**POWER BI PROJECT**

**Project Title: Anomaly Detection in Credit Card Transactions Dashboard**

**LINK:** [**PROJECT LINK**](https://drive.google.com/drive/folders/1jlC-eFgVG_2eg69glvgRrwiBn4EfEsqN?usp=sharing)

**Data Sources:**

The primary data source for this project is a dataset containing credit card transaction records.

**Data Processing:**

Remove any duplicate or inconsistent records from the dataset.Create additional features if necessary, such as calculating the average transaction amount for normal and fraudulent transactions.Convert categorical variables into numerical format if required.Identify and handle outliers in the dataset, particularly in transaction amounts.

**Dashboard:**

Average Transaction Amount: Display the average transaction amount for normal transactions versus fraudulent transactions using DAX functions. Show the total number of credit card transactions recorded in the dataset, including both normal and fraudulent transactions. Provide the number of fraudulent credit card transactions recorded in the dataset. Display the highest recorded transaction amount for fraudulent transactions. Compare the maximum transaction amount for normal transactions with fraudulent transactions to determine any significant differences.Calculate the percentage of fraudulent transactions in the dataset.Visualize the distribution of transaction amounts.

**Summary:**

The Anomaly Detection in Credit Card Transactions project aims to analyze credit card transaction data to identify fraudulent activities. The project utilizes a dataset containing transaction records, including transaction amount and type (normal or fraudulent). The data preprocessing steps involve cleaning, feature engineering, transformation, aggregation, and outlier detection.

**The Power BI dashboard features various visualizations and DAX functions:**

It compares the average transaction amount for normal and fraudulent transactions.

The dashboard displays the total number of credit card transactions recorded, including the count of fraudulent transactions.It highlights the highest recorded transaction amount for fraudulent transactions and compares it with normal transactions.The percentage of fraudulent transactions in the dataset is calculated and visualized.