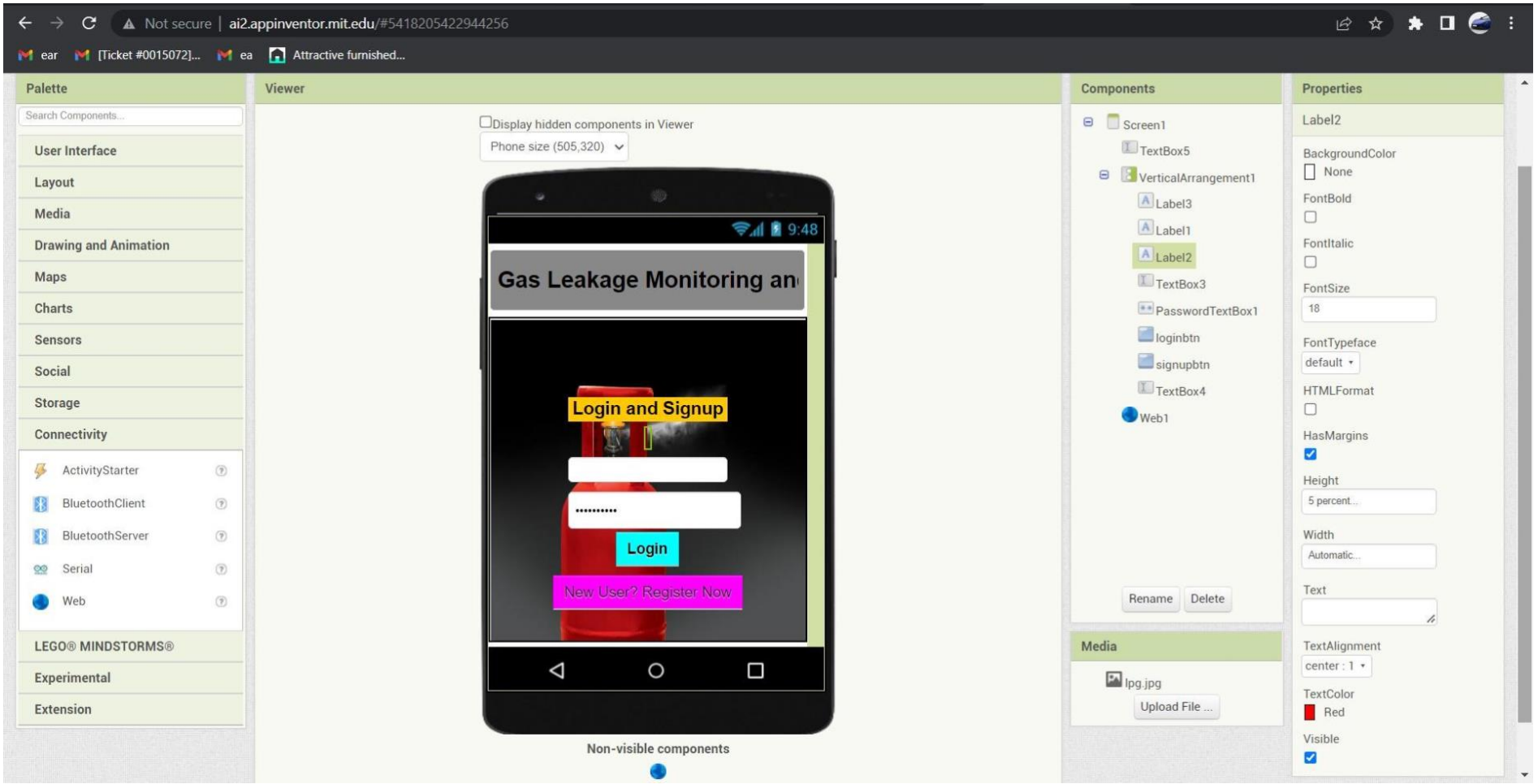
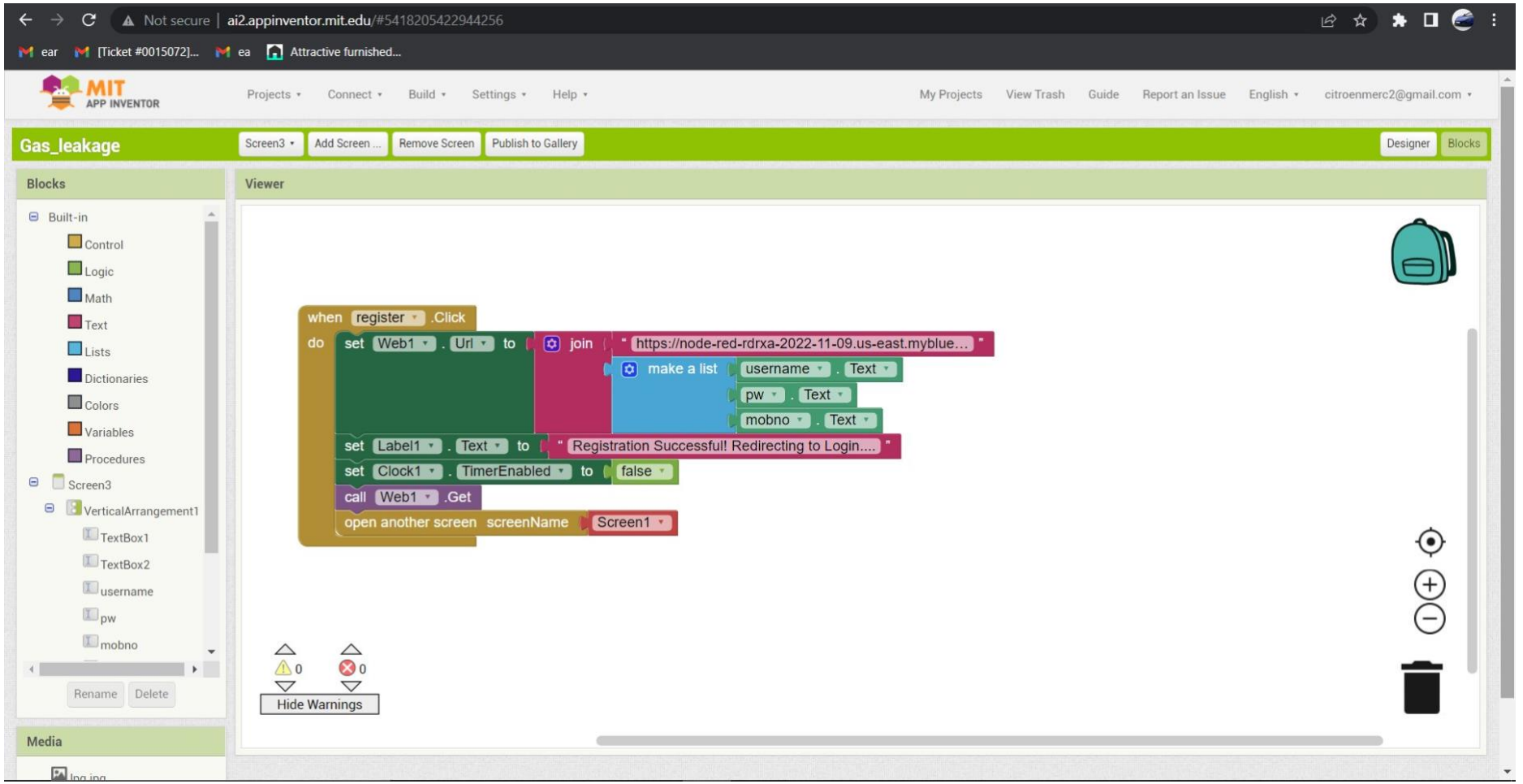
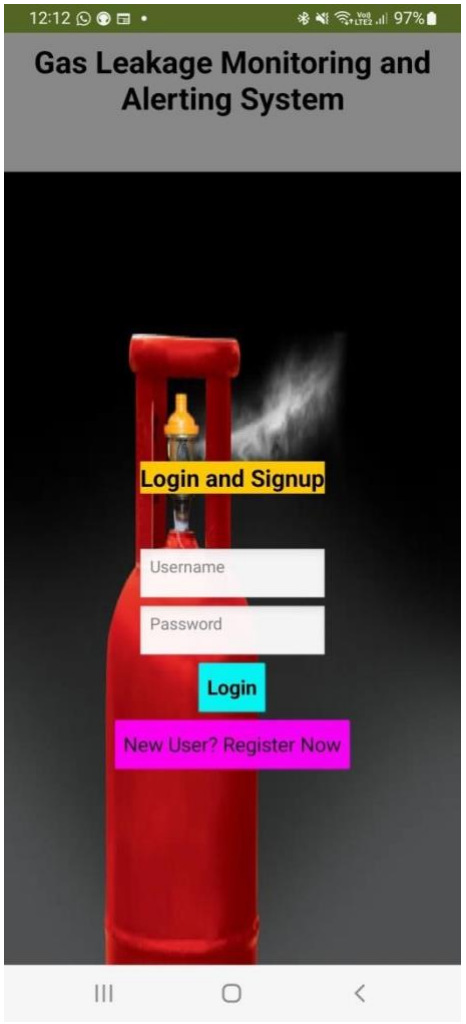
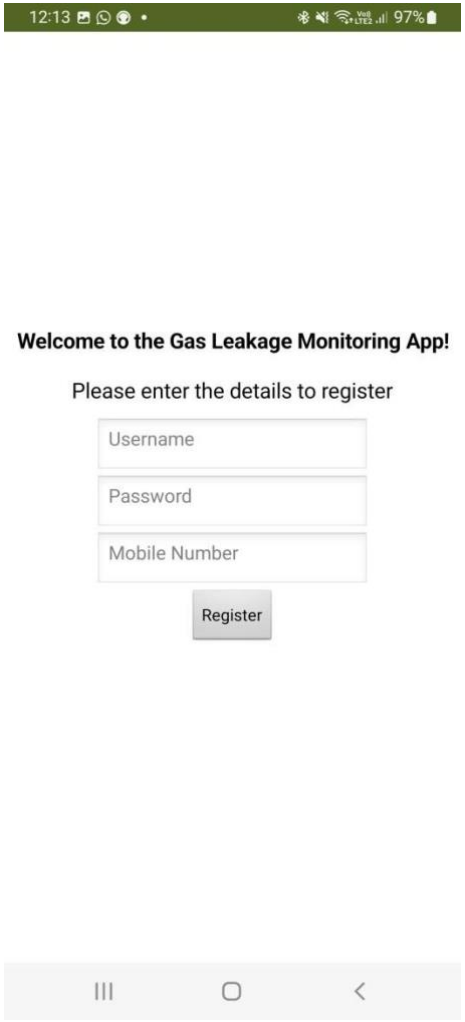
# Project Development Phase
## Sprint-3

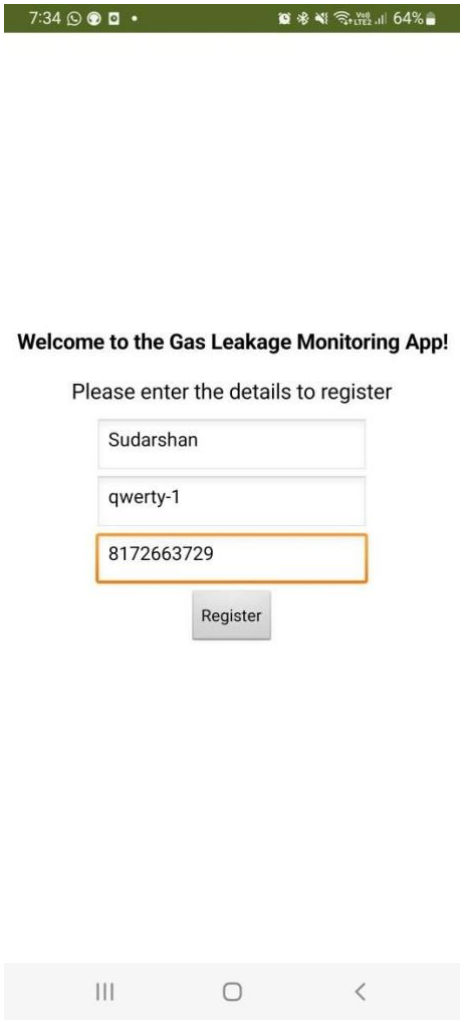
| | |
|---|---|
| Date | 18 November 2022 |
| Team ID | PNT2022TMID49709 |
| Project Name | Gas Leakage Monitoring and Alerting System |


Not secure | ai2.appinventor.mit.edu/#5418205422944256
ear
[Ticket #0015072]...
ea
Attractive furnished...
Palette
Search Components...
User Interface
Layout
Media
Drawing and Animation
Maps
Charts
Sensors
Social
Storage
Connectivity
ActivityStarter
BluetoothClient
BluetoothServer
Serial
Web
LEGO® MINDSTORMS®
Experimental
Extension
Viewer
Display hidden components in Viewer
Phone size (505,320)
9:48
Gas Leakage Monitoring an
Login and Signup
Login
New User? Register Now
Non-visible components
Components
Screen1
TextBox5
VerticalArrangement1
Label3
Label1
Label2
TextBox3
PasswordTextBox1
loginbtn
signupbtn
TextBox4
Web1
Rename
Delete
Media
lpg.jpg
Upload File ...
Properties
Label2
BackgroundColor
None
FontBold
FontItalic
FontSize
18
FontTypeface
default
HTMLFormat
HasMargins
Height
5 percent...
Width
Automatic...
Text
TextAlignment
center : 1
TextColor
Red
Visible

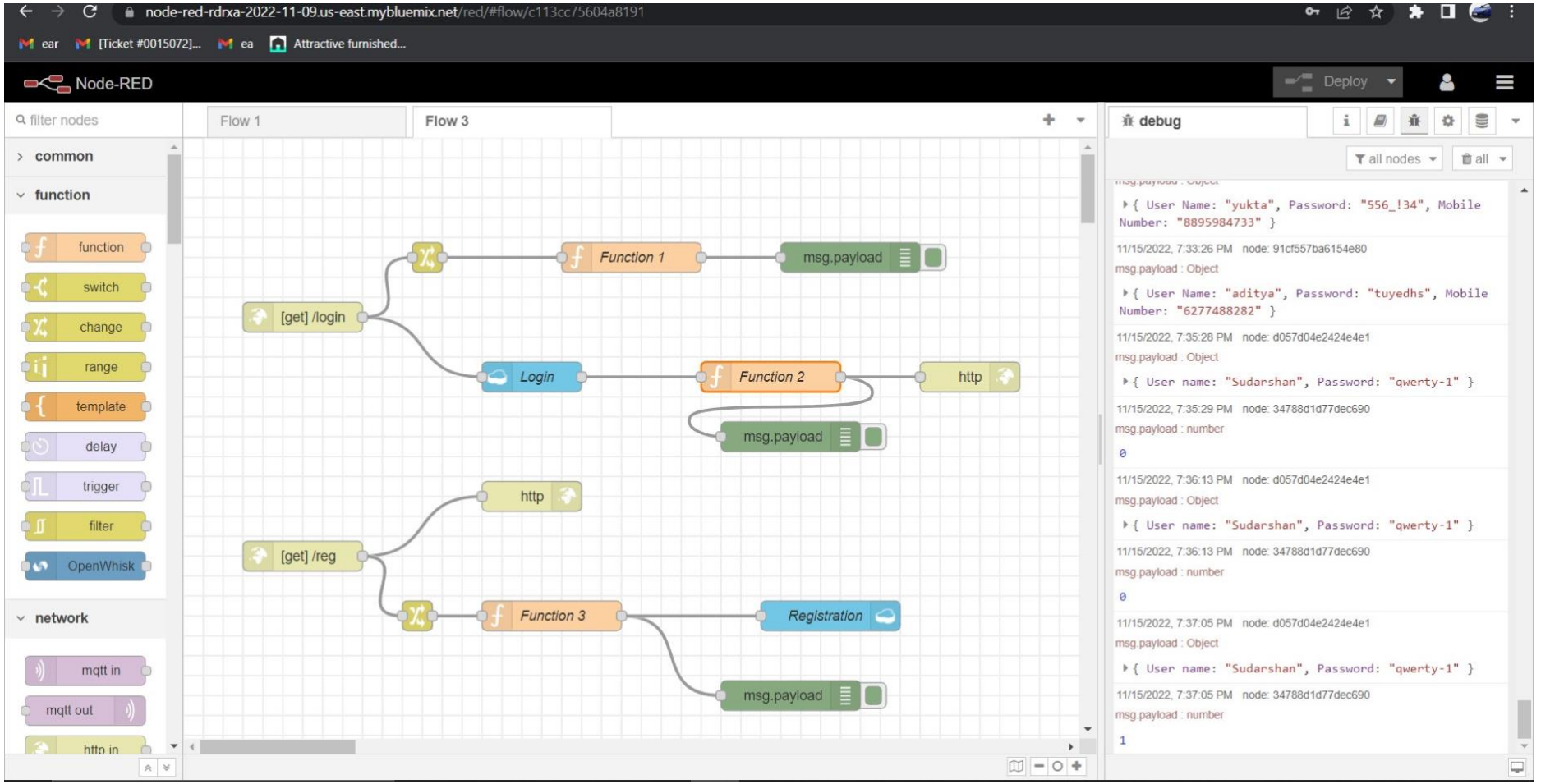

Not secure | ai2.appinventor.mit.edu/#5418205422944256
MIT APP INVENTOR
Projects
Connect
Build
Settings
Help
My Projects
View Trash
Guide
Report an Issue
English
citroenmerc2@gmail.com
Gas_leakage
Screen3
Add Screen ...
Remove Screen
Publish to Gallery
Designer
Blocks
Blocks
Built-in
Control
Logic
Math
Text
Lists
Dictionaries
Colors
Variables
Procedures
Screen3
VerticalArrangement1
TextBox1
TextBox2
username
pw
mobno
Rename
Delete
Media
Viewer
when register .Click
do
set Web1 . Url to
join
" https://node-red-rdrxa-2022-11-09.us-east.myblue... "
make a list
username . Text
pw . Text
mobno . Text
set Label1 . Text to
" Registration Successful! Redirecting to Login.... "
set Clock1 . TimerEnabled to
false
call Web1 .Get
open another screen screenName
Screen1
0
0
Hide Warnings

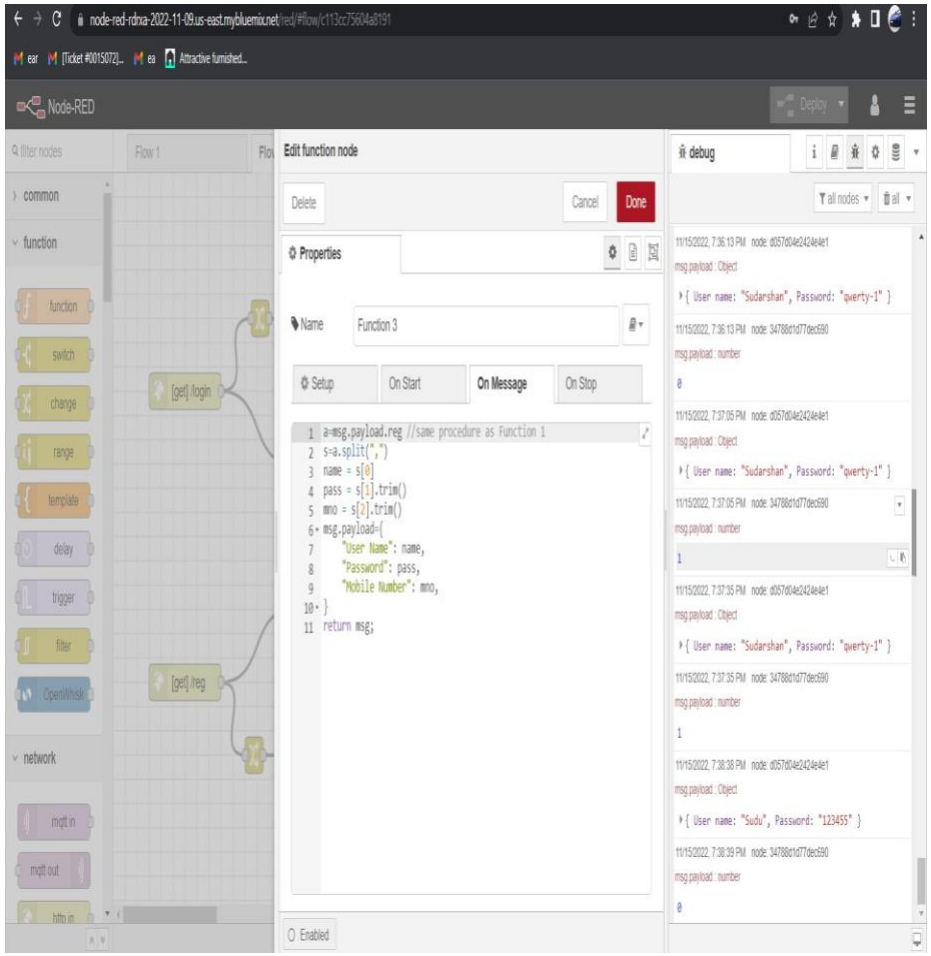

12:12
97%
Gas Leakage Monitoring and Alerting System
Login and Signup
Username
Password
Login
New User? Register Now

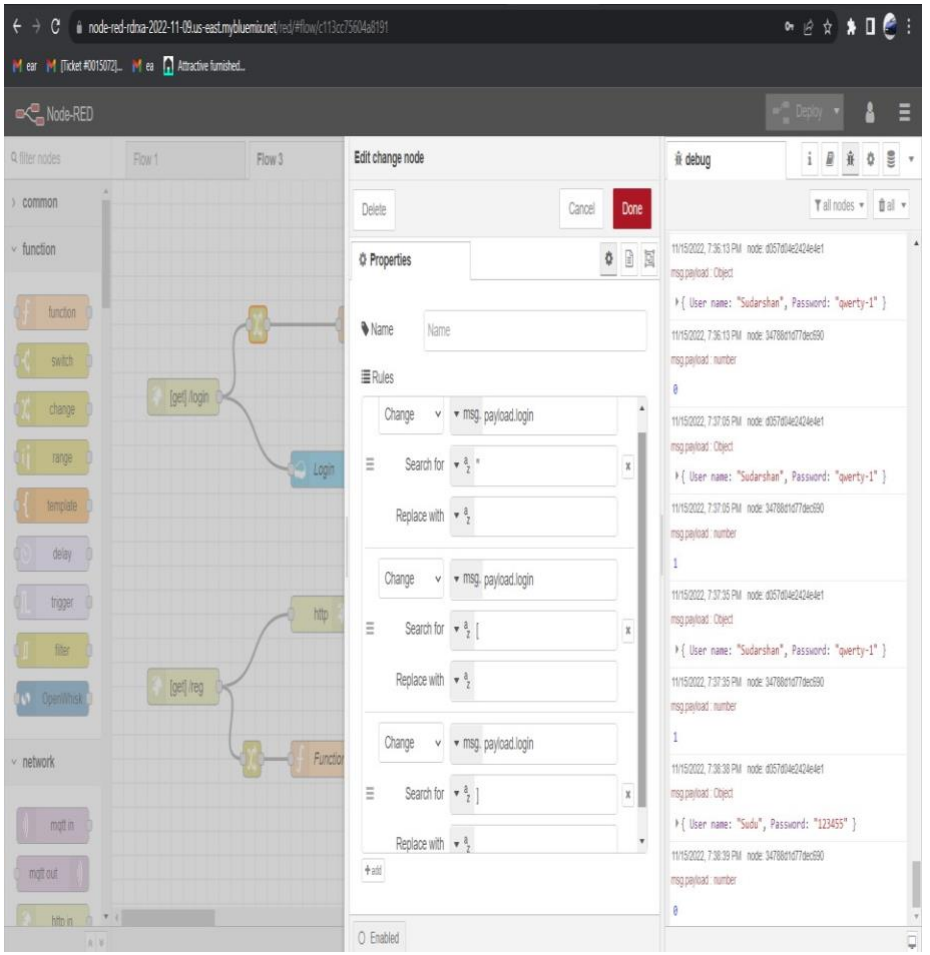

12:13
97%
Welcome to the Gas Leakage Monitoring App!
Please enter the details to register
Username
Password
Mobile Number
Register

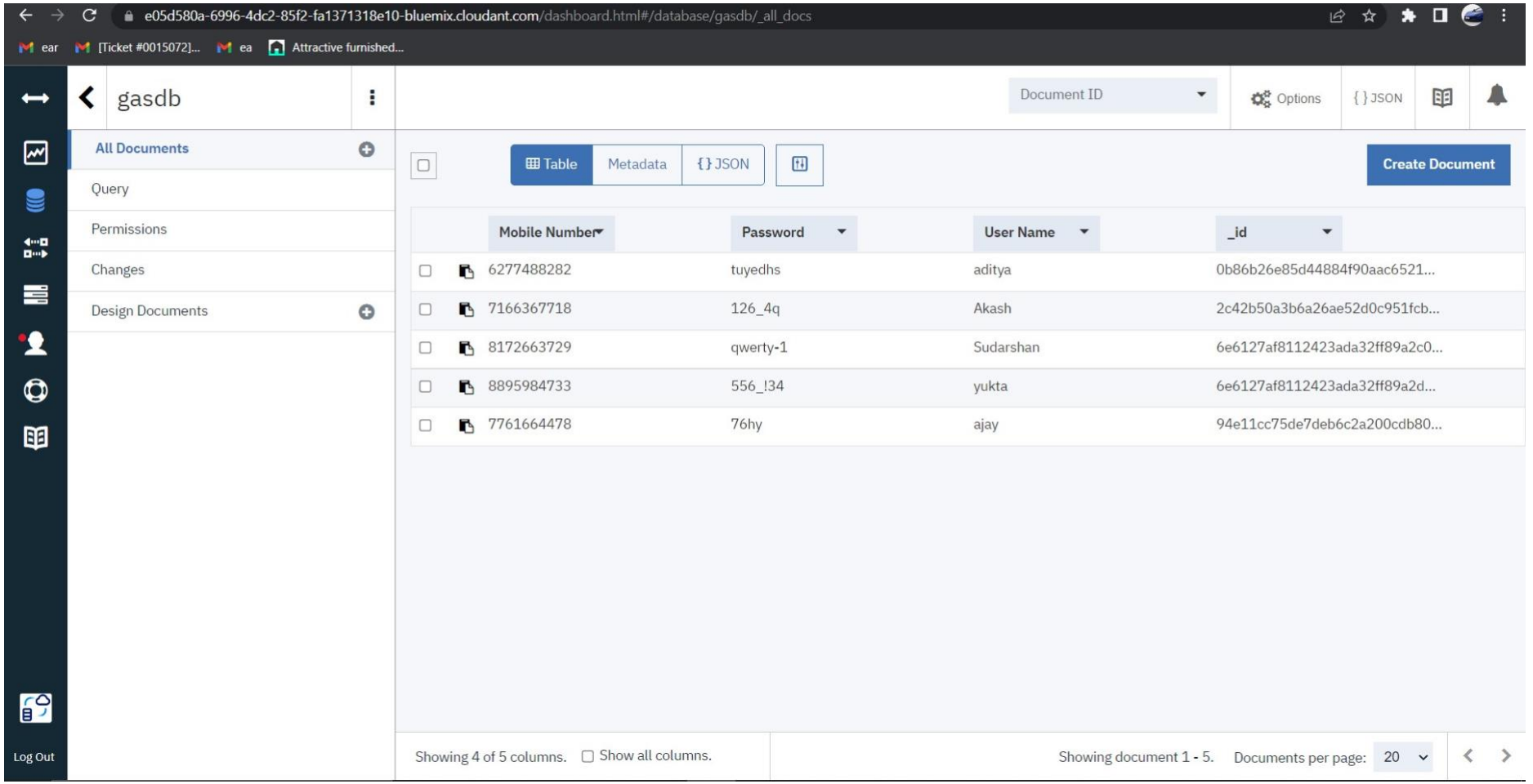

7:34
64%
Welcome to the Gas Leakage Monitoring App!
Please enter the details to register
Sudarshan
qwerty-1
8172663729
Register

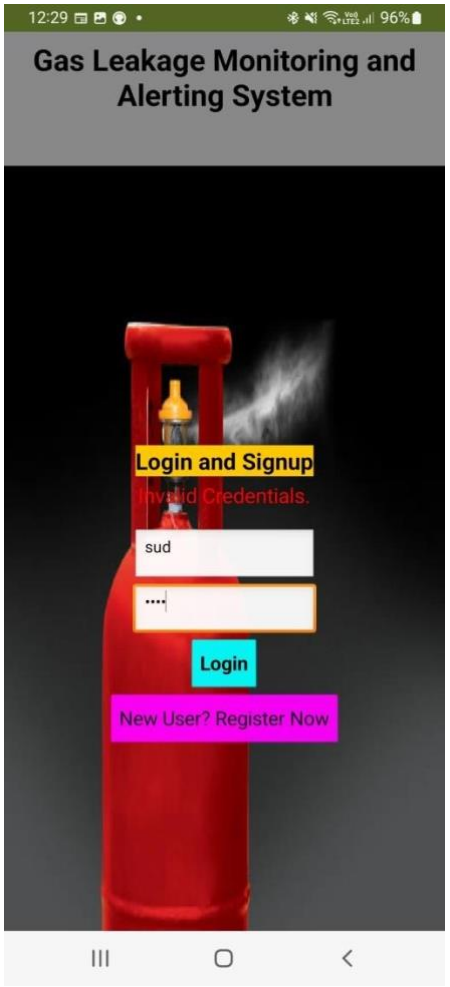
Using Node-RED the entered details are stored in the Cloudant Database.

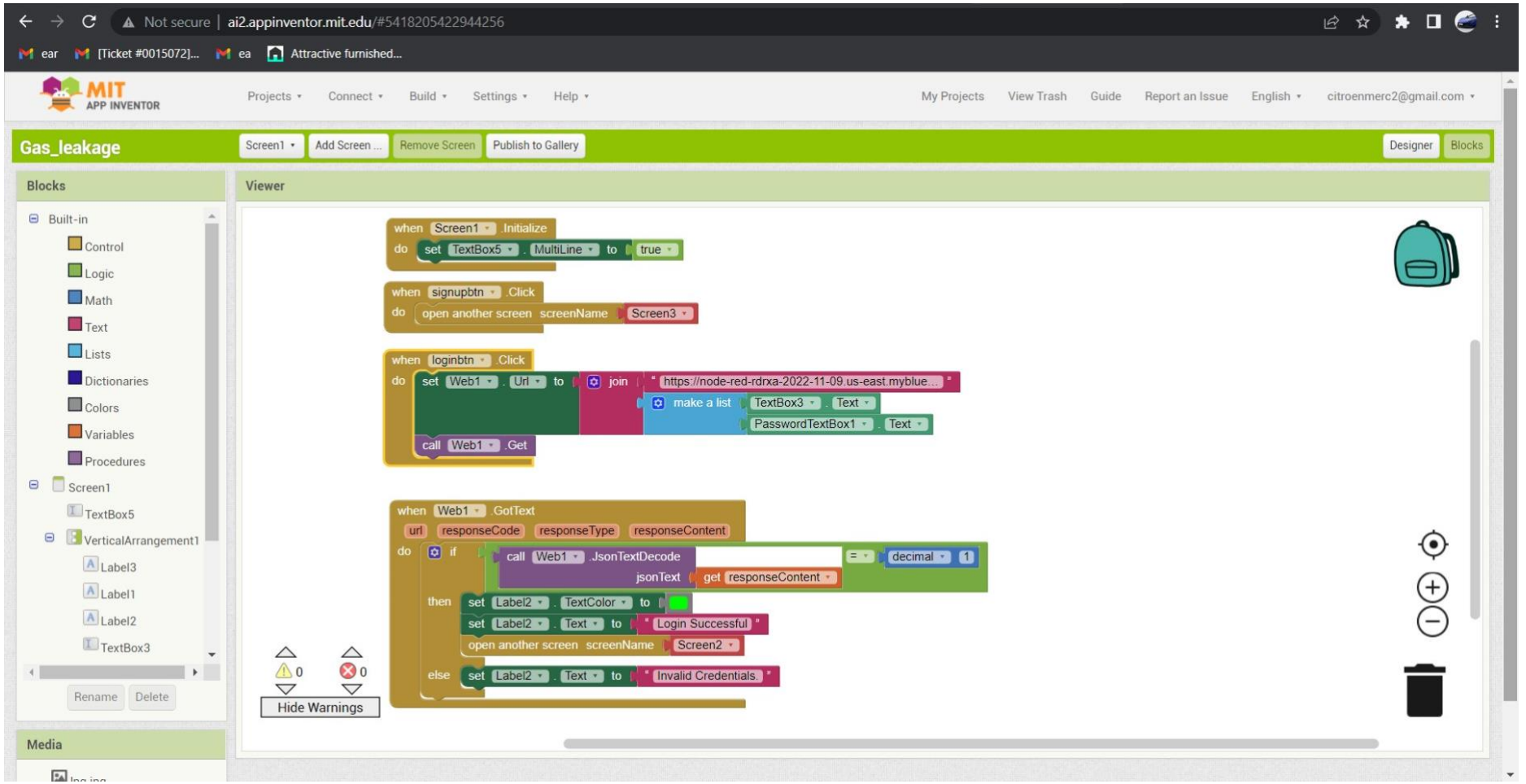


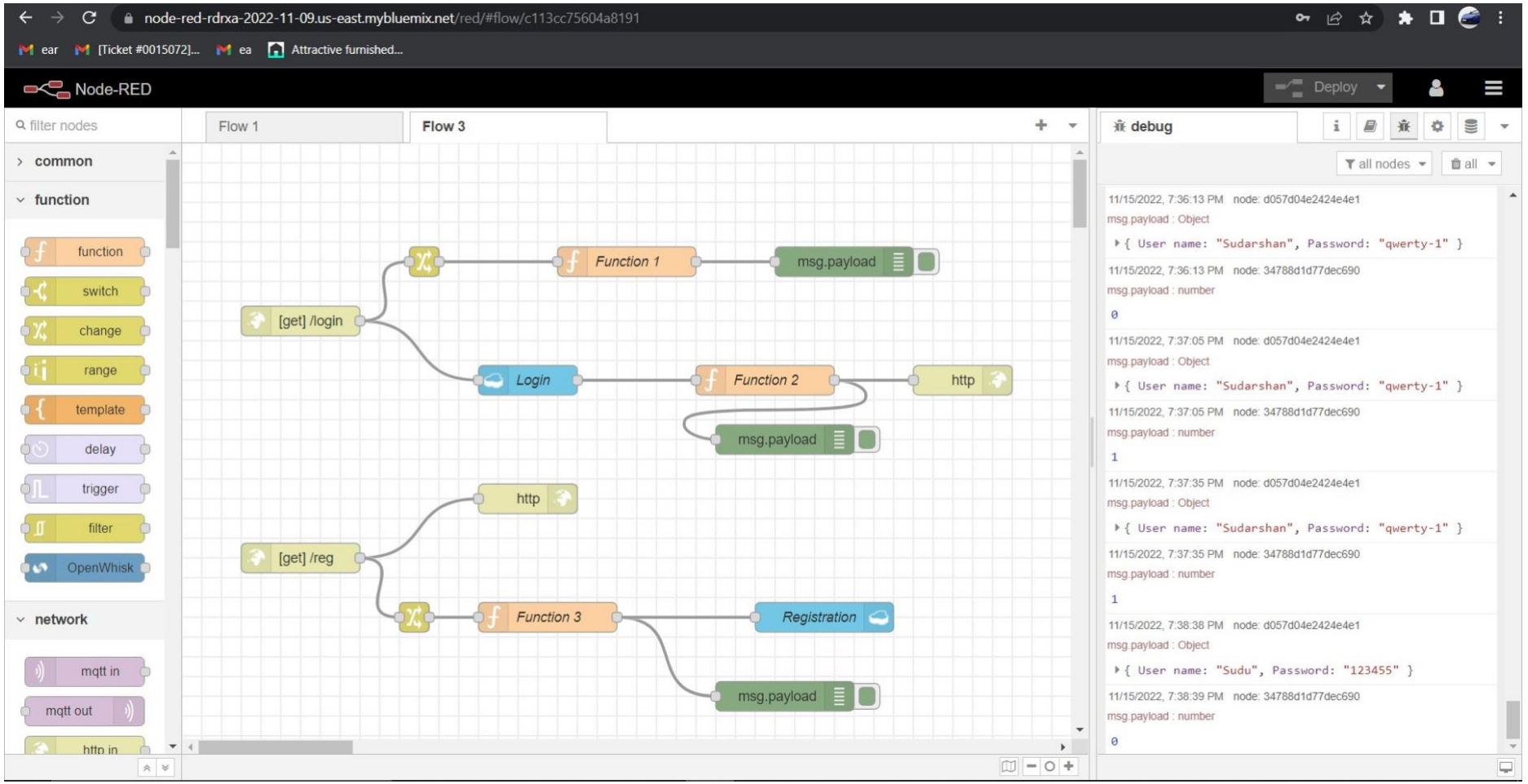

node-red-rdnxa-2022-11-09.us-east.mybluemix.net/red/#flow/c113cc75604a8191
Node-RED
Deploy
Edit function node
Delete
Cancel
Done
Properties
Name
Function 3
Setup
On Start
On Message
On Stop
a=msg.payload.reg //same procedure as Function 1
s=a.split(",")
name = s[0]
pass = s[1].trim()
mno = s[2].trim()
msg.payload={
"User Name": name,
"Password": pass,
"Mobile Number": mno,
}
return msg;
Enabled
debug
[get] /login
[get] /reg
function
switch
change
range
template
delay
trigger
filter
OpenWhisk
network
mqtt in
mqtt out
http in

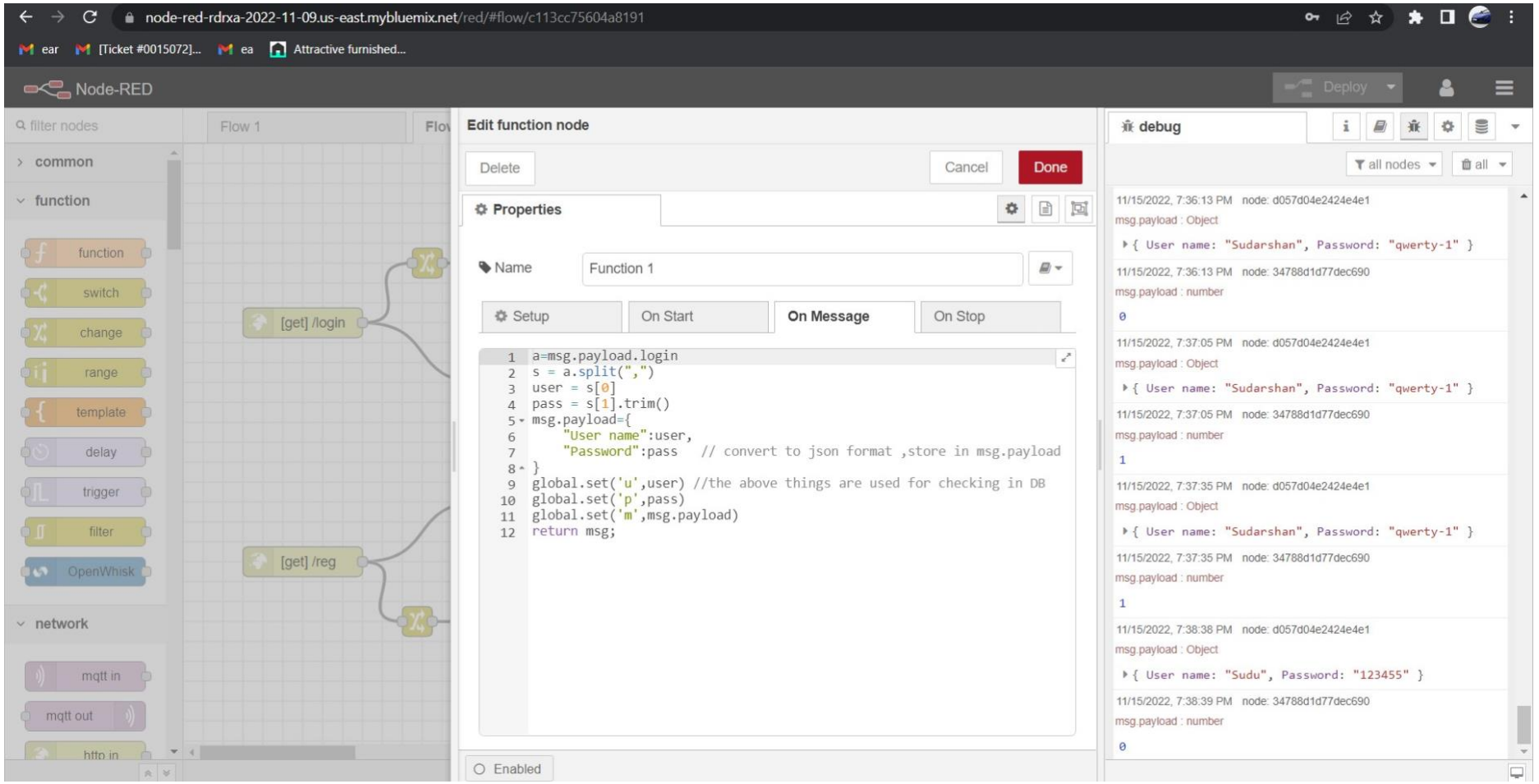

node-red-rdnxa-2022-11-09.us-east.mybluemix.net/red/#flow/c113cc75604a8191
Node-RED
Deploy
Edit change node
Delete
Cancel
Done
Properties
Name
Rules
Change
msg. payload.login
Search for
Replace with
Enabled
debug
[get] /login
[get] /reg
Login
http
function
switch
change
range
template
delay
trigger
filter
OpenWhisk
network
mqtt in
mqtt out

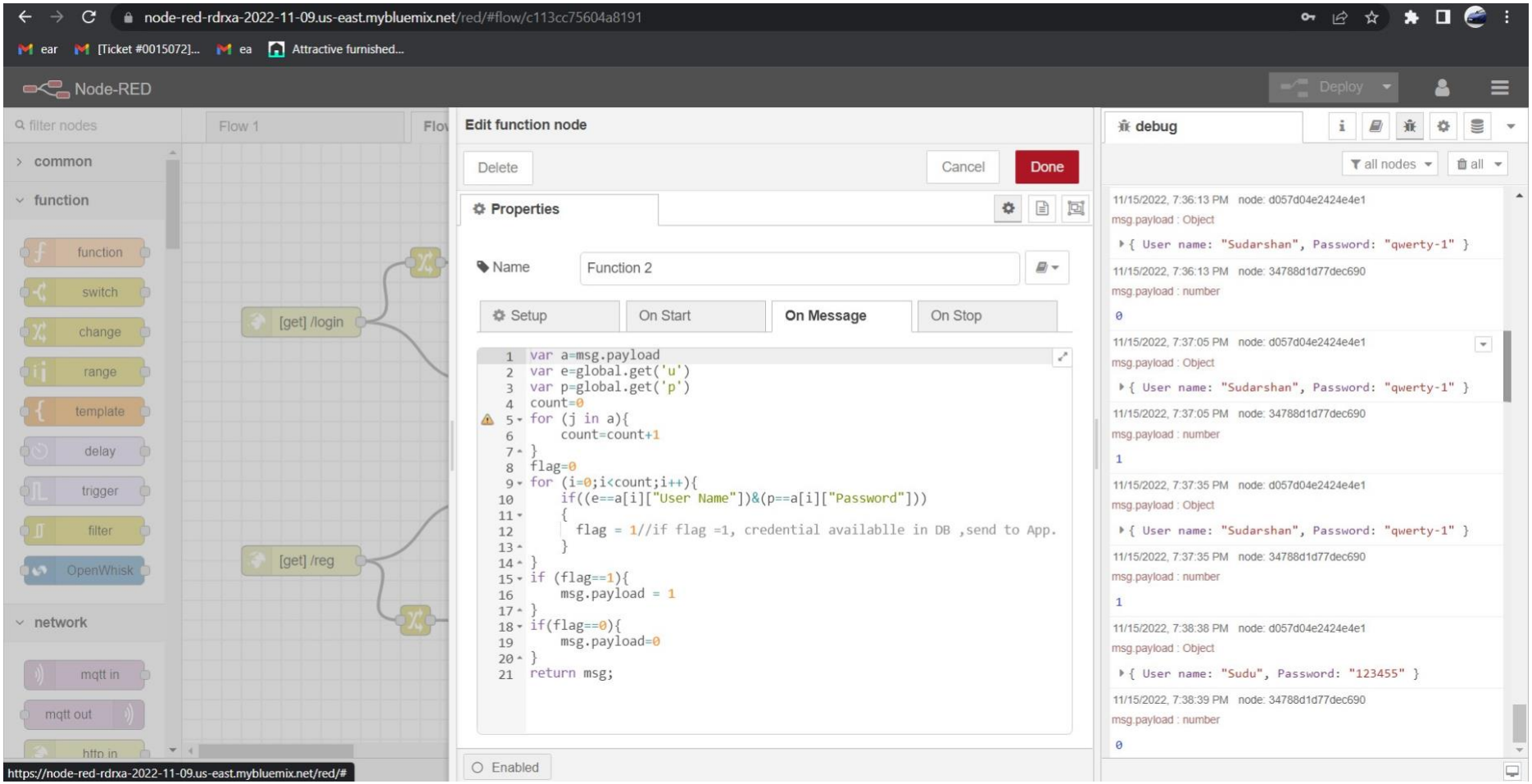

e05d580a-6996-4dc2-85f2-fa1371318e10-bluemix.cloudant.com/dashboard.html#/database/gasdb/_all_docs
ear
[Ticket #0015072]...
ea
Attractive furnished...
gasdb
Document ID
Options
{ } JSON
All Documents
Query
Permissions
Changes
Design Documents
Table
Metadata
{ } JSON
Create Document
Mobile Number
Password
User Name
_id
6277488282
tuyedhs
aditya
0b86b26e85d44884f90aac6521...
7166367718
126_4q
Akash
2c42b50a3b6a26ae52d0c951fcb...
8172663729
qwerty-1
Sudarshan
6e6127af8112423ada32ff89a2c0...
8895984733
556_!34
yukta
6e6127af8112423ada32ff89a2d...
7761664478
76hy
ajay
94e11cc75de7deb6c2a200cdb80...
Showing 4 of 5 columns.
Show all columns.
Showing document 1 - 5.
Documents per page:
20
Log Out


12:29
96%
Gas Leakage Monitoring and Alerting System
Login and Signup
Invalid Credentials.
sud
Login
New User? Register Now


Not secure | ai2.appinventor.mit.edu/#5418205422944256
MIT APP INVENTOR
Projects
Connect
Build
Settings
Help
My Projects
View Trash
Guide
Report an Issue
English
citroenmerc2@gmail.com
Gas_leakage
Screen1
Add Screen ...
Remove Screen
Publish to Gallery
Designer
Blocks
Blocks
Built-in
Control
Logic
Math
Text
Lists
Dictionaries
Colors
Variables
Procedures
Screen1
TextBox5
VerticalArrangement1
Label3
Label1
Label2
TextBox3
Rename
Delete
Media
Viewer
when Screen1 .Initialize
do set TextBox5 . MultiLine to true
when signupbtn .Click
do open another screen screenName Screen3
when loginbtn .Click
do set Web1 . Url to join https://node-red-rdrxa-2022-11-09.us-east.myblue...
make a list TextBox3 . Text
PasswordTextBox1 . Text
call Web1 .Get
when Web1 .GotText
url responseCode responseType responseContent
do if call Web1 .JsonTextDecode
jsonText get responseContent
= decimal 1
then set Label2 . TextColor to
set Label2 . Text to Login Successful
open another screen screenName Screen2
else set Label2 . Text to Invalid Credentials.
0
0
Hide Warnings


node-red-rdrxa-2022-11-09.us-east.mybluemix.net/red/#flow/c113cc75604a8191
Node-RED
Deploy
Flow 1
Flow 3
debug
common
function
switch
change
range
template
delay
trigger
filter
OpenWhisk
network
mqtt in
mqtt out
[get] /login
Function 1
msg.payload
Login
Function 2
http
msg.payload
[get] /reg
http
Function 3
Registration
msg.payload
11/15/2022, 7:36:13 PM node: d057d04e2424e4e1
msg.payload : Object
{ User name: "Sudarshan", Password: "qwerty-1" }
11/15/2022, 7:36:13 PM node: 34788d1d77dec690
msg.payload : number
0
11/15/2022, 7:37:05 PM node: d057d04e2424e4e1
msg.payload : Object
{ User name: "Sudarshan", Password: "qwerty-1" }
11/15/2022, 7:37:05 PM node: 34788d1d77dec690
msg.payload : number
1
11/15/2022, 7:37:35 PM node: d057d04e2424e4e1
msg.payload : Object
{ User name: "Sudarshan", Password: "qwerty-1" }
11/15/2022, 7:37:35 PM node: 34788d1d77dec690
msg.payload : number
1
11/15/2022, 7:38:38 PM node: d057d04e2424e4e1
msg.payload : Object
{ User name: "Sudu", Password: "123455" }
11/15/2022, 7:38:39 PM node: 34788d1d77dec690
msg.payload : number
0


node-red-rdrxa-2022-11-09.us-east.mybluemix.net/red/#flow/c113cc75604a8191
Node-RED
Deploy
filter nodes
Flow 1
common
function
function
switch
change
range
template
delay
trigger
filter
OpenWhisk
network
mqtt in
mqtt out
http in
[get] /login
[get] /reg
Edit function node
Delete
Cancel
Done
Properties
Name
Function 1
Setup
On Start
On Message
On Stop
1 a=msg.payload.login
2 s = a.split(",")
3 user = s[0]
4 pass = s[1].trim()
5 msg.payload={
6 "User name":user,
7 "Password":pass // convert to json format ,store in msg.payload
8 }
9 global.set('u',user) //the above things are used for checking in DB
10 global.set('p',pass)
11 global.set('m',msg.payload)
12 return msg;
Enabled
debug
all nodes
all
11/15/2022, 7:36:13 PM node: d057d04e2424e4e1
msg.payload : Object
{ User name: "Sudarshan", Password: "qwerty-1" }
11/15/2022, 7:36:13 PM node: 34788d1d77dec690
msg.payload : number
0
11/15/2022, 7:37:05 PM node: d057d04e2424e4e1
msg.payload : Object
{ User name: "Sudarshan", Password: "qwerty-1" }
11/15/2022, 7:37:05 PM node: 34788d1d77dec690
msg.payload : number
1
11/15/2022, 7:37:35 PM node: d057d04e2424e4e1
msg.payload : Object
{ User name: "Sudarshan", Password: "qwerty-1" }
11/15/2022, 7:37:35 PM node: 34788d1d77dec690
msg.payload : number
1
11/15/2022, 7:38:38 PM node: d057d04e2424e4e1
msg.payload : Object
{ User name: "Sudu", Password: "123455" }
11/15/2022, 7:38:39 PM node: 34788d1d77dec690
msg.payload : number
0


node-red-rdrxa-2022-11-09.us-east.mybluemix.net/red/#flow/c113cc75604a8191
Node-RED
Deploy
filter nodes
Flow 1
common
function
function
switch
change
range
template
delay
trigger
filter
OpenWhisk
network
mqtt in
mqtt out
http in
[get] /login
[get] /reg
Edit function node
Delete
Cancel
Done
Properties
Name
Function 2
Setup
On Start
On Message
On Stop
1 var a=msg.payload
2 var e=global.get('u')
3 var p=global.get('p')
4 count=0
5 for (j in a){
6 count=count+1
7 }
8 flag=0
9 for (i=0;i<count;i++){
10 if((e==a[i]["User Name"])&(p==a[i]["Password"]))
11 {
12 flag = 1//if flag =1, credential availablle in DB ,send to App.
13 }
14 }
15 if (flag==1){
16 msg.payload = 1
17 }
18 if(flag==0){
19 msg.payload=0
20 }
21 return msg;
Enabled
debug
all nodes
all
11/15/2022, 7:36:13 PM node: d057d04e2424e4e1
msg.payload : Object
{ User name: "Sudarshan", Password: "qwerty-1" }
11/15/2022, 7:36:13 PM node: 34788d1d77dec690
msg.payload : number
0
11/15/2022, 7:37:05 PM node: d057d04e2424e4e1
msg.payload : Object
{ User name: "Sudarshan", Password: "qwerty-1" }
11/15/2022, 7:37:05 PM node: 34788d1d77dec690
msg.payload : number
1
11/15/2022, 7:37:35 PM node: d057d04e2424e4e1
msg.payload : Object
{ User name: "Sudarshan", Password: "qwerty-1" }
11/15/2022, 7:37:35 PM node: 34788d1d77dec690
msg.payload : number
1
11/15/2022, 7:38:38 PM node: d057d04e2424e4e1
msg.payload : Object
{ User name: "Sudu", Password: "123455" }
11/15/2022, 7:38:39 PM node: 34788d1d77dec690
msg.payload : number
0
https://node-red-rdrxa-2022-11-09.us-east.mybluemix.net/red/#