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BREEZE

THE SMART WINDOW

By -Team Breeze

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DURING RAIN

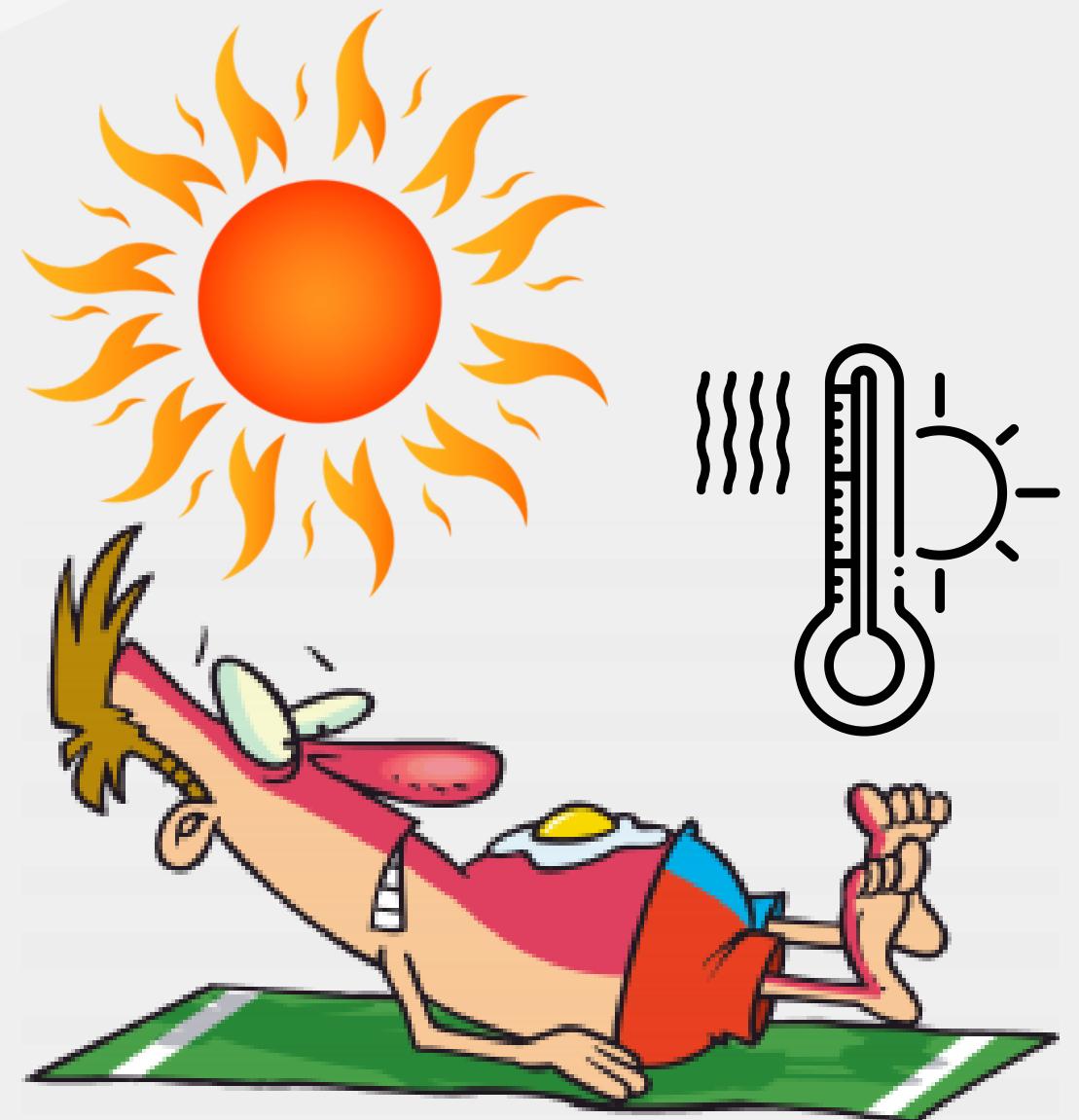
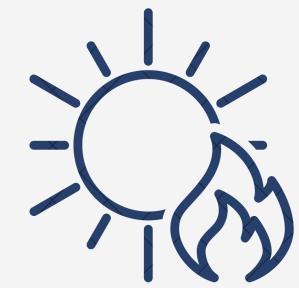


Suppose you forgot to close your window while going outside and it starts raining then what will you do?

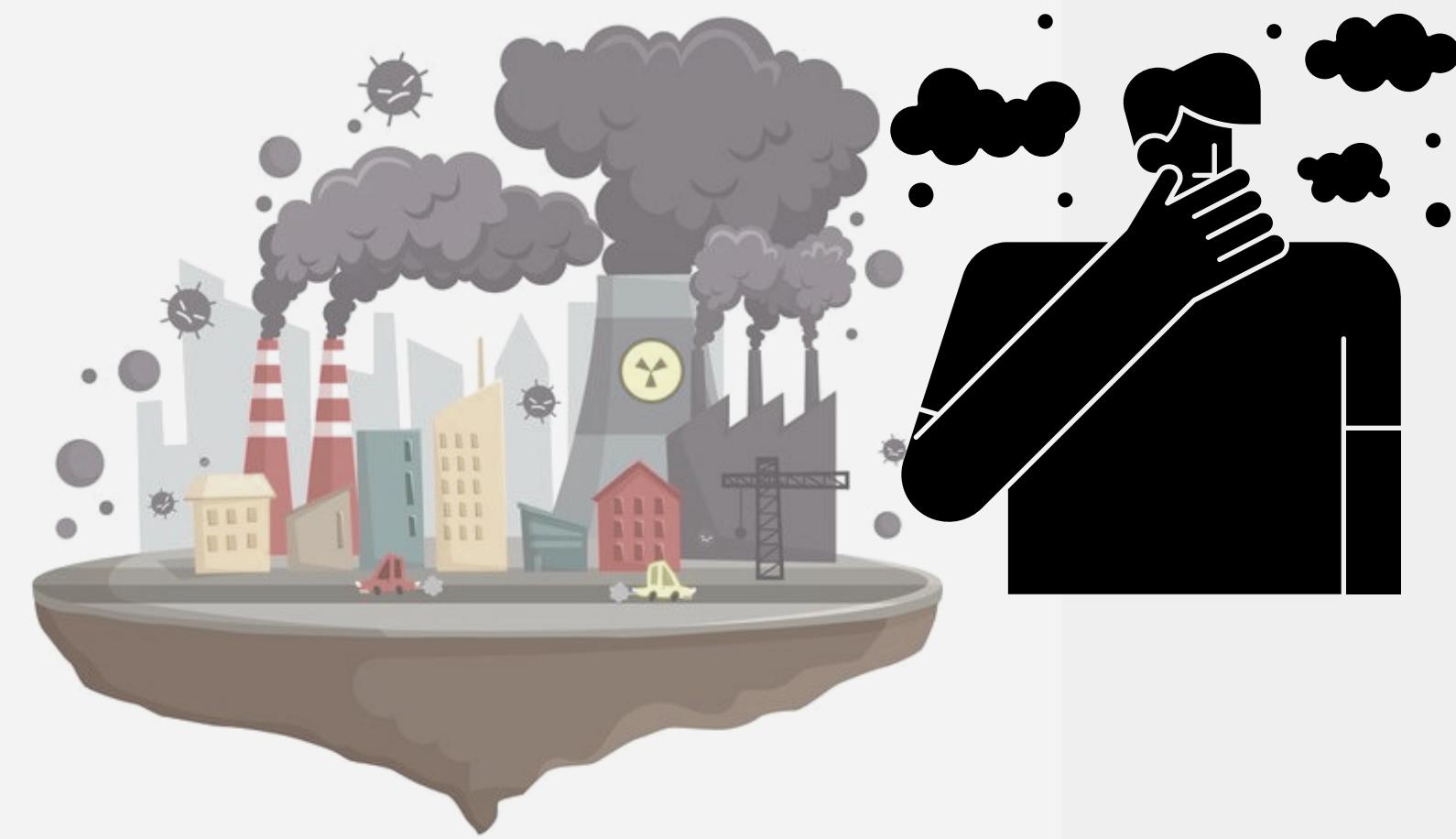
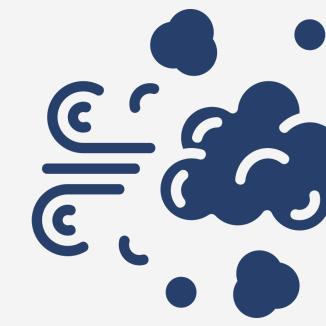


It could cause a heavy damage to your property

INTENSE SUNLIGHT



POLLUTION



CLOSED HOUSE ON FIRE 🔥



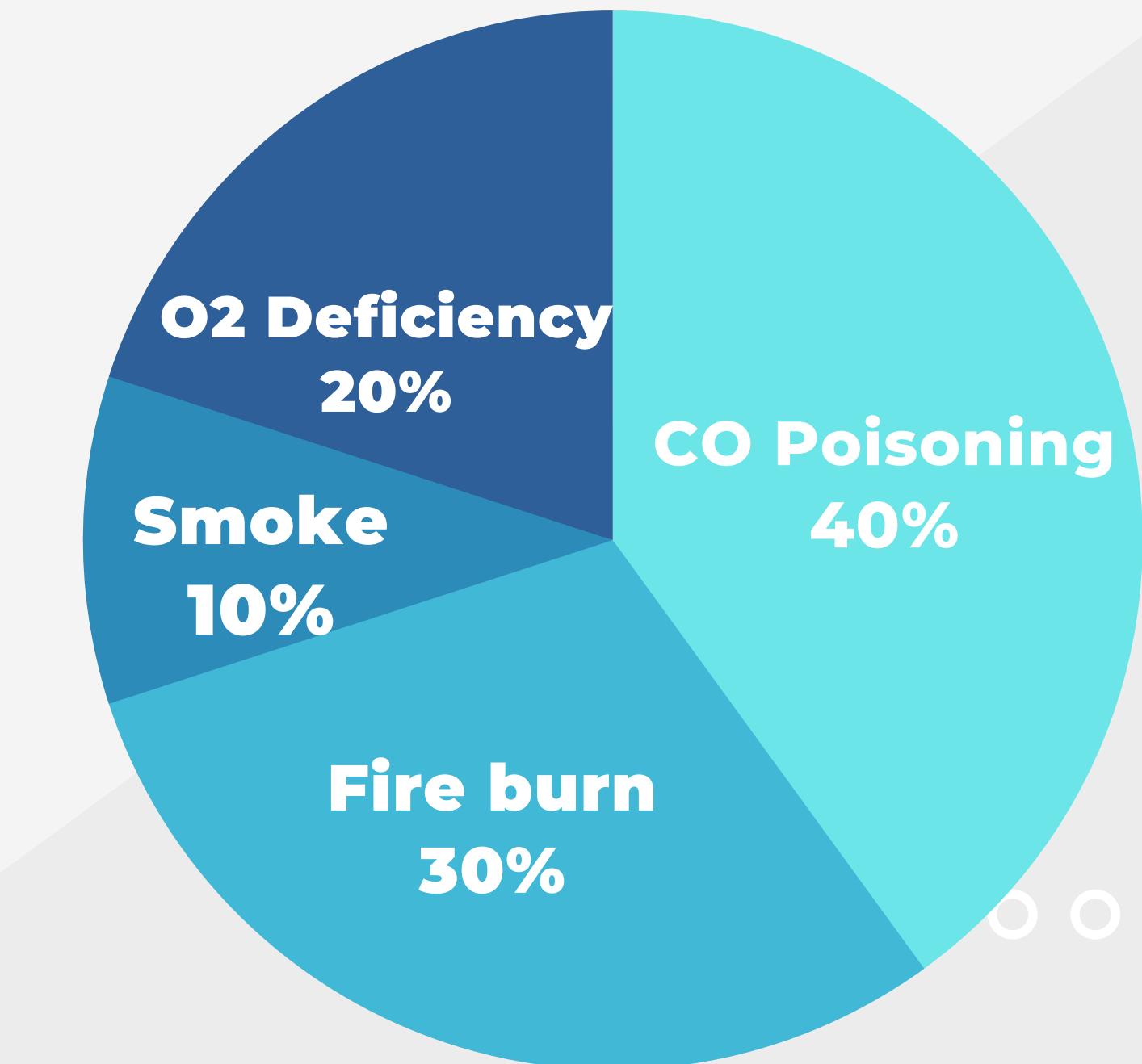
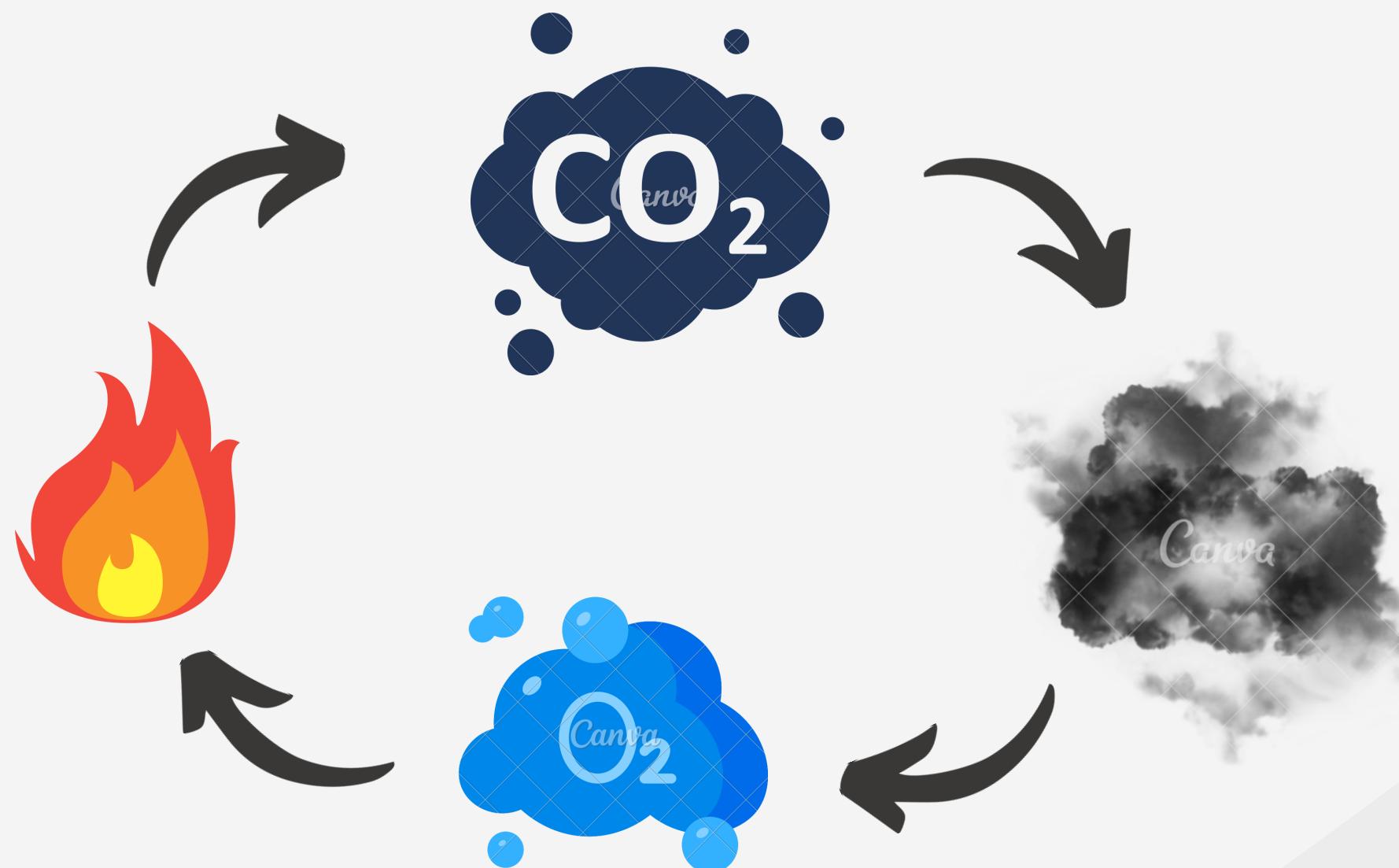
IS FIRE AND GAS LEAKAGE REALLY HAZARDOUS?

An average of 50,000 people sends to the emergency department (ED) annually in USA.

Deaths engulfed in dense smoke in a non-ventilated building

4.3 million premature deaths each year.

Main Causes of these deaths

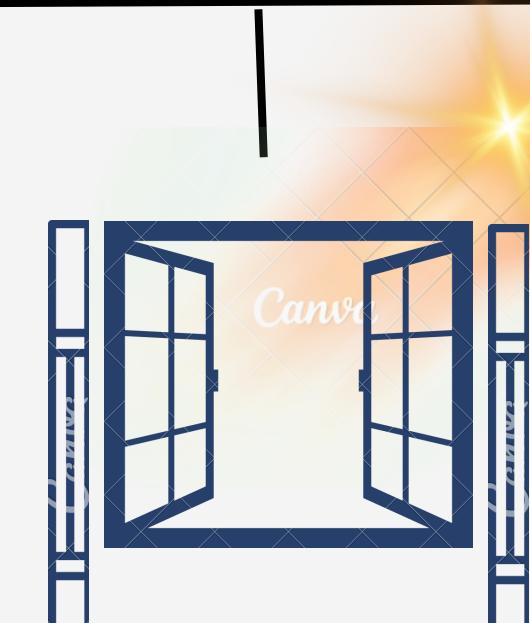
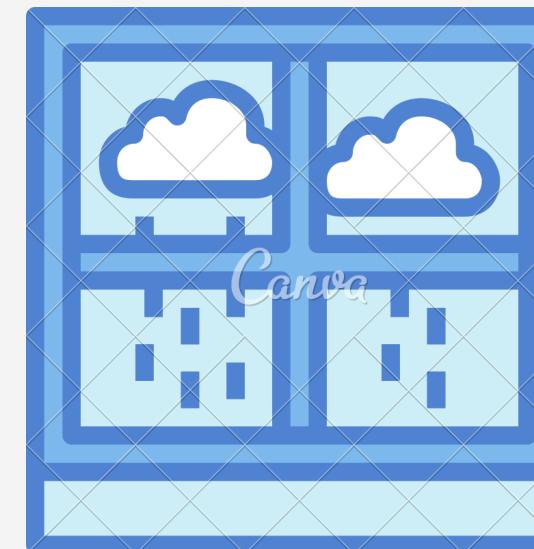
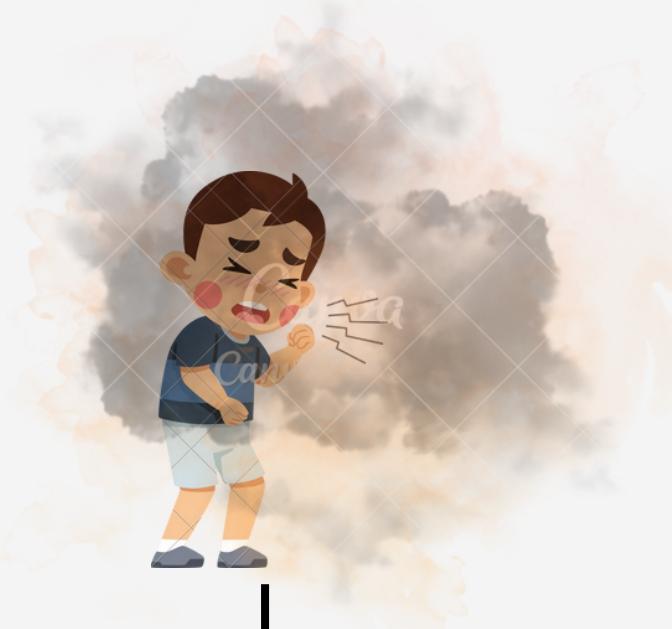


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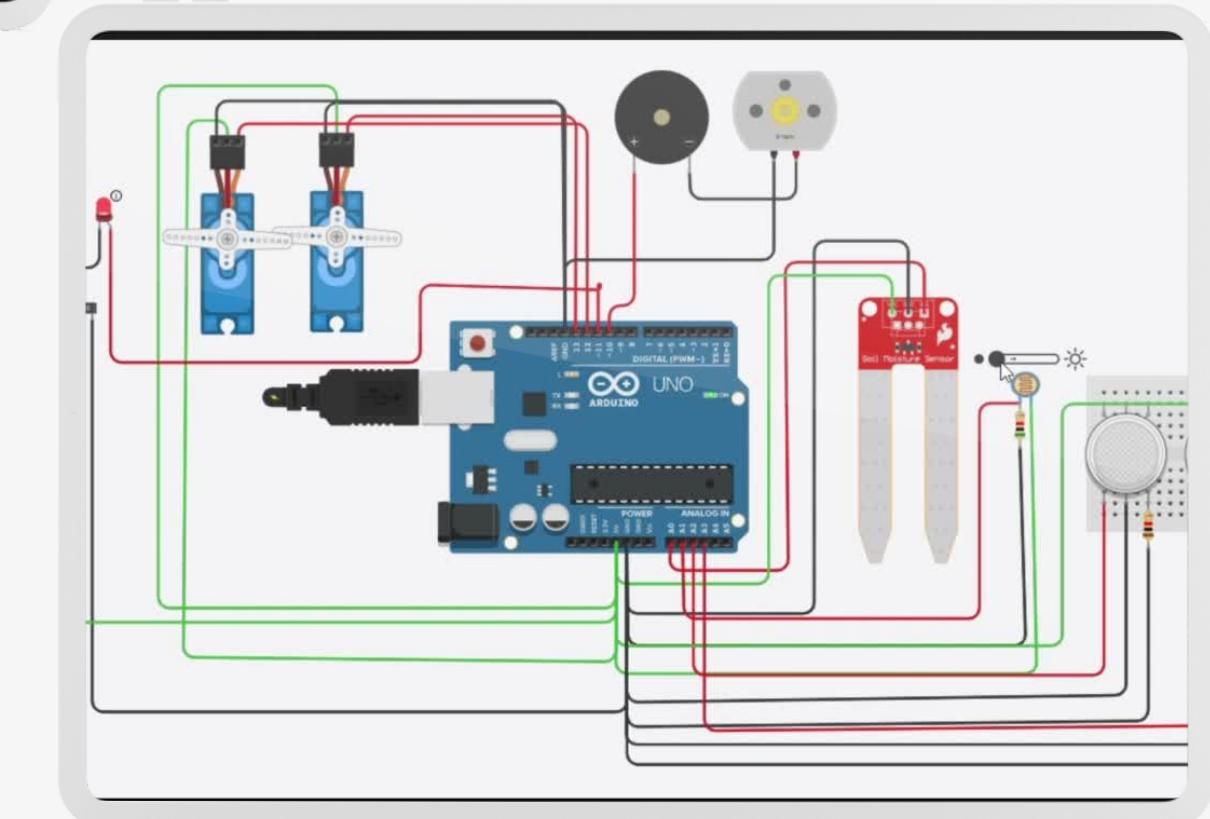
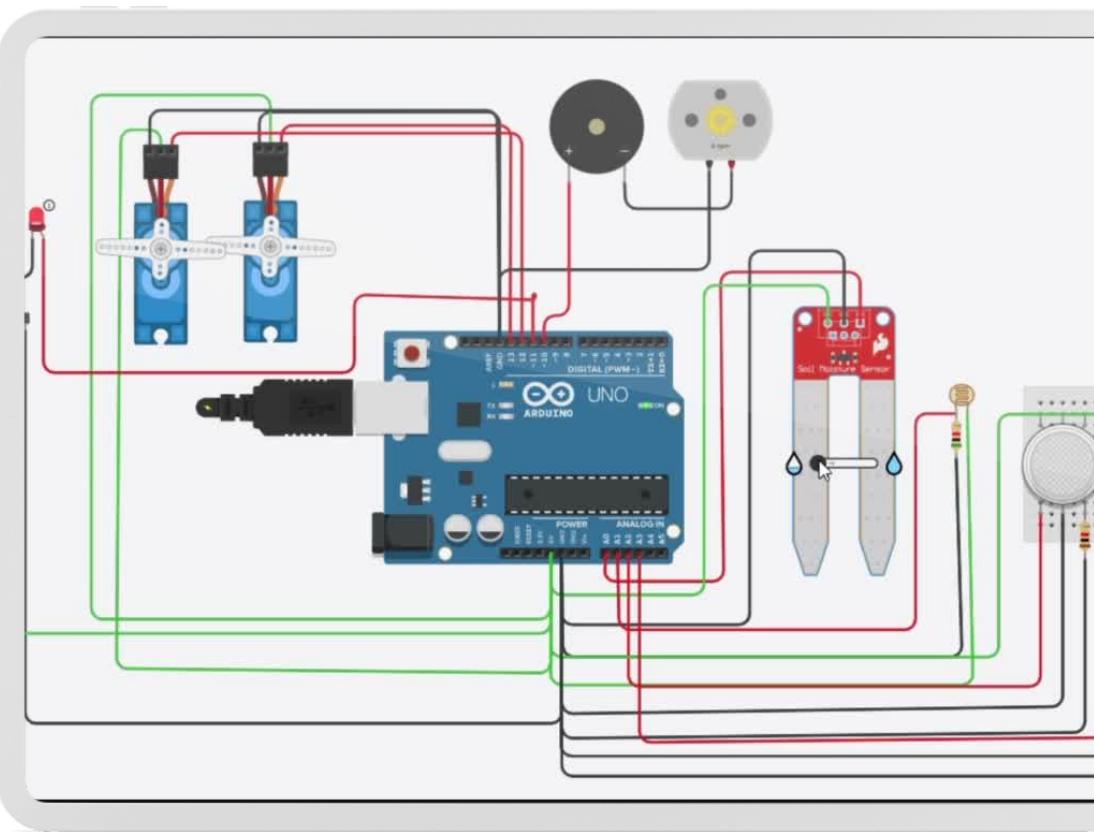
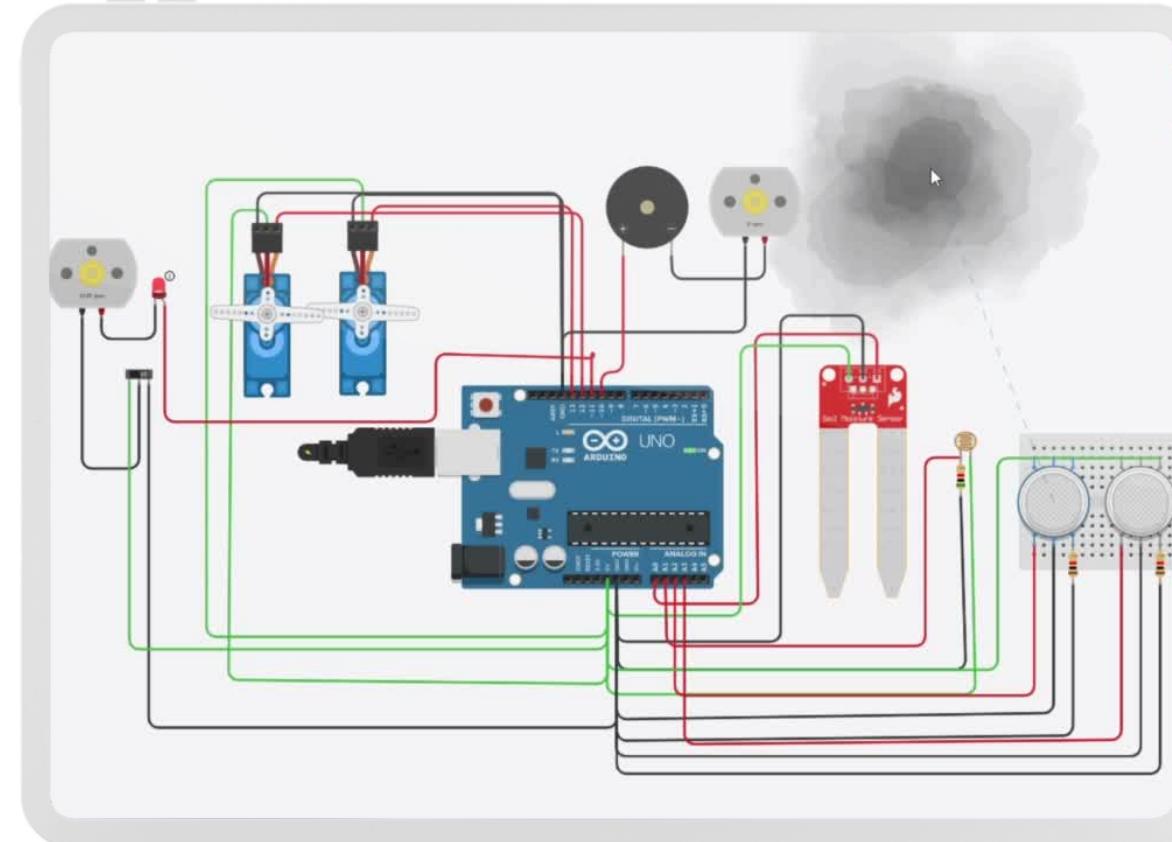
BREEZE A SMART WINDOW



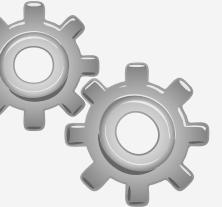
A window automation system that will monitor & control home attributes such as fire smoke, gas leakage, rain, sunlight, and pollution.



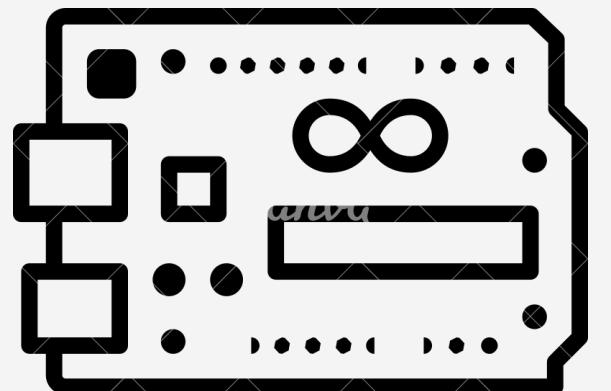
LET'S GO DEEP INTO THE TECHNICAL EXPLANATION



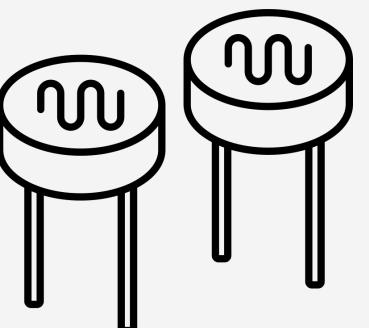
COMPONENTS



Arduino UNO



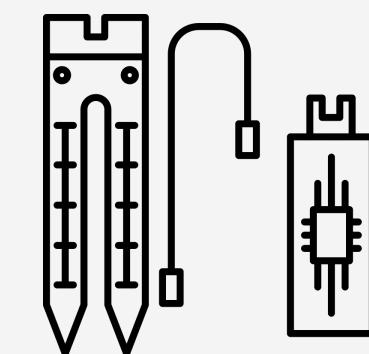
Photodiode Sensor



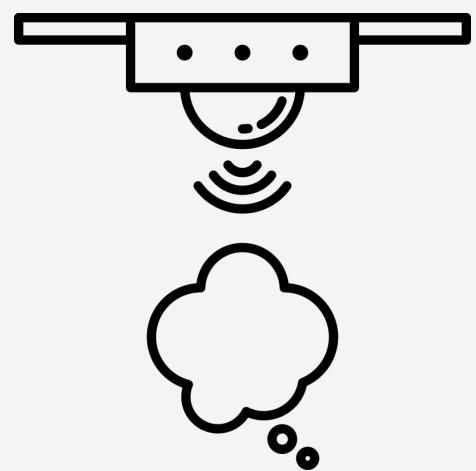
MQ-135 Gas Sensor



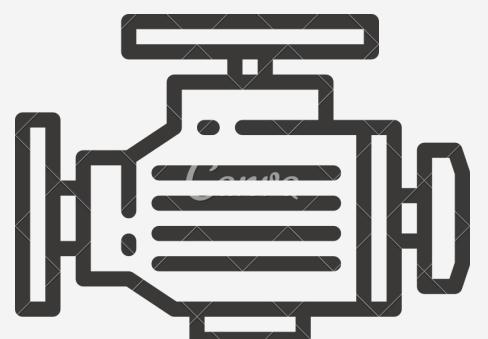
Humidity Sensor



MQ-2 Smoke Sensor



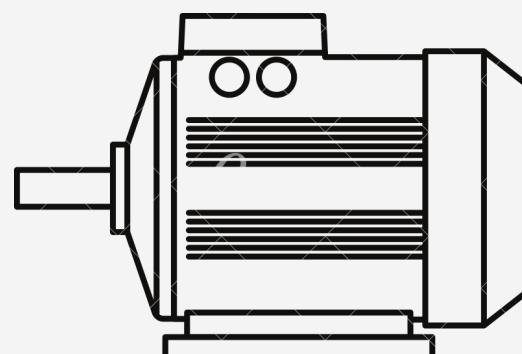
Servo Motor



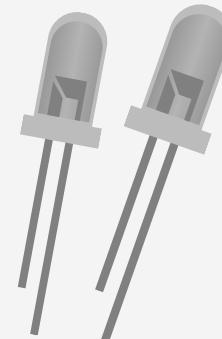
Buzzer



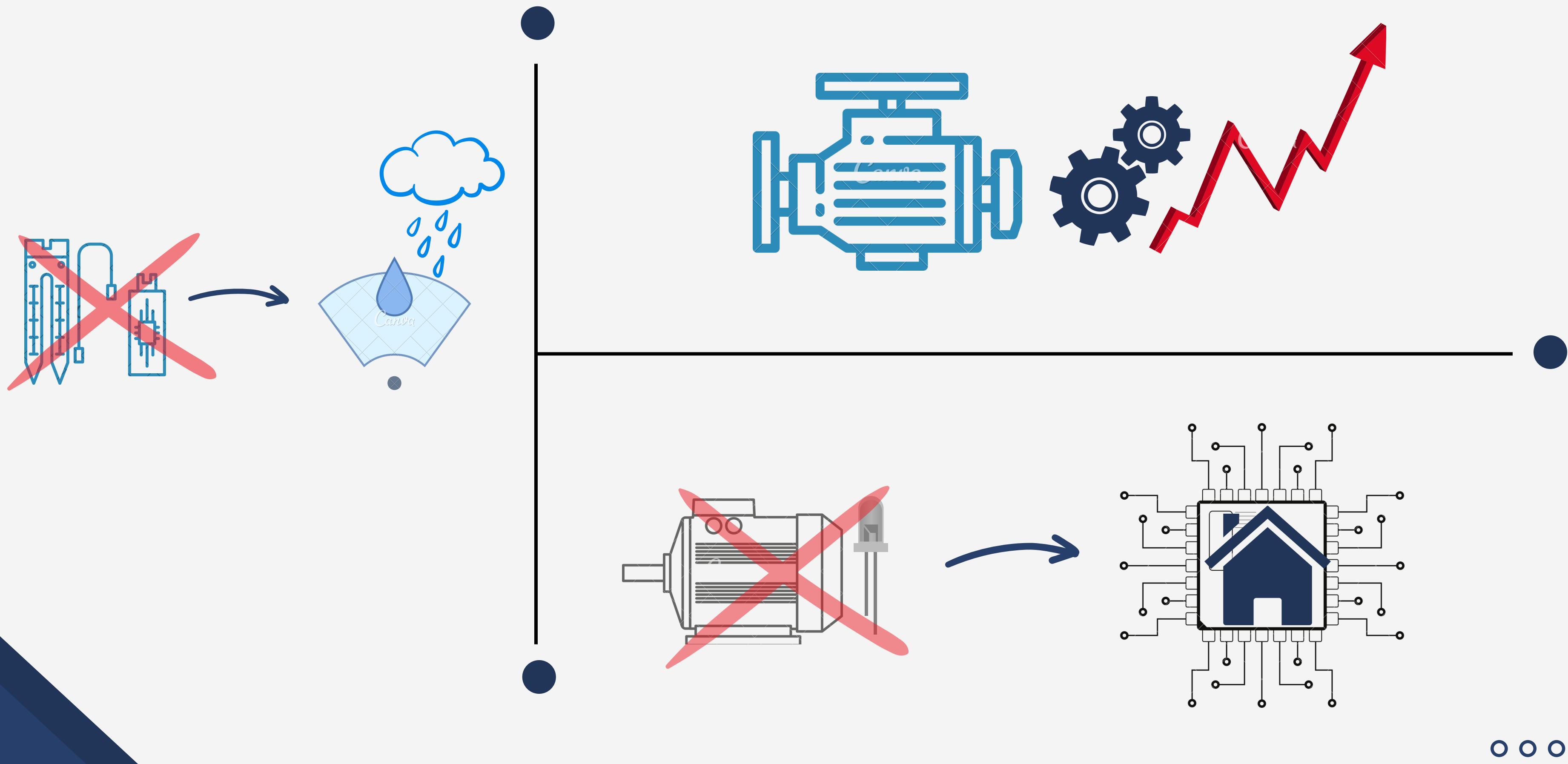
DC Motors



LEDs



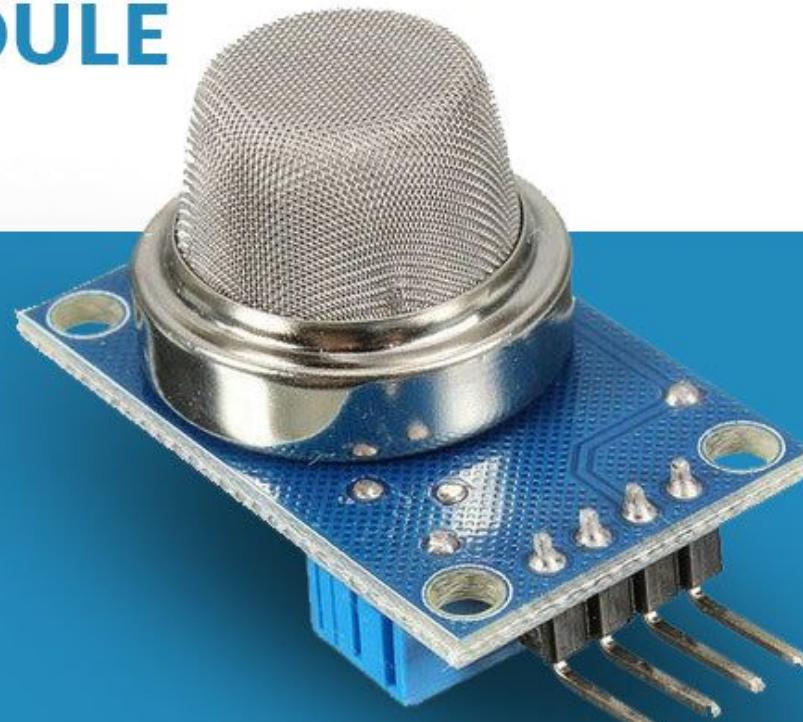
HOW ACTUAL PRODUCT IS DIFFERENT FROM OUR PROTOTYPE?



MQ-135 Pollution Sensor

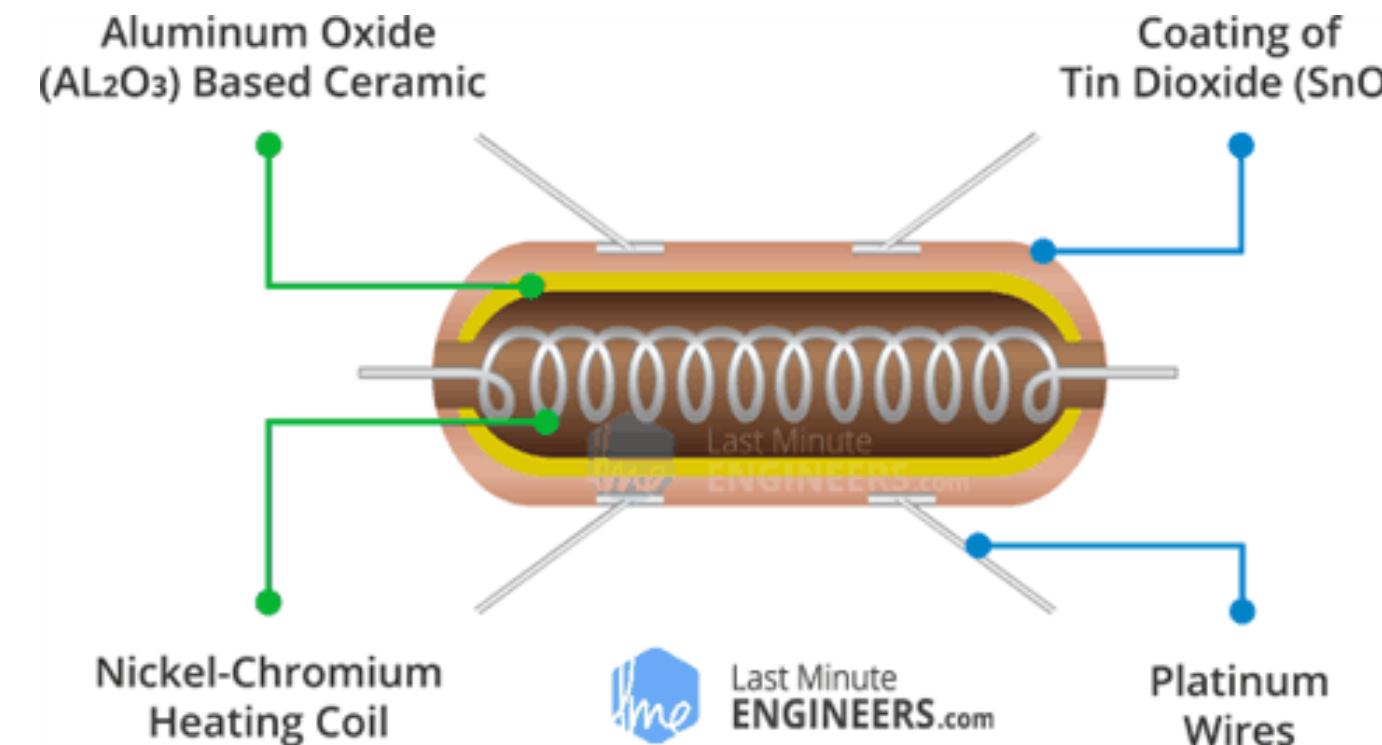
Front View

MQ-135 GAS SENSOR MODULE



- Use to detect different types of air pollutants
- Detect various air pollutants, including ammonia, sulfide, benzene, and smoke.
- Simple and cost-effective to detect air pollution.

How does it works?



Last Minute
ENGINEERS.com

MQ-2 Gas and Smoke Sensor

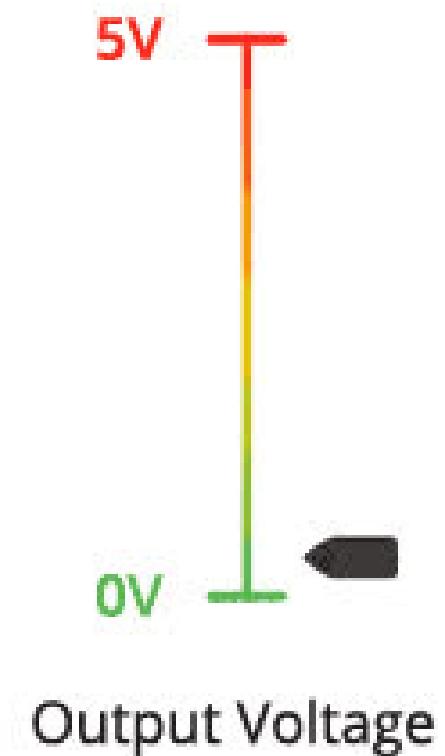
How does it works?

- Smoke and gas detection
- Detects LPG, Alcohol, Propane, Hydrogen, Methane, and CO.



Last Minute
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CleanAir



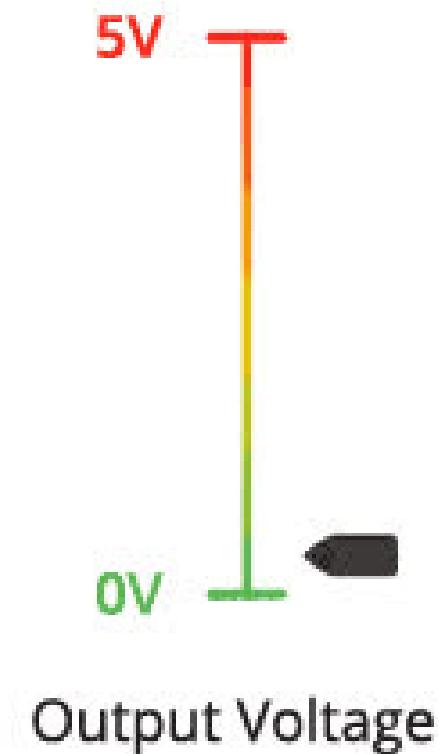
MQ-2 Gas and Smoke Sensor

How does it works?

- Smoke and gas detection
- Detects LPG, Alcohol, Propane, Hydrogen, Methane, and CO.

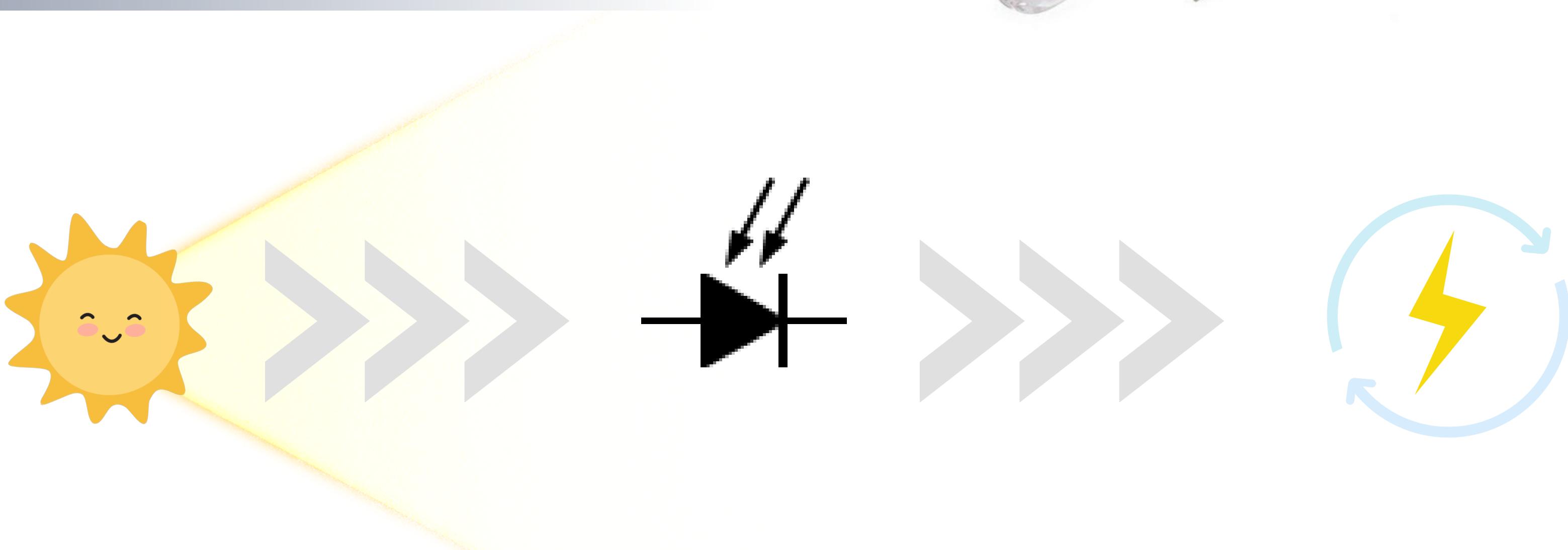
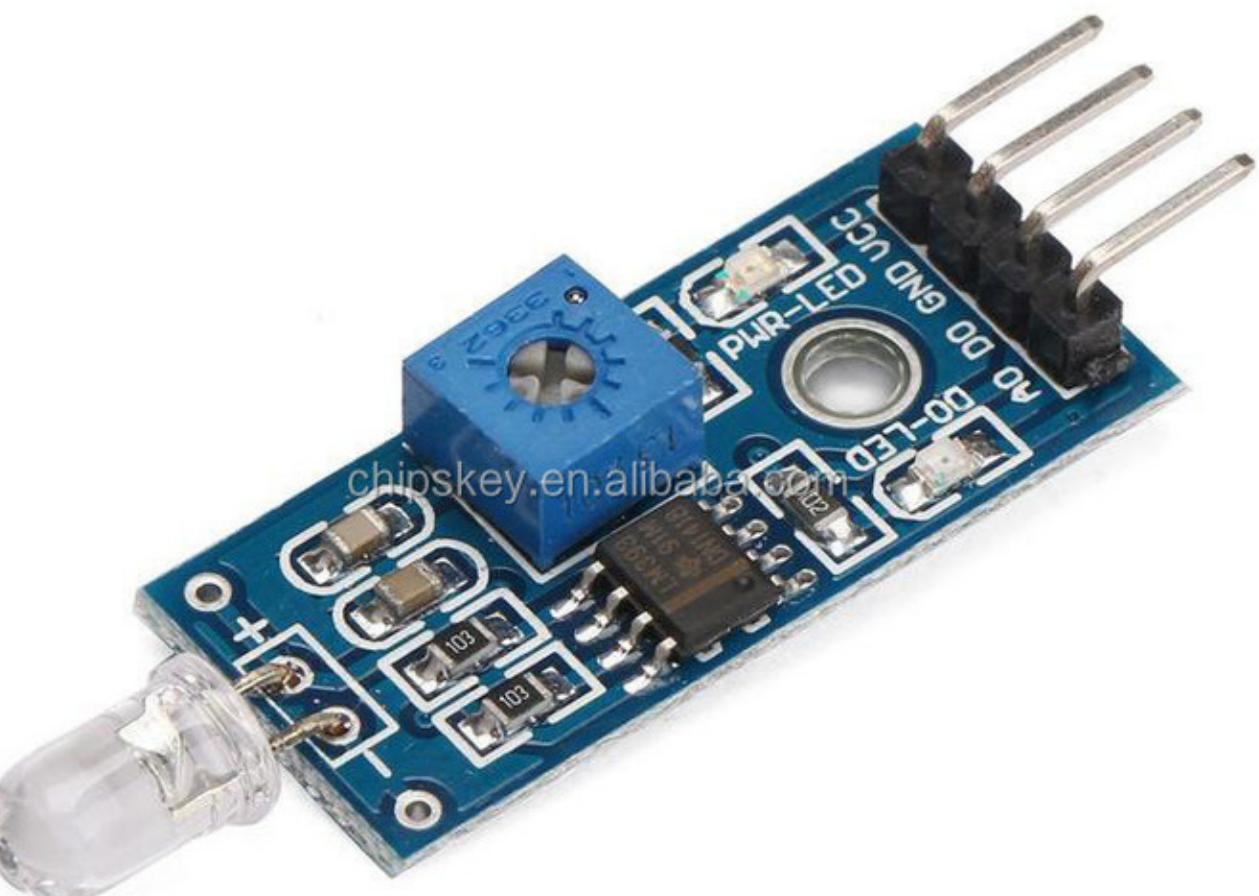


CleanAir



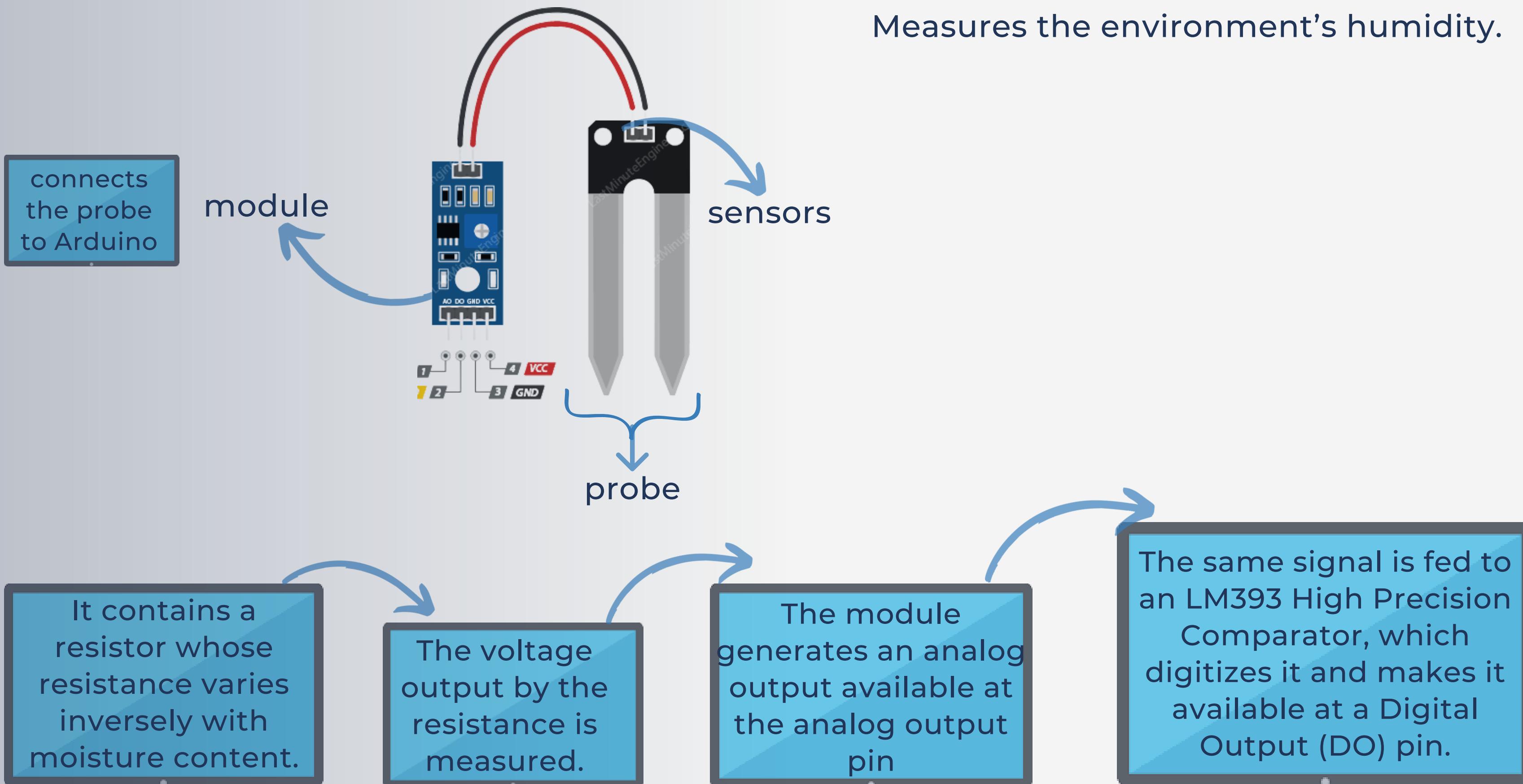
Photodiode Sensor

- A photodiode is a light-sensitive semiconductor diode.
- Produces current when it absorbs photons (converts light to electricity).



Humidity_Sensor

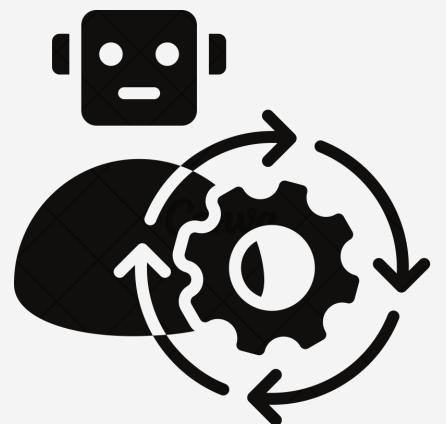
Measures the environment's humidity.



FUTURE PROSPECTS



Smart Controlling



Home Automation



Weather dependent



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LEARNING EXPERIENCE OF THE TEAM



Abhay Singhal

Made the ppt for the model, research and helped with prototyping.



Priyangshu Chatterjee

Wrote the script and helped in the presentation



Saket Dhawale

Helped with the presentation, research and prototyping



Shreya Singh

Did a little research and helped in the presentation



Atif Faizan

Helped with the idea and made the Tinkercad simulation.

Prototype

