

Project Design Phase-I
Proposed Solution

| | |
|---------------|--|
| Date | 19 September 2022 |
| Team ID | PNT2022TMID40006 |
| Project Name | Trip Based Modelling of Fuel Consumption in Modern Fleet Vehicles Using Machine Learning |
| Maximum Marks | 2 Marks |

| S.No. | Parameter | Description |
|-------|--|--|
| 1. | Problem Statement (Problem to be solved) | <p>The problem statement is to predict fuel consumption of modern fleet vehicles using machine learning. A web application needs to be built which is integrated with the ML model. The solution should satisfy the following user requirements:</p> <ul style="list-style-type: none"> ❖ User friendly interface ❖ Process multiple samples simultaneously ❖ Provide detailed report |
| 2. | Idea / Solution description | <p>The solution is a mobile responsive web application that can be used in both mobile and computers. Cumulative results of multiple ML models are used to achieve accurate prediction. The website provides a user-friendly interface and accepts multiple samples predicting them simultaneously. A detailed report can be generated along with the predicted output.</p> |
| 3. | Novelty / Uniqueness | <ul style="list-style-type: none"> ❖ Multiple ML models are used to predict the fuel consumption. ❖ Results are generated in various forms. ❖ Users can run multiple samples at a me. |
| 4. | Social Impact / Customer Satisfaction | <p>Fraudulent activities can be prevented in fleet management. Customers are satisfied in all aspects as the proposed solution is developed using multiple ML models.</p> |
| 5. | Business Model (Revenue Model) | <p>The revenue is generated on subscription basis where large scale data processing and detailed report generation are allowed for only premium subscription.</p> |
| 6. | Scalability of the Solution | <p>The application can further be extended to provide Application Programming Interface (API) which can be used by third party organizations such as Automobile Manufacturers, Logistics companies, etc.</p> |