



Credit Card Fraud Detection.

Classification project



Description:



It is important that credit card companies are able to recognize fraudulent credit card transactions so that customers are not charged for items that they did not purchase.

Dataset:

This dataset presents transactions that occurred in two days, where we have 161 frauds out of 100,000 transactions. The dataset is highly unbalanced.

Binary Classification

0

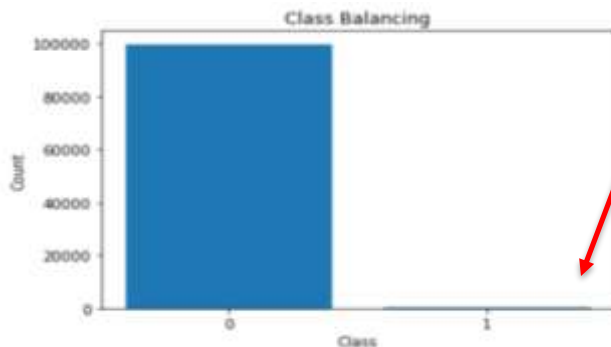
Genuine (Negative)

99839 genuine

1

Fraud (Positive)

161 fraud case



Imbalanced classes!

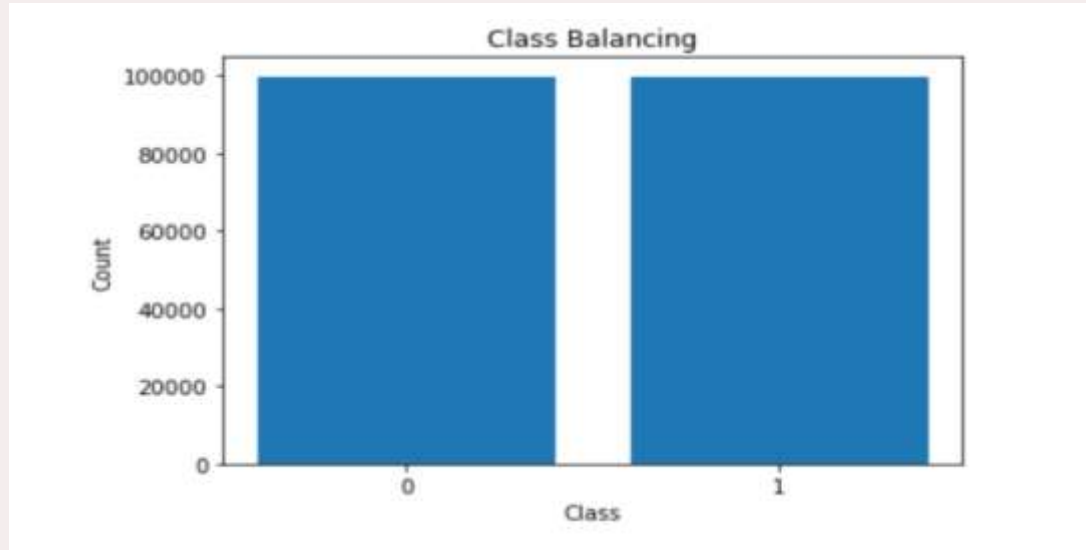
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To manage imbalanced classes:



Synthetic Minority Oversampling Technique (SMOTE).



Classification Models:



Logistic Regression

0.9804



KNN

0.9279



Random Forest

0.9997

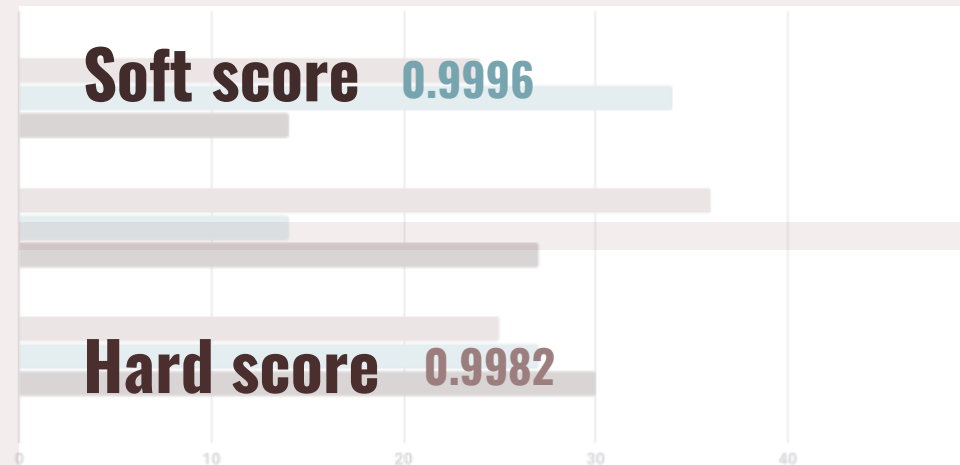


Decision Trees

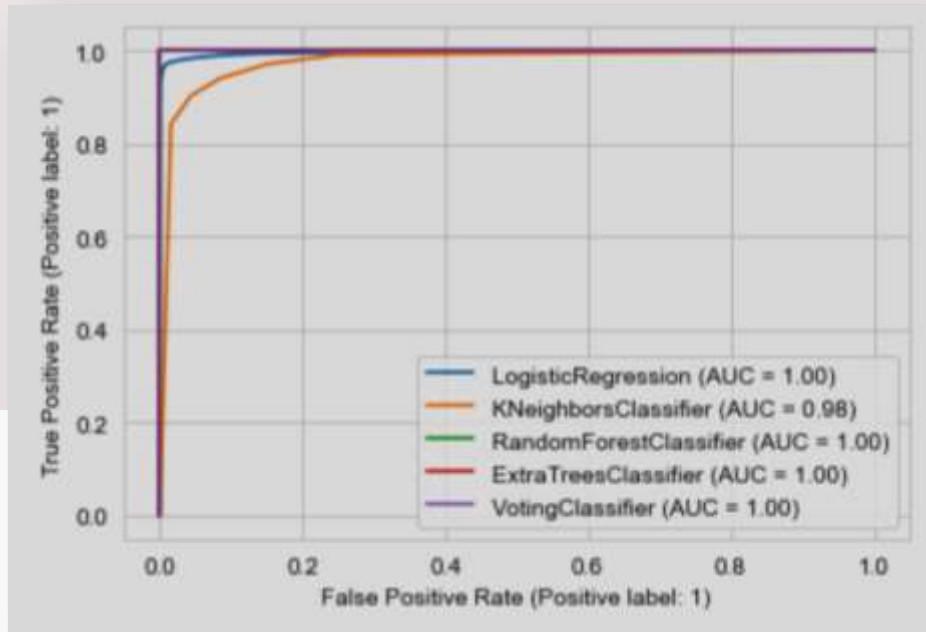
0.9998 ★



Voting Classifier:



ROC/AUC Curve





THANK YOU

