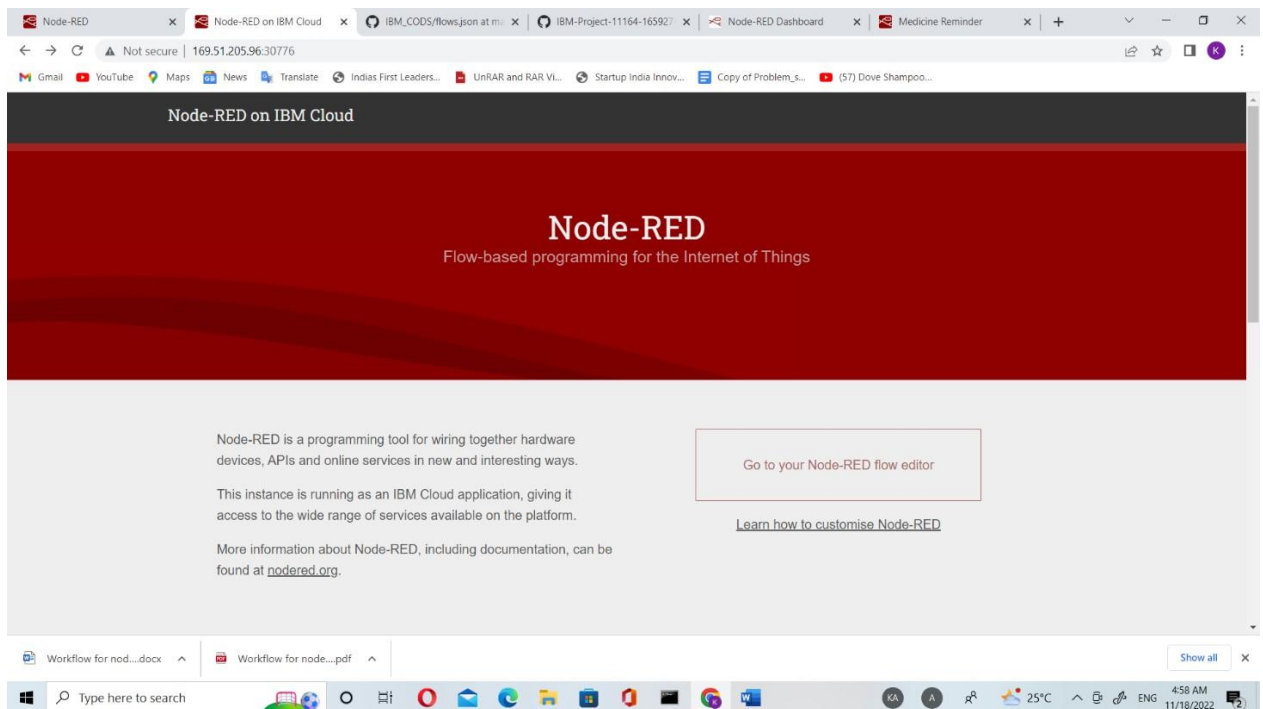


TEAM ID : PNT2022TMID52021

**PROJECT NAME: PERSONAL ASSISTANCE FOR SENIORS WHO
ARE SELF RELIANT**

NODE RED _WEB UI CREATION

NODE-RED INSTALLATION:



The screenshot displays the Node-RED web interface with a flow titled "Flow 3". The flow is designed to handle medicine reminders. It starts with an "input" section containing nodes for "Watson IoT", "inject in", "form_io_in", and "typeform - webhook". The "output" section includes "OpenWhisk", "Watson IoT", and "inject out". The "sequence" section contains "split", "join", and "sort".

The main flow logic is as follows:

- The "form_io_in" node triggers the flow.
- The "typeform - webhook" node sends data to the "inject in" node.
- The "inject in" node triggers the "function to compare time" node.
- The "function to compare time" node triggers the "switch" node.
- The "switch" node triggers the "function to send medicine name to IoT" node.
- The "function to send medicine name to IoT" node triggers the "msg payload" node.
- The "msg payload" node triggers the "OpenWhisk" node.
- The "OpenWhisk" node triggers the "Watson IoT" node.
- The "Watson IoT" node triggers the "inject out" node.
- The "inject out" node triggers the "function to store medicine details" node.
- The "function to store medicine details" node triggers the "function to clear the form" node.
- The "function to clear the form" node triggers the "delay 10s" node.
- The "delay 10s" node triggers the "Medicine reminder" node.
- The "Medicine reminder" node triggers the "msg payload" node.
- The "msg payload" node triggers the "inject out" node.

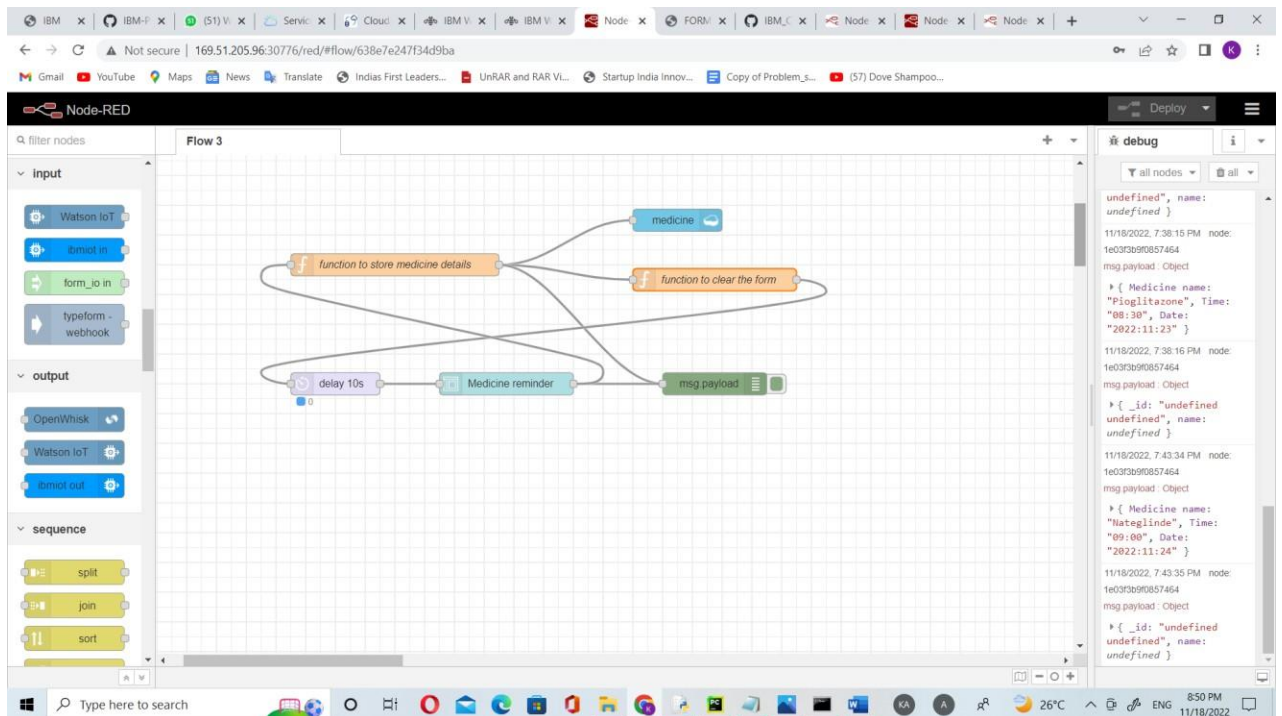
The debug console on the right shows the execution of the flow, displaying the medicine name and time. The output is as follows:

```

undefined, name:
undefined }
11/18/2022, 7:37:04 PM node:
1e039b9f0857464
msg payload: Object
{ Medicine name:
'Repaglinde', Time:
'17:09', Date:
'2022-11-22' }
11/18/2022, 7:37:05 PM node:
1e039b9f0857464
msg payload: Object
{ _id: 'undefined', name:
undefined }
11/18/2022, 7:38:15 PM node:
1e039b9f0857464
msg payload: Object
{ Medicine name:
'Pioglitazone', Time:
'08:30', Date:
'2022-11-23' }
11/18/2022, 7:38:16 PM node:
1e039b9f0857464
msg payload: Object
{ _id: 'undefined', name:
undefined }
  
```

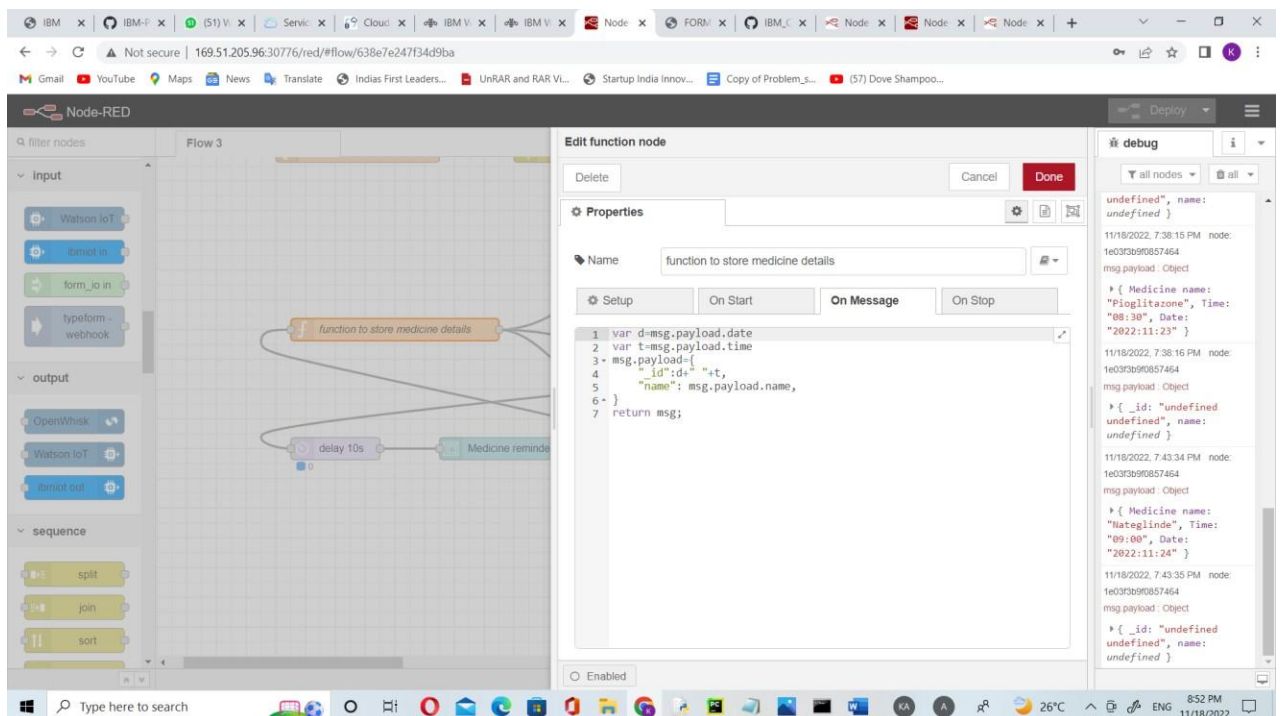
[illegible]

TO ENTER MEDICINE DETAILS:



FUNCTIONS:

1. FUNCTION TO STORE MEDICINE DETAILS



2. FUNCTION TO CLEAR THE FORM

The screenshot shows the Node-RED web interface in a browser. The main workspace displays a flow with several nodes: 'form_io_in' (input), 'typeform-webhook' (input), 'OpenWhisk' (output), 'Watson IoT' (output), 'delay 10s' (delay), and 'Medicine reminder' (output). A function node is connected to the 'form_io_in' node. The 'Edit function node' panel is open, showing the function name 'function to clear the form' and the following code:

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

The debug console on the right shows the message payload being processed, including fields like 'Medicine name', 'Time', and 'Date'.

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 with several nodes: 'timestamp' (input), 'medicine' (input), 'function to compare time' (function), 'function to store medicine details' (function), and 'OpenWhisk' (output). A function node is connected to the 'medicine' node. The 'Edit function node' panel is open, showing the function name 'function to send medicine name to iot' and the following code:

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

The debug console on the right shows the message payload being processed, including fields like 'Medicine name', 'Time', and 'Date'.

4.FUNCTION TO COMPARE TIME

The screenshot shows the Node-RED web interface. A flow named 'Flow 3' is visible, containing a 'timestamp' node, a 'medicine' node, and a 'function to compare time' node. The 'function to compare time' node is selected, and its configuration panel is open. The configuration panel shows the node name 'function to compare time' and the following JavaScript code:

```
1 var d= new Date();
2 var utc= d.getTime()+ (d.getTimezoneOffset() *60000);
3 var offset=5.5;
4 newDate = new Date(utc + (3600000*offset));
5 var n=newDate.toISOString()
6 var date= n.slice(0,10)
7 var time=n.slice(11,16)
8 global.set('time', time)
9 msg.payload=date+" "+time
10 return msg;
```

The debug console on the right shows the output of the function, displaying the date and time in ISO format.

WEB UI(MEDICINE REMINDER PAGE):

The screenshot shows the 'Medicine reminder' web UI. The page has a blue header with the text 'Home'. Below the header, there is a form titled 'Medicine reminder' with the following fields:

- Medicine name *
- Time(HH:MM) *
- Date(YYYY.MM.DD) *

Below the form, there are two buttons: 'SUBMIT' and 'CANCEL'. The page is displayed in a web browser window with the URL 169.51.205.96:30776/ui/#/0?socketid=_d82xWKhMSNJlHcZAAA.

Home

Default

Medicine reminder

Medicine name
Metaformin

Time(HH:MM) *
07:08

Date(YYYY-MM-DD) *
2022:11:19

SUBMIT CANCEL

PNT2022TMID29008

DEBUG WINDOW:

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

Node-RED

Flow 3

input

- Watson IoT
- baseurl
- form_io_in
- typeform - webhook

output

- OpenWhisk
- Watson IoT
- SendGrid Email

sequence

- split
- join
- sort

function to store medicine details

function to clear the form

delay 10s

Medicine reminder

msg.payload

debug

11/18/2022, 7:32:54 PM node
1e03f39f0857464
msg payload: Object

{ Medicine name: 'Metaformin', Time: '07:08', Date: '2022:11:19' }

11/18/2022, 7:32:54 PM node
1e03f39f0857464
msg payload: Object

{ _id: "undefined", name: undefined }

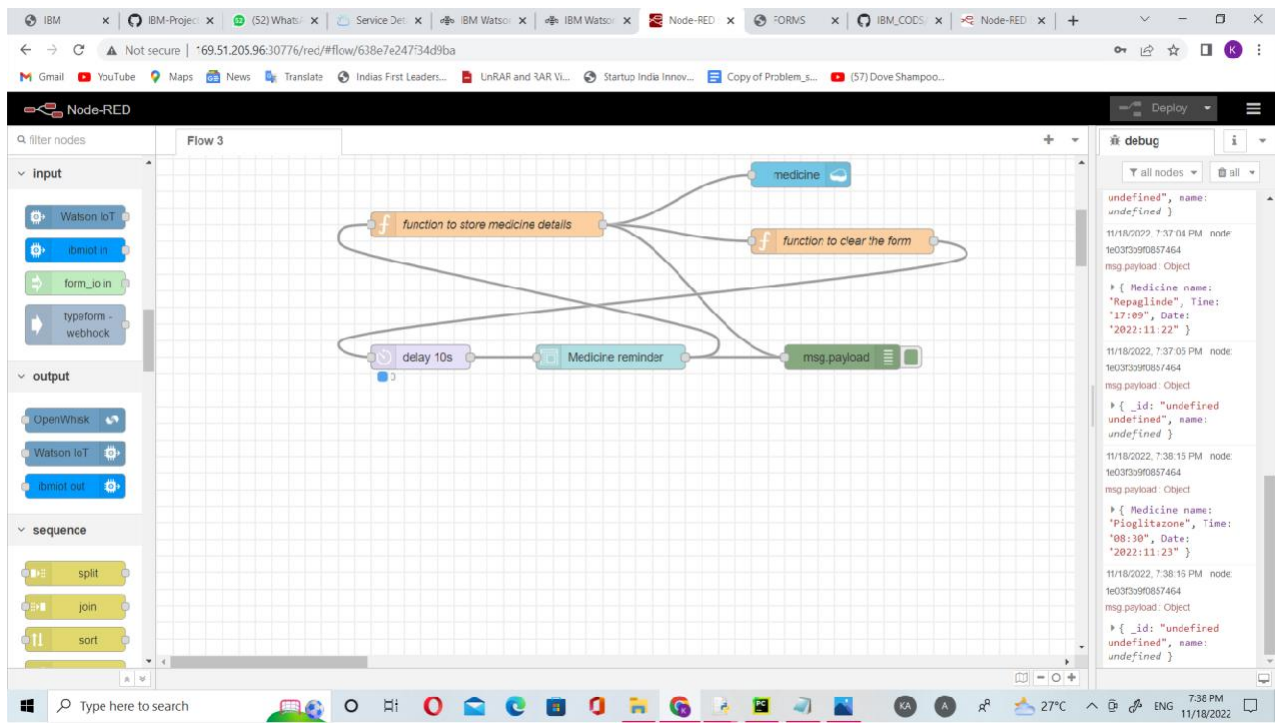
11/18/2022, 7:34:35 PM node
1e03f39f0857464
msg payload: Object

{ Medicine name: 'Paracetamol', Time: '18:09', Date: '2022:11:20' }

11/18/2022, 7:34:35 PM node
1e03f39f0857464
msg payload: Object

{ _id: "undefined", name: undefined }

11/18/2022, 7:37:04 PM node
1e03f39f0857464



MEDICINE DATABASE IN CLOUDANT DB:

The image shows the Cloudant dashboard for a database named 'medicine'. The dashboard displays a list of documents in a table view. The table has two columns: '_id' and 'name'. The documents are listed as follows:

_id	name
Time: 07:08 Date: 2022:11:19	{ 'name': 'metformin' }
Time: 08:30 Date: 2022:11:23	{ 'name': 'Pioglitazone' }
Time: 09:00 Date: 2022:11:24	{ 'name': 'Nateglinide' }
Time: 17:09 Date: 2022:11:22	{ 'name': 'Repaglinde' }
Time: 18:09 Date: 2022:11:18	{ 'name': 'paracetamol' }

The dashboard also shows a sidebar with navigation options: All Documents, Query, Permissions, Changes, and Design Documents. The bottom status bar indicates 'Showing 2 of 3 columns' and 'Showing document 1 of 5'.

medicine

Document ID

Options

JSON

Create Document

Table Metadata JSON

Id "Time:07:08 Date:2022:11:19"

```
{
  "id": "Time:07:08 Date:2022:11:19",
  "key": "Time:07:08 Date:2022:11:19",
  "value": {
    "rev": "2-c64f3030b765b1301da338a69c430d8d"
  },
  "doc": {
    "_id": "Time:07:08 Date:2022:11:19",
    "_rev": "2-c64f3030b765b1301da338a69c430d8d",
    "name": {
      "name": "metformin"
    }
  }
}
```

Id "Time:08:30 Date:2022:11:23"

```
{
  "id": "Time:08:30 Date:2022:11:23",
  "key": "Time:08:30 Date:2022:11:23",
  "value": {
    "rev": "1-9/1feeb2e492ac576f8ba24c5f9f2"
  },
  "doc": {
    "_id": "Time:08:30 Date:2022:11:23",
  }
}
```

Showing document 1 - 5. Documents per page: 20

IBM WATSON IOT PLATFORM:

IBM Watson IoT Platform

Browse Action Device types Interfaces

Add Device

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
12345	Disconnected	Iotensor	Device	17 Nov 2022 20:29	

Identity Device Information Recent Events State Logs

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
event_1	("Medicine name": "Nateglindol", "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": "Paracetamol", "Time": "18:09", ...)	json	2 minutes ago
event_1	("Medicine name": "Metformin", "Time": "07:08", ...)	json	3 minutes ago

1 Simulation running

SIGNUP FORM IN NODE RED:

In debug window the details are stored.

The screenshot shows the Node-RED web interface in a browser. The main workspace displays a flow with the following components: a `[get]/signup` node, a `function 2` node, a `function 3` node, a `delay 5s` node, a `signup` node, and a `debug 1` node. The flow starts with the `[get]/signup` node, which connects to `function 2`. `function 2` connects to `function 3`, which then connects to the `signup` node. The `signup` node connects to the `debug 1` node. A `delay 5s` node is also present in the flow. The left sidebar shows the 'filter nodes' and 'network' categories. The right sidebar shows the 'debug' window with a list of messages. The messages in the debug window are as follows:

```
11/18/2022, 8:37:27 PM node: debug 1
msg payload: Object
{ empty: }

11/18/2022, 8:39:18 PM node: debug 1
msg payload: Object
{ Username: "keerthana", Password: "12345" }

11/18/2022, 8:39:18 PM node: debug 1
msg payload: Object
{ Username: "keerthana", Password: "12345" }

11/18/2022, 8:37:43 PM node: debug 1
msg payload: Object
{ Username: "keerthana", Password: "12345", email: "keerthanaandh4@gmail.com", age: "20" }

11/18/2022, 8:37:43 PM node: debug 1
msg payload: Object
{ Username: "keerthana", Password: "12345", email: "keerthanaandh4@gmail.com", age: "20" }
```

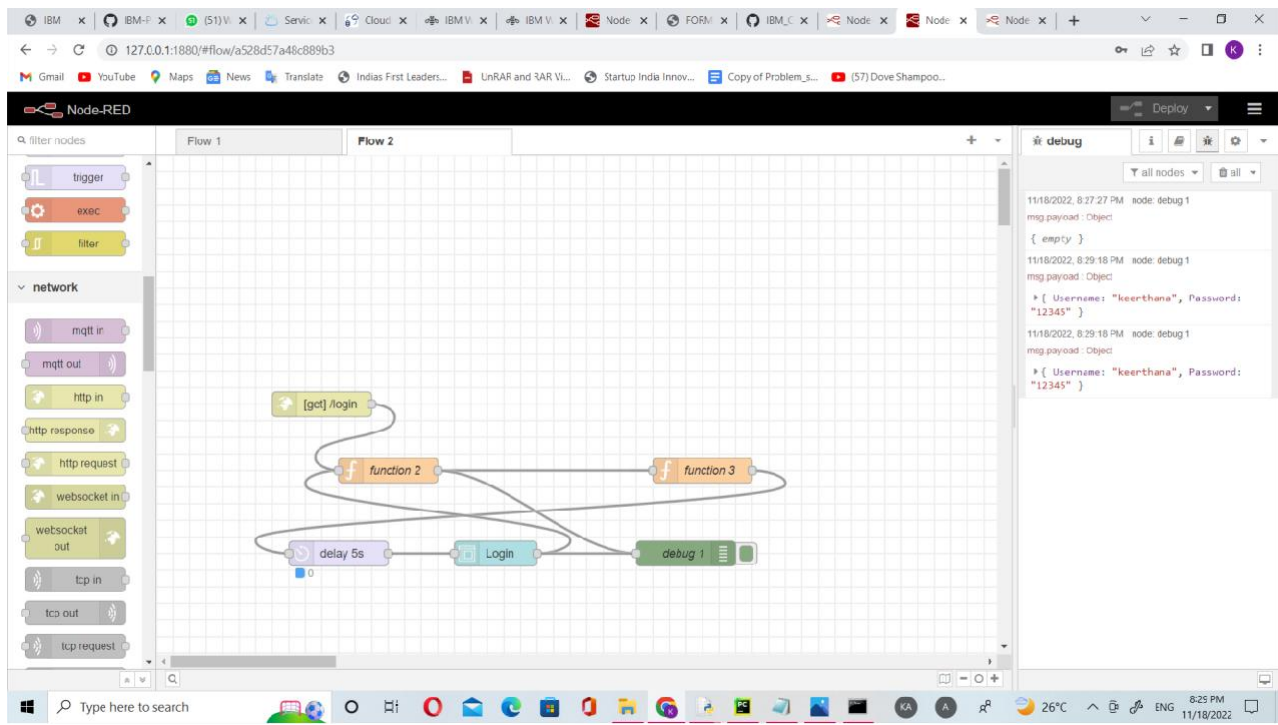
WEBUI(SIGNUP):

The screenshot shows the Signup web form in a browser. The form is titled "Signup" and has a "Default" label. The form fields are:

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

Below the form fields are two buttons: "SUBMIT" and "CANCEL". Below the buttons is a text box containing the text "PNT2022TMD29008".

LOGIN FORM USING NODE RED:



The screenshot shows a web browser displaying a login form. The browser's address bar shows the URL `127.0.0.1:1880/#/O?socketid=5aWJ/RQYNgBuph:MinAAAA`. The login form is titled "Login" and has a "Default" tab. The form fields are:

- Username: `keerthana`
- Password: `*****`

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

Below the login form, the text `iPNT2022TMD29008` is displayed within a dashed box.

MEDICINE REMINDER PAGE:

[http://169.51.205.96:30776/ui/#!/0?socketid= d82xWKhMSNJtHcZAAAJ](http://169.51.205.96:30776/ui/#!/0?socketid=d82xWKhMSNJtHcZAAAJ)

SIGNUP PAGE:

<http://127.0.0.1:1880/ui/#!/0?socketid=5aWJRQVNq8uphtMhAAAA>