In [1]:
```
import numpy as np
import pandas as pd
from sklearn.model_selection import train_test_split
from sklearn.preprocessing import LabelEncoder
from sklearn.naive_bayes import MultinomialNB
from sklearn.metrics import classification_report, accuracy_score
```

```
C:\Users\admin\anaconda3\lib\site-packages\scipy\__init__.py:146: UserWarn
ing: A NumPy version >=1.16.5 and <1.23.0 is required for this version of
SciPy (detected version 1.23.5
  warnings.warn(f"A NumPy version >={np_minversion} and <{np_maxversion}"
```

In [2]:
```
# Load your dataset
df = pd.read_csv('Rama.csv')
```

In [3]:
```
# Encode categorical features
label_encoders = {}
for column in ['Days', 'Season', 'Fog', 'Rain']:
    le = LabelEncoder()
    df[column] = le.fit_transform(df[column])
    label_encoders[column] = le
```

In [4]:
```
# Split data into features (X) and target (y)
X = df.drop('Class', axis=1)
y = df['Class']
```

In [5]:
```
# Train-test split
X_train, X_test, y_train, y_test = train_test_split(X, y, test_size = 0
```

In [6]:
```
# Create and train the model
model = MultinomialNB()
model.fit(X_train, y_train)
```

Out[6]:
```
MultinomialNB()
```

In [7]:
```
# Make predictions
y_pred = model.predict(X_test)
```

In [8]:

```
# Evaluate the model
accuracy = accuracy_score(y_test, y_pred)
classification_rep = classification_report(y_test, y_pred)
```

```
C:\Users\admin\anaconda3\lib\site-packages\sklearn\metrics\_classificatio
n.py:1248: UndefinedMetricWarning: Precision and F-score are ill-defined a
nd being set to 0.0 in labels with no predicted samples. Use `zero_divisio
n` parameter to control this behavior.
  _warn_prf(average, modifier, msg_start, len(result))
C:\Users\admin\anaconda3\lib\site-packages\sklearn\metrics\_classificatio
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nd being set to 0.0 in labels with no predicted samples. Use `zero_divisio
n` parameter to control this behavior.
  _warn_prf(average, modifier, msg_start, len(result))
```

In [9]:

```
print("Accuracy:", accuracy)
print("Classification Report:\n", classification_rep)
```

```
Accuracy: 0.75
Classification Report:
               precision    recall  f1-score   support

   Cancelled       0.00      0.00      0.00         1
     On Time       0.75      1.00      0.86         3

    accuracy                           0.75         4
   macro avg       0.38      0.50      0.43         4
weighted avg       0.56      0.75      0.64         4
```

In [ ]:

```

```