**Team name: Growth Gurus**

**Members:** Akansha Shetty, Kaparotu Venkata Surya Tharani, Chimirala Kowstubha

**Dataset:** synthetic financial data

**Roles allocated:**

* **Insightful Reporting:** Combining all the analysis work and providing insights. Done by **Akansha**, **Kowstubha** and **Tharani** for their respective works.
* **Predictive Analysis:** Taskwas split andcollaboratively done by **Akansha**, **Kowstubha** and **Tharani**

**Name - Akansha Shetty**

**Responsibilities -**

* **Enhanced Descriptive Analysis:** Tasked with succinctly summarizing and vividly portraying the intrinsic attributes of the dataset, enabling comprehensive understanding.
* **Advanced Multivariate Analysis:** Delving into numerous variables concurrently to unveil intricate patterns and interconnections within the dataset, facilitating nuanced insights.
* **Precision Anomaly Detection:** Proficiently spotting aberrant patterns or outliers within the dataset, crucial for pinpointing potential fraudulent activities with utmost accuracy.
* **Communication:** communicate analysis methodologies and findings, and provide guidance on data-driven decision-making.

**Name - Chimirala Kowstubha**

**Responsibilities -**

* **Bivariate Analysis:** Will examine the relationship between pairs of variables within the dataset to identify correlations or patterns that may indicate fraudulent behavior.
* **Network Analysis:** Their task is to analyze the network structure within the dataset, focusing on relationships and connections between entities like customers, merchants, or transactions.
* **Collaboration:** Combining all the analysis work and formatting.

**Name - Kaparotu Venkata Surya Tharani**

**Responsibilities -**

* **Data Preprocessing -** Data preprocessing involves cleaning and preparing the synthetic financial transaction dataset by handling missing values, encoding categorical variables, scaling features, and transforming data to ensure it is suitable for analysis and modeling which aims to enhance data quality, consistency, and compatibility with machine learning algorithms.
* **Univariate Analysis:** Analyzing individual variables within the dataset to understand their distributions and characteristics.
* **Temporal Analysis:** Temporal analysis involves examining trends and patterns in transaction data over time intervals, such as every minute or hour, to identify temporal variations, recurring patterns, and potential anomalies, facilitating the detection of suspicious activities and understanding how transaction behavior evolves over time.