

Data Collection and Preprocessing Phase

Date	8 July 2024
Team ID	SWTID1720195303
Project Title	Predictive Modeling For Fleet Fuel Management Using Machine Learning
Maximum Marks	2 Marks

Data Collection Plan & Raw Data Sources Identification Template

Elevate your data strategy with the Data Collection plan and the Raw Data Sources report, ensuring meticulous data curation and integrity for informed decision-making in every analysis and decision-making endeavor.

Data Collection Plan Template

Section	Description
Project Overview	The machine learning project aims to optimize fleet fuel management by predicting fuel consumption patterns based on vehicle data. The objective is to enhance operational efficiency and reduce fuel costs through data-driven insights.
Data Collection Plan	<ol style="list-style-type: none"> 1. Fuel Logs: Daily fuel consumption records from vehicle sensors. 2. Vehicle Maintenance Records: Logs of maintenance activities, including repairs and inspections. 3. Vehicle Telemetry : Real-time data from onboard sensors (e.g., GPS, engine diagnostics). 4. Weather Data: Historical weather conditions (temperature, humidity) affecting fuel efficiency.

Raw Data Sources Identified	Description
Fuel Logs	Detailed records of fuel consumption per vehicle, including timestamps and quantities.
Vehicle Maintenance Records	Logs of maintenance activities such as repairs, inspections, and part replacements.
Vehicle Telemetry	Real-time data from vehicle sensors capturing engine performance, GPS location, and driving behavior.
Weather Data	Historical records of weather conditions (e.g., temperature, humidity) impacting fuel efficiency.

Raw Data Sources Template

Source Name	Description	Location/URL	Format	Size	Access Permissions
Fuel Logs	Detailed records of fuel consumption per vehicle, including timestamps and quantities.	Link of Dataset 1	CSV	15 GB	Public

Maintenance Records	Logs of maintenance activities, including repairs, inspections, and part replacements.	Link of Dataset 2	Excel	10 GB	Private (with access)
Vehicle Telemetry	Real-time data from vehicle sensors capturing engine performance, GPS location, and driving behavior.	Link of Dataset 3	JSON	20 GB	Private (with access)
Weather Data	Historical records of weather conditions (e.g., temperature, humidity) impacting fuel efficiency.	Link of Dataset 4	CSV	5 GB	Public