Sprint-3

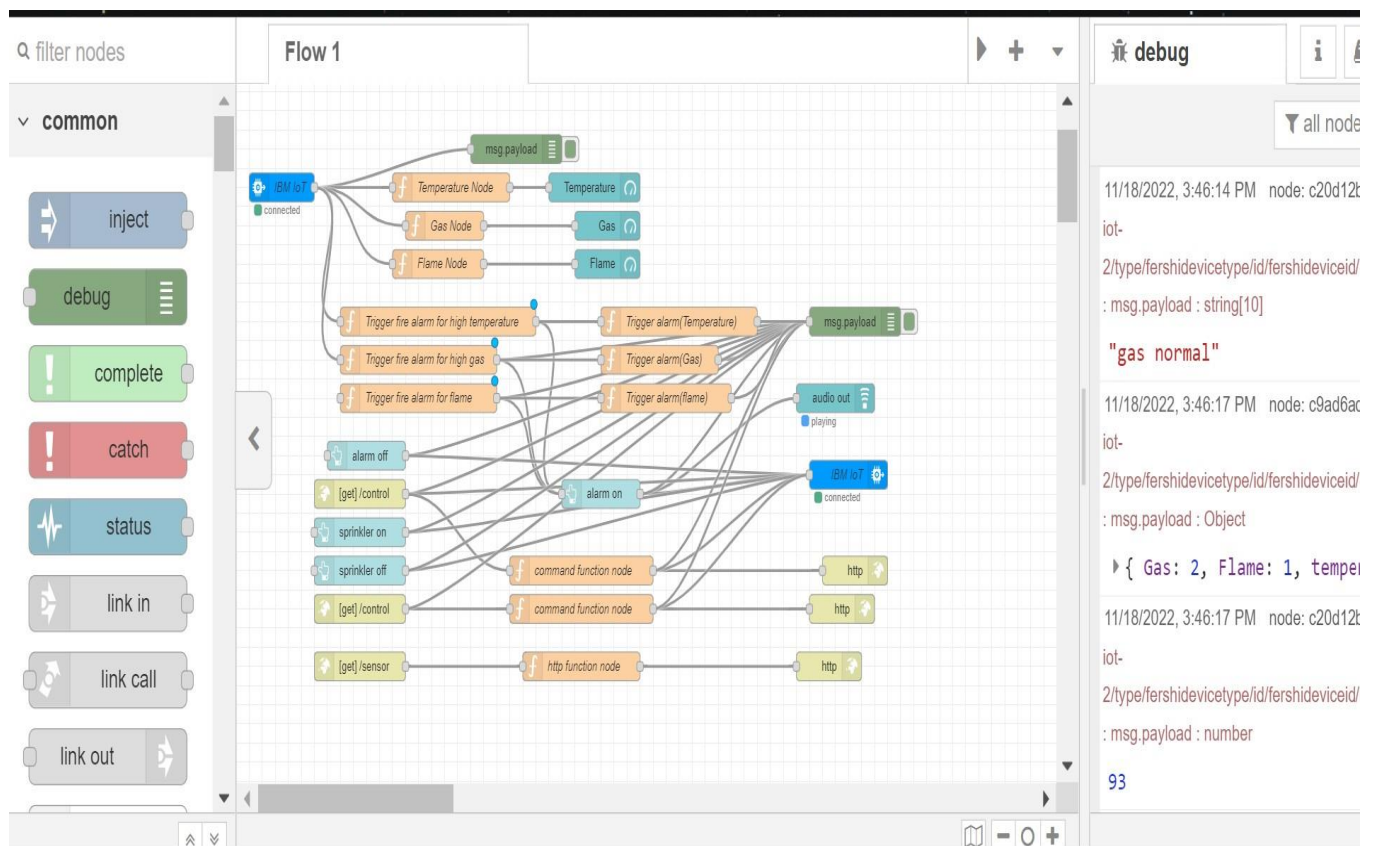| Date	18 November 2022
Team ID	PNT2022TMID20427
Project Name	Industry-Specific Intelligent Fire Management System

Turning the alarm ON whenever temperature, gas, flame exceeds a particular value, Turning the alarm OFF:

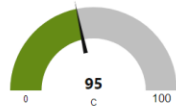Submitted by: Ganesh Arravind B

Lokesh durai V

Naveenraj B M

Abiswetha S

1

0   1

Temperature

95

0   C   100

ALARM ON

ALARM OFF

SPRINKLER ON

SPRINKLER OFF

▼ all node

11/18/2022, 3:47:14 PM   node: c9ad6ad912607e2a
iot-2/type/fershidevicetype/id/fershideviceid/evt/event_1/fmt/json : msg.p

▶ { Gas: 93, Flame: 1, temperature: 38 }

11/18/2022, 3:47:14 PM   node: c20d12b97cbb6b1b
iot-2/type/fershidevicetype/id/fershideviceid/evt/event_1/fmt/json : msg.p

38

11/18/2022, 3:47:14 PM   node: c20d12b97cbb6b1b
iot-2/type/fershidevicetype/id/fershideviceid/evt/event_1/fmt/json : msg.p

93

11/18/2022, 3:47:14 PM   node: c20d12b97cbb6b1b
iot-2/type/fershidevicetype/id/fershideviceid/evt/event_1/fmt/json : msg.p

"alarmon"

11/18/2022, 3:47:14 PM   node: c20d12b97cbb6b1b
iot-2/type/fershidevicetype/id/fershideviceid/evt/event_1/fmt/json : msg.p

: msg.payload : string[18]

"Temperature normal"

11/18/2022, 6:25:43 PM   node: c20d12b97cbb6b1b
msg.payload : string[8]

"alarmoff"

11/18/2022, 6:25:43 PM   node: c20d12b97cbb6b1b
msg.payload : string[8]

"alarmoff"

11/18/2022, 6:25:44 PM   node: c9ad6ad912607e2 ▼
iot-
2/type/fershidevicetype/id/fershideviceid/evt/event_1/fmt/js
: msg.payload : Object

  ▶ { Gas: 62, Flame: 0, temperature:
35 }

11/18/2022, 6:25:44 PM   node: c20d12b97cbb6b1b
iot-

Code:

Edit function node

| Delete | | Cancel | Done |

⚙ **Properties**

🏷 **Name** | Trigger fire alarm for high temperature |

| ⚙ Setup | On Start | **On Message** | On Stop |

```
1  msg.payload=msg.payload.temperature
2  if(msg.payload>=59)
3 ▾ {
4      return msg;
5 ▴ }
6
```

Edit function node

Delete

Cancel

Done

⚙ **Properties**

⚙ 📄 🔲

🏷 **Name**   `Trigger alarm(Temperature)`

⚙ Setup | On Start | **On Message** | On Stop

```
1  msg.payload=msg.payload.temperature
2  if(msg.payload>59)
3  {
4      msg.payload="Temperature too high"
5      return[msg,null];
6  }
7  else
8  {
9    msg.payload="Temperature normal"
10   return[msg,null];
11 }
```

Edit function node

Delete

Cancel

Done

⚙ **Properties**

⚙ 📄 🔲

🏷 **Name**   `Trigger fire alarm for high gas`

⚙ Setup | On Start | **On Message** | On Stop

```
1  msg.payload=msg.payload.Gas
2  if(msg.payload>=50)
3  {
4      return msg;
5  }
6
```

Edit function node

Delete   Cancel   Done

⚙ **Properties**   ⚙ 📄 🔲

🏷 Name   Trigger alarm(Gas)   📰▾

⚙ Setup | On Start | **On Message** | On Stop

```
1  msg.payload=msg.payload.Gas
2  if(msg.payload>50)
3  {
4      msg.payload="gas too high"
5      return[msg,null];
6  }
7  else
8  {
9    msg.payload="gas normal"
10   return[msg,null];
11 }
```

Edit function node

Delete

Cancel

Done

⚙ **Properties**

🏷 Name   Trigger fire alarm for flame

| ⚙ Setup | On Start | **On Message** | On Stop |

```
1  msg.payload=msg.payload.Flame
2  if(msg.payload==1)
3  {
4      return msg;
5  }
6
```

Edit function node

Delete   Cancel   Done

⚙ **Properties**   ⚙ 📄 🔲

🏷 Name   Trigger alarm(flame)   📕 ▾

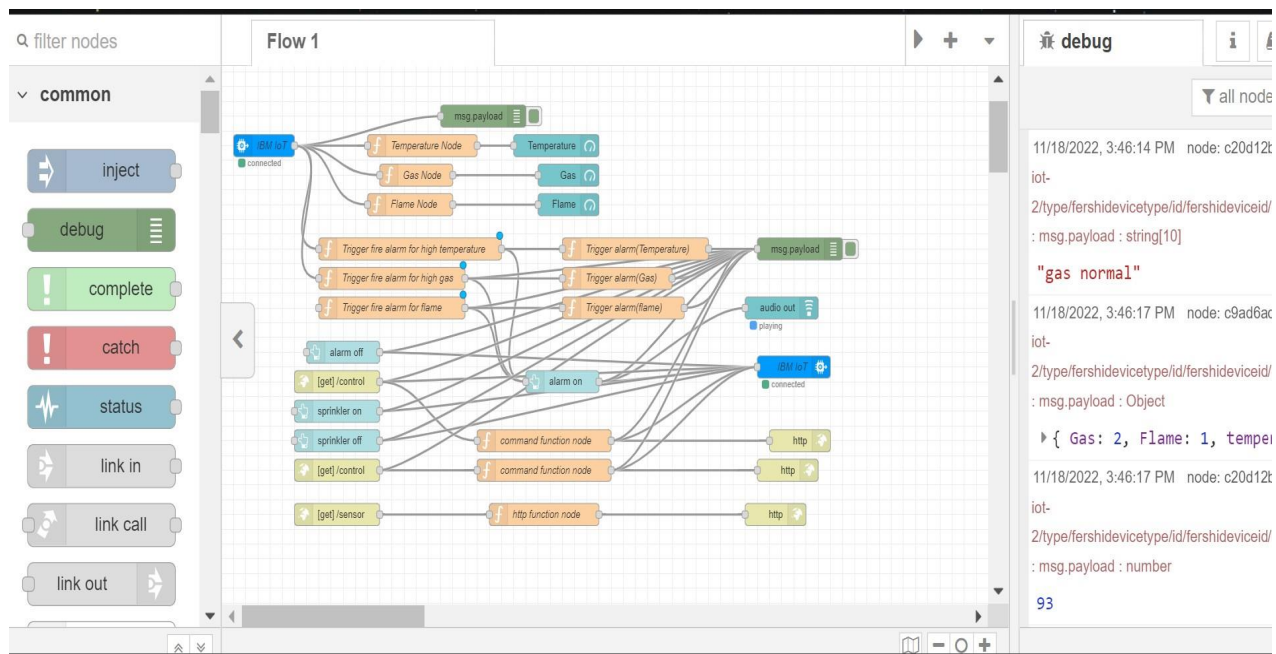⚙ Setup   On Start   **On Message**   On Stop
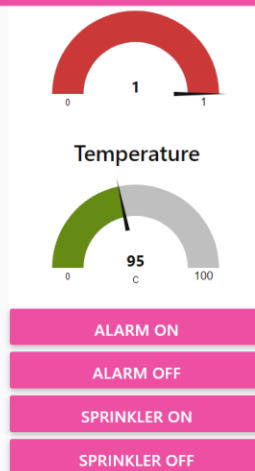
```
 1   msg.payload=msg.payload.Flame
 2   if(msg.payload==1)
 3 ▾ {
 4       msg.payload="Fire is detected"
 5       return[msg,null];
 6 ▴ }
 7   else
 8 ▾ {
 9     msg.payload="No fire"
10     return[msg,null];
11 ▴ }
```

Turning the sprinkler ON whenever temperature, gas, flame exceeds a particular value, Turning the sprinkler OFF:

msg.payload : string[12]

"sprinkler on"

11/18/2022, 6:24:10 PM   node: c9ad6ad912607e2a

iot-

2/type/fershidevicetype/id/fershideviceid/evt/event_1/fmt/

: msg.payload : Object

▶ { Gas: 10, Flame: 1, temperature: 66 }

11/18/2022, 6:24:10 PM   node: c20d12b97cbb6b1 ▼

iot-

2/type/fershidevicetype/id/fershideviceid/evt/event_1/fmt/

: msg.payload : number

66

11/18/2022, 6:24:10 PM   node: c20d12b97cbb6b1b

iot-

2/type/fershidevicetype/id/fershideviceid/evt/event_1/fmt/

: msg payload : string[7]

11/18/2022, 6:24:53 PM   node: c20d12b97cbb6b1b

iot-

2/type/fershidevicetype/id/fershideviceid/evt/event_1/fmt/j

: msg.payload : string[10]

"gas normal"

11/18/2022, 6:24:53 PM   node: c20d12b97cbb6b1b

msg.payload : string[13]

"sprinkler off"

11/18/2022, 6:24:53 PM   node: c20d12b97cbb6b1b

msg.payload : string[13]

"sprinkler off"

11/18/2022, 6:24:53 PM   node: c9ad6ad912607e2 ▼

iot-

2/type/fershidevicetype/id/fershideviceid/evt/event_1/fmt/j

: msg.payload : Object

▶ { Gas: 29, Flame: 0, temperatur >_ 📋
47 }