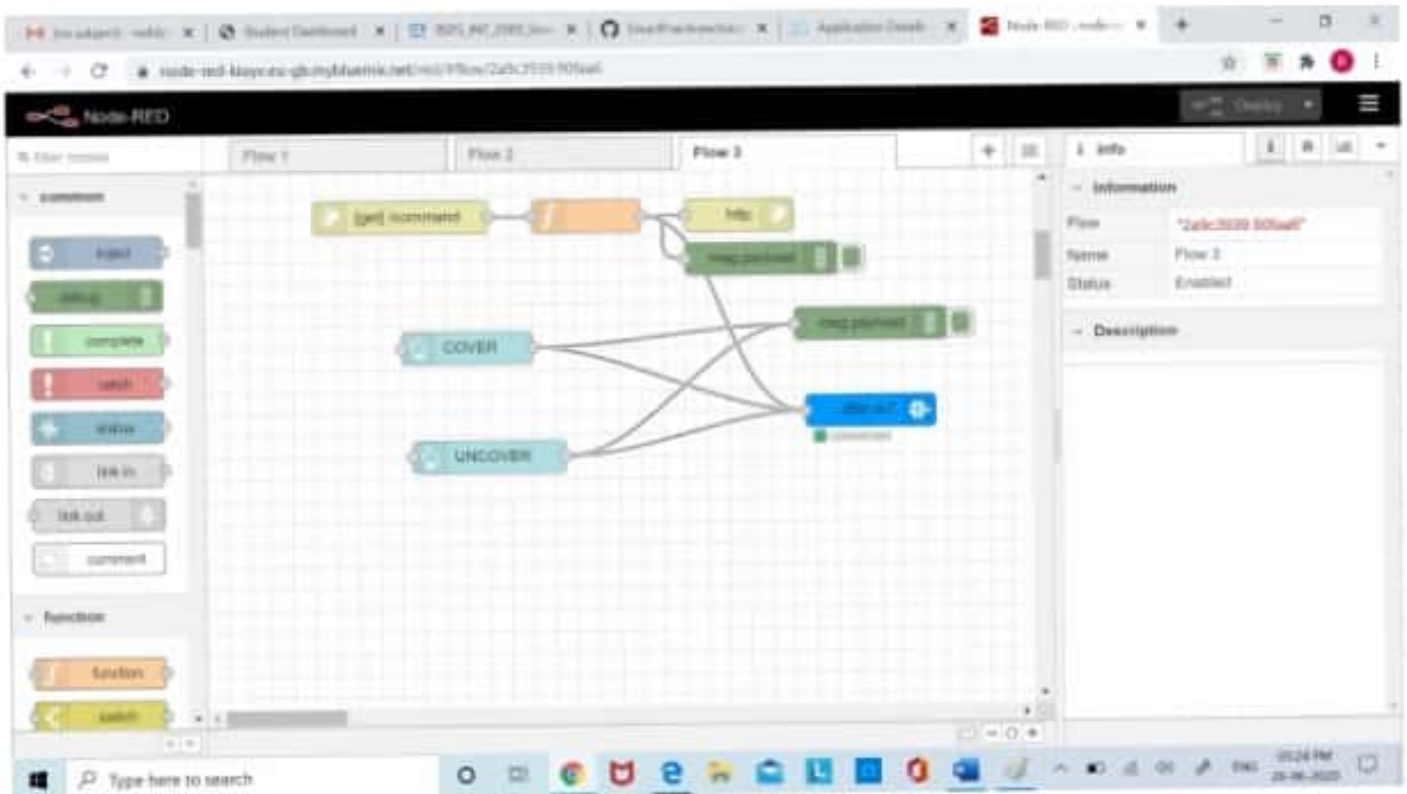
● After connecting all the nodes , Copy the Node Red URL till .net and paste in t he new tab by typing /ui along with the Node Red URL and press ENTER which will display the UI.
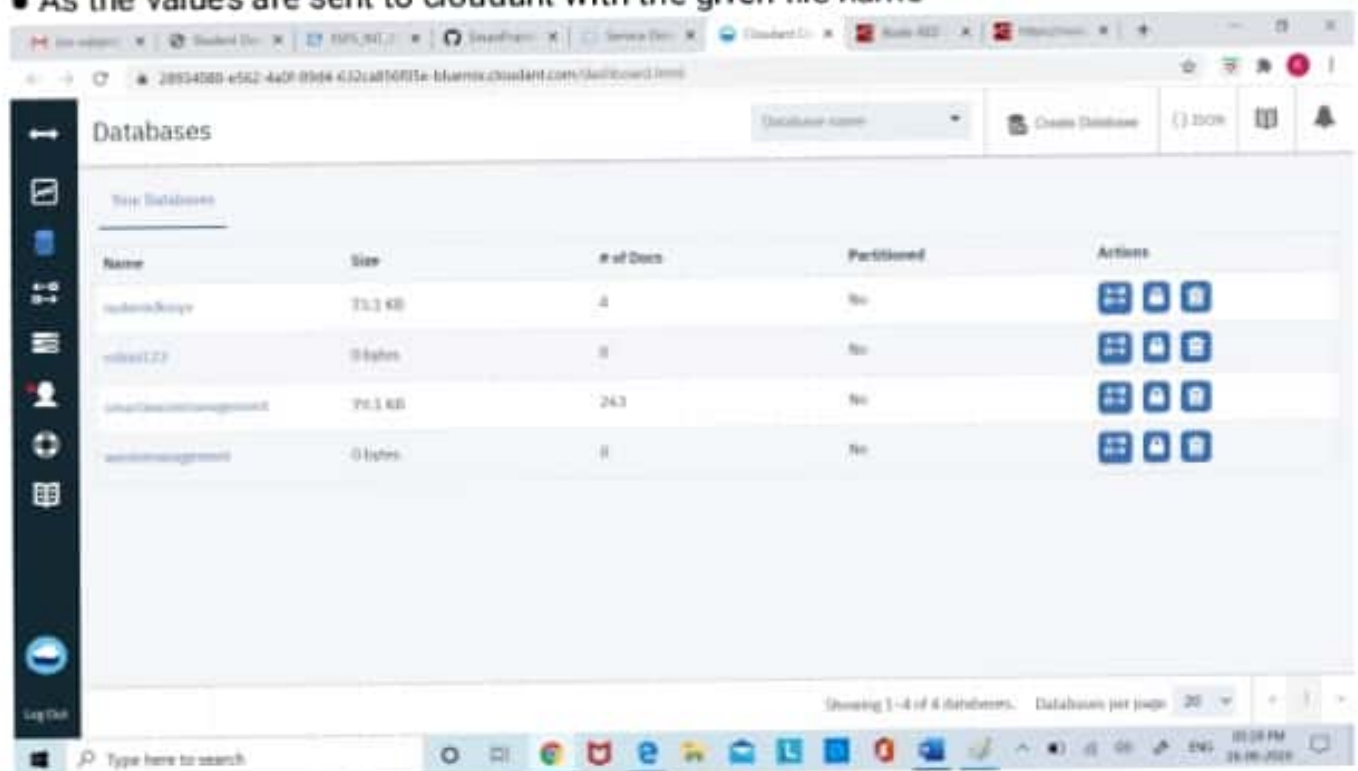

Garbage level

58
units

100

Garbage weight

96
units

100

COVER

UNCOVER
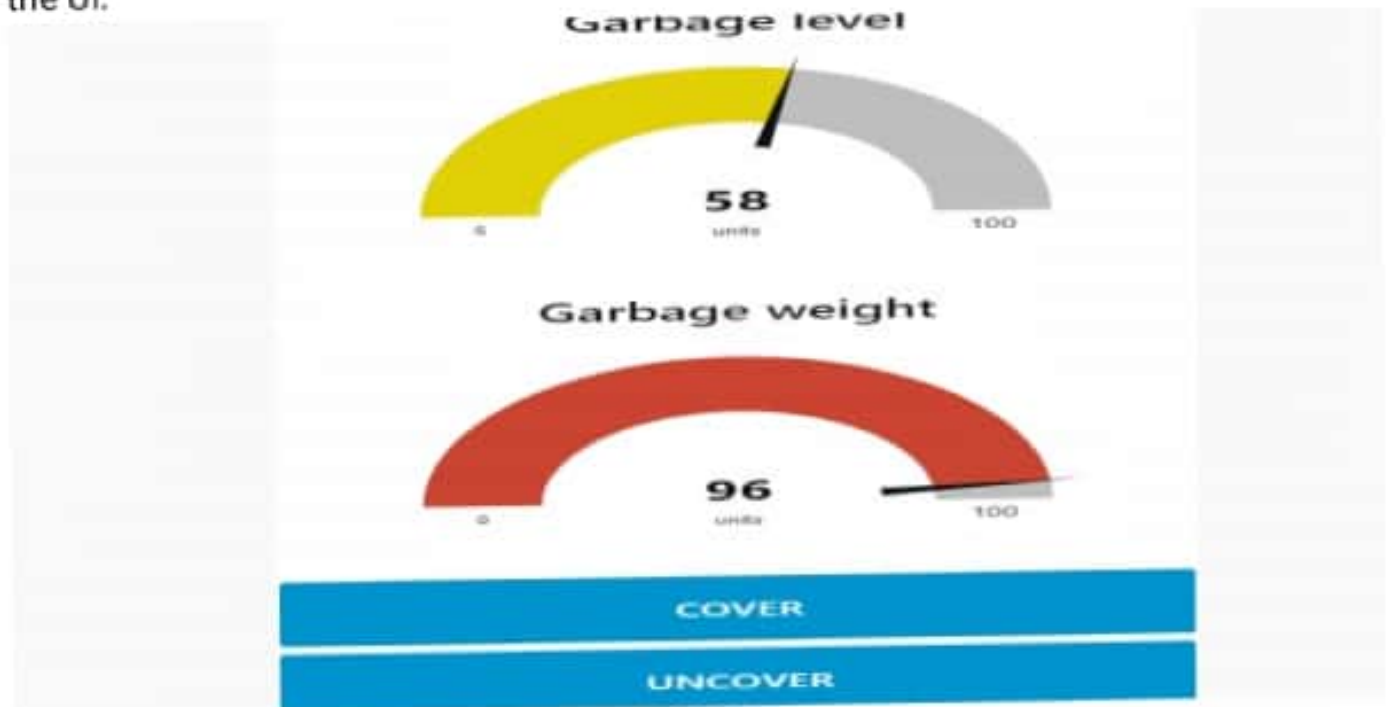
● Copy the URL in the Node Red flow till .net and paste in the new tab by a ppending

"/data" along with the URL and press Enter. Both the tank level and f low rate values will be displayed on the webpage

{"garbagelevel":97,"garbageweight":97}

- As the values are sent to cloudant with the given file name

- **The data is stored in the json format**

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- Type MIT App inventor in google search and press Enter, select the first link in the search engine
- Click on the first link you will be redirected to MIT App Inventor dashboard.
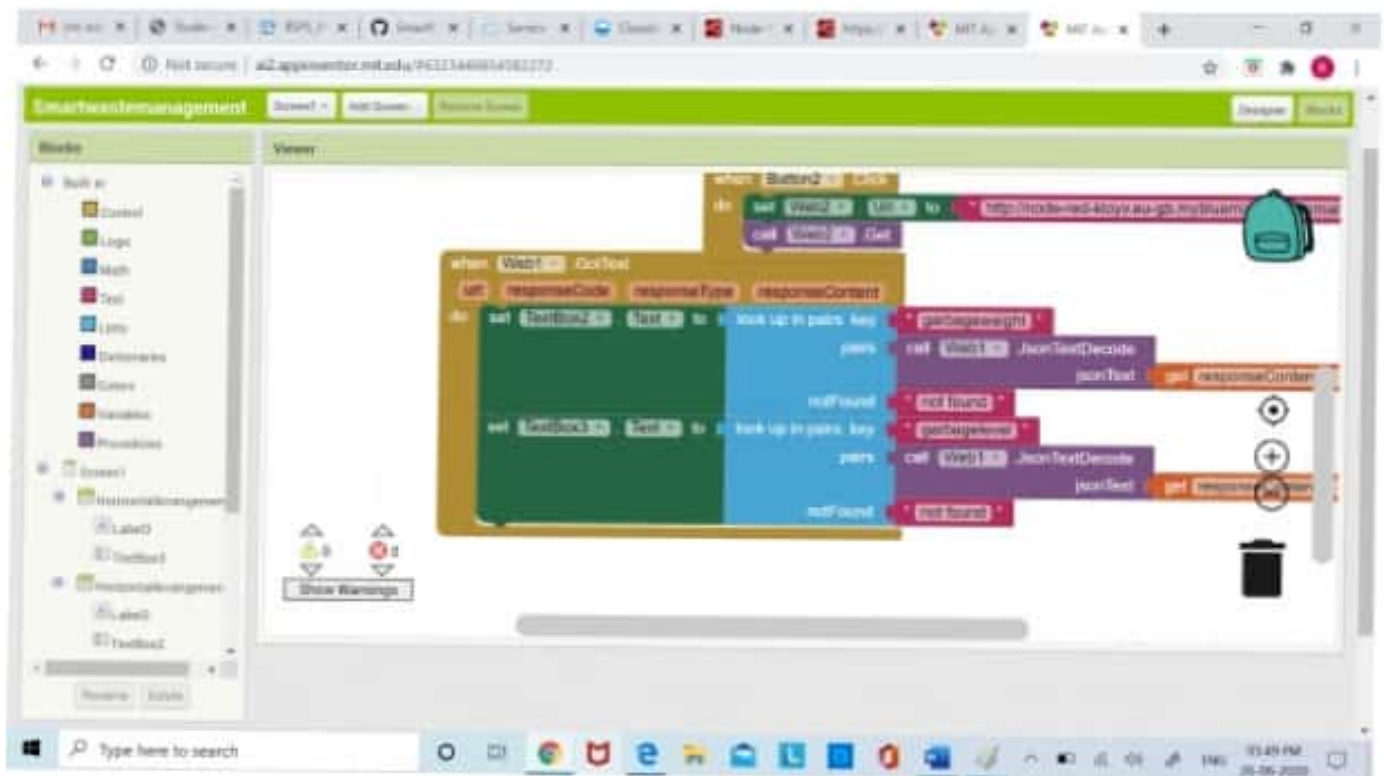
- Click on Create Apps! It will redirect to the Gmail login page. Through Gmail account by typing your Username and Password, you can log in to the MIT App flow editor .
- Agree with terms and conditions. By agreeing with the terms and conditions you will be redirected to the Dashboard and click on Start new project.
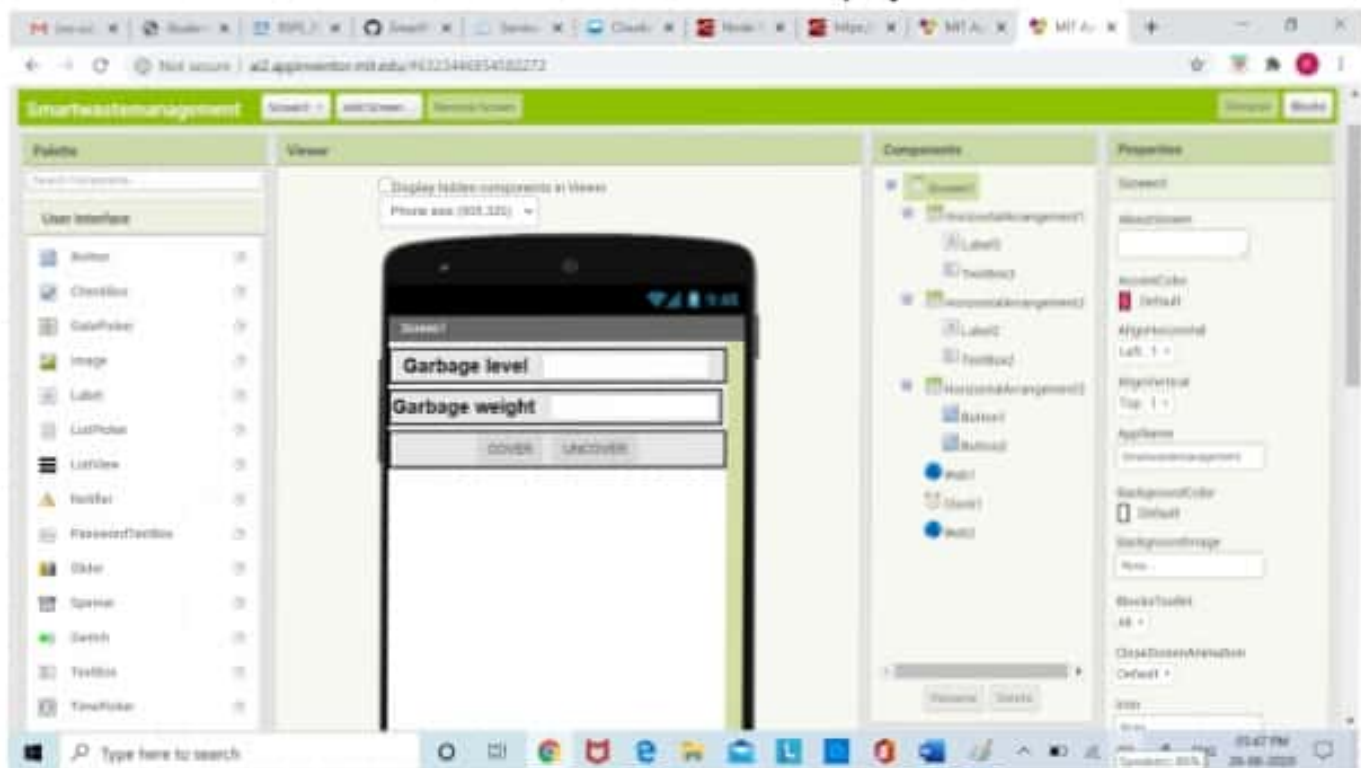
Displaying the garbage level and garbage weight using the mobile app.

Alert system: SMS alert system is implemented in such a way that SMS will be