Prompts

Chatgpt(ANT)

- This dataset focuses on air quality assessment across various regions. The dataset contains 5000 samples and captures critical environmental and demographic factors that influence pollution levels. 01 KEY FEATURES: Temperature (°C): Average temperature of the region. Humidity (%): Relative humidity recorded in the region. PM2.5 Concentration (µg/m³): Fine particulate matter levels. PM10 Concentration (µg/m³): Coarse particulate matter levels. NO2 Concentration (ppb): Nitrogen dioxide levels. SO2 Concentration (ppb): Sulfur dioxide levels. CO Concentration (ppm): Carbon monoxide levels. Proximity to Industrial Areas (km): Distance to the nearest industrial zone. Population Density (people/km²): Number of people per square kilometer in the region. 02 REQUIRED OUTPUT: Target Variable: Air Quality Levels Good: Clean air with low pollution levels. Moderate: Acceptable air quality but with some pollutants present. Poor: Noticeable pollution that may cause health issues for sensitive groups. Hazardous: Highly polluted air posing serious health risks to the population. Build a visualization and basic classifier around the statement
  Above is my problem statement read and understand it properly and suggest which algorithms should I use.

- I have uploaded a dataset. Can you check if it's clean and tell me how many rows and columns it has Also, what are the column names
- which columns contain categorical data
- I want to build a system step by step based on the above given problem statement, including data cleaning, visualization, and model building. Can you guide me with the code
- first load the dataset and explore its structure
- the goal is to predict air quality, which can be Good, Moderate, Poor, or Hazardous. can you help me create visualizations and build a simple model for this
- I created a boxplot, and I see some outliers. Will they affect my model’s accuracy
- What are some ways to handle these outliers
- if I not remove the outliers, which machine learning models would still perform well
- can you give me the code to build a Support Vector Machine (SVM) classifier for this dataset
- I getting an error: 'KeyError: Air Quality Level not found in axis.' Solve
- now, I want to try XGBoost for air quality prediction
- can you extract all the prompts i have given tou you
- yes give me all the prompts that i have given to you in this notebook

Copilot(ANT)

- This dataset focuses on air quality assessment across various regions. The dataset contains 5000 samples and captures critical environmental and demographic factors that influence pollution levels. 01 KEY FEATURES: Temperature (°C): Average temperature of the region. Humidity (%): Relative humidity recorded in the region. PM2.5 Concentration (µg/m³): Fine particulate matter levels. PM10 Concentration (µg/m³): Coarse particulate matter levels. NO2 Concentration (ppb): Nitrogen dioxide levels. SO2 Concentration (ppb): Sulfur dioxide levels. CO Concentration (ppm): Carbon monoxide levels. Proximity to Industrial Areas (km): Distance to the nearest industrial zone. Population Density (people/km²): Number of people per square kilometer in the region. 02 REQUIRED OUTPUT: Target Variable: Air Quality Levels Good: Clean air with low pollution levels. Moderate: Acceptable air quality but with some pollutants present. Poor: Noticeable pollution that may cause health issues for sensitive groups. Hazardous: Highly polluted air posing serious health risks to the population. Build a visualization and basic classifier around the statement
  What is the best way to solve above problem Which algorithm should use What input features should I take

Boult(AKR)

- Feature Selection

Inputs (User Provides or System Reads Automatically):

Temperature (°C)

Humidity (%)

PM2.5 Concentration (µg/m³)

PM10 Concentration (µg/m³)

NO2 Concentration (ppb)

SO2 Concentration (ppb)

CO Concentration (ppm)

Proximity to Industrial Areas (km)

Population Density (people/km²)

Output (Model Predicts):

Air Quality Level (Good, Moderate, Poor, Hazardous)

- Build a Flask Web App with an HTML form to take inputs from the user and display the predicted Air Quality Level with visualization so make it dynamic and proper UI in HTML,CSS AND JS ONLY.
- i don't want predefined values instead of you can show in background of that text box properly like modern website has i hope you understood so do it properly and update the code below without affecting other parts of code.
- how to remove increment and decrement option
- all fields are required so how can i add icon with text to know ?
- for visualization give the icon at right corner side of text air quality predictor so give visualization symbol or icon or emoji propery so when you click on it will scroll down and show you the visualization text after the prediction i.e down side i hope you understood so make it properly and update the code which i have attached with you.

Deepseek(AKR)

i have my dataset which i have shared with you so i want that i want to show the visualization also not using bi tools so how i can visualize it based on dataset just tell me properly

here is my column name of dataset so how i can show visualization to user in web ?

you have dataset so based on it only i have visualize and give to user.

Chatgpt (ARS)

- these is te cleaned dtaset i have provided you now i want analyze that dataset in colab and i want to create a model which we can use it for prediction analyze the dataset and apply best algorithm for that to create algorithm in this the output column is air quality and other columns are the input so do it accordingly provide code on this so that i can run itin colab
- the inputes are the rest of the columns in the dataset except air quality
- # Import required libraries

import pandas as pd

from sklearn.model_selection import train_test_split

from sklearn.preprocessing import LabelEncoder

```
from sklearn.ensemble import RandomForestClassifier
from sklearn.metrics import accuracy_score, classification_report
file_path = "/content/TechBlitz DataScience Dataset.csv"
data = pd.read_csv(file_path)
# Encode target variable
le = LabelEncoder()
data["Air Quality"] = le.fit_transform(data["Air Quality"])
# Define input and output explicitly
X = data[[
    "Temperature",
    "Humidity",
    "PM2.5",
    "PM10",
    "NO2",
    "SO2",
    "CO",
    "Proximity_to_Industrial_Areas",
    "Population_Density"
]]
y = data["Air Quality"]
# Split the data
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)
# Apply Random Forest Classifier
model = RandomForestClassifier(n_estimators=100, random_state=42)
model.fit(X_train, y_train)

# Make predictions
y_pred = model.predict(X_test)
# Model evaluation
```

accuracy = accuracy_score(y_test, y_pred)

report = classification_report(y_test, y_pred, target_names=le.classes_)

print(f"Accuracy: {accuracy * 100:.2f}%")

print(report)

above i have provide you the code which i have run in the colab to create the model is it enough to do by ooking at the dataset for implementation of the model or anything is missing if missing then provide each and every step with code if anything missed to get the perfect model for the implementation with out any mistake and also provide suitable graph if possible

- can you test it my applying some example inputs and predict it to just check so that we can start with the deployment
- now i want to deploy it in my frontend so provide me proper code for that using python flask the front end file i have uploaded now provide code accordingly so that it make proper prediction there also provide accurate code

Deepseek(ARS)

SO WHEN I RUN THE PY FILE SO IN WEB IT IS NOT GIVING THE CORRECT PREDICTION SO PLEASE UPDATE THE CODE.

SAME ERROR BUT IN CONSOLE GETTING THIS ERROR : Failed to load resource: the server responded with a status of 405 (Method Not Allowed)

give full updated js code