

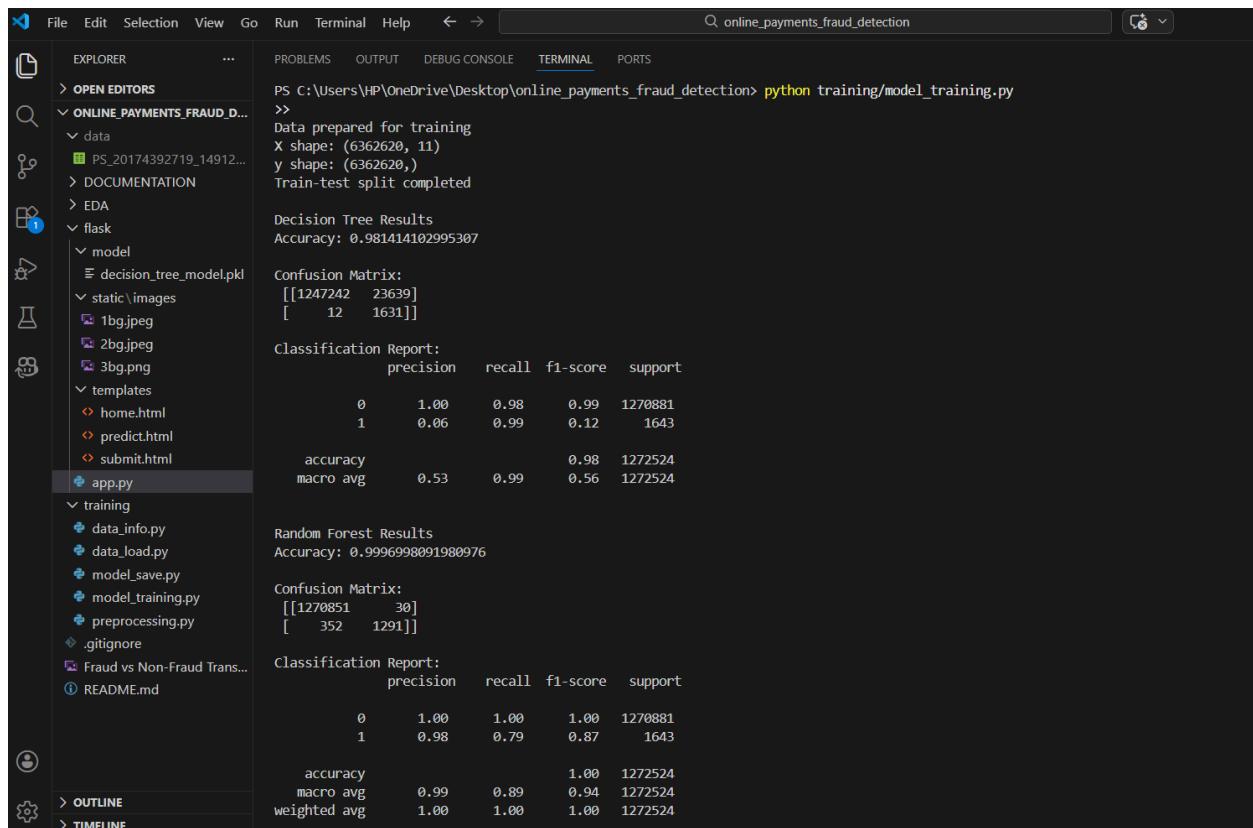
## Project Development Phase

### Model Performance Test

Date	
Team ID	LTVIP2026TMIDS40243
Project Name	Online Payments Fraud Detection
Maximum Marks	

#### Model Performance Testing

S.No.	Parameter	Values	Screenshot
1.	Model Summary	Decision Tree: 98.14%	Decision Tree: 98.14%, Random Forest: 99.97%
2.	Accuracy	Training Accuracy: 98.14% Validation Method: Test Train	Decision Tree: 98.14% Random Forest: 99.97%



```

File Edit Selection View Go Run Terminal Help ← → Q online_payments_fraud_detection
EXPLORER PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS

PS C:\Users\HP\Desktop\online_payments_fraud_detection> python training/model_training.py
>>
Data prepared for training
X shape: (6362620, 11)
y shape: (6362620,)
Train-test split completed

Decision Tree Results
Accuracy: 0.981414102995307

Confusion Matrix:
[[1247242 23639]
 [ 12   1631]]

Classification Report:
precision recall f1-score support
      0       1.00    0.98    0.99  1270881
      1       0.06    0.99    0.12   1643

accuracy macro avg       0.53    0.99    0.56  1272524

Random Forest Results
Accuracy: 0.9996998091980976

Confusion Matrix:
[[1270851   38]
 [ 352  1291]]

Classification Report:
precision recall f1-score support
      0       1.00    1.00    1.00  1270881
      1       0.98    0.79    0.87   1643

accuracy macro avg       0.99    0.89    0.94  1272524
weighted avg       1.00    1.00    1.00  1272524

```

The screenshot shows a terminal window with the command `python training/model_training.py` executed. The output displays the preparation of data, a train-test split, and the results for a Decision Tree and a Random Forest model. The Decision Tree accuracy is 0.981414102995307. The Random Forest accuracy is 0.9996998091980976. Confusion matrices and classification reports are provided for both models, showing precision, recall, f1-score, and support counts for each class (0 and 1).