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main32.py  main31.py  regression_data.csv  main33.py X  historical_ride_demand.csv

main33.py
1 import pandas as pd
2 from sklearn.preprocessing import StandardScaler
3 from sklearn.model_selection import train_test_split
4 from sklearn.linear_model import LinearRegression
5 from sklearn.metrics import mean_squared_error
6
7 # Step 3: Data Collection
8 try:
9     # Assuming you have a CSV file containing historical ride demand data
10    historical_data_path = "historical_ride_demand.csv"
11    ride_data = pd.read_csv(historical_data_path)
12 except FileNotFoundError:
13     print("Error: File 'historical_ride_demand.csv' not found. Please check the file path.")
14     exit()
15
16 # Step 4: Data Preprocessing
17 try:
18     # Example feature engineering
19    ride_data['timestamp'] = pd.to_datetime(ride_data['timestamp'])
20    ride_data['hour'] = ride_data['timestamp'].dt.hour
21    ride_data['day_of_week'] = ride_data['timestamp'].dt.dayofweek
22
23    # Example: Define features and target variable
24    X = ride_data[['hour', 'day_of_week']]
25    y = ride_data['ride_demand']
26
27    # Example: Split data into train and test sets
28    X_train, X_test, y_train, y_test = train_test_split(X, y, test_size=0.2, random_state=42)
29 except KeyError:
30     print("Error: Required columns not found in the dataset. Please check the data format.")
31     exit()
32
33 # Step 7: Machine Learning Models
34 try:
35     # Example: Train the model
36    model = LinearRegression()
37    model.fit(X_train, y_train)
38
39    # Example: Make predictions
40    y_pred = model.predict(X_test)
41
42    # Example: Evaluate model performance
43    mse = mean_squared_error(y_test, y_pred)
44    print("Mean Squared Error:", mse)
45 except Exception as e:
46     print("Error:", e)
```

```
main32.py  main31.py  regression_data.csv  main33.py  historical_ride_demand.csv X

historical_ride_demand.csv > data
1 timestamp,ride_demand
2 2022-01-01 08:00:00,10
3 2022-01-01 09:00:00,15
4 2022-01-01 10:00:00,20
5 2022-01-02 08:00:00,12
6 2022-01-02 09:00:00,18
7 2022-01-02 10:00:00,22
8 |
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

PS C:\Users\hp\OneDrive\Desktop\New folder> python main33.py
Mean Squared Error: 0.0
PS C:\Users\hp\OneDrive\Desktop\New folder> |
```