Real time Predictive Fraud Analytics using Databricks & Tableau

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Predictive Fraud Analytics

Payments Network
- Card Transaction Data

Database
- Product Data
- Location Data

salesforce
- Accounts
- Contacts

databricks

RAW DATA LAKE

aws

Azure

Tableau
Predictive Fraud Analytics

Payments Network
- Card Transaction Data

Database
- Product Data
- Location Data

UNIFIED DATA ANALYTICS PLATFORM
- DATA ENGINEERS
- DATA SCIENTISTS
- ML ENGINEERS
- DATA ANALYSTS

mlflow
DATA SCIENCE WORKSPACE
Collaboration across the lifecycle

UNIFIED DATA SERVICE
High quality data with great performance

ENTERPRISE CLOUD SERVICE
A simple, scalable, and secure managed service

RAW DATA LAKE

Tableau
Tableau Integration
Access all your data

Databricks

salesforce
Accounts
Contacts
Delta Lake allows you to improve the quality of your data until it is ready for consumption.
Data Engineering using Delta

Payments Network
- Card Transaction Data

Database
- Product Data
- Location Data

bronze
- Card Transaction Data
- Product Data
- Location Data
- SFDC Accounts
- SFDC Contacts

silver
- Raw Ingestion
- Filtered, Cleaned Augmented

Gold
- Business-level Aggregates

Tableau
Data Engineering using Delta

Payments Network
- Card Transaction Data

Database
- Product Data
- Location Data

sfdc
- Accounts
- Contacts

Bronze
- Raw Ingestion
- Card Transaction Data

Silver
- Filtered, Cleaned, Augmented
- Enriched - Card Transaction Data

Gold
- Business-level Aggregates

Tableau

Databricks

Delta Lake

Streaming
Data Engineering using Delta

**Payments Network**

- Card Transaction Data

**Database**

- Product Data
- Location Data

**salesforce**

- Accounts
- Contacts

**SFDC Accounts SFDC Contacts**

**Bronze**

- Raw Ingestion

**Card Transaction Data**

**Silver**

- Filtered, Cleared, Augmented

**Enriched - Card Transaction Data**

**Gold**

- Business-level Aggregates

**Customer 360**

**Predictions**

**Tableau**
Machine Learning Lifecycle

- **Raw Data**
- **ETL**
- **Featurize**
- **Score/Serve**
- **Monitor/Alert, Debug**
- **Retrain**
- **Update Features**

**Data Sources**
- Card Transaction Data
- Product Data
- Location Data
- SFDC Accounts
- SFDC Contacts

**Data Quality Stages**
- Bronze (Raw Ingestion)
- Silver (Filtered, Cleaned, Augmented)
- Gold (Business-level Aggregates)

**Customer 360**
- Internal
- Enriched Card Transaction Data
- Predictions

**Model Building Stages**
- Build Model
- Train
- Retrain
- Score/Serve
- Batch + Realtime
- Monitor/Alert, Debug

**Predictions**
Demo
Thank You

For more information visit
http://www.databricks.com
http://www.databricks.com/tableau