

# NAAN MUDHALVAN PROJECT PHASE 2: INNOVATION

PROJECT TITLE: AIR QUALITY ANALYSIS

BY:

## DATA ANALYTICS OF AIR QUALITY ANALYSIS

VALUABLE INNOVATION STEPS:

### STEP1: DATA COLLECTIONS

- Review the initial design concept to ensure it aligns with the identified problem.
- Gather feedback from stakeholders and subject matter experts for improvements.
- Incorporate necessary changes to enhance the design's effectiveness.

### STEP2: CLEANING DATA

- Clean and reprocess the data to remove outliers, errors, and inconsistencies.
- Ensure data quality before analysis.
- Transformation data into proper format for further processes

### STEP3: EVALUATE AND ANALYSIS

Machine Learning Models:

- Train machine learning models to predict Air quality based on chemical components present in Air.
- This can help pinpoint potential sources of quality.

Cluster Analysis:

- Use clustering algorithms to group similar noise patterns together.
- This can help identify areas with distinct noise characteristics.

### STEP4: DATA VISUALIZATION

- Create interactive maps and visualizations to communicate Air quality patterns.
- Finding components present on Air such as PH, sodium, carbon, hydrogen etc..

### STEP5: DISCRIBE RESULT (COMMUNICATOIN)

- Result is predicted by using appropriate calculation method using statistic evaluation as per our data collections.

- Finally result of Air quality is predicted.

## AIR QUALITY ANALYSIS DESIGN

