# **Fuel Consumption Prediction**



Given data collected from vehicle’s OBD (on-board diagnostic) port, data has been prepared to feature engineer various critical variables.

Based on these variables, predict the fuel consumption of the vehicles and take pre-emptive steps to maintain the vehicle or direct the driver for proper driving in order to not consume extra fuel, thereby saving precious unnecessary cost to the company.

**Evaluation**

Evaluation will be based on:

* Data Cleanup (10%)
* Feature Selection (10%)
* Feature Engineering (20%)
* Model Comparison (25%)
* Model Selection (20%)
* Presentation (15%)

**Data Cleanup**

Clean up the missing, treat missing values, treat outliers, if any.

**Feature Selection**

Select the right features based on importance and significance.

**Feature Engineering**

Apply feature engineering techniques to see how new features can be created to improve the model. Check for Interaction.

**Model Comparison**

Apply multiple regression algorithms and compare results.

**Model Selection**

Select the best model. Model selection to be based on R2, and RMSE (Root Mean Squared Error).