

# ONLINE PAYMENTS FRAUD DETECTION USING MACHINE LEARNING

## ENTICE

Fraud cases increase in digital payments.  
Banks need an intelligent automated fraud detection system.  
**Goal:** Reduce fraud losses and secure transactions.

## ENTER

Collect credit card transaction dataset.  
Preprocess data using Python, Pandas, NumPy.  
**Goal:** Understand transaction behavior.

## ENGAGE

Train Machine Learning models:  
• Logistic Regression  
• Random Forest (Final Model)  
**Goal:** Learn hidden fraud patterns.

## EXIT

Model predicts whether transaction is Fraud or Genuine.  
Evaluate using Accuracy, Precision, Recall, F1 Score.  
**Goal:** Stop fraud before financial loss.

## EXTEND

Deploy system for real-time banking & online payment monitoring.  
Future enhancement with Deep Learning & Live APIs.  
**Goal:** Maintain long-term digital payment security.