**PHASE – 5 PROJECT FOR DATA ANALYTICS WITH COGNOS**

**TITLE: AIR QUALITY ANALYTICS**

**TOPIC: DOCUMENTATION OF THE PROJECT**

**Title: Air Quality Analysis in Tamil Nadu**

**Overview:**

**The "Air Quality Analysis in Tamil Nadu" project aims to comprehensively assess and analyze the air quality across various regions in Tamil Nadu, addressing the critical issue of air pollution in the state. By conducting a thorough examination of air quality parameters, the project seeks to provide invaluable insights into the causes, trends, and potential solutions for mitigating air pollution.**

**Objectives:**

**- Conduct a detailed analysis of air quality metrics including PM2.5, PM10, NO2, SO2, relevant pollutants across key regions in Tamil Nadu.**

**- Identify the sources and patterns of air pollution, considering industrial, vehicular, and natural factors.**

**- Evaluate the health and environmental implications of varying air quality levels.**

**- Propose data-driven recommendations and potential interventions to improve air quality in the region.**

**Methodology/Approach:**

**The project will utilize a network of air quality monitoring stations strategically positioned across Tamil Nadu. These stations will gather real-time data, enabling a comprehensive assessment of air quality parameters. Statistical analysis and geographic mapping techniques will be employed to interpret and visualize the collected data.**

**Unique Features:**

**This project's uniqueness lies in its comprehensive approach towards understanding the diverse sources and impacts of air pollution in Tamil Nadu, providing a foundation for targeted interventions and policy recommendations.**

**Target Audience/Beneficiaries:**

**The findings and recommendations of this project will benefit policymakers, environmental agencies, public health officials, researchers, and the general public in Tamil Nadu. By understanding the nuances of air quality, these stakeholders can make informed decisions to improve public health and the environment.**

**Potential Impact:**

**The project's outcome is expected to shed light on the critical factors contributing to poor air quality in Tamil Nadu. This understanding will guide the formulation of effective strategies and policies to reduce air pollution, leading to improved public health and environmental sustainability.**

**Progress/Status:**

**The project has been completed . Early findings indicate trends that require further investigation. Collaborations with local agencies and experts are ongoing to ensure a comprehensive study.**

**Resources/Support Needed:**

**We are seeking support in the form of expertise in environmental analysis, funding for expanding the monitoring network, and collaboration with local authorities to facilitate access and data sharing.**

**Success Metrics:**

**Success will be measured by the depth of analysis, the accuracy of the findings, and the practicality of the recommendations provided to stakeholders.**

**Call to Action:**

**We invite stakeholders, experts, and potential partners to collaborate and contribute to this crucial endeavor aimed at addressing air quality issues in Tamil Nadu. Together, we can work towards a cleaner and healthier environment for all residents.**

**Steps taken:**

**From the given data set, we uploaded that data set and analyse the air pollution using IBM cognos analytics and also with jupyter by using libraries like pandas, numpy etc. finally we completed using IBM cognos analytics.**

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