**Data-Driven Insights for GTM, and Product**

Objective:

- Analyze the provided dataset: Customer Churn.

- Develop actionable insights and recommendations for CX.

Dataset (see data dictionary in the excel file shared with you):

Customer Churn Data: Contains customer information and churn status.

Tasks:

1. Data Exploration (15%)

* Load and preprocess the dataset.
* Perform exploratory data analysis (EDA) for the dataset.
* Visualize key features and relationships, considering CX viewpoints.

1. Analysis from CX perspectives (25%)

* For Customer Churn Data: Identify factors contributing to customer churn from a CX perspective.

1. Insights and Recommendations (30%)

* For the Churn dataset, provide actionable insights and recommendations based on CX analyses.
* Employ **machine learning techniques** to enhance the depth and accuracy of your insights.
* Support your recommendations with robust data-driven analyses to ensure a comprehensive and well-informed decision-making process.

1. Presentation (30%)

* Prepare a concise presentation summarizing your findings for Churn dataset.
* Clearly communicate insights and recommendations to stakeholders in CX.
* Assume your audience has limited technical knowledge.

Deliverables:

1. Jupyter Notebook or Python script with code for analysis.
2. If modeling was applied then :
   1. What algorithms did you use and **why**
   2. What performance metric did you choose, and why did you choose it
3. Presentation slides (PDF or PowerPoint) with visualizations and insights specific to CX.
4. Establish a public Git repository and upload your artifacts to it

Submission:

- Submit the Jupyter Notebooks/Python scripts and presentation slides for the selected dataset to your public Git repository

Evaluation Criteria:

* Data preprocessing, exploration and modeling.
* Quality of analysis from CX perspective.
* Actionable insights and recommendations.
* Clarity and professionalism of each presentation.
* Creativity and problem-solving skills specific to each perspective.

Additional Information:

* You have **a maximum of 7 days**, including the date you receive the assignment, to complete it.
* Please use Python along with any additional packages and tools you prefer.
* Feel free to ask for clarifications if needed.

Data Dictionary:

Customer Churn Data: Contains customer information and churn status.

CustomerID: Unique customer ID

Churn: Churn Flag

Tenure: Tenure of customer in organization

PreferredLoginDevice: Preferred login device of customer

CityTier: City tier

WarehouseToHome: Distance in between warehouse to home of customer

PreferredPaymentMode: Preferred payment method of customer

Gender: Gender of customer

HourSpendOnApp: Number of hours spend on mobile application or website

NumberOfDeviceRegistered: Total number of deceives is registered on particular customer

PreferedOrderCat: Preferred order category of customer in last month

SatisfactionScore: Satisfactory score of customer on service

MaritalStatus: Marital status of customer

NumberOfAddress: Total number of added added on particular customer

Complain: Any complaint has been raised in last month

OrderAmountHikeFromlastYear: Percentage increases in order from last year

CouponUsed: Total number of coupon has been used in last month

OrderCount: Total number of orders has been places in last month

DaySinceLastOrder: Day Since last order by customer

CashbackAmount: Average cashback in last month