TEAM FLOOR-X

AIR POLLUTION MONITORING SYSTEM

MEET OUR TEAM

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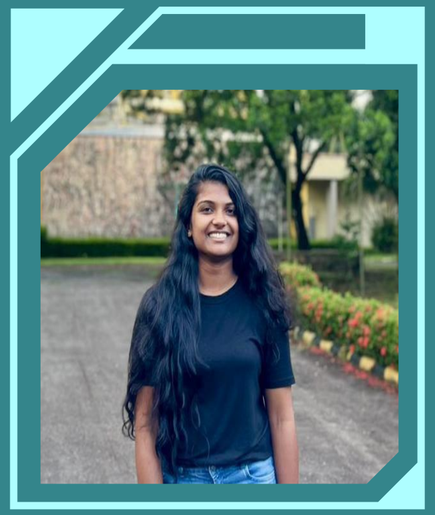

Janani Bagaya
Team Member

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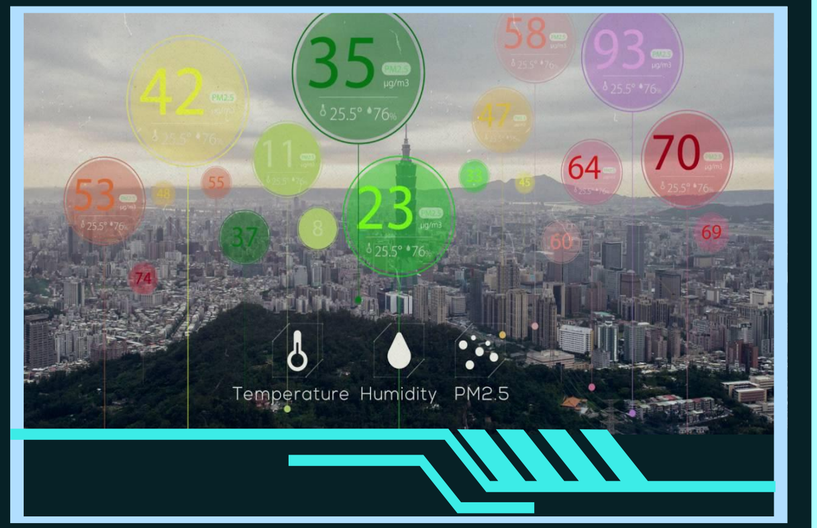
INTRODUCTION

- This project explains the depiction and execution of an Air Pollution detection system.
- Propose an air quality as well as air pollution monitoring system that allows us to monitor and check live air quality as well as air pollution in an area through Internet of Things (IoT).
- It uses air sensors to sense presence of harmful gases in the air and constantly transmit this data.
- Also, Our system can clear polluted air.



PROJECT GOAL

- Air pollution is a growing issue and it is necessary to solve. So, Our goal was to reduces monitor air quality and clean polluted air for a better future and healthy living for all.

OBJECTIVE

- ❑ Record the concentration levels of atmospheric pollutions.
- ❑ Inform the user through reporting.
- ❑ Clean up the pollutant gases.

PROJECT BENEFITS

- Air pollution data helps us determine whether an area meets air quality standards.
- Identify polluted areas and clean up pollutant gases.
- By removing pollutant gases, it is possible to protect the environment and the well –being of all living beings.

PROJECT TIMELINE

Researching Period	2 weeks
Project Planning & Design Implementation	5 weeks
Developing, Test Run & Fixing Errors	7 weeks
Final Test Run & Finalized	2 weeks

PROJECT BUDGET

ITEMS	COST
DHT 11 Sensor	520/=
Dust Sensor pms7003	5280 /=
Ardunio uno	2500 /=
Node esp wifi 8266	1500 /=
Pursepex board (1x8 feet)	3800 /=
Air Filter	4000 /=
Cooling Fan (2)	600 /=
Blower Motor	500 /=
BEM680 Environment Sensor	5000 /=
Mq Q135 Sensor	350 /=
Channel Relay Module (4)	650 /=
Buck Converter (2)	700 /=
Liquid Cristal Display	520 /=
Water Motor	360 /=
0.69 OLED Display	1400/=
UV Light	150 /=
LED bulbs	20 /=
TOTAL COST	**27850 /=**

METHODOLOGY

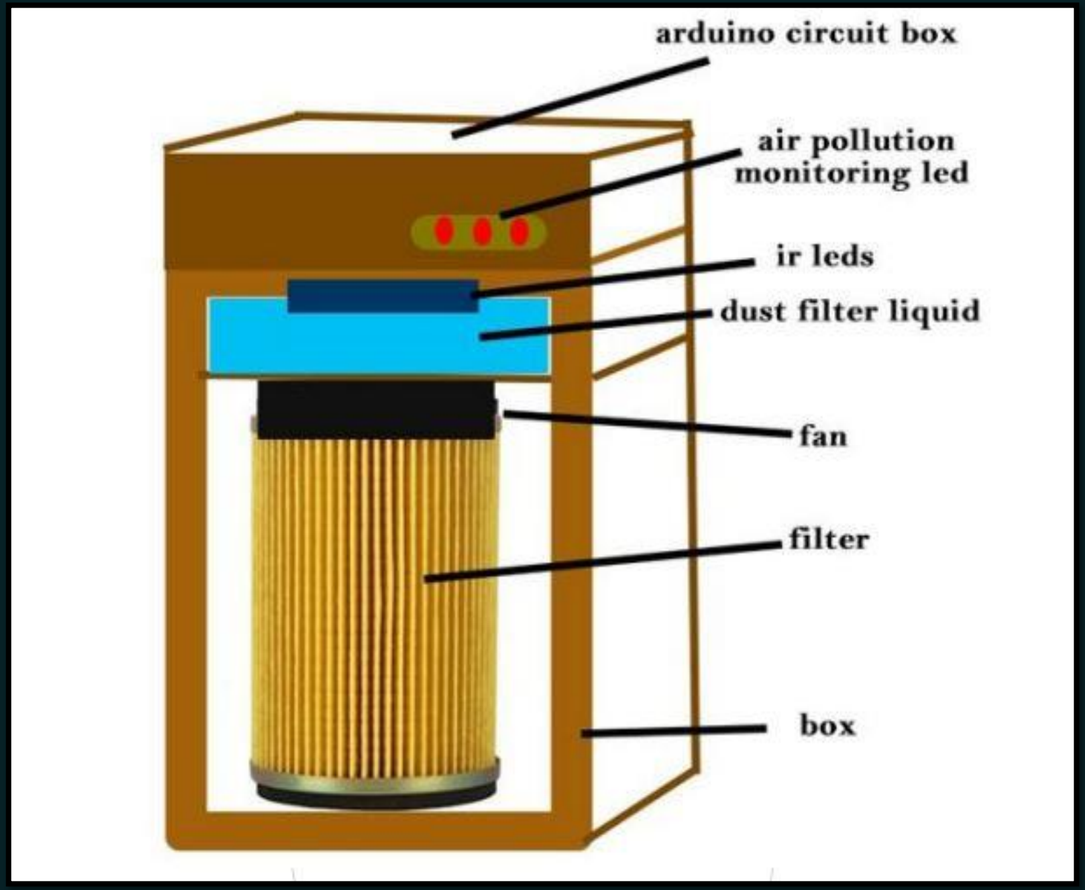
- Basically, we are planning to use Arduino nano microcontroller board and NodeMCU ESP8266.
- Through our Air Pollution monitoring system, the air is cleaned in three stages.

  Level 1: Through air filter

  Level 2 : Using Renew Air liquid

  Level 3 : Through UV rays
- The air quality is displayed through an LCD screen as well as an LED lighting system through the air pollution monitoring system itself to tweet automatic air quality alerts if it goes beyond a preset value.
- The collected air quality data is sent to Thingspeak where we can get a report about the air quality of that surrounding area through the Thingspeak dashboard & Also, the data is stored in the web servers.

BLOCK DIAGRAM



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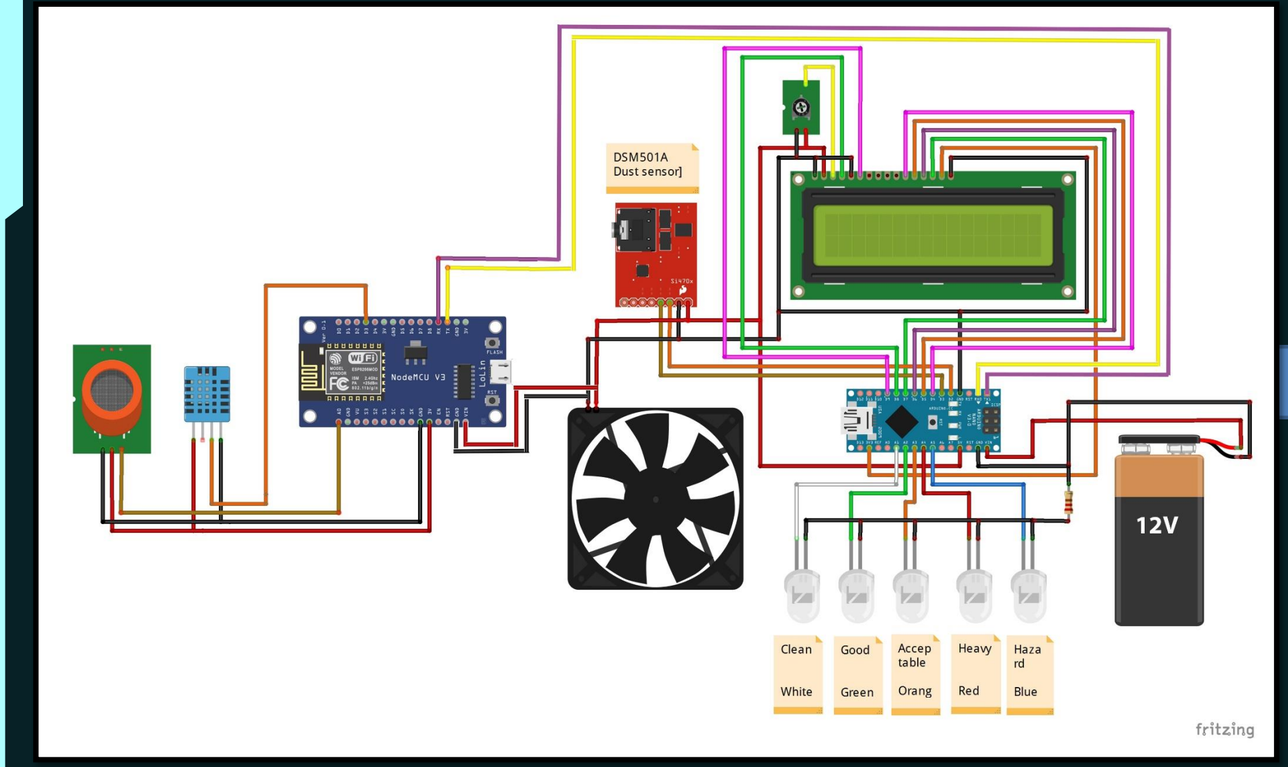
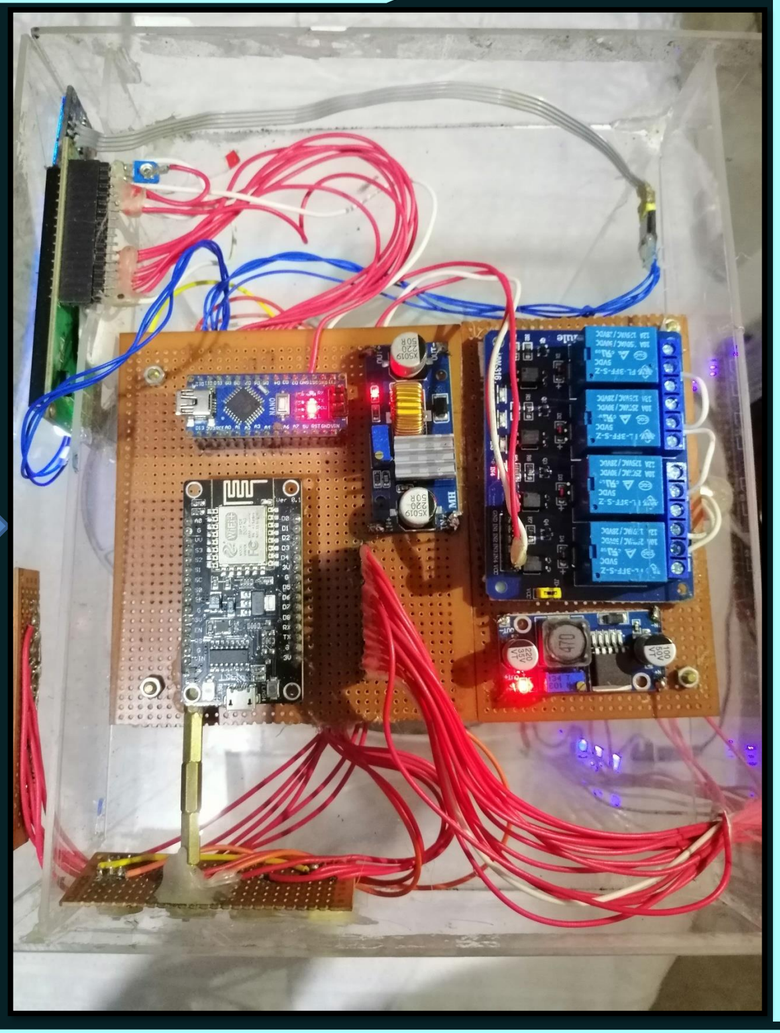
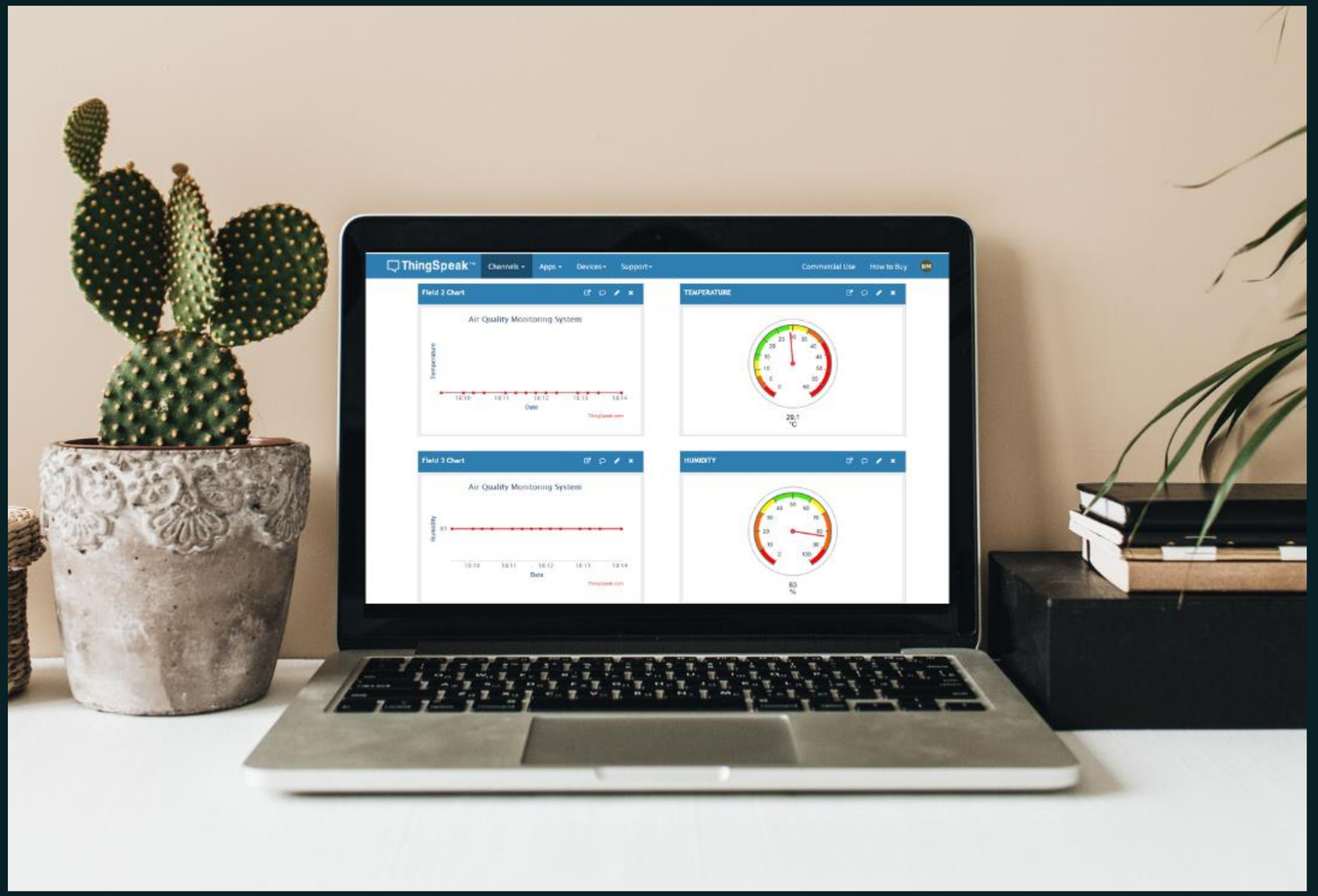




WEB VIEW


ThingSpeak
Channels
Apps
Devices
Support
Commercial Use
How to Buy
Field 2 Chart
Air Quality Monitoring System
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Field 3 Chart
Air Quality Monitoring System
Humidity
Date
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83
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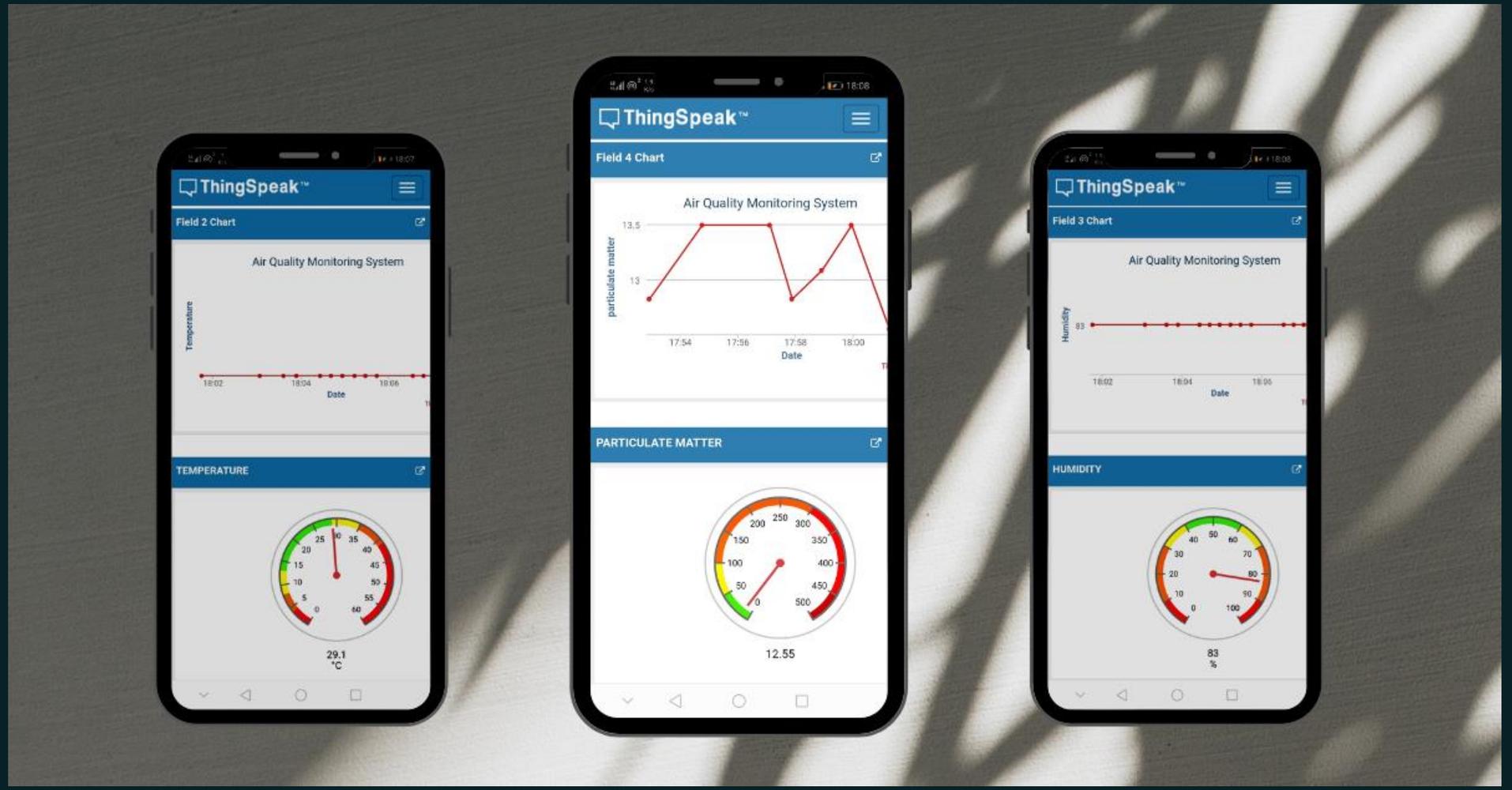
MOBILE VIEW


ThingSpeak™
Field 2 Chart
Air Quality Monitoring System
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ThingSpeak™
Field 4 Chart
Air Quality Monitoring System
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ThingSpeak™
Field 3 Chart
Air Quality Monitoring System
Humidity
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EXPLANATION OF SYSTEM

THANK YOU