Real-Time Fraud Detection Platform
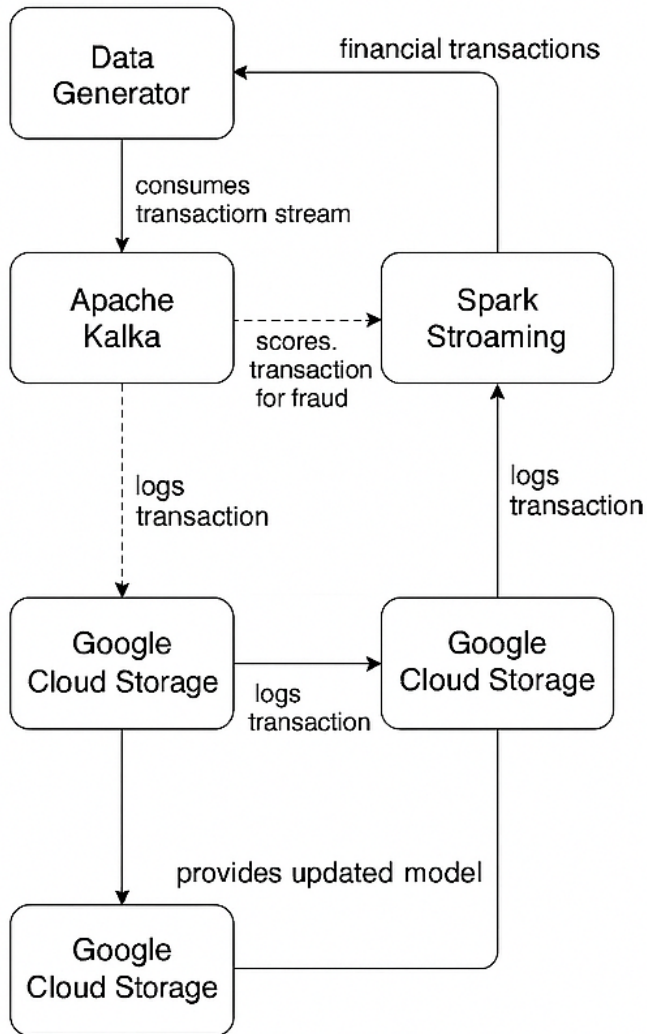
Real-Time Processing Loop

Data Generator

financial transactions

consumes transactiorn stream

Apache Kalka

scores. transaction for fraud

Spark Stroaming

logs transaction

logs transaction

Google Cloud Storage

logs transaction

Google Cloud Storage

provides updated model

Google Cloud Storage

Model Retrainring Loop

queries labeled data

Analyst Dashboard

Apache Airflow

triggers model retraining

Apache Airflow

execuies

Retraining Script

outputs new model