

Data Collection and Preprocessing Phase

Date	15 th July 2024
Team ID	739740
Project Title	Predictive Mdeling For Fleet Furl Management Using ML
Maximum Marks	2 Marks

Data Collection Plan & Raw Data Sources Identification Template

To develop a robust predictive model for fleet fuel management, the data collection plan focuses on optimizing fuel efficiency and predicting refueling needs. Raw data sources include vehicle telematics systems providing real-time fuel consumption and location data, fuel purchase records detailing transactions and pricing trends, and maintenance logs capturing vehicle health and efficiency metrics. Key variables encompass fuel consumption rates, mileage patterns, driver behavior indicators, and contextual factors like weather conditions. Data will be collected through automated telematics feeds, integrated fuel management software, and periodic manual inputs to ensure comprehensive coverage and accuracy for modeling purposes.

Data Collection Plan Template

Section	Description
Project Overview	Optimize fuel usage and reduce costs through predictive modeling. Scope includes data analysis from telematics, fuel purchases, and maintenance logs. Approach involves advanced analytics to forecast demands and improve efficiency.
Data Collection Plan	<ul style="list-style-type: none"> Utilize vehicle telematics for real-time fuel consumption and location data. Gather fuel purchase records to track transactions and pricing trends. Capture maintenance logs to monitor vehicle health and efficiency metrics.
Raw Data Sources Identified	<ul style="list-style-type: none"> Telematics Data: Real-time information on fuel consumption and vehicle locations. Fuel Purchase Records: Transaction details including volume, cost, and location. Maintenance Logs: Records of vehicle upkeep and efficiency metrics.

Raw Data Sources Template

Source Name	Description	Location/URL	Format	Size	Access Permissions
Vehicle Telematics	Real-time fuel consumption and location data	[Telematics Provider URL]	Large	CSV, JSON	Access granted via API key
Fuel Purchase Records	Transaction details including volume, cost, location	Fuel Management System	Medium	CSV	Access restricted to authorized personnel
Maintenance Logs	Vehicle maintenance and efficiency metrics	Fuel Management System	Medium	Excel	Access restricted to fleet maintenance team