

Task Title: Analyze Customer Churn Data and Generate Insights

Objective:

The goal is to analyze customer churn data to identify patterns, key factors influencing churn, and opportunities for improving customer retention.

Deliverables:

1. **Data Cleaning & Preparation:**
 - Clean and preprocess the provided customer churn dataset to handle missing values, outliers, and inconsistent data.
2. **Exploratory Data Analysis (EDA):**
 - Conduct a thorough EDA to uncover patterns and correlations.
 - Include visualizations (e.g., histograms, scatter plots, and heatmaps) to highlight trends.
3. **Modeling & Predictions:**
 - Build predictive models (e.g., logistic regression, decision trees) to estimate the likelihood of churn.
 - Evaluate model performance using appropriate metrics (e.g., accuracy, precision, recall).
4. **Insights & Recommendations:**
 - Summarize key insights from the analysis.
 - Provide actionable recommendations to reduce customer churn.

Requirements:

- Use Python or R for the analysis.
- Create a well-documented report summarizing findings, methodologies, and recommendations.
- Prepare a short presentation to share key findings with stakeholders.

Deadline:

- Submit the final report and presentation by **11th January 2025**.

Resources Provided:

- Customer churn dataset (attached).
- Relevant documentation and guidelines for data access.