A black silhouette of a large Ferris wheel is positioned on the left side of the slide, partially overlapping the vertical dashed line. Three solid black circles are connected by dashed lines to form a triangle above the Ferris wheel.

AirSential

Advanced Smart Device for Air Quality Monitoring,
Gas Leak Detection, and Emergency Response

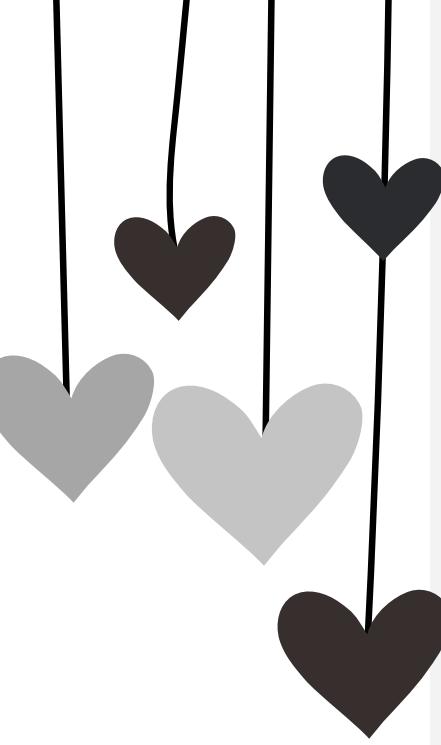
-- Safeguarding Respiratory Health with Intelligent Hazard Prevention

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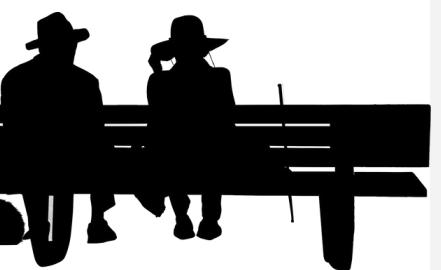
GitHub : [issrivastava](https://github.com/issrivastava)



What is AirSential?

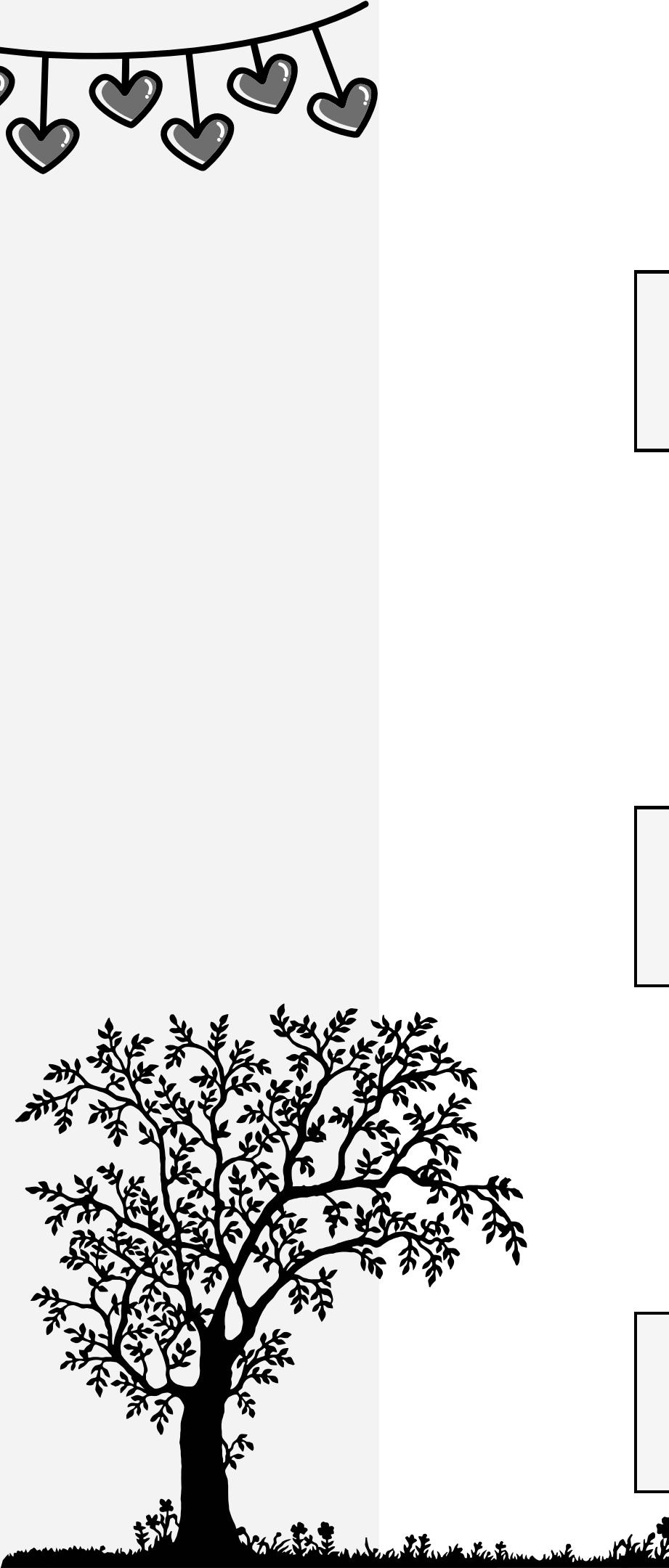
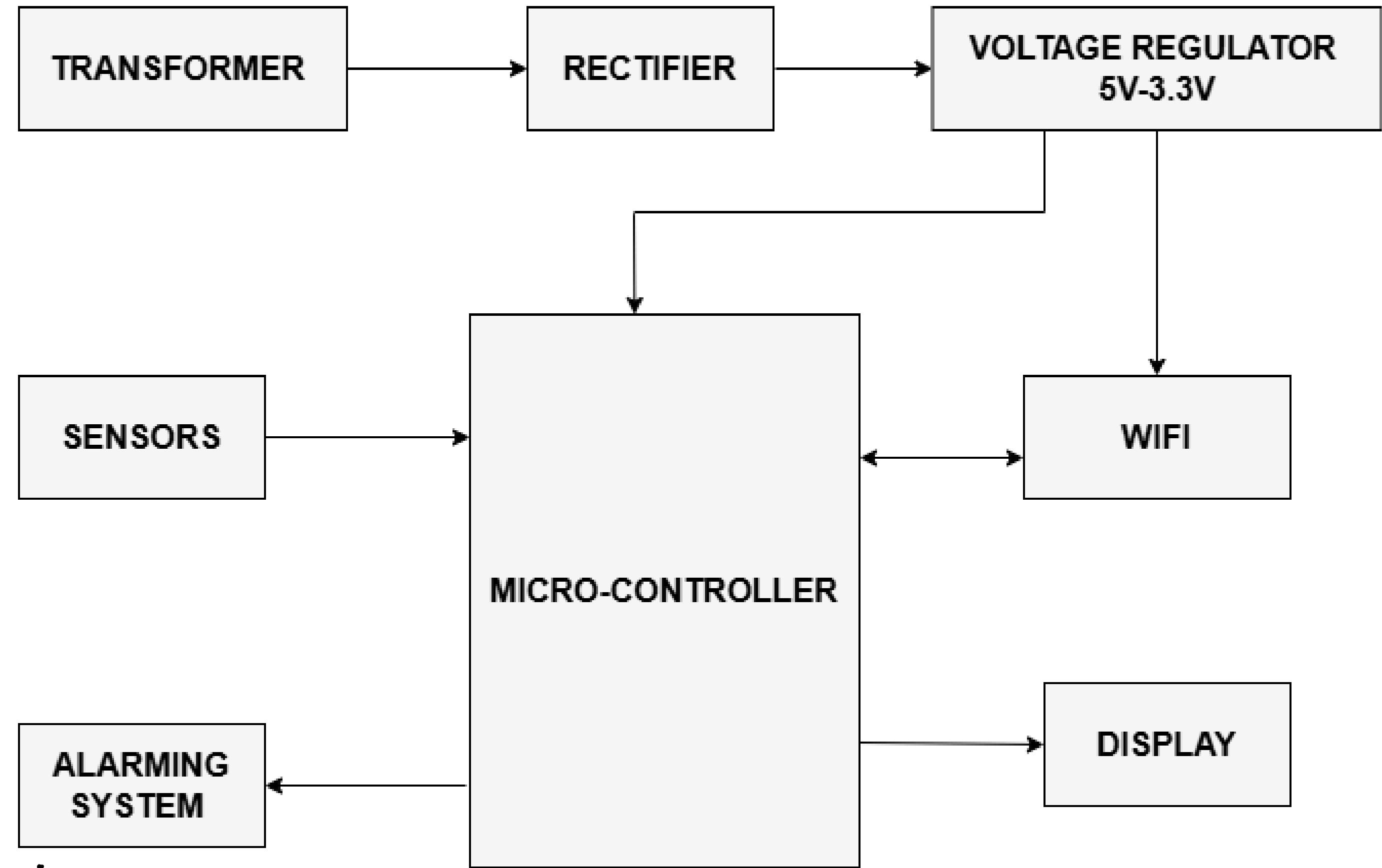
AirSential is an advanced smart device designed to revolutionize air quality monitoring, gas leak detection, and emergency response, safeguarding respiratory health with intelligent hazard prevention.

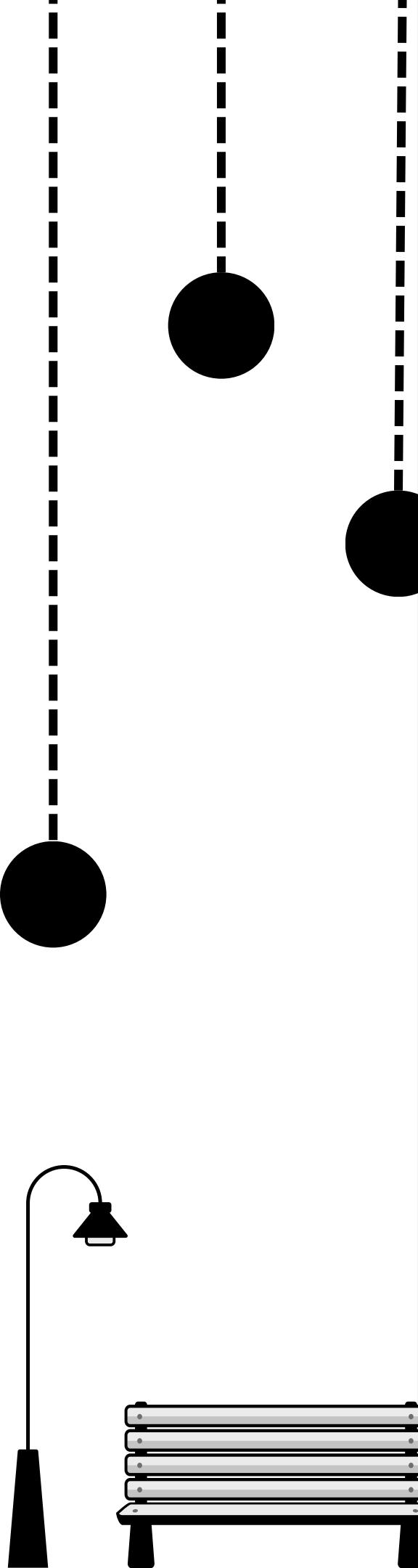
Built using a combination of cutting-edge sensors—PIR (passive infrared), gas, temperature, and humidity—AirSential leverages sensor fusion technology to enhance data precision and reliability.



By integrating motion detection with PIR sensors, the device ensures higher accuracy in identifying environmental hazards while minimizing false alarms.

Device Architecture

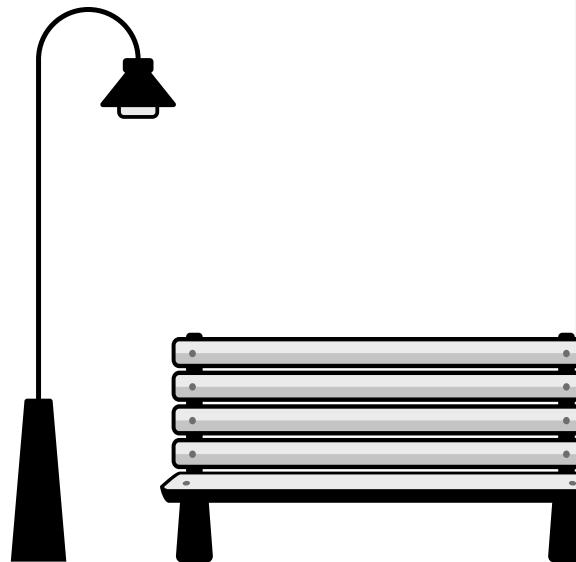




Increased Precision

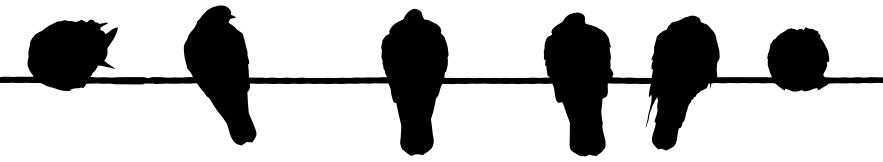
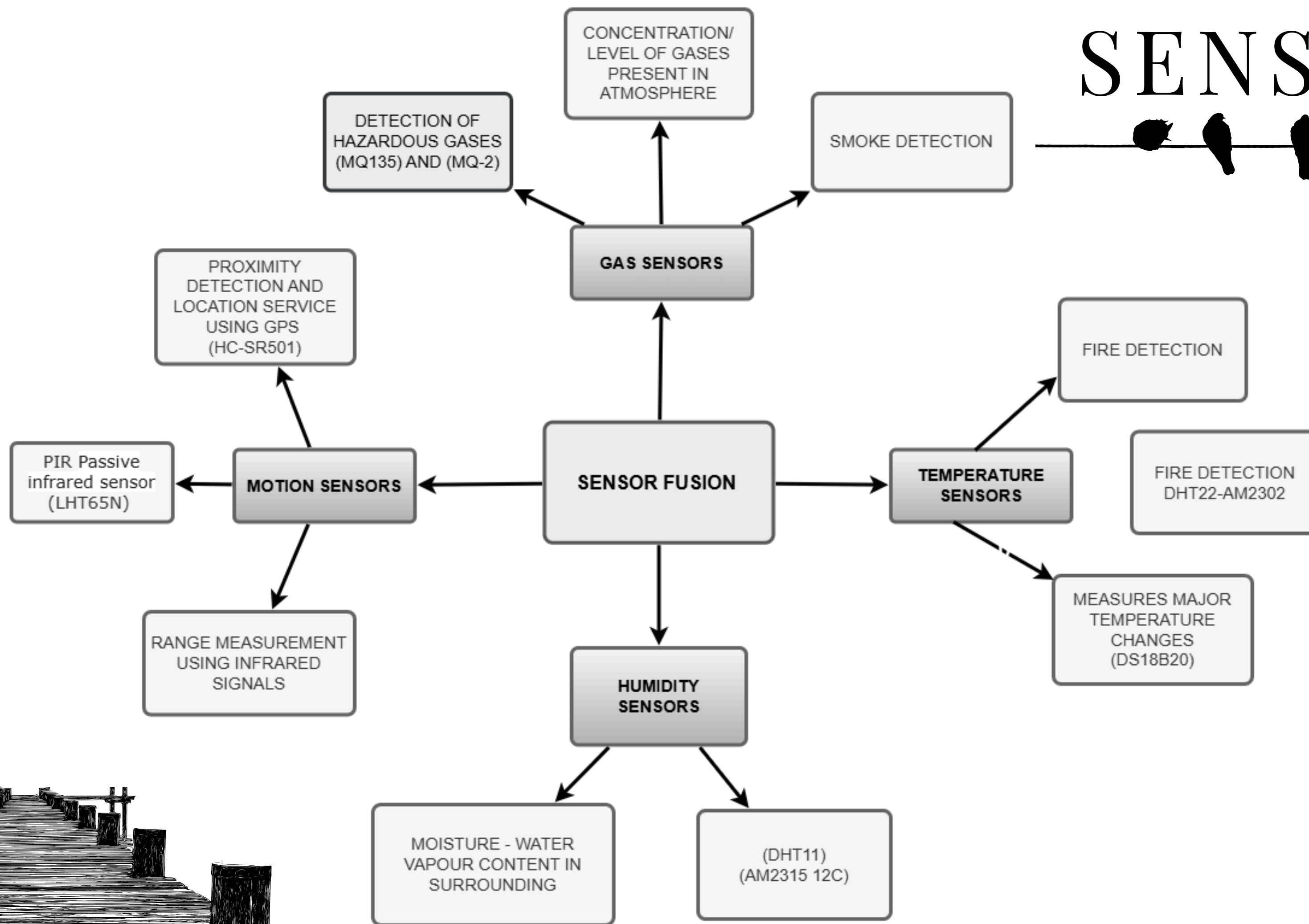
AirSential is powered by microcontrollers and connected via Wi-Fi, enabling real-time monitoring and seamless communication with concerned authorities in case of emergencies.

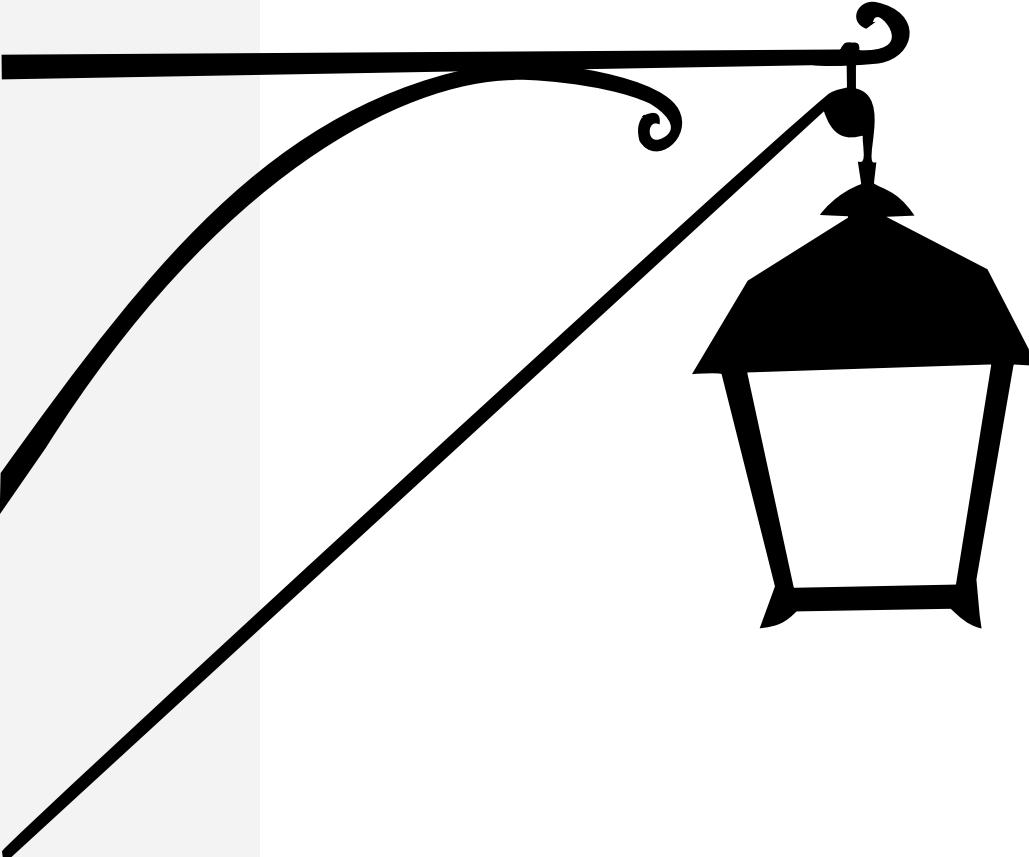
This comprehensive approach ensures proactive hazard mitigation and promotes safety in residential, industrial, and commercial environments.



Its precision-engineered design and intelligent capabilities make AirSential a robust and indispensable solution for maintaining air quality and preventing environmental threats effectively.

SENSORS





MICRO-CONTROLLER

INPUT

SENSORS

The microcontroller will interface with sensors and read sensor data periodically with the help of ADC (Analog to Digital) converter.

DATA STORAGE

It will process the sensor data, perform necessary calculations, and potentially filter or smooth the data to ensure it is accurate and reliable.

Processing

Monitoring

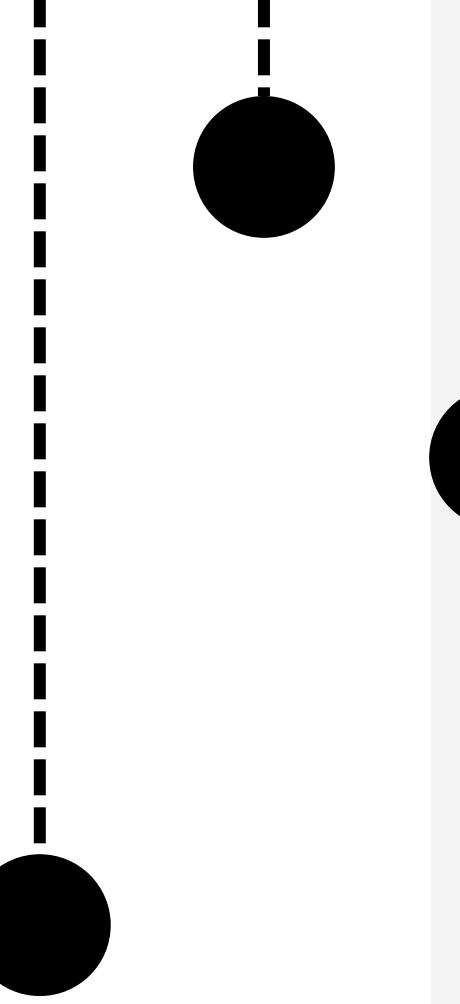
USER INTERFACE

- User Interface will help display current air quality data, trends, or warnings. It will also handle user inputs, such as buttons or touch screens, allowing the user to change settings or view different types of data.

COMMUNICATION

It will be connected to a wireless network, enabling communication with other devices or cloud platforms which will transmit data to cloud the microcontroller might trigger actions based on sensor readings.

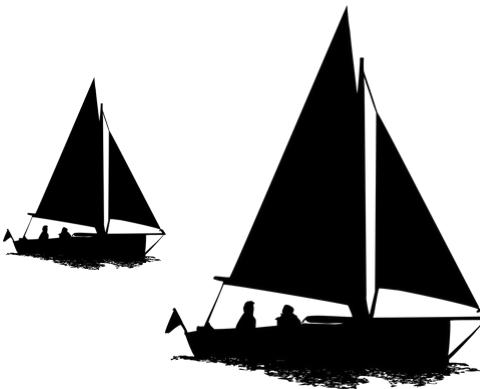
Decision-Making



Implementation

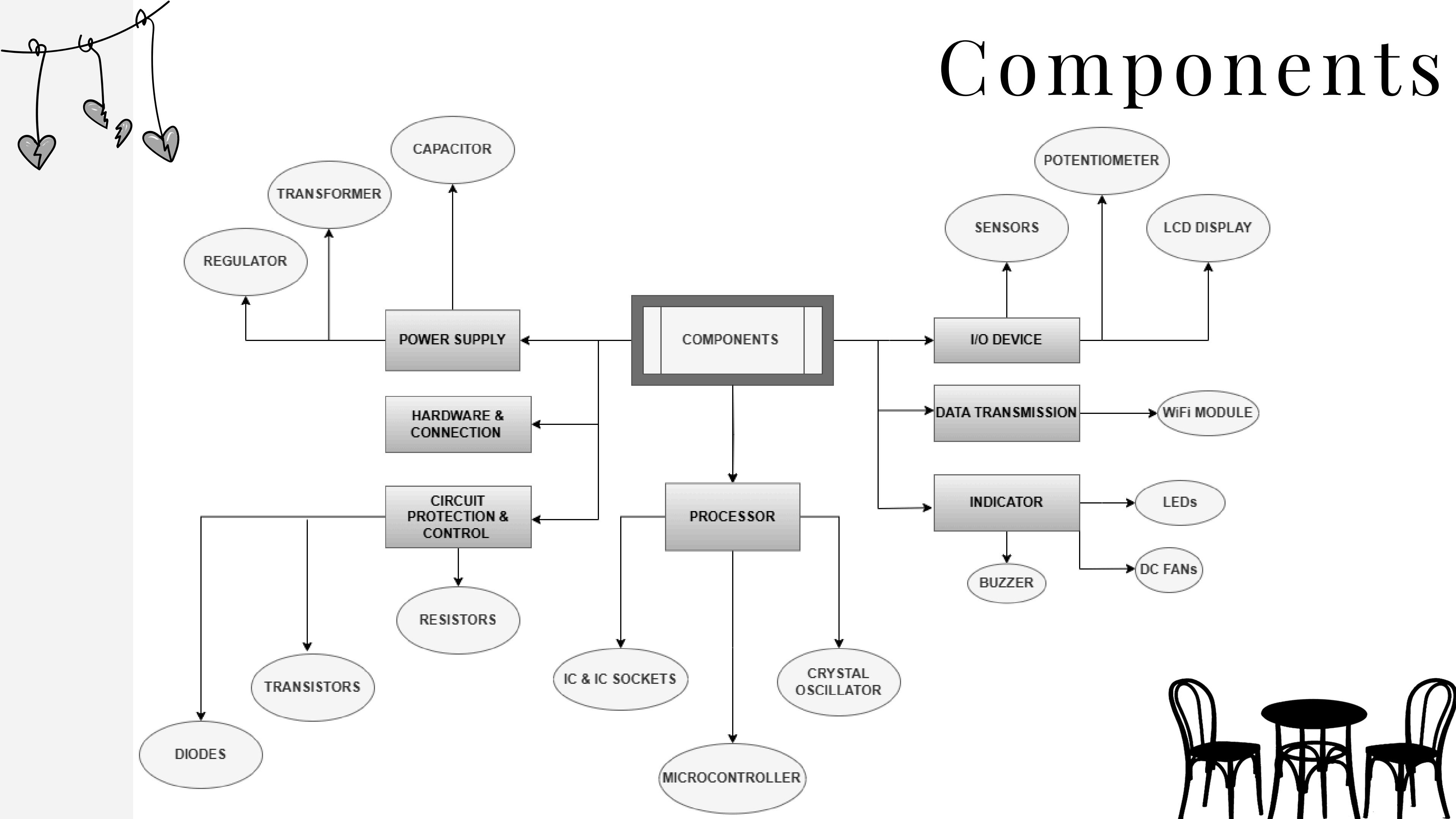
To successfully promote Airsential, a multi-channel approach is essential. The strategy involves leveraging digital marketing through targeted social media campaigns, SEO, and influencer partnerships to build awareness.

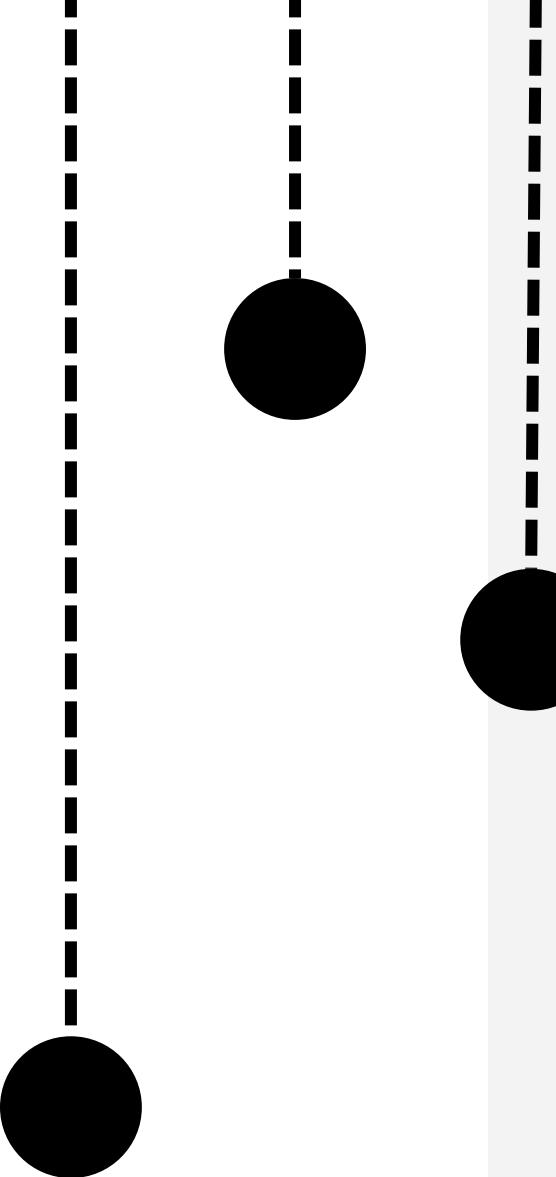
Collaborations with smart home companies and healthcare organizations can broaden the product's reach, while live demonstrations and webinars help engage and educate potential customers on the device's benefits.



Encouraging customer testimonials and offering discounts or referral programs will drive adoption and enhance trust.

Components

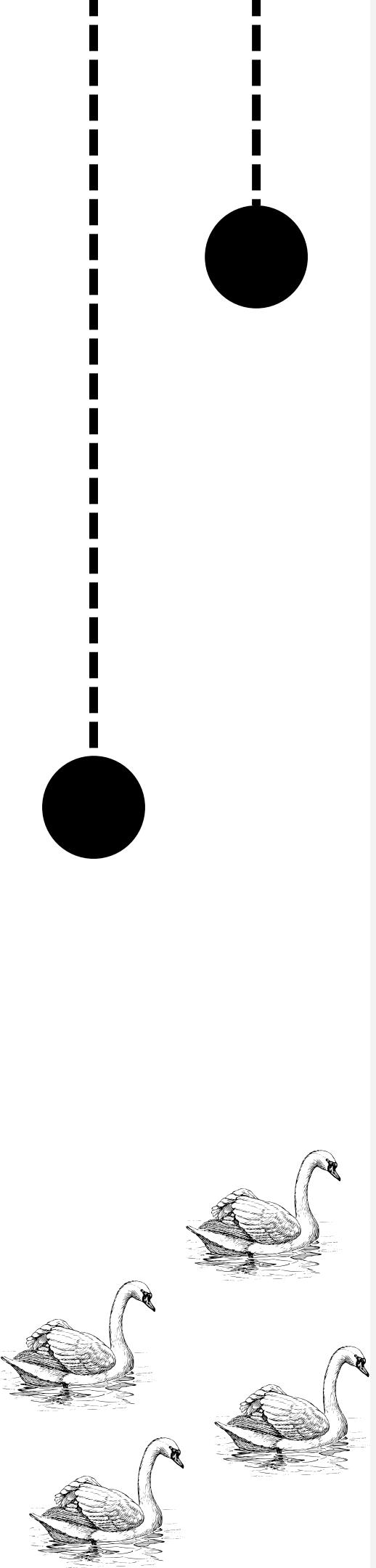




Promotion Strategy

- 
1. **Targeted Digital Marketing - Social Media Campaigns**
 2. **SEO & Content Marketing - Create awareness and drive traffic to product website.**
 3. **Partnerships & Collaborations - Work with Healthcare Organizations and NGOa to Expand reach and credibility**
 4. **Product Demonstrations & Webinars - Organize educational webinars on air quality and gas safety Engage customers and showcase product features.**
 5. **Customer Testimonials & Reviews - Collect and share user testimonials, Showcase positive reviews and case studies**
 6. **Discounts & Promotions - Launch limited-time discounts or bundle offers,**

Key Partners	Activities	Resources	Value Propositions
Sensor suppliers	R&D, product development	AirSential hardware, cloud services	Monitor air quality and gas leaks
Cloud providers	Marketing & sales	Sensors, IoT devices	Real-time alerts and emergency response
Manufacturers	Customer support	Data infrastructure	Health and safety improvement
Retailers	Regulatory compliance	Development team	Improve air quality in homes, offices, and industries



Revenue Model

1. **Fixed Expenses:** Rent & Utilities, Salaries, Depreciation, Insurance, Software Subscriptions, Warehouse Storage
2. **Variable Expenses:** Raw Materials, Labour Costs, Shipping & Delivery, Marketing & Advertisement
3. **Semi-Variable Expenses:** Maintenance, Hardware
4. **Operational Expenses (OPEX):** Training and Development, Office Supplies, Travel Expenses
5. **Capital Expenses (CAPEX):** Technology Investments, Infrastructure Upgrades
6. **Contingencies and Emergency Funds:** Unplanned Repairs, Economic Downturns:
7. **Taxes and Compliance Costs:** Income Taxes, Licensing Fees

EXPENSES ▾ **DESCRIPTION** ▾ **ONE TIME** ▾ **MONTHLY** ▾ **TOTAL** ▾

Rent & Utilities	Office Supplies, Warehouse	₹ 1,00,000		₹ 1,00,000
Materials & Supply	Costs for manufacturing, production inputs	₹ 50,000		₹ 50,000
Labour Costs	Hourly wages, overtime, or contract workers		₹ 50,000	₹ 50,000
Shipping & Deliver	Costs for transporting products to customers	₹ 50,000		₹ 50,000
Marketing & Sales	Campaign costs, social media spending		₹ 30,000	₹ 30,000
Maintenance	Regular servicing costs, additional repair costs		₹ 30,000	₹ 30,000
Technology & Equipments	Hardware and specialized softwares		₹ 10,000	₹ 10,000
Income Taxes	Licencing Fees, Permit, tax obligations	₹ 15,000		₹ 15,000
Miscellaneous	Unplanned Repairs, Emergency funds	₹ 50,000		₹ 50,000
OVERALL				
	Immediate Funding Request:	₹ 2,65,000	₹ 1,20,000	₹ 3,85,000
	Annual Funding Requirement:			₹ 14,40,000

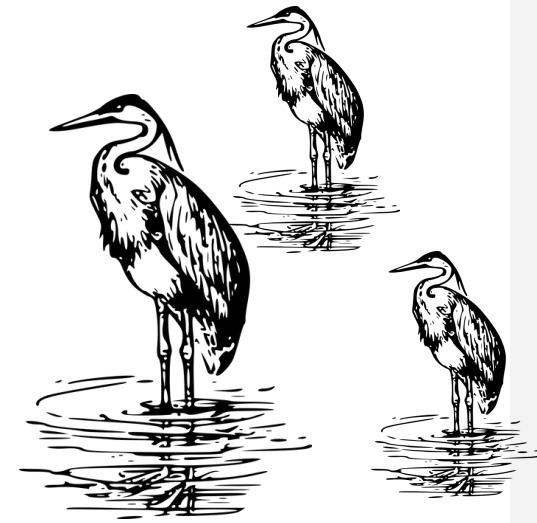
Target Audience

Airsential is designed for individuals and households concerned about indoor air quality, gas leaks, and respiratory health.

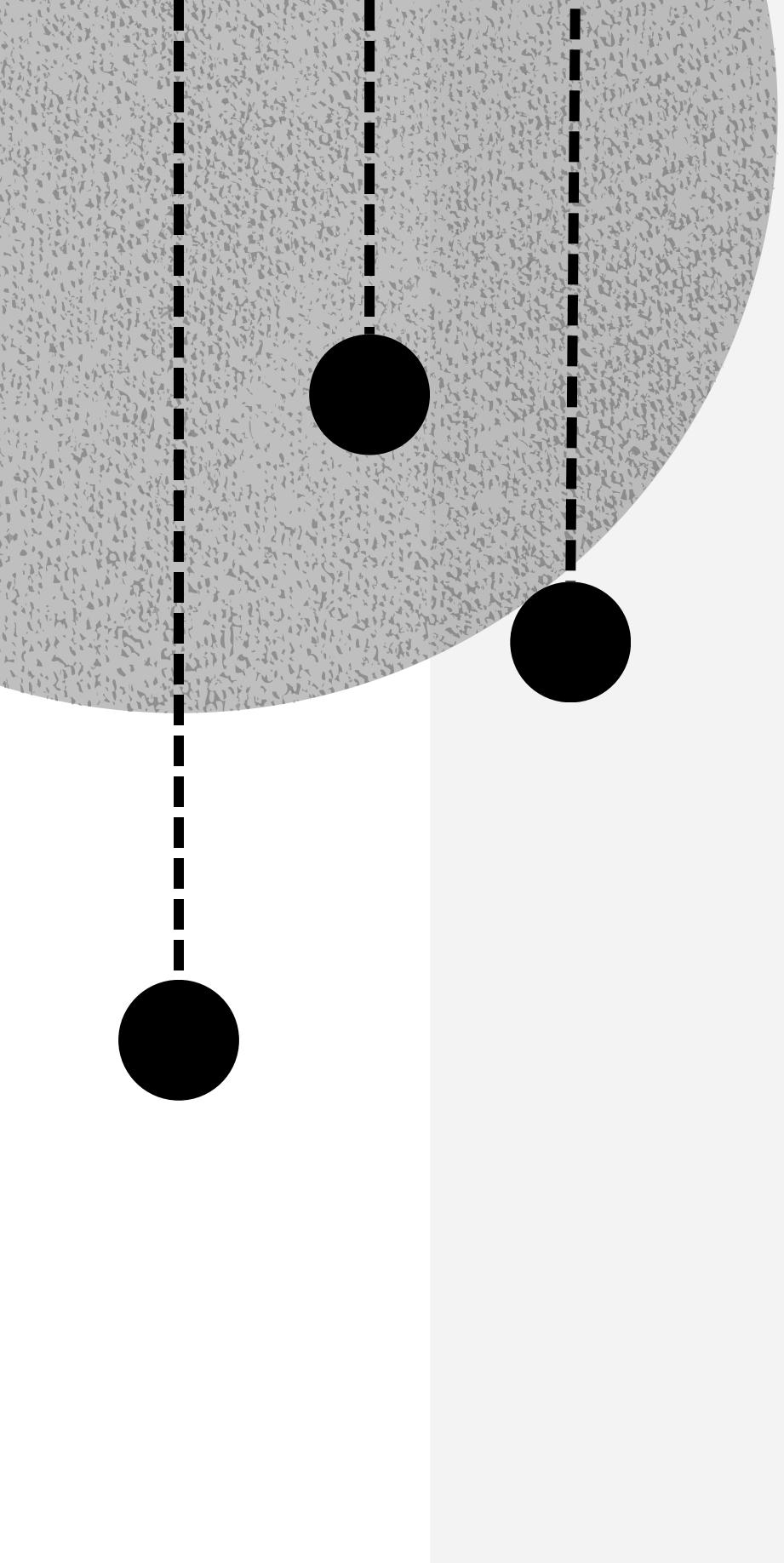
The product is ideal for:

1. Homeowners
2. Families
3. Health-conscious Individuals
4. Smart Home Enthusiasts
5. Businesses & Offices
6. Environmental and Safety Advocates

By targeting these groups, Airsenal can provide enhanced air safety and quality, becoming an essential part of daily life for those who prioritize health and environmental well-being.



Customer Segment	Needs & Pain Points	Motivation for Buying	How AirSential Can Help
Homeowners	Concerns about indoor air quality (e.g., allergens, pollutants)	Health and safety of family members, asthma or allergy management	Monitors air quality (PM2.5, CO2, VOCs), alerts for harmful gases
Businesses/Offices	Need to ensure employee safety and comply with health regulations	Compliance with health & safety standards, creating a comfortable work environment	Real-time air quality monitoring, data reports for compliance
Schools/Colleges	Ensuring a safe and healthy environment for students and staff	Compliance with educational health standards, improving air quality	Monitors air quality for classroom and common areas
Healthcare Facilities	Maintaining a high-quality environment for patients (e.g., ICU, labs)	Protecting vulnerable individuals (e.g., asthma patients, elderly)	Monitors air quality, detecting harmful gases for better patient care
Industrial Facilities	Need to monitor workplace hazards like gas leaks or poor air quality	Compliance with workplace safety regulations, preventing accidents	Gas leak detection, air quality monitoring in hazardous areas
Smart Cities	Environmental data collection, improving public health and safety	Monitoring and improving city-wide air quality	Integrates into smart city infrastructure, public health monitoring
Environmental Agencies	Tracking pollution levels for regulatory compliance	Data for environmental impact reports, public awareness	Real-time and historical air quality data, extensive monitoring



Thank You !

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