# CREDIT CARD DETECTOR

An Interpretive Model to Determine Credit Card Fraud Presented By: James Baker

#### Schedule

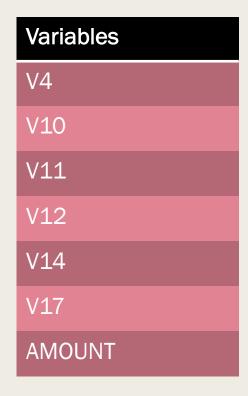
- The data the analytics team provided
- Explain the model presented
- Testing Model / Tableau Visualization
- Conclusion / Main Takeaways

#### At First Glance

- Appears that Amount and Time might play a major role.
- Due to range of customers served in a given day. Many correlations were superficial.
- Standardized Numbers

## Credit Card Fraud Detecting Model

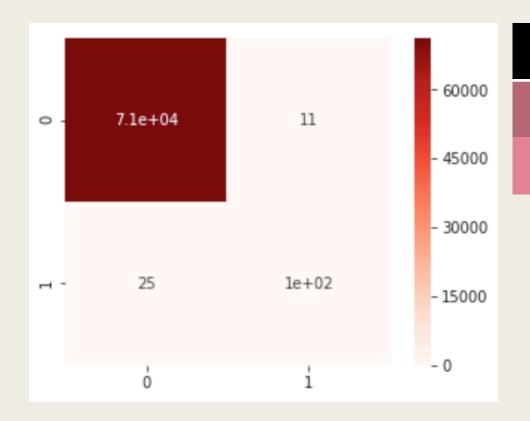
■ 7 Specific Variables



# Credit Card Fraud Detecting Mode

■ 7 Specific Variables

■ 30% Weight



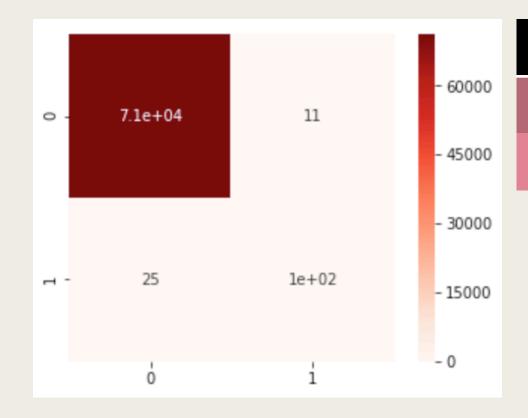
#### Legend

0 = Legitimate

1 = Fraudulent

#### Credit Card Fraud Detecting Mode

- 7 Specific Variables
- 30% Weight
- This not too low?



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## Credit Card Fraud Detecting Mode

■ 7 Specific Variables

■ 30% Weight

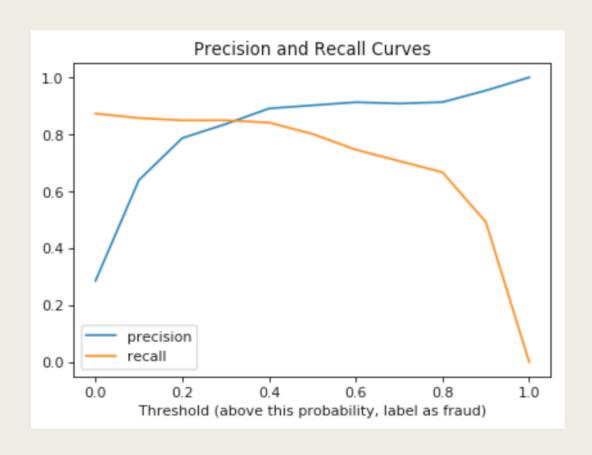
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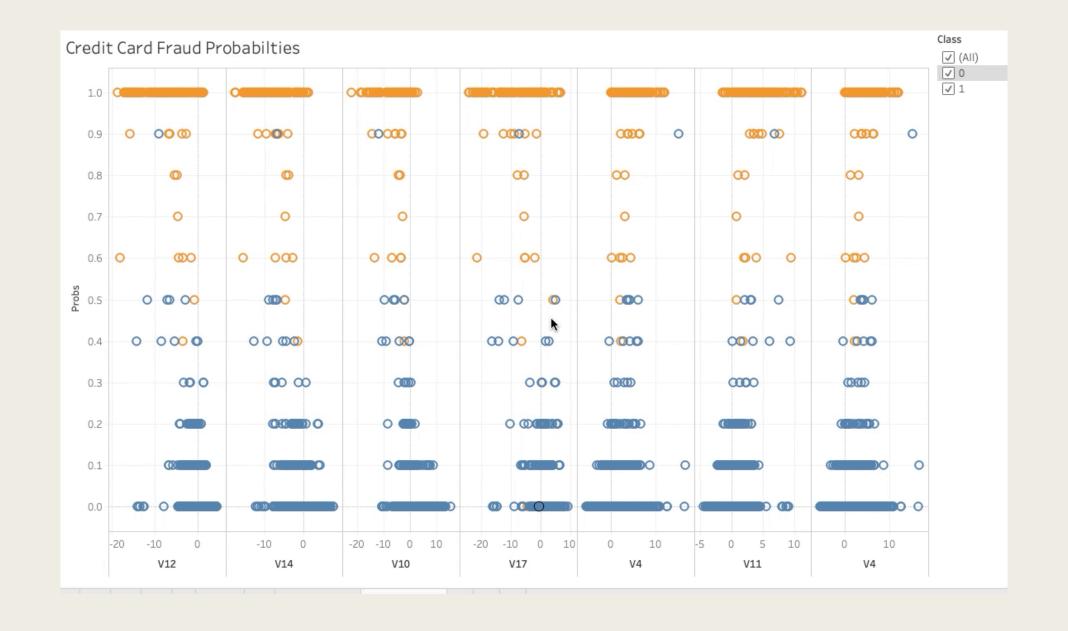
- High Precision
- High Recall

90.1% Precision

80.1%Recall

#### Precision and Recall Tradeoff





## Conclusion / Takeaways

- New and improved model
- Some features are more important than others
- Fraud interpretations have been improved and about 1% are false positives or false negatives
- Expectation: Time detecting fraud and cost of fraud will be reduced

Questions?