**Project Title:** Credit Card Fraud Detection System

* **Input file:** creditcard.csv
* **\*Business objective:**

The aim of a credit card fraud detection project using machine learning (ML) is to develop a model that can accurately identify fraudulent transactions made with credit cards. The primary goal is to minimize financial losses for both credit card companies and cardholders by detecting and preventing fraudulent activity in real-time or near real-time.

* **\*Maximizing :**

catching as many fraudulent transactions as possible to minimize financial losses.

* **\*Minimizing :**

Avoiding incorrectly flagging legitimate transactions as fraudulent, which can inconvenience customers and damage trust.[¶](http://localhost:8888/notebooks/1.TefoLogic%20project/Credit_card_Fraud_Detection_System.ipynb#*Minimizing-:-Avoiding-incorrectly-flagging-legitimate-transactions-as-fraudulent,-which-can-inconvenience-customers-and-damage-trust.)

* **EDA:**

Correlation using heat map.

Cheak data is balance or not using countplot.

* **Splitting, Train and Test data:**

Check Data accuracy using Logistics Regression.

* **Undersampling:**

Logistic Regression, Random Forest.

* **Oversampling:**

Logistic Regression, Random Forest.

* **Choose Model:** Random Forest.
* **Prediction Using GUI:**