Project Synopsis

1. Title : OLA SERVICE ANALYSIS REPORT Using Python
2. Introduction

This Ola report is about the services done by the company. The report states about the issues faced by the customer and driver where they couldn't complete their required job on time. Let's see, what are the major problems faced by them with our analysis report. The analysis report is taken of one particular month to know the exact reason so the July month is the example. Based on the problems faced in that month, what should be the next step taken by the company considering the points and what measures should be taken from next month onwards.

1. Objectives

* Identify Causes of Ride Cancellations: Analyse reasons for ride cancellations, such as driver unavailability, traffic congestion, or technical issues.
* Analyse Customer Complaints: Examine common customer complaints, such as driver behaviour, cleanliness, or safety concerns.
* Investigate Ride Quality Issues: Investigate issues related to ride quality, such as traffic delays, route deviations, or driver performance.
* Assess Safety and Security Concerns: Evaluate safety and security concerns, such as driver verification, GPS tracking, or emergency response systems.
* Determine Causes of Payment Disputes: Analyse reasons for payment disputes, such as incorrect fares, payment processing issues, or refund requests.

1. Scope of Work

The project will involve the following tasks:

• Data Exploration:

Understanding the dataset, including the features and target variable.

• Data Pre-processing :

Cleaning the dataset by handling missing values, removing outliers, and normalizing/standardizing the data.

• Feature Selection:

Identifying the most significant features influencing the OLA services.

• Data Visualization:

Using plots and graphs to visualize the relationship between Customer and Driver issues as well as the performance.

• Interpretation of Results:

Analysing the output of the models and drawing conclusions.

• Reporting:

Documenting the findings and preparing a final report.

1. Methodology:

The project will follow a structured approach:

* Data Collection: The dataset will be sourced from a public repository, such as the Kaggle.
* Data Pre-processing: Handle missing data using imputation techniques. Detect and remove outliers. Normalize or standardize the data if necessary.
* Exploratory Data Analysis (EDA): Use descriptive statistics to summarize the dataset. Create visualizations like histograms, box plots, and correlation heatmaps to understand feature distributions and relationships.
* Feature Selection: Use correlation analysis to identify relevant features. Apply dimensionality reduction techniques like PCA if necessary.
* Modelling: Split the data into different area so that we can find where the issues lies.
* Evaluation and Interpretation: Compare model performance. Interpret the results to understand the impact of different features of OLA services.
* Visualization: Generate charts and graphs to visualize the findings.
* Reporting: Compile the analysis, results, and insights into a comprehensive report.

1. Tools and Technologies :

The project will utilize the following tools and technologies:

• Programming Language: Python

• Libraries: Pandas, NumPy, Matplotlib, Seaborn

• IDE : Jupyter Notebook or any Python-compatible Integrated Development Environment (IDE)

• Data Source: Kaggle.

1. Project Outcome

The outcome of this project is to provide actionable insights and recommendations to Ola's management team to:

* + Reduce ride cancellations by 20%
  + Decrease customer complaints by 15%
  + Improve overall customer satisfaction ratings by 10%

1. Timeline

The project is expected to be completed within a 2 weeks with the following milestones: • Week 1 : Data Collection and Pre-processing and Exploratory Data Analysis and Feature Selection.

• Week 2 : Model Building and Evaluation. Also, Visualization, Reporting, and Final Submission.

1. Conclusion

The analysis highlights areas for improvement in Ola's ride-hailing services, including ride cancellations, customer complaints, and safety concerns. Addressing these issues can enhance customer experience, increase satisfaction, and maintain competitiveness.