

Use cache

Data Summarization

Choose a dataset

Choose a dataset

Select a dataset

Upload your own data

Choose a CSV or JSON file

Drag and drop file here
Limit 200MB per file • CSV, JSON

combined- 2.csv

combined- 2.csv
15.8KB

Choose a summarization method

Choose a method

LLM

Uses the LLM to generate annotate the default summary, adding details such as semantic types for columns and dataset description

Goal Selection

Number of goals to generate

4

1 10

Add Your Own Goal

Describe Your Goal

how do temp and humidity show downy mildew

Visualization Library

Choose a visualization library

seaborn

Number of visualizations to generate

2

1 10

PBL: Adaptive Dashboards Powered by Generative LLMs

Guide : Dr. Deepak Dharrao



Dr. Deepak Dharrao

By: Nouman Jinabade (R&A), Shivansh Chutani (E&TC), Rika Mallika (E&TC)





Nouman Jinabade Rika Mallika Shivansh Chutani

Summary

	column	dtype	min	max	samples	num_unique
0	Date	date	1/1/23	9/9/23	[13/20/23, '10/11/23', '1/23/23']	
1	Temperature__Mean__	number	15.6429	30.559375	[21.05354166666666, 25.74229166666666]	
2	Relative_humidity__Mean__	number	39.2083	96.83333333333333	[51.79166666666666, 58.95833333333333]	
3	Unnamed_3	number	None	None	[]	
4	Disease	category	None	None	[]	
5	Humidity	category	None	None	[]	
6	Temperature	category	None	None	[]	
7	Susceptible_Conditions	category	None	None	[]	
8	Disease_1	category	None	None	[]	

Goals (4)

Choose a generated goal

how do temp and humidity show downy mildew , plot temp and humidity threshold

```
goals[selected_goal_index] Goal Goal(question='how do temp and humidity show downey mildew , plot temp and humidity threshold', visualization='how do temp and humidity show downey mildew , plot temp and humidity threshold', rationale='', index=0)

A visualization goal

index int 0

question str 'how do temp and humidity show downey mildew , plot temp and humidity threshold'

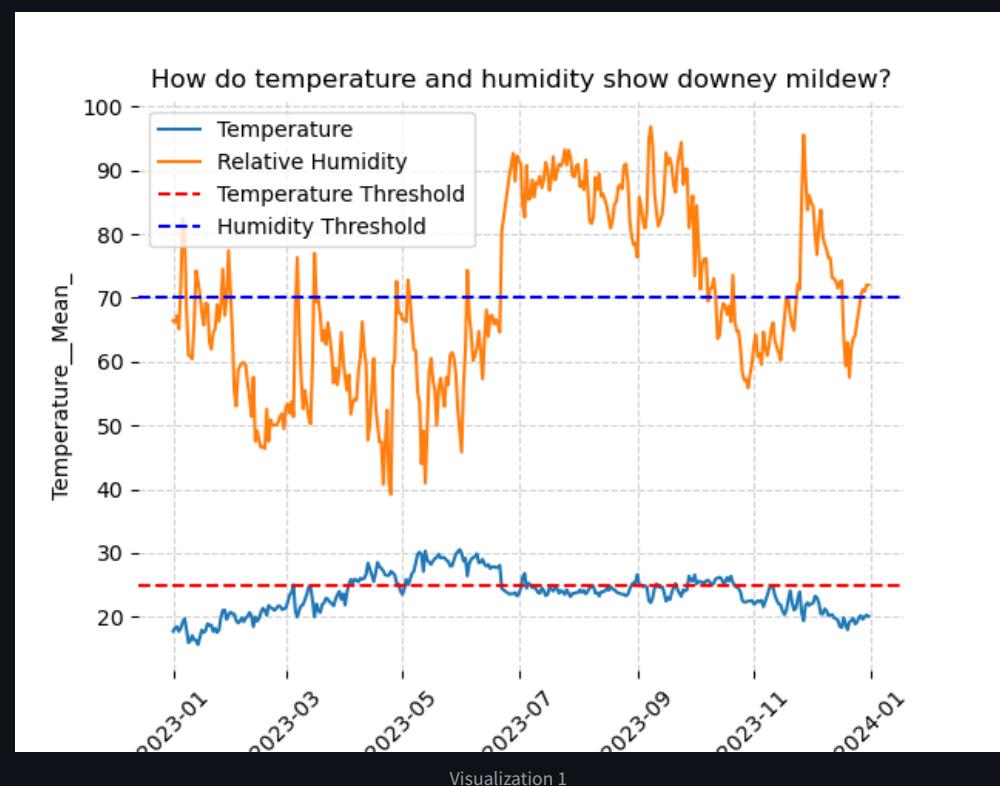
rationale str ''

visualization str 'how do temp and humidity show downey mildew , plot temp and humidity threshold'
```

Visualizations

Choose a visualization

Visualization 1



Visualization Code

```
import seaborn as sns
import pandas as pd
import matplotlib.pyplot as plt

# solution plan
# i. Convert date fields to date types
data['Date'] = pd.to_datetime(data['Date'], errors='coerce')

# ii. Drop rows with NaT values
data = data[pd.notna(data['Date'])]
```

```

def plot(data: pd.DataFrame):
    sns.lineplot(x='Date', y='Temperature__Mean_', data=data, label='Temperature')
    sns.lineplot(x='Date', y='Relative_humidity__Mean_', data=data, label='Relative humidity')
    plt.axhline(y=25, color='red', linestyle='--', label='Temperature Threshold')
    plt.axhline(y=70, color='blue', linestyle='--', label='Humidity Threshold')
    plt.legend()
    plt.xticks(rotation=45)
    plt.title('How do temperature and humidity show downey mildew?')
    return plt

chart = plot(data)

```

Visualization Code

```

import seaborn as sns
import pandas as pd
import matplotlib.pyplot as plt

# solution plan
# i. Convert date fields to date types
data['Date'] = pd.to_datetime(data['Date'], errors='coerce')

# ii. Drop rows with NaT values
data = data[pd.notna(data['Date'])]

def plot(data: pd.DataFrame):
    sns.lineplot(x='Date', y='Temperature__Mean_', data=data, label='Temperature')
    sns.lineplot(x='Date', y='Relative_humidity__Mean_', data=data, label='Relative humidity')
    plt.axhline(y=25, color='red', linestyle='--', label='Temperature Threshold')
    plt.axhline(y=70, color='blue', linestyle='--', label='Humidity Threshold')
    plt.legend()
    plt.xticks(rotation=45)
    plt.title('How do temperature and humidity show downey mildew?')
    return plt

chart = plot(data)

```

Customize Visualization using NLP

Enter customization instructions (e.g., 'Change color to red')

show only the months of june to October

Apply Customization

```

import seaborn as sns
import pandas as pd
import matplotlib.pyplot as plt
import matplotlib.dates as mdates

# solution plan
# i. Convert date fields to date types
data['Date'] = pd.to_datetime(data['Date'], errors='coerce')

# ii. Drop rows with NaT values

```

```
data = data[pd.notna(data['Date'])]

def plot(data: pd.DataFrame):
    data['Month'] = data['Date'].dt.month
    data = data[(data['Month'] >= 6) & (data['Month'] <= 10)]

    sns.lineplot(x='Date', y='Temperature__Mean_', data=data, label='Temperature')
    sns.lineplot(x='Date', y='Relative_humidity__Mean_', data=data, label='Relative humidity')
    plt.axhline(y=25, color='red', linestyle='--', label='Temperature Threshold')
    plt.axhline(y=70, color='blue', linestyle='--', label='Humidity Threshold')
    plt.legend()
    plt.xticks(rotation=45)
    plt.title('How do temperature and humidity show downey mildew?')
    return plt

chart = plot(data)
```

