

# Verzeo Minor Project Submission

1.Create a circuit using any two sensors of your choice in tinkercad and implement it using Arduino code and creating a circuit for the same.

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## Project review

I have made an IOT project of Fire Alarm System Project by Interfacing Arduino with Temperature & Gas Sensor using TinkerCad

## Tools used-

### Arduino UNO Board.

**Arduino** board is a microcontroller that is used to accept inputs from sensors connected and provide an output action on the desired device connected to it. The sensor inputs can be from light-detecting sensors, motion sensors (Ultrasonic or IR), temperature sensors, etc. The output from this device can be received through other output devices such as LED, Buzzer, Serial monitor, etc.

### LM-35 Temperature Sensor

LM-35 Temperature Sensor gives an analog output based on the instantaneous temperature value. This analog output is proportional to the instantaneous input.

### Gas sensor

The gas sensor is used to measure the concentration or presence of gas in the atmosphere. It is also used to detect smoke in the air. Based on the gas, a potential difference is generated by changing the resistance of the material present inside the sensor. The output is measure in terms of Voltage.

### Resistors

1k Ohm Resistor

Resistors are passive devices that restrict the flow of current or divide the voltage through the circuit. The input power passes through these resistors and then to the sensors to avoid damage.

## **Breadboard**

### **Breadboard**

The breadboard is the basic component of any circuit building process. All components, be it input sensors or output display devices are connected to the power supply, microcontroller using wired connections through a breadboard. The holes in the breadboard are in series. There are various sizes like full-sized, half-sized, and mini breadboard.

## **LED**

### **LED**

Light Emitting Diode is a commonly used light source. It is a semiconductor that emits light when current flows through it.

## **Piezo Buzzer**

### **Piezo Buzzer**

It is an electrical component that generates a beep sound on receiving an input. It works on the principle of piezo crystal.

## **Jumper Wires**

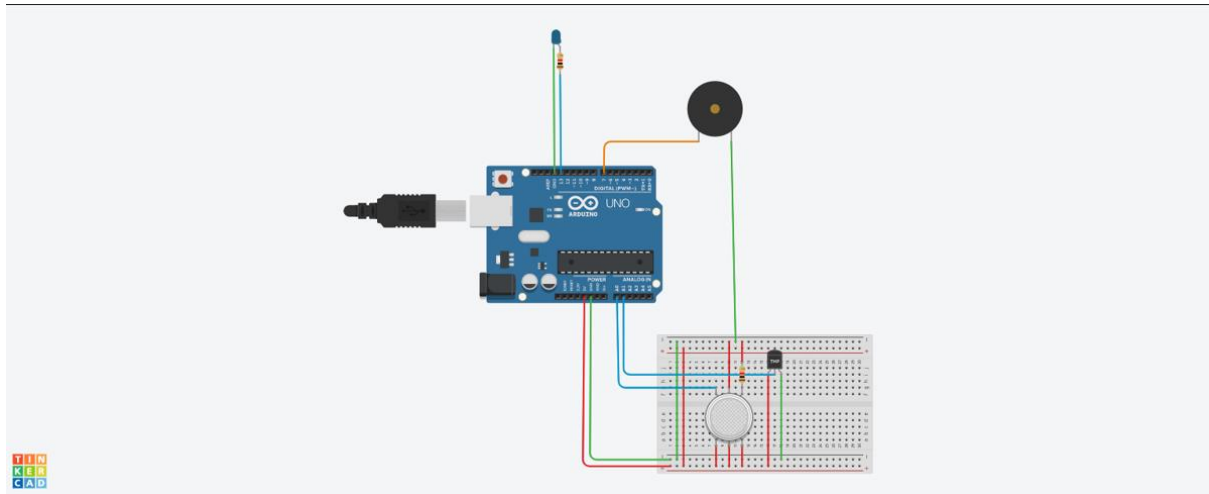
### **Jumper Wires**

These are the main components that are used to establish the connections between different devices of the circuit.

## **TinkerCad circuit simulation software.**

It is an online simulation software used for circuit design. It has all the electrical components required to built circuits and runs them.

## Circuit Design



Link for the TINKERCAD PROJECT –

[https://www.tinkercad.com/things/d7whCDPmXLc-spectacular-migelo-allis/editel?sharecode=N5\\_DeIJ7lIS-caGk2KkkHjqDEP1Jwvlqqj30Q12YQ](https://www.tinkercad.com/things/d7whCDPmXLc-spectacular-migelo-allis/editel?sharecode=N5_DeIJ7lIS-caGk2KkkHjqDEP1Jwvlqqj30Q12YQ)

## 2. Create a thingspeak http request of either a cricket score or share price of any shares.

### ThingHTTP request screenshots of Tesla Stocks

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

Apps / ThingHTTP / Stocks of Tesla

Edit ThingHTTP

Name: Stocks of Tesla

API Key: VQ7CVFG9K9DQ3E2U

Regenerate API Key

URL: https://www.marketwatch.com/investing/stock/tesla

HTTP Auth Username:

HTTP Auth Password:

Method: GET

Content Type:

HTTP Version: 1.0

Host:

Headers:

Body:

Help

You can now send your ThingHTTP request and view the response using the following URL:

GET https://api.thingspeak.com/apps/thinghttp/send\_request?api\_key=VQ7CVFG9K9DQ3E2U

Learn More

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

API Key: VQ7CVFG9K9DQ3E2U

Regenerate API Key

URL: https://www.marketwatch.com/investing/stock/tesla

HTTP Auth Username:

HTTP Auth Password:

Method: GET

Content Type:

HTTP Version: 1.0

Host:

Headers:

Body:

Parse String: /html/body/div[3]/div[2]/div[3]/div/div[2]/h2/bg-quote/text()

Created: 2021-07-24 11:47 am

Learn More

## API KEY-

[https://api.thingspeak.com/apps/thinghttp/send\\_request?api\\_key=VQ7CVFG9K9DQ3E2U](https://api.thingspeak.com/apps/thinghttp/send_request?api_key=VQ7CVFG9K9DQ3E2U)

## Output-



713.68

Thank You  
Suryaansh Jaiswal

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