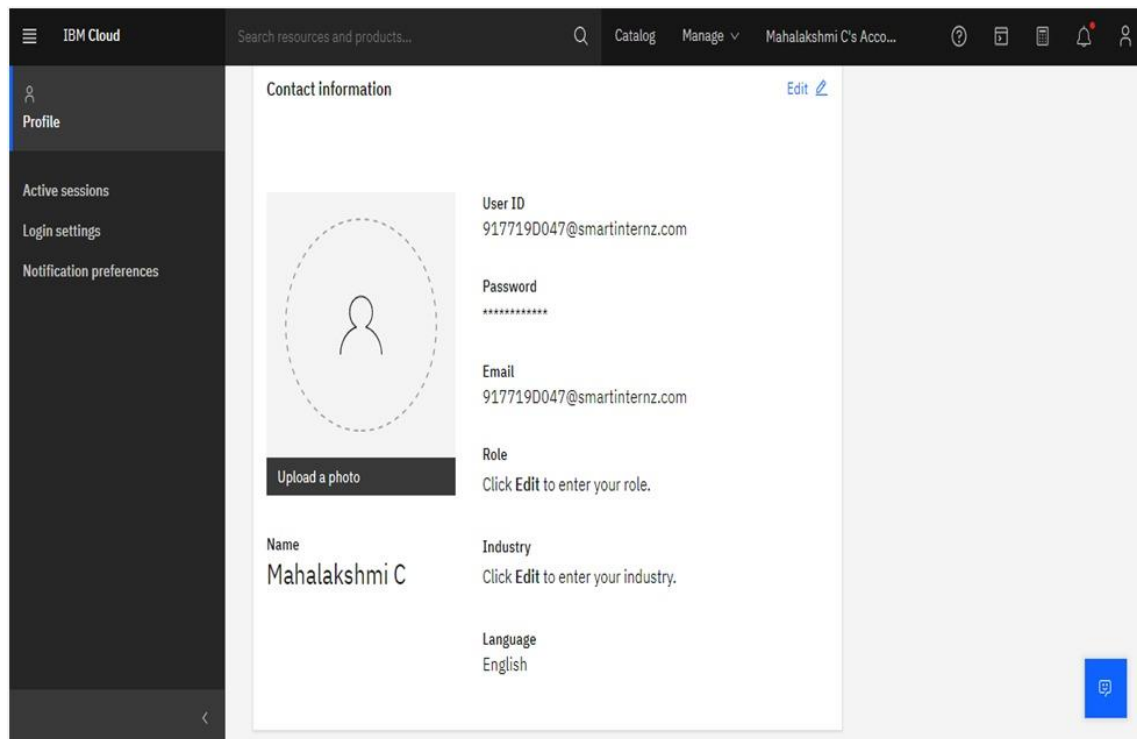


Sprint 2

Storing data using node red

Team ID	PNT2022TMID21380
Project Name	Gas leakage Monitoring and Alerting System

Create IBM Cloud account



The screenshot shows the IBM Cloud user interface. On the left is a dark sidebar with a menu containing 'Profile', 'Active sessions', 'Login settings', and 'Notification preferences'. The 'Profile' section is active. The main content area is titled 'Contact information' and includes an 'Edit' link. It displays a profile card with a dashed circle for a photo and an 'Upload a photo' button. Below the photo, the name 'Mahalakshmi C' is shown. To the right of the photo, the following details are listed: User ID (917719D047@smartinternz.com), Password (masked with asterisks), Email (917719D047@smartinternz.com), Role (with a prompt to click 'Edit' to enter a role), Industry (with a prompt to click 'Edit' to enter an industry), and Language (English). A blue chat icon is visible in the bottom right corner of the main content area.

IBM Cloud

Search resources and products...

Catalog Manage Mahalakshmi C's Acco...

Profile

Active sessions

Login settings

Notification preferences

Contact information [Edit](#)

Upload a photo

Name
Mahalakshmi C

User ID
917719D047@smartinternz.com

Password

Email
917719D047@smartinternz.com

Role
Click [Edit](#) to enter your role.

Industry
Click [Edit](#) to enter your industry.

Language
English

Devices

The screenshot shows the 'All Devices' page in the IBM Watson IoT Platform. A modal window is open for creating a new event type for the 'gas_leakage' device type.

Device Type: gas_leakage

Events: 1

Event type name: gas_detection

Schedule: 1 Every Minute

Payload:

```
0 {
1   "randomNumber": random(0, 100),
2   "co_level": random(90, 110),
3   "methane_level": random(60, 100),
4   "temp": random(10, 80)
5 }
6
```

Table of Devices:

Device ID	Status	Device Type
12345	Disconnected	gas_leakage
15	Disconnected	ngmp

Items per page: 50 | 1-2 of 2 items

Output Graph

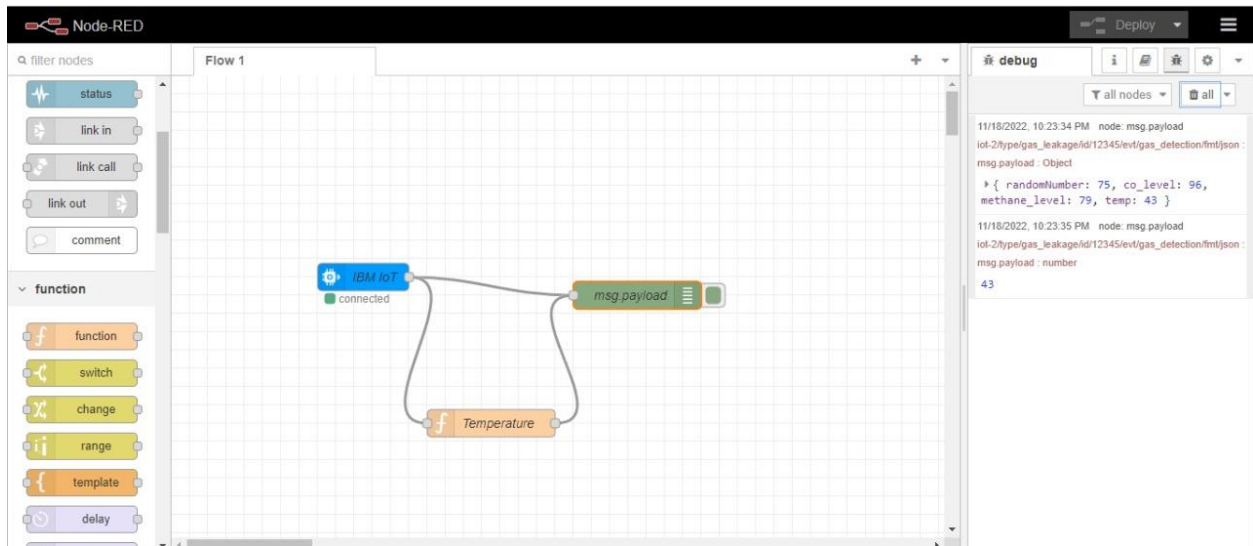
The screenshot shows the 'smart_home' dashboard in the IBM Watson IoT Platform. A line chart is displayed for the 'co_level' device type.

Line Chart:

- Y-axis: 0 to 100
- X-axis: 23:15
- Legend: co_level

Simulation Status: 2 Simulations running

Node-red



Code

```
#include <LiquidCrystal.h>

LiquidCrystal lcd(5,6,8,9,10,11);

int redled = 2;

int greenled = 3;

int buzzer = 4;

int sensor = A0;

int sensorThresh = 400;

void setup()

{

    pinMode(redled, OUTPUT);

    pinMode(greenled,OUTPUT);

    pinMode(buzzer,OUTPUT);
```

```
pinMode(sensor,INPUT);

Serial.begin(9600);

  lcd.begin(16,2);

}

void loop()

{

  int analogValue = analogRead(sensor);

  Serial.print(analogValue);

  if(analogValue>sensorThresh)

  {

    digitalWrite(redled,HIGH);

    digitalWrite(greenled,LOW);

    tone(buzzer,1000,10000);

    lcd.clear();

    lcd.setCursor(0,1);

    lcd.print("ALERT");

    delay(1000);

    lcd.clear();

    lcd.setCursor(0,1);

    lcd.print("EVACUATE");

    delay(1000);
```

```
}  
  
else  
  
{  
  
    digitalWrite(greenled,HIGH);  
  
    digitalWrite(redled,LOW);  
  
    noTone(buzzer);  
  
    lcd.clear();  
  
    lcd.setCursor(0,0);  
  
    lcd.print("SAFE");  
  
    delay(1000);  
  
    lcd.clear();  
  
    lcd.setCursor(0,1);  
  
    lcd.print("ALL CLEAR");  
  
    delay(1000);  
  
}  
  
}
```