

Verzeo IOT Major Project Submission

By- Suryaansh Jaiswal

Company – INTERNSPOOL

Project review

I have made an IOT project to demonstrate IFTTT using google assistant for sending mail and for sending an SMS and I have Build a tinkercard based project for measuring soil moisture and temperature and displaying it on a lcd screen .I have created a thingspeak channel for my given react.

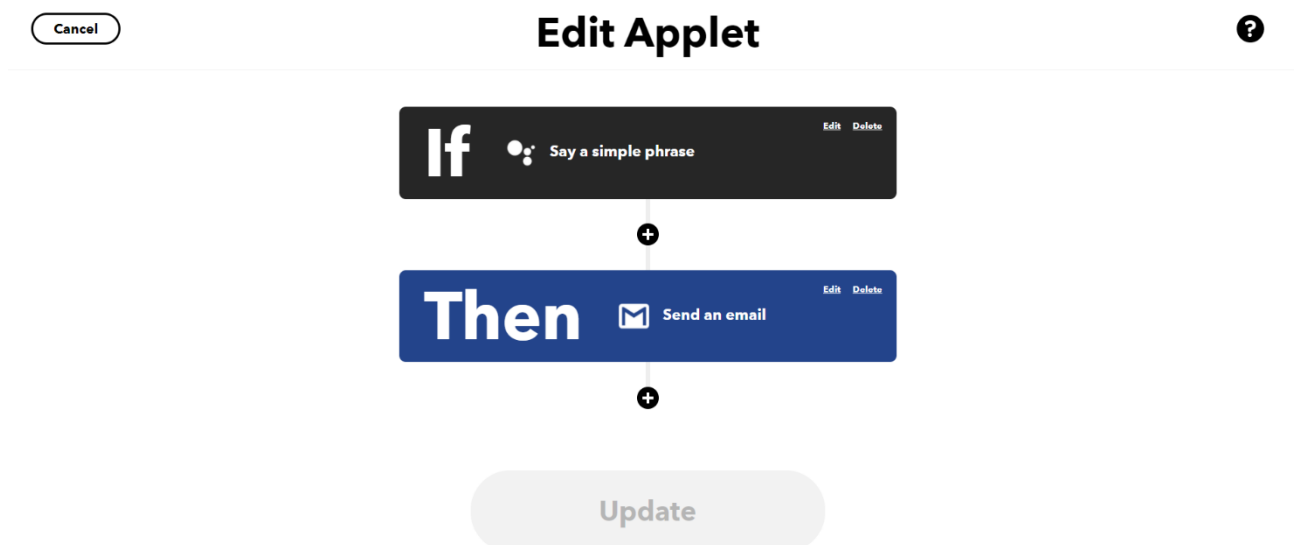
Objective

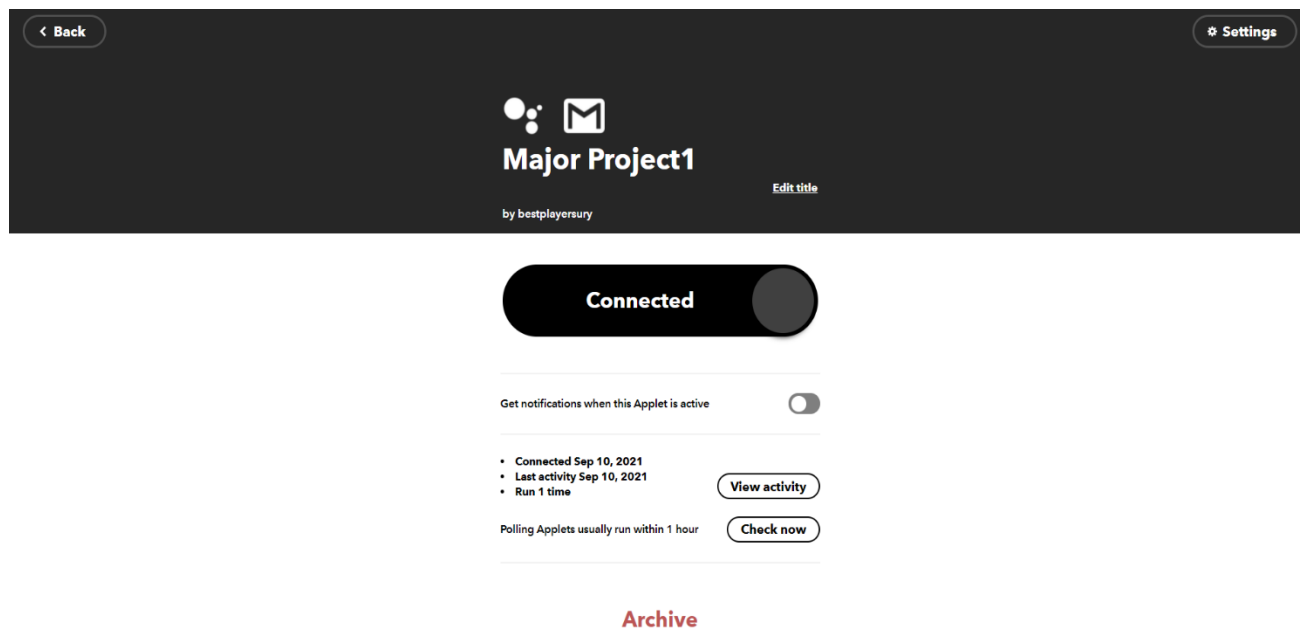
To use google assistant configure with IFTTT

Project-

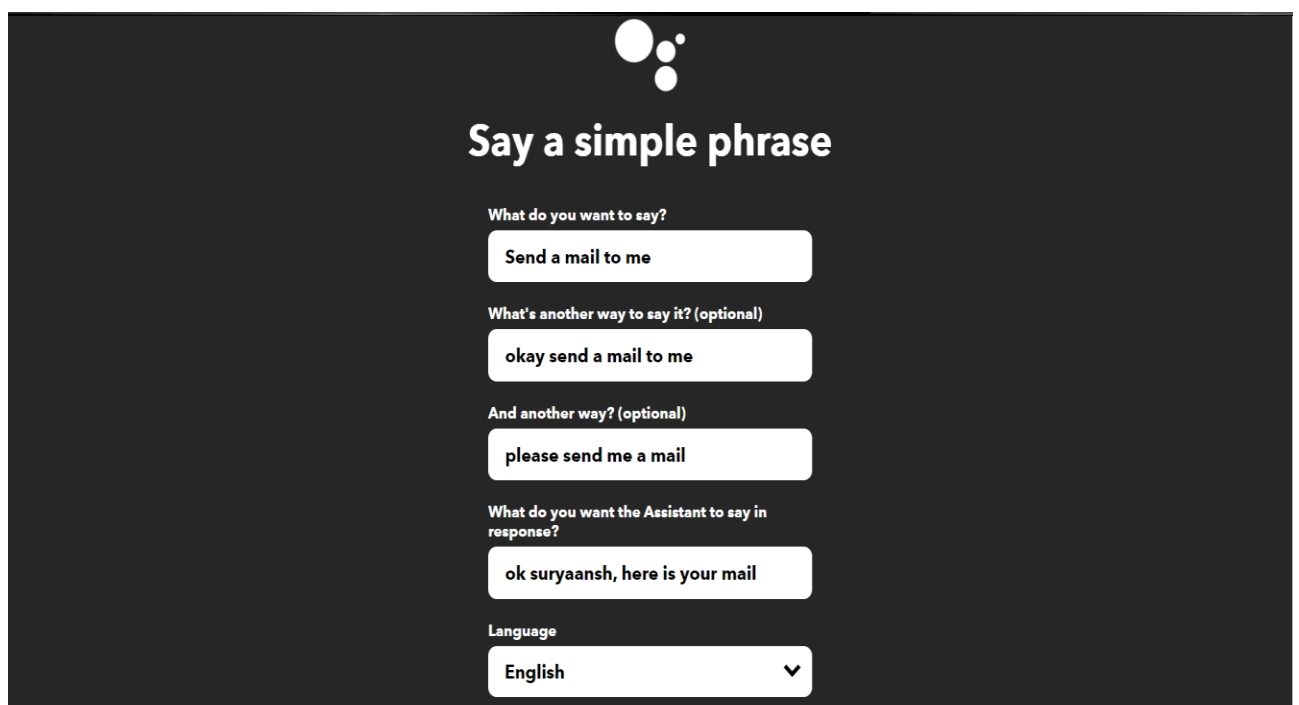
Google assistant with mail.

Basic If Then structure





In If structure I give a command such as “Hey Google! Send a mail to me” or “Hey Google! okay send a mail to me ”.
The response we get is “Ok Suryaansh, here is your mail!”



In Then section I have added subject as “Major IoT Project” and some body

Hi Suryaansh
This is to confirm that your IFTTT was connected to your mail successfully
Thanks

Send an email

To address

bestplayersury@gmail.com,
thehappyclubvit@gmail.com

Accepts up to twenty email addresses,
each separated with a space or comma

Add ingredient

CC address

bestplayersury@gmail.com

Accepts up to twenty email addresses,
each separated with a space or comma

Add ingredient

BCC address

bestplayersury@gmail.com

Accepts up to twenty email addresses,
each separated with a space or comma

Add ingredient

Subject

Major IoT Project

Add ingredient

Body

Hi Suryaansh
This is to confirm that your IFTTT
was connected to your mail
successfully
Thanks

Some HTML ok

Add ingredient

Attachment URL

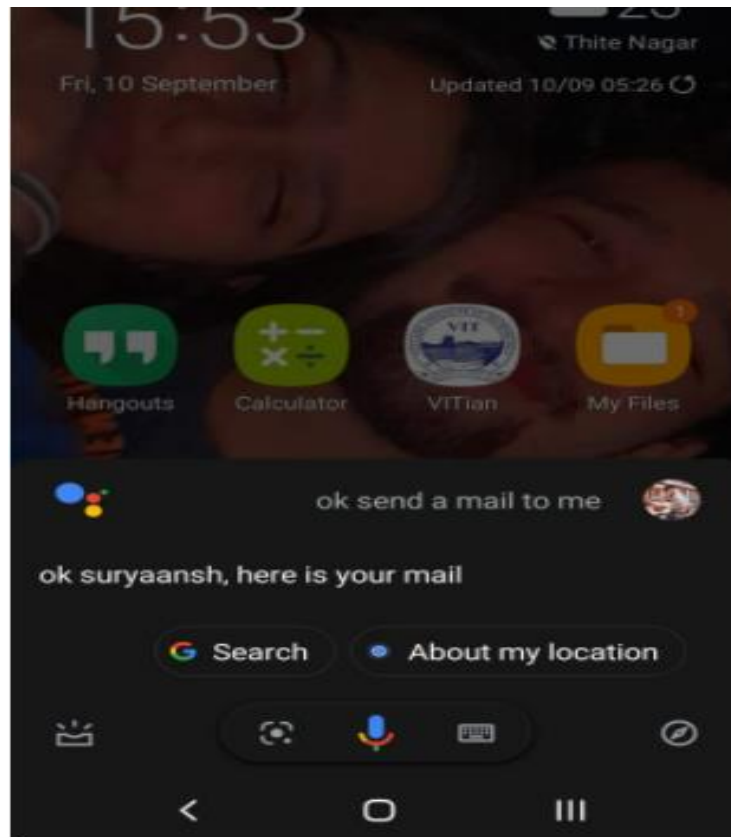
none

URL to include as an attachment

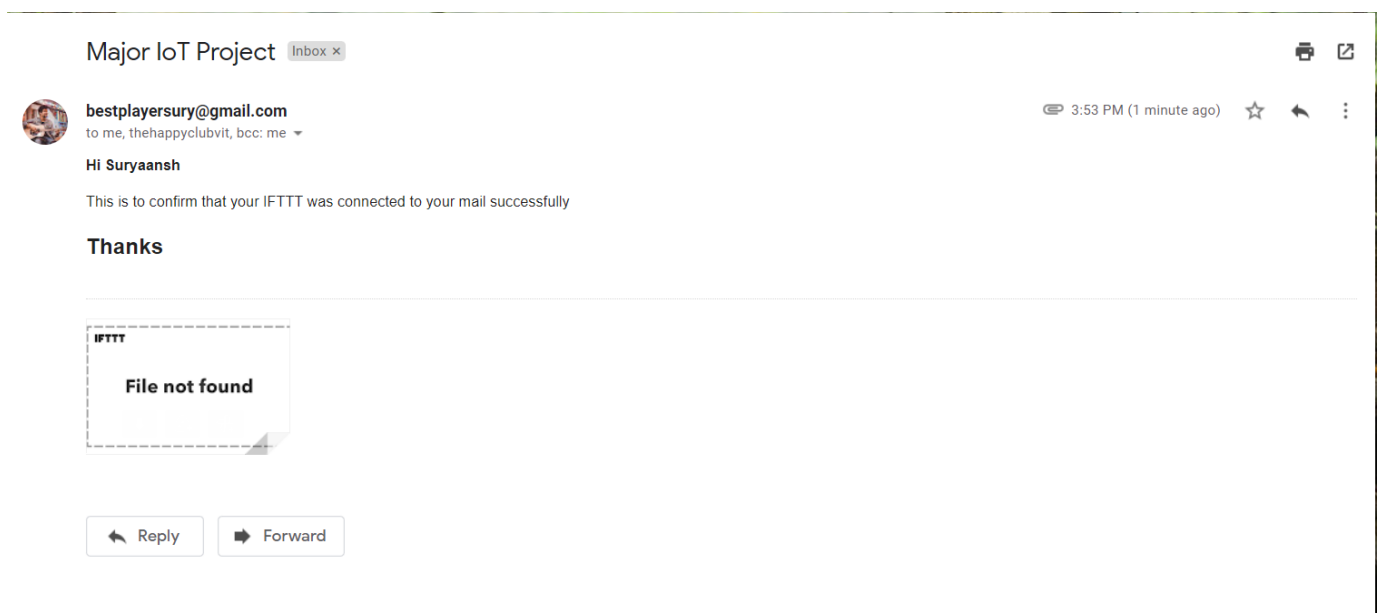
Add ingredient

Output –

Command given from mobile



Received the mail in mail box



Mail received by thehappyclubvit@gmail.com as well which was mentioned in the recipient name

Major IoT Project Inbox x



bestplayersury@gmail.com

to bestplayersury, me ▾

15:53 (6 minutes ago)



Hi Suryaansh

This is to confirm that your IFTTT was connected to your mail successfully

Thanks



Great, thanks for letting me know.

Thanks a lot.

Thank you for your response.

Objective

To use google assistant configure with IFTTT

Project-

Google assistant with SMS

Sending a text message to different recipients from my number with IFTTT

Cancel

Edit Applet



If



Say a phrase with a text ingredient

Edit Delete



Then



Send an SMS

Edit Delete



Update



Major Project2

[Edit title](#)

by bestplayersury

Connected

Get notifications when this Applet is active



- Connected Aug 18, 2021
- Last activity Sep 10, 2021
- Run 5 times

[View activity](#)


Polling Applets usually run within 1 hour

[Check now](#)

Archive

In If structure I give a command such as “Hey Google! Kindly message \$Charvi\$ ” or “Hey Google! Please message hi to \$Charvi\$ ”.

The response we get is “Ok Suryaansh, will message charvi”



Say a phrase with a text ingredient

What do you want to say?

please message hi to \$

Enter a \$ where you'll say the text ingredient

What's another way to say it? (optional)

Kindly message \$

Enter a \$ where you'll say the text ingredient

And another way? (optional)

hey bro message \$

Enter a \$ where you'll say the text ingredient

What do you want the Assistant to say in response?

okay suryaansh, will message \$


You can enter a \$ where you want to hear the text ingredient in the response

Language

English ▼

Update trigger

Edit action fields



Send an SMS

Phone number

TextField +917775068795

Include country code e.g. 12024561111

Add ingredient

Message

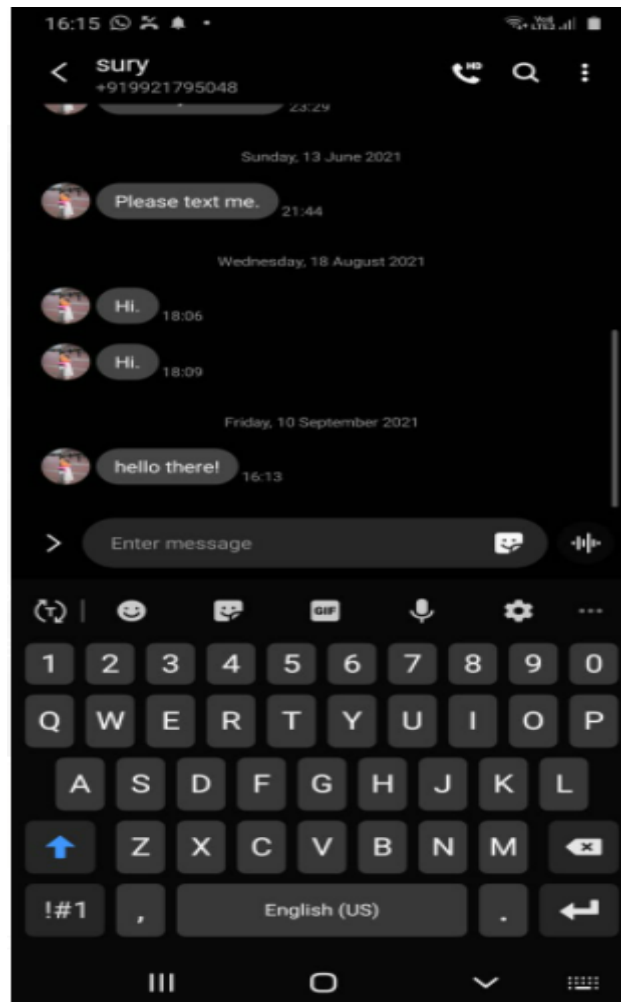
hello there!

Add ingredient

Update action

Output

We can see a “hello there!” In SMS



.....

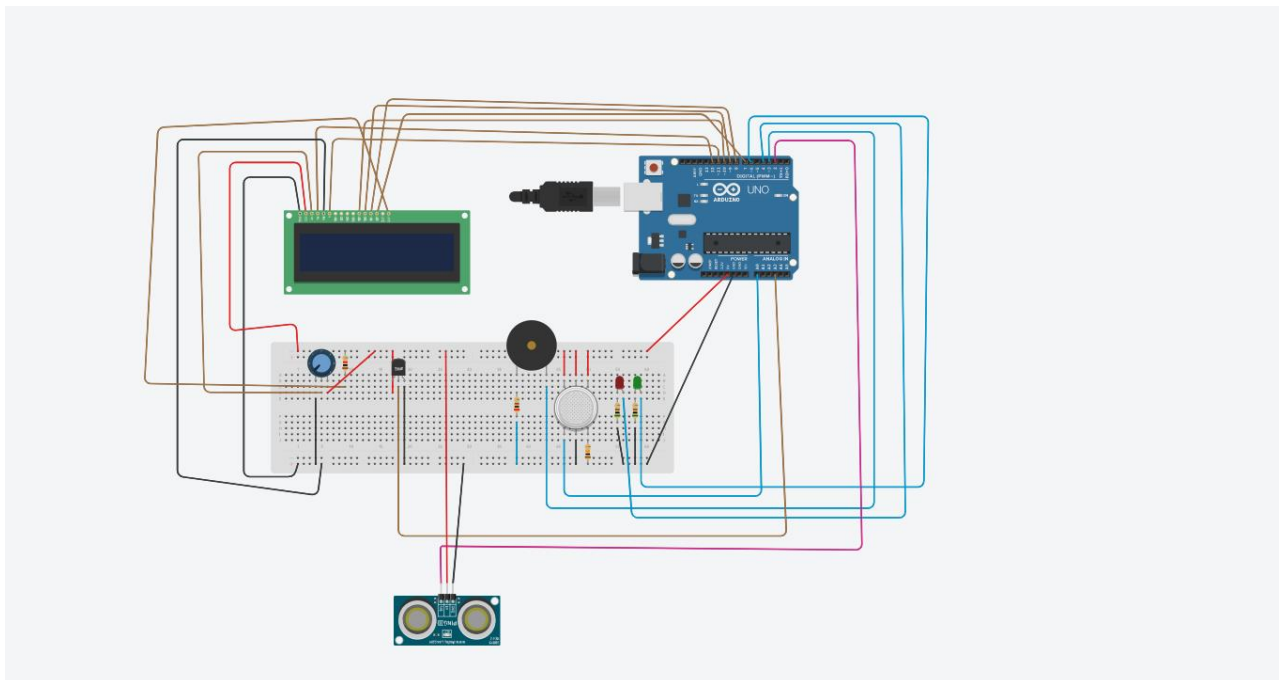
Tinkercad project with 3 sensors and lcd.

Objective

Build a tinkercard based project for measuring soil moisture and temperature and displaying it on a lcd screen.

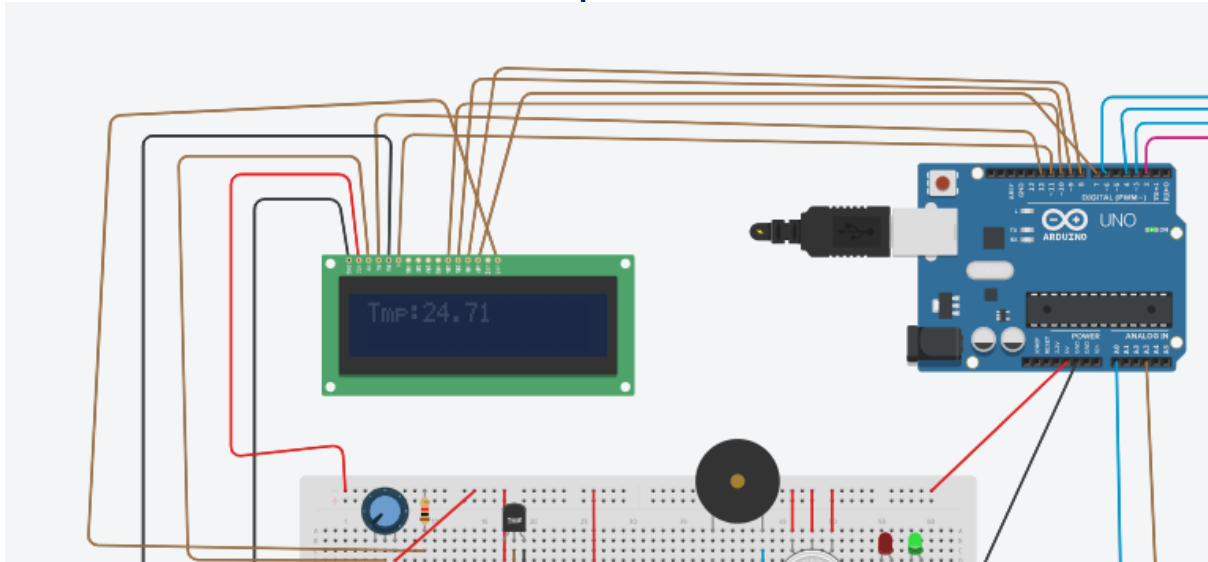
I have taken gas sensor, temperature sensor and ultrasonic sensor with Arduino and lcd. The lcd displays temp value, Distance from ultrasonic sensor and also whenever value from gas sensor exceeds threshold values lcd will print the same.

Circuit Diagram

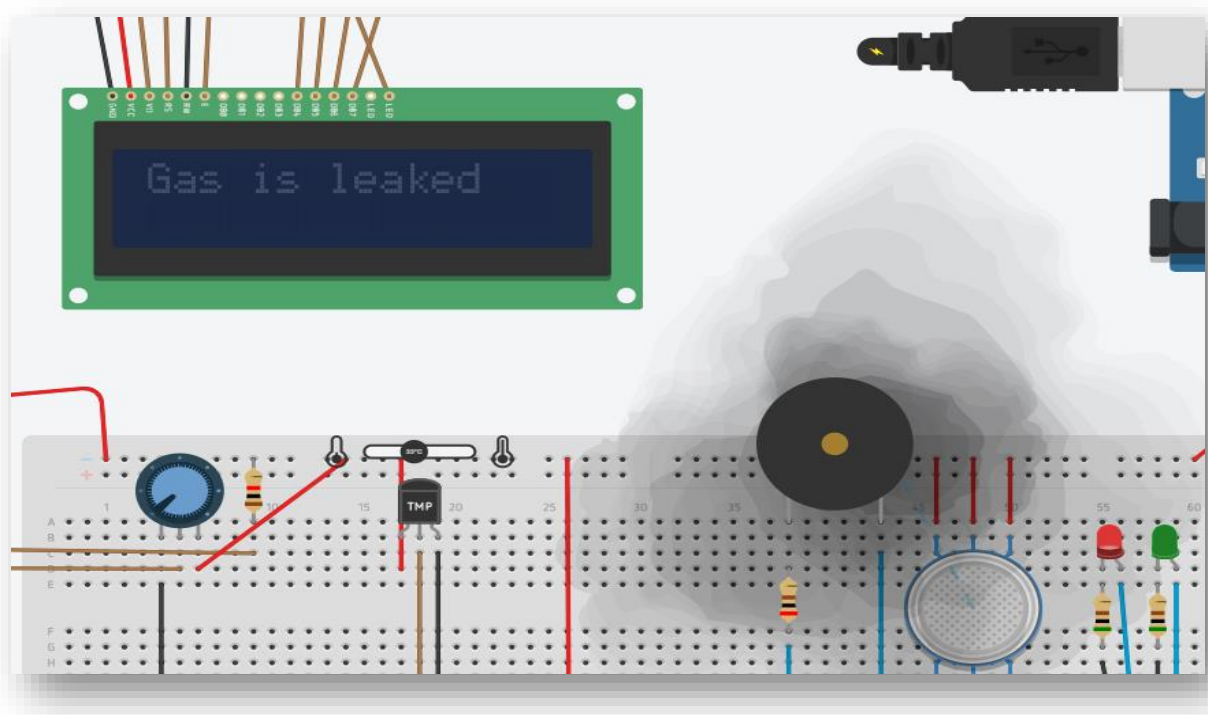


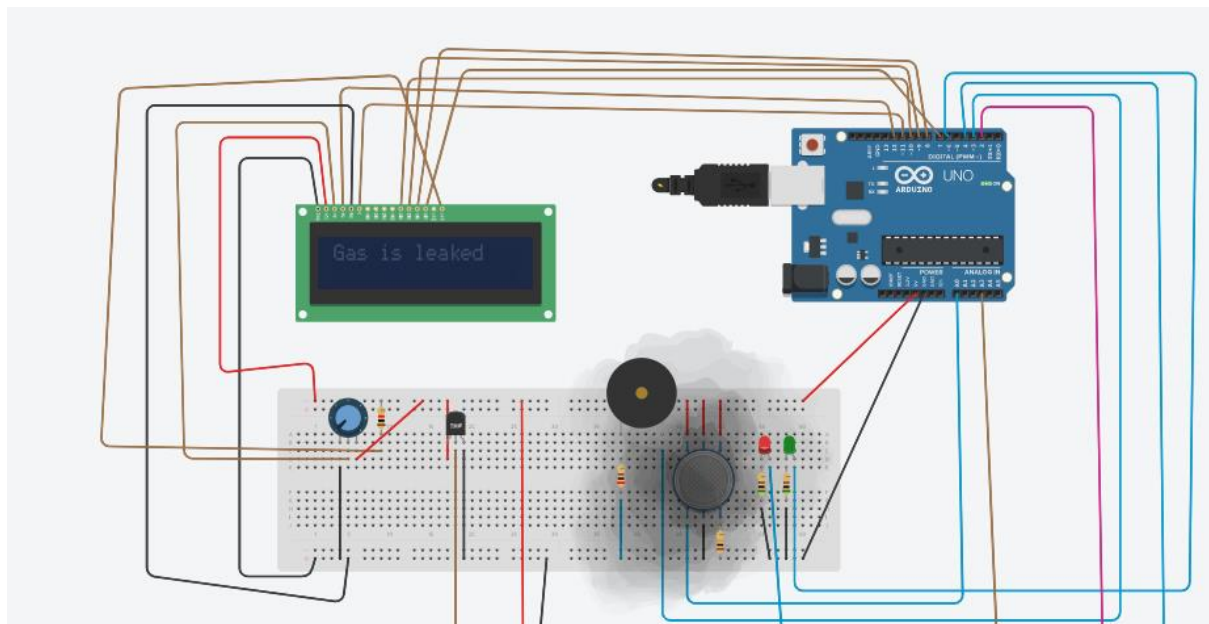
Output-

Temp value

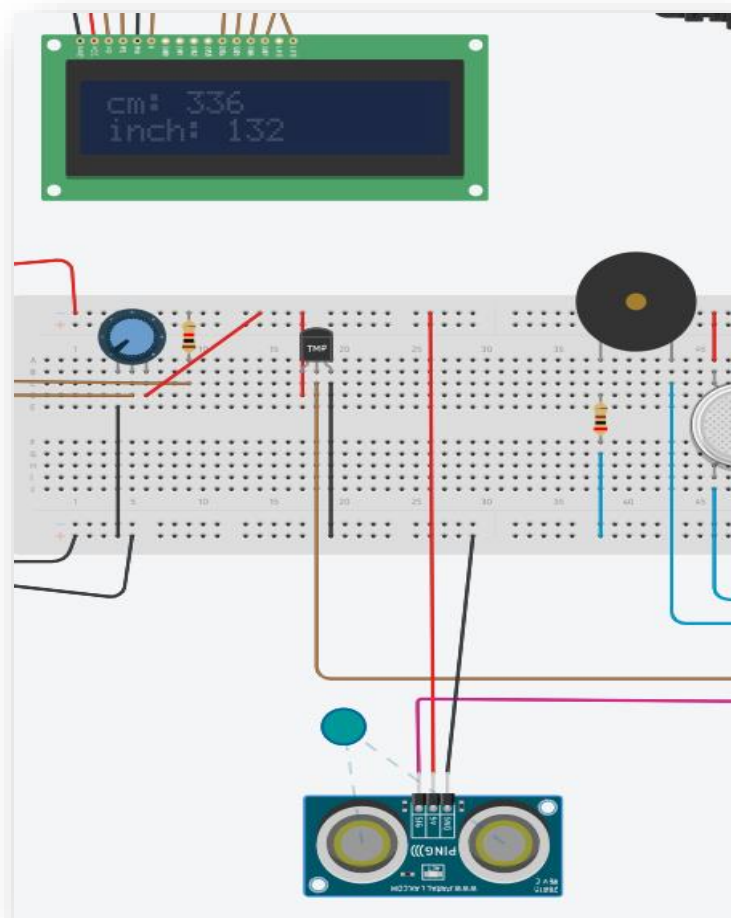


Gas sensor





Ultrasonic sensor



Tinkercad Link-

<https://www.tinkercad.com/things/0vKgMbbbSIC-gas-and-temp-sensor/editel?sharecode=OtZPKuPK4ugXAEhn3EZZ24FJX63WuicN-tBgAUfCanU>

Code –

```
#include<LiquidCrystal.h>
int LED1 = 4;
int LED2 = 6;
int buzzer = 3;
int smoke = A0;
int sensorThreshold = 500;
LiquidCrystal lcd(12,11,10,9,8,7);

float value;
int tmp = A3;
int inches = 0;
int cm = 0;

void setup() {
  pinMode(LED1, OUTPUT);
  pinMode(LED2, OUTPUT);
  pinMode(buzzer, OUTPUT);
  pinMode(smoke, INPUT);
  pinMode(tmp,INPUT);
  lcd.begin(16, 2);
  pinMode(2, INPUT);
  Serial.begin(9600);
}

void loop() {
  int analogSensor = analogRead(smoke);
  if (analogSensor > sensorThreshold)
  {
    digitalWrite(LED1, HIGH);
    digitalWrite(LED2, LOW);
    tone(buzzer, 1000, 350);
```

```

    lcd.clear();
    lcd.setCursor(0,0);
    lcd.print("Gas is leaked");
    delay(3000);

}
else
{
    digitalWrite(LED1, LOW);
    digitalWrite(LED2, HIGH);
    noTone(buzzer);
}
value = analogRead(tmp)*0.004882814;
value = (value - 0.5) * 100.0;
lcd.clear();
lcd.setCursor(0,0);
lcd.print("Tmp:");
lcd.print(value);
delay(3000);

lcd.clear();
cm = 0.01723 * readUltrasonicDistance(2);
inches = (cm / 2.54);
lcd.setCursor(0, 0);
lcd.print("cm: ");
lcd.setCursor(4,0);
lcd.print(cm);

lcd.setCursor(0,1);
lcd.print("inch: ");
lcd.setCursor(6,1);
lcd.print(inches);
delay(3000);
}

long readUltrasonicDistance(int pin)
{
    pinMode(pin, OUTPUT);
    digitalWrite(pin, LOW);
    delayMicroseconds(2);
    digitalWrite(pin, HIGH);
    delayMicroseconds(10);
    digitalWrite(pin, LOW);

```

```
pinMode(pin, INPUT);
```

```
}
```

Thinspeak React

Created a React called as sp02 drop

Apps / React / sp02 drop

Edit React

Name:	sp02 drop
Condition Type:	Numeric
Test Frequency:	On data insertion
Last Ran:	
Channel:	bp monitor
Condition:	Field 1 (sp02) is less than 94
ThingHTTP:	Stocks of Tesla
Run:	Only the first time the condition is met
Created:	2021-08-11 1:19 pm

Help

React works with [ThingHTTP](#) and [ThingTweet](#) to perform actions when channel data meets a certain condition. For example, you can have a mobile app report your latitude and longitude to a ThingSpeak channel. When your position is within a certain distance of your house, have ThingHTTP turn on your living room lights.

[Learn More](#)

ThingSpeak™ Channels Apps Devices Support Commercial Use How to Buy 51

Apps / React / sp02 drop / Edit

React Name

sp02 drop

Condition Type

Numeric

Test Frequency

On Data Insertion

Condition

If channel

bp monitor (1471273)

field

1 (sp02)

is less than

94

Action

ThingHTTP

then perform ThingHTTP

Stocks of Tesla

Options

☒ Run action only the first time the condition is met

☐ Run action each time condition is met

Save React

Help

React Settings

- React Name:** Enter a unique name for your React.
- Condition Type:** Select a condition type corresponding with your data. A channel can hold numeric sensor data, text, strings, status updates, or geographic location information.
- Test Frequency:** Choose whether to test your condition every time data enters the channel or on a periodic basis.
- Condition:** Select a channel, a field and the condition for your React.
- Action:** Select ThingTweet, ThingHTTP, or MATLAB Analysis to run when the condition is met.
- Options:** Select when the React runs.

[Learn More](#)

Created a channel bp monitor

My Channels

[New Channel](#)

Search by tag

Name	Created	Updated
arduino Private Public Settings Sharing API Keys Data Import / Export	2021-07-21	2021-07-21 13:23
bp monitor Private Public Settings Sharing API Keys Data Import / Export	2021-08-11	2021-08-11 13:17

Help

Collect data in a ThingSpeak channel from a device, from another channel, or from the web.

Click **New Channel** to create a new ThingSpeak channel.

Click on the column headers of the table to sort by the entries in that column or click on a tag to show channels with that tag.

Learn to [create channels](#), explore and transform data.

Learn more about [ThingSpeak Channels](#).

Examples

- [Arduino](#)
- [Arduino MKR1000](#)
- [ESP8266](#)
- [Raspberry Pi](#)
- [Netduino Plus](#)

Upgrade

ThingSpeak™

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bp monitor

Channel ID: **1471273**
Author: [bestplayersury](#)
Access: Private

[Private View](#) [Public View](#) [Channel Settings](#) [Sharing](#) [API Keys](#) [Data Import / Export](#)

[Add Visualizations](#) [Add Widgets](#) [Export recent data](#)

[MATLAB Analysis](#) [MATLAB Visualization](#)

Channel 2 of 2 < >

Channel Stats

Created: [about a month ago](#)
Entries: 0

Field 1 Chart

Field 2 Chart

[Apps](#) [Gmail](#) [YouTube](#) [Course: CSE1006 BI...](#) [Linkedin](#) [GitHub](#) [CodeTantra](#) [Vellore Institute of...](#)

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Thank You
Suryaansh Jaiswal