# Project Development Phase
# Model Performance Test

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|---|---|
| Date | |
| Team ID | LTVIP2026TMIDS40243 |
| Project Name | Online Payments Fraud Detection |
| Maximum Marks | 10 Marks |

**Model Performance Testing**

| S.No. | Parameter | Values |
|---|---|---|
| 1. | **Metrics:**<br>• Decision Tree:<br>• Accuracy: 98.14%<br>[1247242 23639]<br>[ 112 1631]<br>• Precision: 0.06<br>• Recall: 0.99<br>• F1 Score: 0.12 | **Decision Tree:**<br>• Accuracy: 98.14%<br>• Confusion Matrix: [2639]<br>[ 12]<br>1631]<br>• Precision: 0.06<br>• Recall: 0.99<br>• F1 Score: 0.87 |
| 2. | **Tune the Model**<br>• Hyperparameter Tuning:<br>• class_weight = 'balanced',<br>• max_depth = 8<br>• Validation Method: TesTrain Split | **Decision Tree:**<br>• Hyperparameter Tuning:<br>• n_estimators = 50<br>• Validation Method:<br>• Test-Train Split |