**Data Collection and Preprocessing Phase**

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| Date | 9 July 2024 |
| Team ID | 739659 |
| Project Title | Trip-Based Modelling of Fuel Consumption in Modern Fleet Vehicles Using Machine Learning |
| Maximum Marks | 6 Marks |

**Data Exploration and Preprocessing Template**

Identifies data sources, assesses quality issues like missing values and duplicates, and implements resolution plans to ensure accurate and reliable analysis.

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| **Section** | **Description** |
| Data Overview | 388 rows x 12 columns, dtypes: float64(4),int64(5),object(3) |
| Univariate Analysis | Exploration of individual of accuracy\_score,mean\_squared\_error,r2\_score,mean\_absolute\_  error |
| Bivariate Analysis | Relationships between two variables (correlation, scatter plots)  . |
| Multivariate Analysis |  |
| Outliers and Anomalies and null values | We do not have any outliers and analomalies in our dataset except that we have null values so we have handle the null values and drop them in the way as follows |
| **Data Preprocessing Code Screenshots** | |
| Loading Data |  |
| Handling Missing Data |  |
| Data Transformation | Splitting the data : |
| Feature Engineering | modifying existing ones |
| Save Processed Data | Code to save the cleaned and processed data for future use. |