This is a Catboost classifier model that predicts CREDIT CARD FRAUD DETECTION. The model uses historical credit card user data to make accurate predictions.

Installation To install and run this project on your local machine, follow these steps: git clone(https://github.com/Surendra8768/creditcard-project) pip install -r requirements.txt jupyter notebook

Usage To use this project, follow the steps outlined in the Jupyter Notebook. This will involve loading the necessary data, preprocessing the data, training the model, and making predictions. You can also modify the model parameters and retrain the model to improve its performance.

Data Source The data used in this project was provided by upgrad-CREDIT CARD(<a href="https://kh3-ls-storage.s3.us-east-1.amazonaws.com/Updated%20Project%20guide%20data%20set/creditcard.csv">https://kh3-ls-storage.s3.us-east-1.amazonaws.com/Updated%20Project%20guide%20data%20set/creditcard.csv</a>).

Model Evaluation The performance of the model was evaluated using the classification report. The model achieved an area under a curve of 0.85, indicating good performance.

Additionally, the AUC values for the train and test datasets were calculated:

Train dataset AUC of cat boost after 500 iteration: 0.86, Test dataset(AVG): 0.97

Results The model was able to predict credit card fraud on historical credit card data accurately.

Contributors This project was developed by Surendra pajjuru.

Future Work Some potential ideas for future work on this project include:

Experimenting with different machine learning models and feature engineering techniques to improve performance. Developing a web application or API that allows users to interact with the model and make predictions.