Project Objectives

Team ID	PNT2022TMID12506
Project Name	Machine Learning based Vehicle Performance Analyzer

Predicting a car's performance level is a significant and fascinating challenge. The primary goal of this research is to forecast automobile performance in order to improve specific vehicle behavior. This can significantly reduce the system's fuel consumption while also increasing its effectiveness. Analysis of vehicle performance based on engine type, number of cylinders, fuel type, and horsepower, among other factors. These variables can be used to predict the health of an automobile. Obtaining, investigating, interpreting, and documenting health data based on the three aforementioned elements is a continuous process. Both prediction engines and engine management systems rely heavily on performance metrics like mileage, reliability, flexibility, and cost, which can be combined. To improve the vehicle's performance efficiency, elements must be analysed using a variety of well-known machine learning methodologies, such as linear regression, decision trees, and random forests. The power, lifespan, and range of automotive traction batteries are the "hot topics" in automotive engineering right now. We also consider mileage performance. To resolve this issue, we will develop models using various techniques and neural networks. Then, we'll see which algorithm predicts car performance the best (Mileage).