**Credit-Card-Fraud-Detection**

**A credit card is one of the most used financial products to make online purchases and payments. Though the Credit cards can be a convenient way to manage your finances, they can also be risky. Credit card fraud is the unauthorized use of someone else's credit card or credit card information to make purchases or withdraw cash. 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. The dataset contains transactions made by credit cards in September 2013 by European cardholders. This dataset presents transactions that occurred in two days, where we have 492 frauds out of 284,807 transactions. The dataset is highly unbalanced, the positive class (frauds) account for 0.172% of all transactions. We have to build a classification model to predict whether a transaction is fraudulent or not.**

**Steps :**

1. **Imported dataset**
2. **Display data from dataset**
3. **EDA**
4. **Check null values in dataset**
5. **Feature selection**
6. **Feature selection applied on amount column**

# time can be external deciding factor so we can drop it

# Remove duplicate values

# X is feature matrix and y is response matrix

# Splitting data into the training set and test set

# Handling Imbalanced Data

# undersampling

# oversampling

# Logistic Regression

# Decision Tress classifier

# Random Forest Classifier

# Oversampling

# Save The Model