

AIR QUALITY MONITORING

SUBMITTED BY

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ABSTRACT:

Certainly, IoT (Internet of Things) plays a crucial role in air quality monitoring. IoT devices, such as sensors and data loggers, can be deployed in various locations to continuously collect data on air pollutants, temperature, humidity, and other relevant parameters. These devices transmit the data to a central server or cloud platform in real-time, where it can be processed and analyzed.

Design Thinking:

Benefits of using IoT for air quality monitoring include:

1. Real-time Monitoring:

IoT devices provide continuous and real-time data, enabling quick responses to changes in air quality.

2. Data Accuracy:

IoT sensors are capable of precise measurements, ensuring accurate and reliable data.

3. Cost-Effective:

IoT technology can be cost-effective compared to traditional monitoring methods.

4. Scalability:

IoT networks can be easily scaled up or down to cover larger areas or specific locations of interest.

5. Data Accessibility:

Data collected through IoT devices can be easily accessed by stakeholders, researchers, and the public through online platforms and apps.

6. Alerts and Notifications:

IoT systems can generate alerts and notifications when air quality reaches unhealthy levels, helping to protect public health.

7. Data Analytics:

IoT data can be analyzed to identify trends, patterns, and sources of pollution, aiding in informed decision-making and policy formulation.