Project Sketch

Title: Forecasting Air Quality

Project Description: This project looks at how we can use past air quality data to predict the Air Quality Index (AQI) in a particular location. The idea is to use computer-based analysis to study patterns in the data, identify the major pollutants that reduce air quality, and then predict AQI for the next year.

Users and Stakeholders:

1. <u>Main Users</u>: City officials, environmental researchers, and government agencies managing pollution.

2. <u>Other Users</u>: Local residents who want to know the expected air quality

Problem to Solve: Air quality in many cities in India is a major health concern. People often don't have access to clear, localized, and reliable air quality forecasts. Without these predictions, it's hard to plan safety measures or raise awareness.

Workflow (Step-by-Step Process):

1. Collect air pollution data for a particular city.

2. Clean the data and fill in missing values.

3. Analyze and forecast air quality index

4. Create daily reports

Data (Input and Processing):

1. <u>Input</u>: Air pollution data from public API.

2. <u>Processing</u>: Clean data, identify key pollutants, and build forecasting models.

3. <u>Output</u>: Forecasted AQI values and simple daily reports.

Results and Presentation: Daily reports about AQI trends