localhost:8888/notebooks/Untitled16.ipynb

jupyter Untitled16 Last Checkpoint: 14 hours ago (autosaved)

File Edit View Insert Cell Kernel Widgets Help

Not Trusted | Python 3 (ipykernel)

Run Code

In [9]:

```
import pandas as pd
from sklearn.ensemble import IsolationForest
import openpyxl
from openpyxl.styles import PatternFill
from twilio.rest import Client

# Your Twilio account SID and auth token
account_sid = 'AC05d1a82f7ce1df27960e4b3f6ef404dd'
auth_token = 'da30e4f159cc762488f683889446a5fe'

# Initialize Twilio client
client = Client(account_sid, auth_token)

# Step 1: Load the CSV data
df = pd.read_csv("C:\\Users\Student\\Desktop\\feeds (3).csv")

# Step 2: Preprocess the data
# Perform any necessary data cleaning and transformations

# Step 3: Feature engineering
X = df[['field1', 'field2']]  # Select the temperature (field1) and humidity (field2) columns as features

# Step 4: Train the Isolation Forest model
model = IsolationForest()
model.fit(X)

# Step 5: Predict abnormal values
predictions = model.predict(X)
abnormal_values = (predictions == -1)  # Identify the abnormal values
```

jupyter Untitled16 Last Checkpoint: 14 hours ago (autosaved)

File Edit View Insert Cell Kernel Widgets Help

Not Trusted | Python 3 (ipykernel)

Run Code

```
# Step 6: Send messages for abnormal values
threshold_temp_min = 31.2
threshold_temp_max = 33.8
threshold_humidity_min = 40
threshold_humidity_max = 75

for index, is_abnormal in enumerate(abnormal_values):
    if is_abnormal:
        temperature = df.loc[index, 'field1']
        humidity = df.loc[index, 'field2']

        if temperature < threshold_temp_min or temperature > threshold_temp_max:
            message = client.messages.create(
                body=f'Abnormal temperature value detected: {temperature}. Please check your health condition.',
                from_='+15416232594',
                to='+916305993196'
            )
            print(message.sid)

        if humidity < threshold_humidity_min or humidity > threshold_humidity_max:
            message = client.messages.create(
                body=f'Abnormal humidity value detected: {humidity}. Please check your health condition.',
                from_='+15416232594',
                to='+916305993196'
            )
            print(message.sid)
```

```
SM152e7bfa7f5ee1dc111a10038ec3306d
SM6512fd01f30b2bde0ff170d87df4e2bc
SMe8af932424a14dc4cdc7b6dfecb2e060
SM2467432d9c7eb3db91253dac2bd45c36
SMd070fb9904a8c391e9b7edc2f0f909d9
```

localhost:8888/notebooks/Untitled15.ipynb

jupyter **Untitled15** Last Checkpoint: 16 hours ago (autosaved)

Logou

File Edit View Insert Cell Kernel Widgets Help

Not Trusted | Python 3 (ipykernel)

Run Code

```
Note: you may need to restart the kernel to use updated packages.
```

In [5]:
```
import pandas as pd
import numpy as np
df=pd.read_csv("C:\\Users\\Student\\Desktop\\feeds (3).csv")
df
```

Out[5]:

	created_at	entry_id	field1	field2	latitude	longitude	elevation	status
0	2023-03-30T09:08:27+00:00	1	32.3	68.0	NaN	NaN	NaN	NaN
1	2023-03-30T09:08:44+00:00	2	32.6	70.0	NaN	NaN	NaN	NaN
2	2023-03-30T09:09:05+00:00	3	33.1	69.0	NaN	NaN	NaN	NaN
3	2023-03-30T09:09:25+00:00	4	33.3	65.0	NaN	NaN	NaN	NaN
4	2023-03-30T09:09:40+00:00	5	33.1	65.0	NaN	NaN	NaN	NaN
...	...	...	...	...	...	...	...	...
79	2023-03-30T11:59:58+00:00	80	32.4	73.0	NaN	NaN	NaN	NaN
80	2023-03-30T12:00:14+00:00	81	32.3	73.0	NaN	NaN	NaN	NaN
81	2023-03-30T12:00:31+00:00	82	32.2	73.0	NaN	NaN	NaN	NaN
82	2023-03-30T12:00:47+00:00	83	32.2	73.0	NaN	NaN	NaN	NaN
83	2023-03-30T12:01:05+00:00	84	32.3	73.0	NaN	NaN	NaN	NaN

84 rows × 8 columns

In [10]:
```
import pandas as pd
from sklearn.ensemble import IsolationForest
import openpyxl
from openpyxl.styles import PatternFill
```