

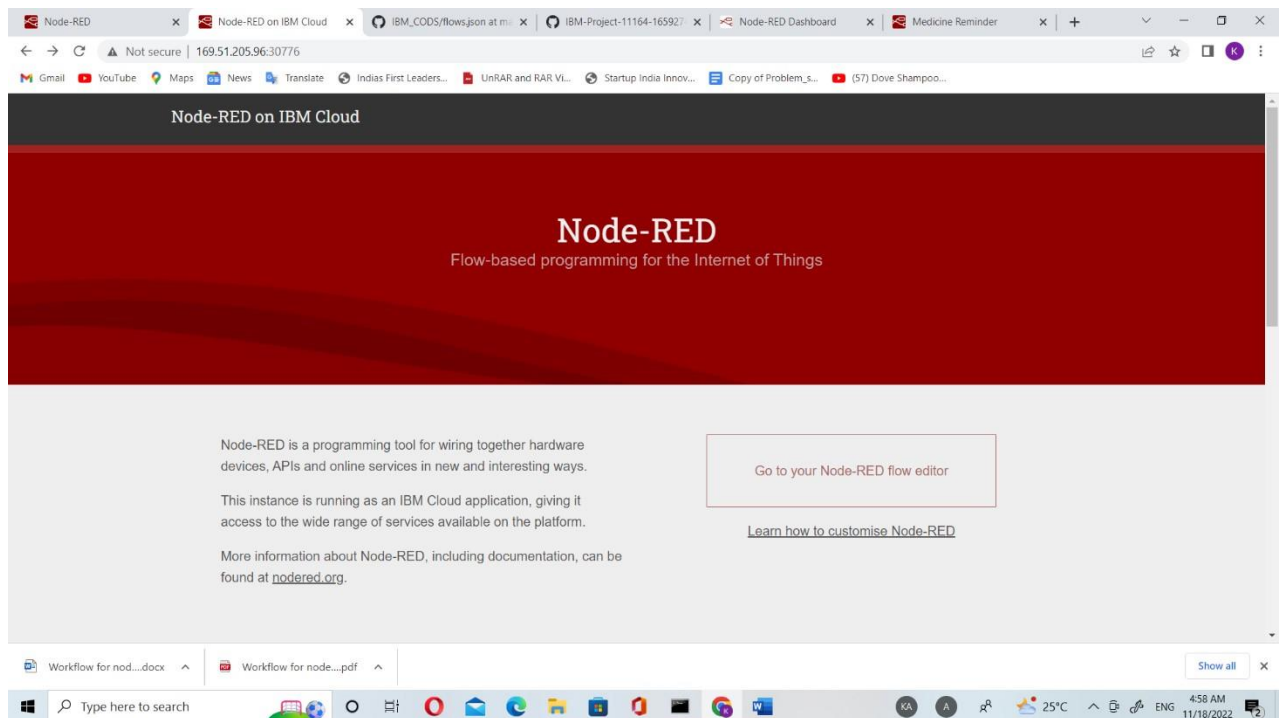
SPRINT DELIVERY – 3

TEAM ID : PNT2022TMID19312

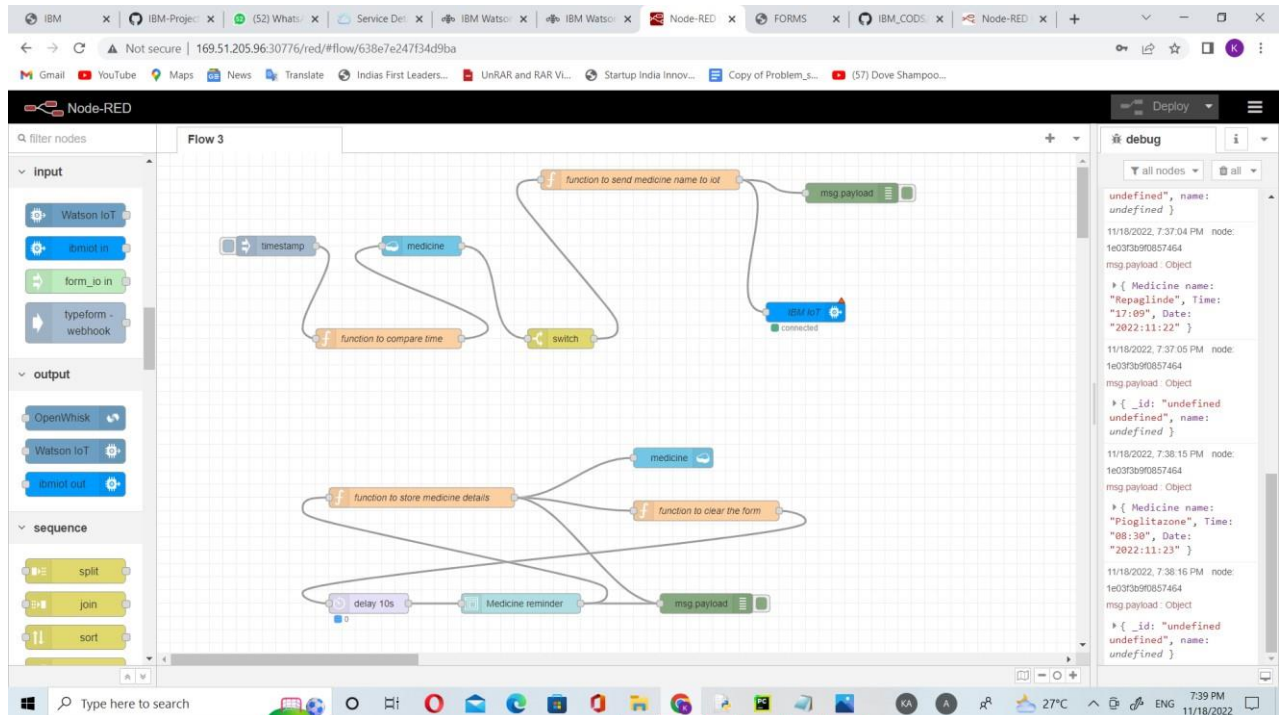
PROJECT NAME: PERSONAL ASSISTANCE FOR SENIORS WHO ARE SELF RELIANT

WORKFLOW FOR IOT SCENARIOS USING NODE RED(CREATING WEB UI)

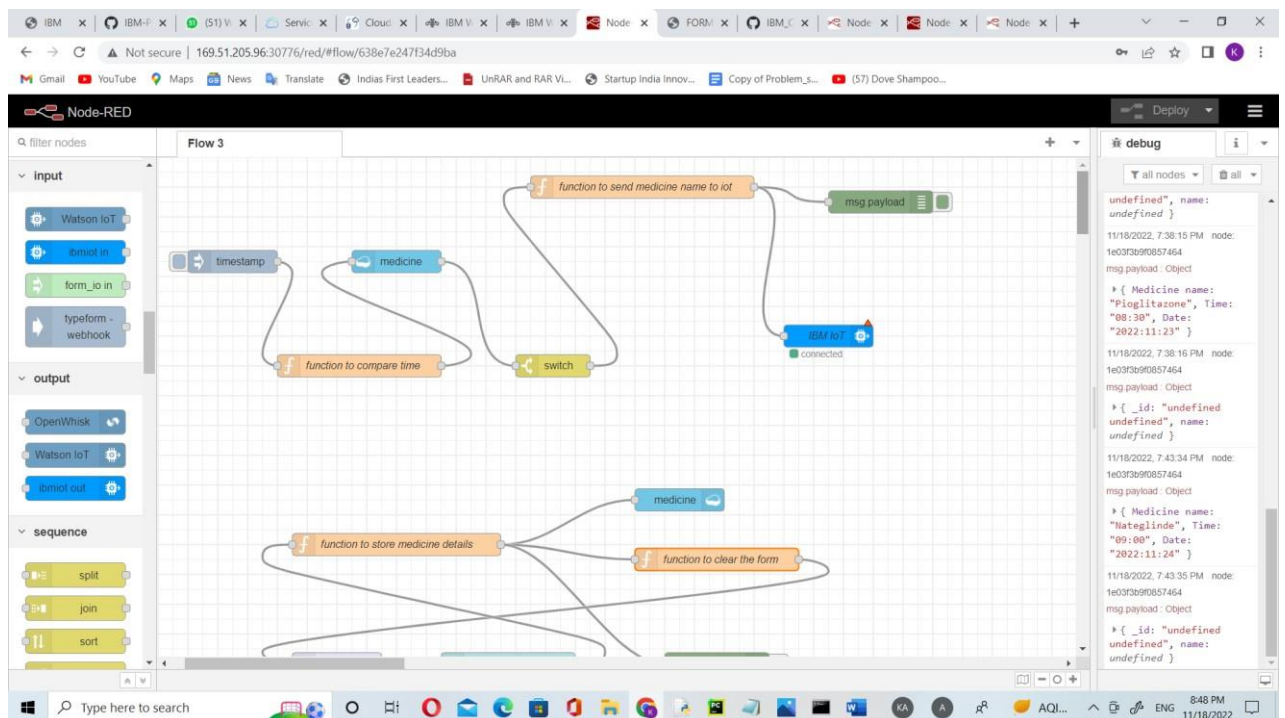
NODE-RED INSTALLATION:



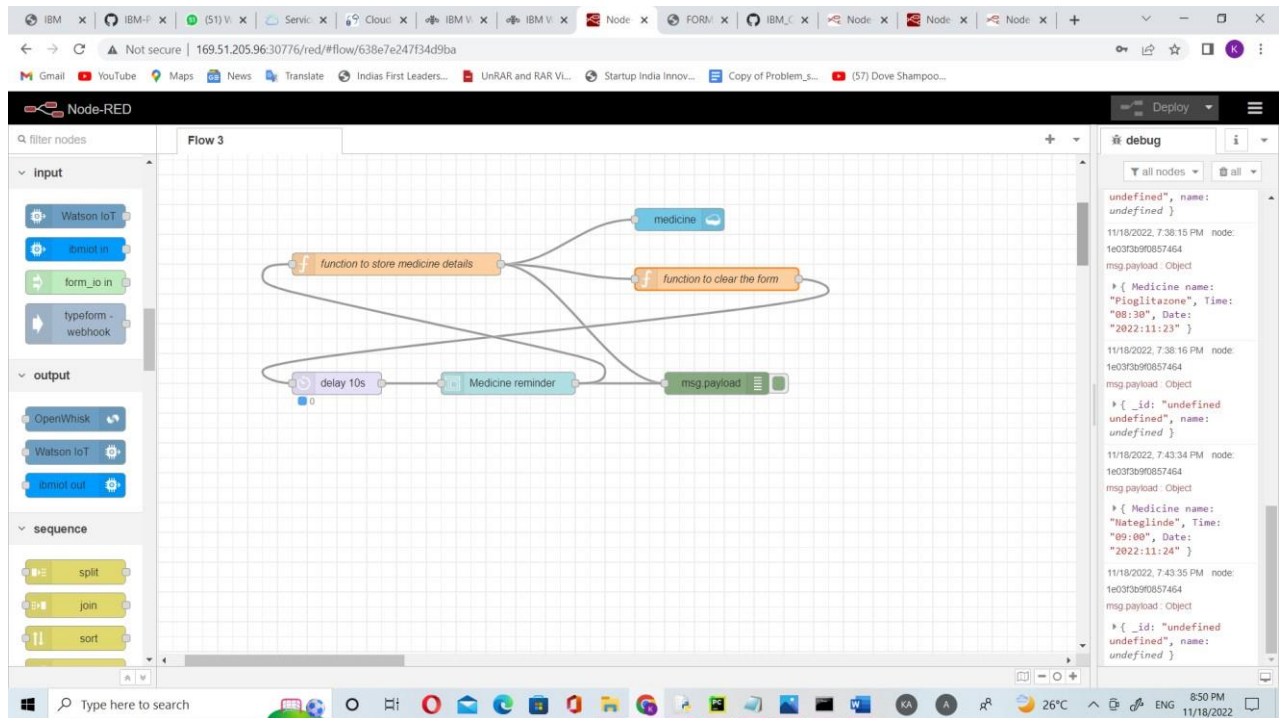
CREATING MEDICINE REMINDER FORM: (COMPLETE)



SENDING MEDICINE NAME AT APPROPRIATE TIME:



TO ENTER MEDICINE DETAILS:



FUNCTIONS:

1. FUNCTION TO STORE MEDICINE DETAILS

Node-RED interface showing a flow named "Flow 3". The flow includes a "function to store medicine details" node, a "delay 10s" node, and a "Medicine reminder" node. The "function to store medicine details" node is currently selected, and its properties are being edited. The function code is as follows:

```
1 var d=msg.payload.date
2 var t=msg.payload.time
3 msg.payload={
4   "_id":d+" "+t,
5   "name": msg.payload.name,
6 }
7 return msg;
```

The debug console shows the following log entries:

```
undefined, name: undefined
11/18/2022, 7:38:15 PM node: 1e03f3b9f0857464
msg payload: Object
{ Medicine name: "Pioglitazone", Time: "08:38", Date: "2022:11:23" }
11/18/2022, 7:38:16 PM node: 1e03f3b9f0857464
msg payload: Object
{ _id: "undefined", name: undefined }
11/18/2022, 7:43:34 PM node: 1e03f3b9f0857464
msg payload: Object
{ Medicine name: "Metaglinde", Time: "09:00", Date: "2022:11:24" }
11/18/2022, 7:43:35 PM node: 1e03f3b9f0857464
msg payload: Object
{ _id: "undefined", name: undefined }
```

2. FUNCTION TO CLEAR THE FORM

Node-RED interface showing a flow named "Flow 3". The flow includes a "function to store medicine details" node, a "delay 10s" node, and a "Medicine reminder" node. The "function to clear the form" node is currently selected, and its properties are being edited. The function code is as follows:

```
1 msg.payload={
2   "date":"","
3   "name":"","
4   "time":""
5 }
6 return msg;
```

The debug console shows the following log entries:

```
undefined, name: undefined
11/18/2022, 7:38:15 PM node: 1e03f3b9f0857464
msg payload: Object
{ Medicine name: "Pioglitazone", Time: "08:38", Date: "2022:11:23" }
11/18/2022, 7:38:16 PM node: 1e03f3b9f0857464
msg payload: Object
{ _id: "undefined", name: undefined }
11/18/2022, 7:43:34 PM node: 1e03f3b9f0857464
msg payload: Object
{ Medicine name: "Metaglinde", Time: "09:00", Date: "2022:11:24" }
11/18/2022, 7:43:35 PM node: 1e03f3b9f0857464
msg payload: Object
{ _id: "undefined", name: undefined }
```

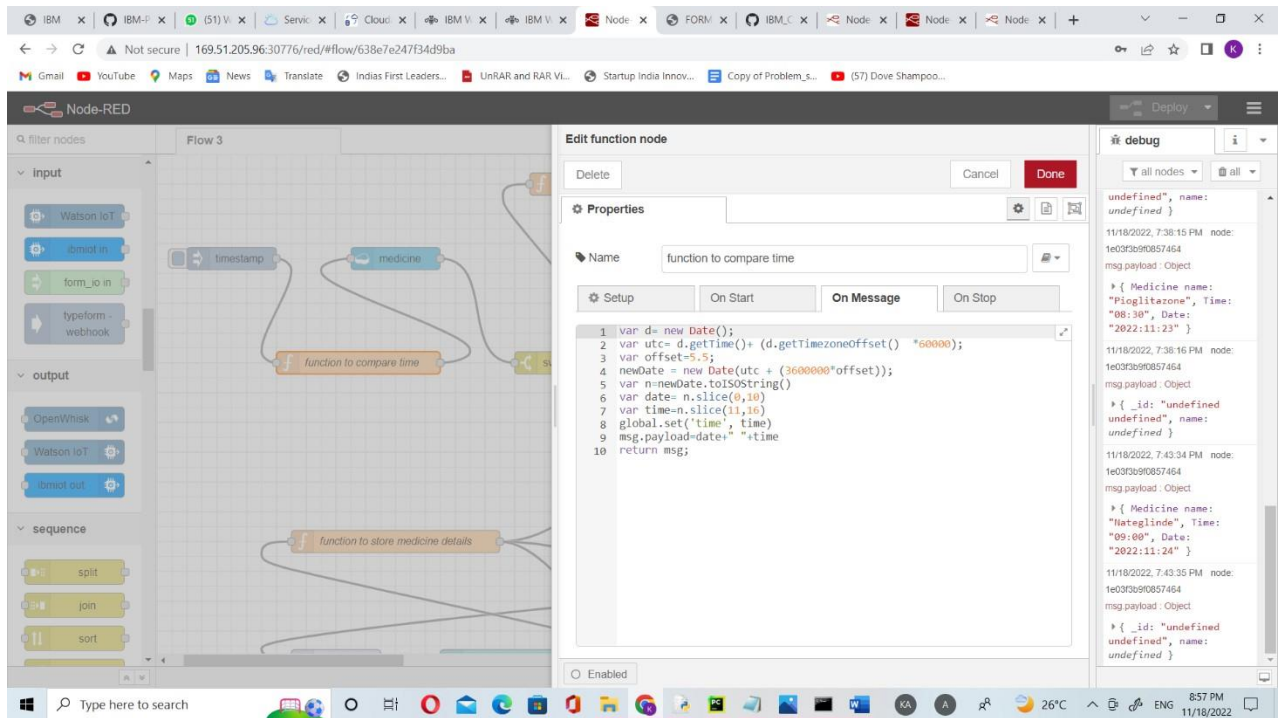
3.FUNCTION TO SEND MEDICINE NAME TO IOT

The screenshot shows the Node-RED web interface in a browser. The main workspace displays a flow named 'Flow 3'. The flow starts with an input node 'form_io_in' connected to a 'timestamp' node, which then connects to a 'medicine' node. The 'medicine' node connects to a 'function to compare time' node. The 'function to compare time' node is currently selected, and its code is visible in the 'Edit function node' panel. The code is as follows:

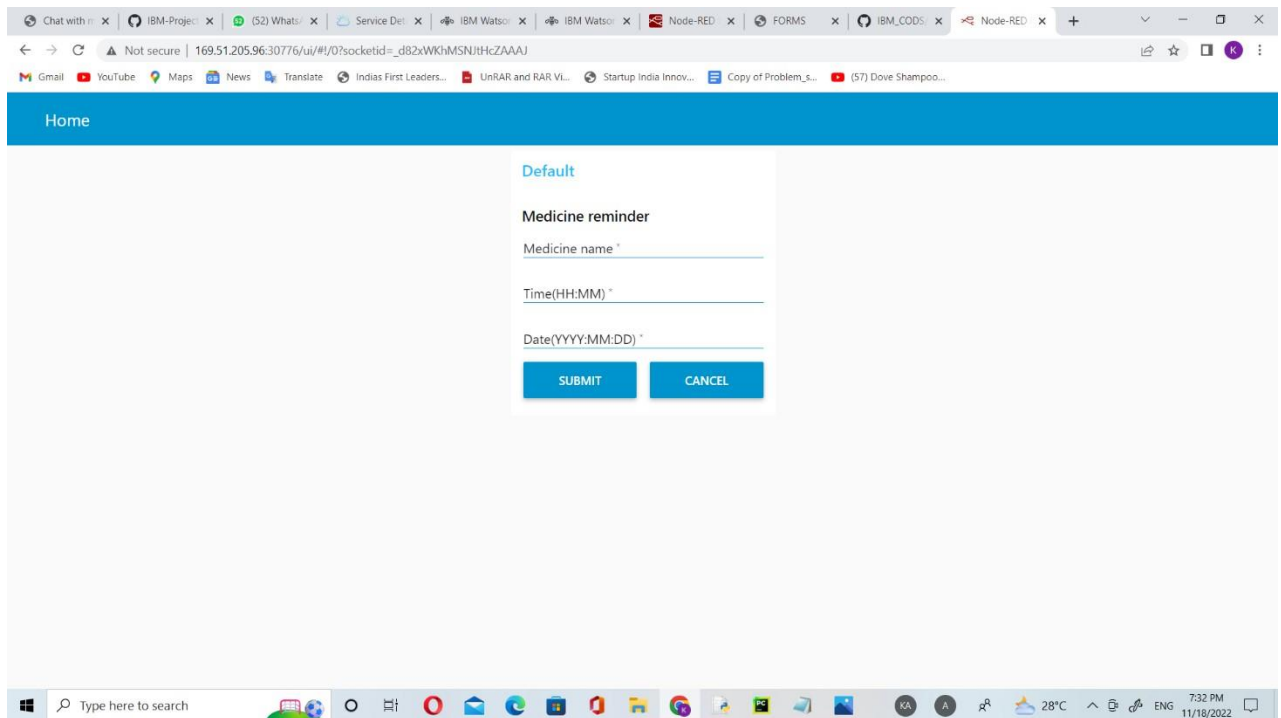
```
1 msg.payload={"command":msg.payload.name}
2 return msg;
```

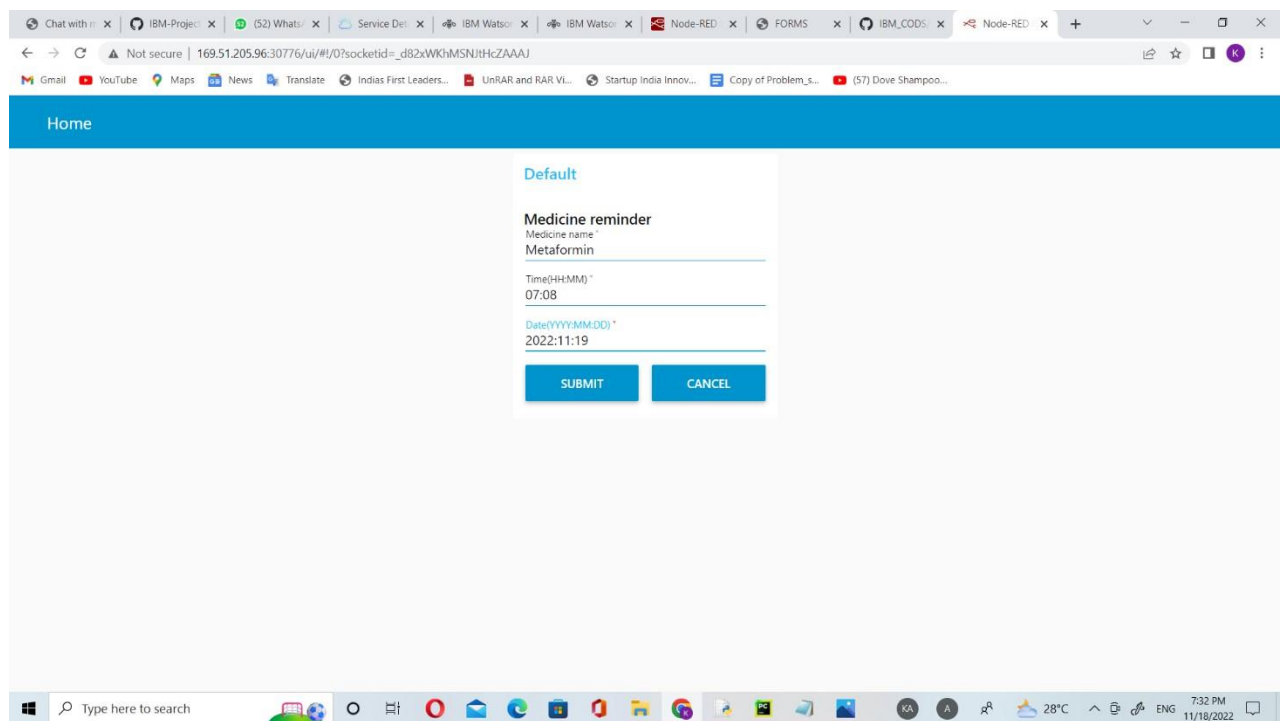
The 'Edit function node' panel also shows the node's name 'function to send medicine name to iot' and the 'On Message' tab. The 'debug' console on the right shows the output of the function, displaying the message payload and the time.

4.FUNCTION TO COMPARE TIME



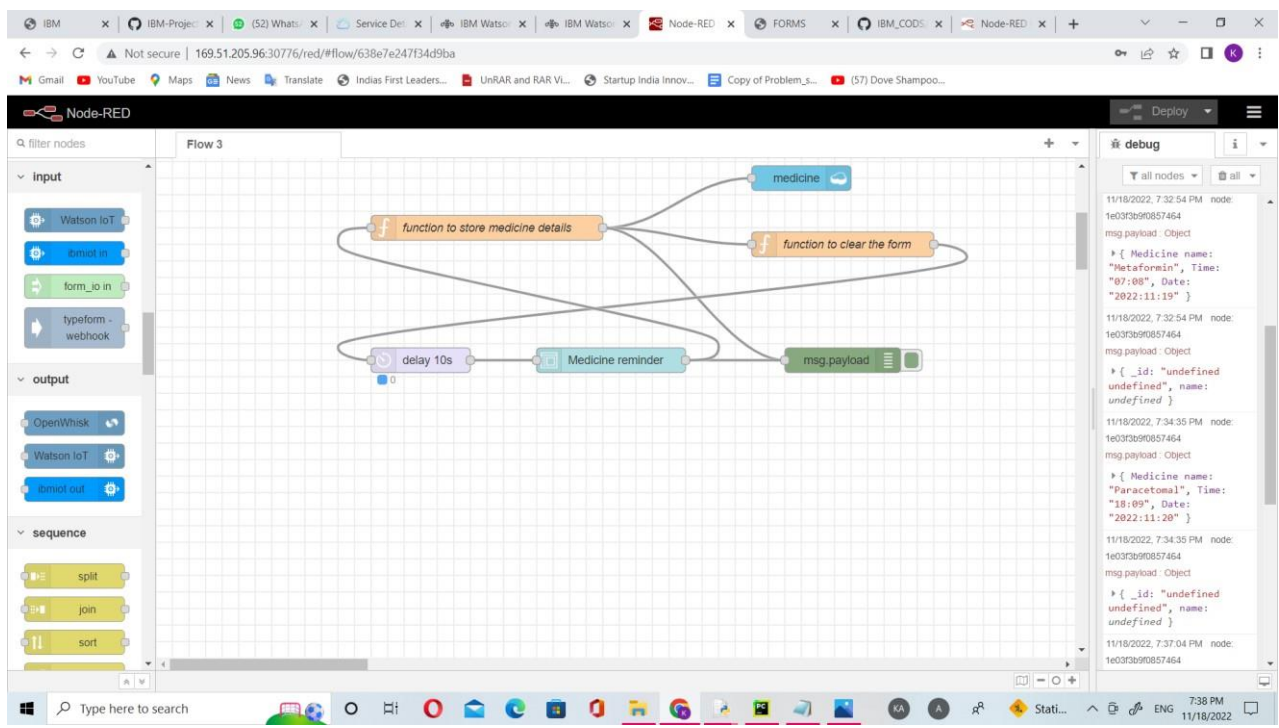
WEB UI(MEDICINE REMINDER PAGE):





DEBUG WINDOW:

The details of medicine name,date and time that are entered are shown in debug window.



The screenshot shows the Node-RED web interface in a browser. The main workspace displays a flow named 'Flow 3'. The flow starts with an input node 'form_to_in' connected to a function node 'function to store medicine details'. This function node is connected to a 'delay 10s' node, which then connects to a 'Medicine reminder' node. The 'Medicine reminder' node is connected to a 'msg.payload' node. The 'function to store medicine details' node also branches to a 'medicine' node and a 'function to clear the form' node. The 'function to clear the form' node is connected back to the 'form_to_in' node. The right sidebar shows the 'debug' console with logs for the function nodes.

MEDICINE DATABASE IN CLOUDANT DB:

The screenshot shows the Cloudant database interface in a browser. The left sidebar contains navigation options: 'All Documents', 'Query', 'Permissions', 'Changes', and 'Design Documents'. The main area displays a table of documents under the 'medicine' database. The table has columns for '_id' and 'name'. The documents listed are:

_id	name
Time:07:08 Date:2022:11:19	{ "name": "metaformin" }
Time:08:30 Date:2022:11:23	{ "name": "Pioglitazone" }
Time:09:00 Date:2022:11:24	{ "name": "Nateline" }
Time:17:09 Date:2022:11:22	{ "name": "Repaglinde" }
Time:18:09 Date:2022:11:18	{ "name": "paracetomal" }

The bottom of the interface shows 'Showing 2 of 3 columns. Show all columns.' and 'Showing document 1 - 5. Documents per page: 20'.

The screenshot shows the IBM Watson IoT Platform database interface. The left sidebar contains navigation options: All Documents, Query, Permissions, Changes, and Design Documents. The main area displays a list of documents for the 'medicine' collection. Two documents are visible:

- Document 1:** id "Time:07:08 Date:2022:11:19". The document content is a JSON object:

```
{  "id": "Time:07:08 Date:2022:11:19",  "key": "Time:07:08 Date:2022:11:19",  "value": {    "rev": "2-c84f3838b765b1361da38a09d438d8d"  },  "doc": {    "_id": "Time:07:08 Date:2022:11:19",    "_rev": "2-c84f3838b765b1361da38a09d438d8d",    "name": {      "name": "metaformin"    }  }}
```
- Document 2:** id "Time:08:30 Date:2022:11:23". The document content is a JSON object:

```
{  "id": "Time:08:30 Date:2022:11:23",  "key": "Time:08:30 Date:2022:11:23",  "value": {    "rev": "1-971feeb2e492ac767f8bca24c53fe9f2"  },  "doc": {    "_id": "Time:08:30 Date:2022:11:23",    "_rev": "1-971feeb2e492ac767f8bca24c53fe9f2",    "name": {      "name": "pioglitazone"    }  }}
```

The interface includes a 'Create Document' button and a 'Showing document 1 - 5. Documents per page: 20' status bar.

IBM WATSON IOT PLATFORM:

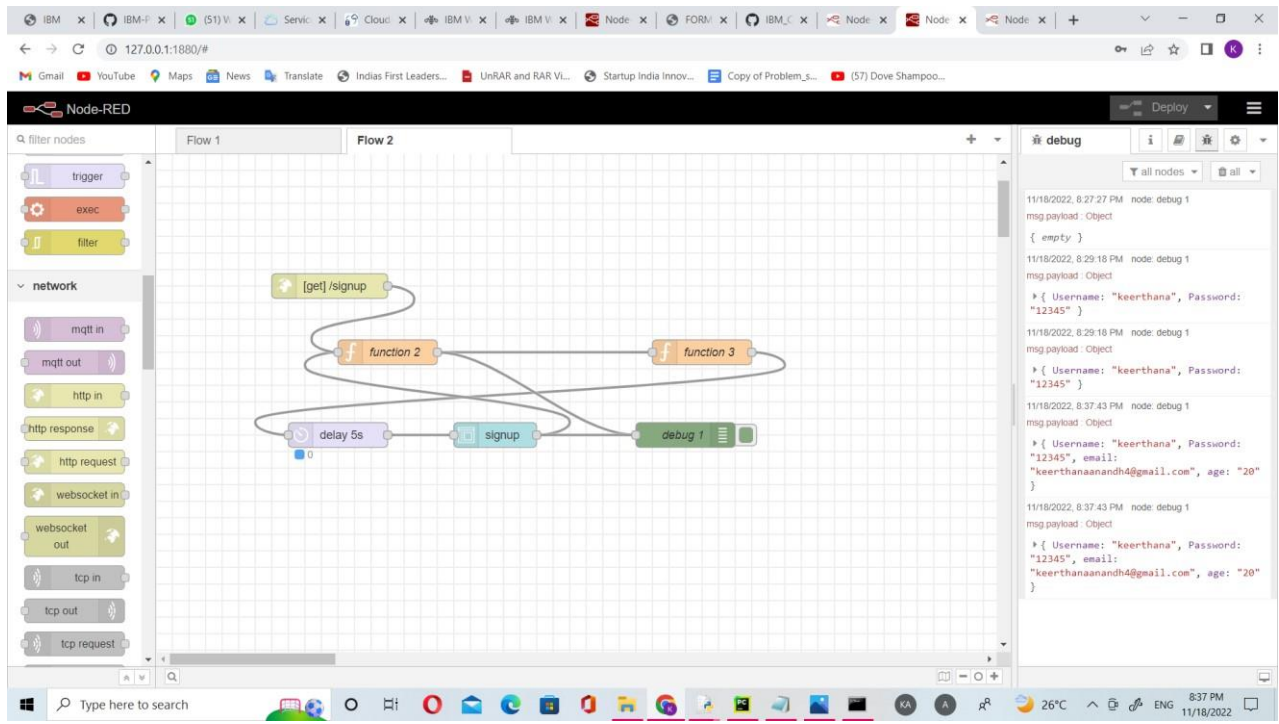
The screenshot shows the IBM Watson IoT Platform dashboard. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. The main area displays a table of devices. The selected device (ID: 12345) is shown in detail, including its status (Disconnected), device type (Iotsensor), class ID (Device), date added (17 Nov 2022 20:29), and descriptive location. Below the device details, the 'Recent Events' tab is selected, showing a list of events:

Event	Value	Format	Last Received
event_1	{"Medicine name": "Nateglinde", "Time": "09:00", ...}	json	a few seconds ago
event_1	{"Medicine name": "Pioglitazone", "Time": "08:30", ...}	json	a minute ago
event_1	{"Medicine name": "Repaglinde", "Time": "17:09", ...}	json	2 minutes ago
event_1	{"Medicine name": "Paracetomal", "Time": "18:09", ...}	json	2 minutes ago
event_1	{"Medicine name": "Metaformin", "Time": "07:08", ...}	json	3 minutes ago

A notification at the bottom right indicates '1 Simulation running'.

SIGNUP FORM IN NODE RED:

In debug window the details are stored.



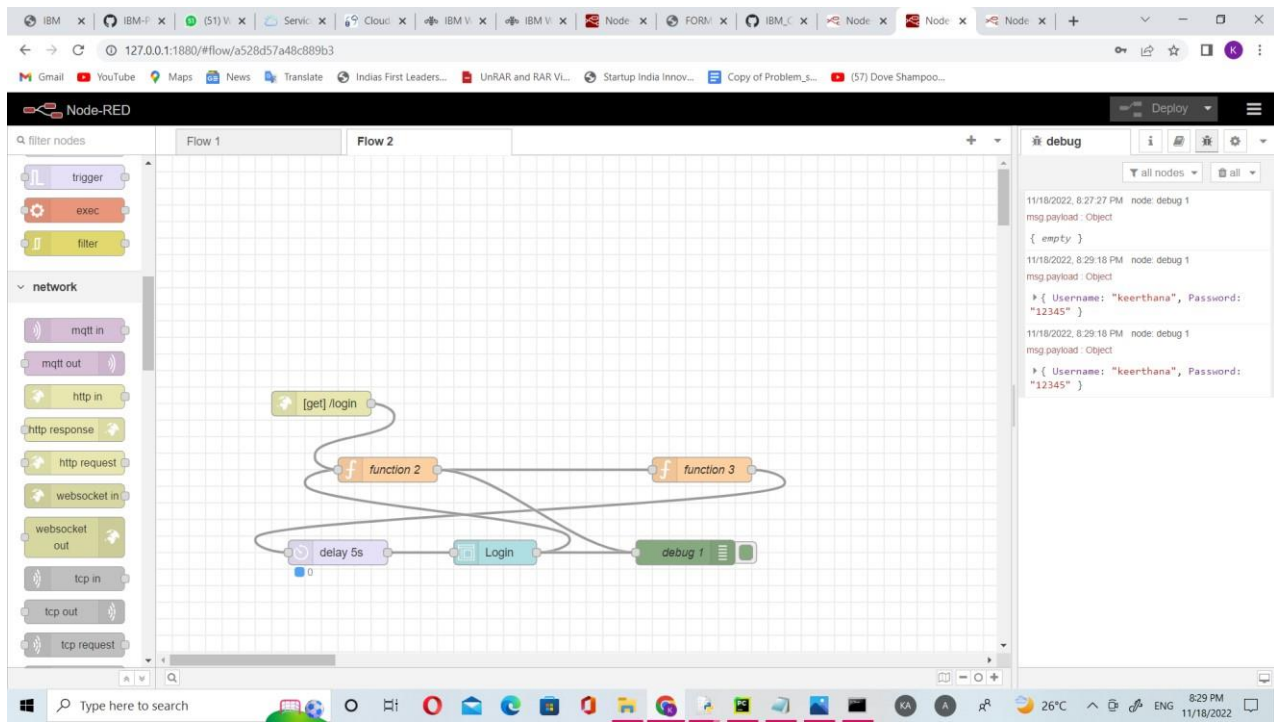
WEBUI(SIGNUP):

The screenshot shows a web browser displaying a signup form. The form is titled "Default" and has the following fields:

- Username:
- Password:
- Email:
- Age:

Below the fields are two buttons: "SUBMIT" and "CANCEL".

LOGIN FORM USING NODE RED:



The screenshot shows a web browser displaying a login form. The address bar shows `127.0.0.1:1880/ui/#/1/0?socketid=5aWJROVNg8uphtMhAAAA`. The page has a blue header with the text 'Login'. The main content area is light gray. A white box in the center contains the login form. The form has a title 'Default' and a section 'Login'. It includes two input fields: 'Username' with the value 'keerthana' and 'Password' with masked characters '*****'. Below the input fields are two buttons: 'SUBMIT' and 'CANCEL'.

MEDICINE REMINDER PAGE:

http://169.51.205.96:30776/ui/#!/0?socketid=_d82xWKhMSNJtHcZAAAJ

SIGNUP PAGE:

<http://127.0.0.1:1880/ui/#!/0?socketid=5aWJRQVNg8uphtMhAAAA>



