📌 ***1. Project Title***

**“Customers’ behavior on credit cards”.**

🎯 ***2. Purpose & Questions***

Purpose:

* *Which customer’s group brings the most values from credit card usage?*

Questions:

* *Customers’ lifetime value?*
* *Customers’ acquisition patterns?*

📊 ***3. Data Source & Overview***

Data source: Kaggle from the link [💳 Financial Transactions Dataset: Analytics](https://www.kaggle.com/datasets/computingvictor/transactions-fraud-datasets/data)

Data structure:

* transactions\_data.csv – 12 colums and 1,048,575 rows



* card\_data.csv: 14 colums and 2,000 rows



* user\_data.csv: 13 colums and 6,146 rows



🧹 ***4. Methodology***

🔹 Data Cleaning

Xử lý missing values, duplicate, outliers, định dạng sai (ghi lại rõ các bước xử lý)

🔹 Exploratory Data Analysis (EDA)

Tạo thống kê mô tả, phân phối biến, mối tương quan giữa các biến.

Phân tích thống kê mô tả => Đưa ra insides

🔹 Analysis & Modeling

* Correlation, Clustering, Linear/Logistic Regression, Forecasting…
* Insight thực tế

🔹 Visualization & Storytelling

* Power BI / Python Matplotlib / Excel Chart…
* Storytelling.

📈 ***5. Expected Outcome***

* Findings
* Recommendations

🧰 ***6. Technologies***

* Python – Pandas, Seaborn; Power BI; SQL; Excel; …
* Python for cleaning data, Power BI for visualizing & storytelling

📦 ***7. Deliverables***

Code + documentation: sharing to GitHub (README.md)

Final report: PDF/Word to summarize the process and findings.

Slides presentation: storytelling + visual + insight

🕓 ***8. Timeline***

* 26/06/2025 : Selecting the topic + getting data
* 03/07/2025 : Project proposal
* 08-15/07/2025 : Reviewing and Q&A sessions to discuss your progress and receive feedback from lecturers/instructors.
* 15/07/2025 : Uploading the project to GitHub
* 19-22/07/2025 : Presenting project to the class and lecturers/instructors.

1. Import libraries
2. Load data
3. Data profiling