PROJECT DESIGN PHASE-I

Solution Architecture

Date	04/10/2022
Team ID	PNT2022TMID33271
Project Name	TRIP BASED MODELLING OF FUEL CONSUMPTION IN MORDEN FLEET VEHICLES
Maximum Marks	4 Marks

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions.

Our solutions are,

- Data modeling can easily help to diagnose the reason behind fuel consumption with a knowledge of input parameters.
- Data is collected at a rate that is proportional to its impact on the outcome. When the input space is sampled with respect to time, the amount of data collected from a vehicle at a stop is the same as the amount of data collected when the vehicle is moving.
- The predictors in the model are able to capture the impact of both the duty cycle and the environment on the average fuel consumption of the vehicle (e.g., the number of stops in an urban traffic over a given distance).
- Data from raw sensors can be aggregated on-board into few predictors with lower storage and transmission bandwidth requirements. Given the increase in computational capabilities of new vehicles, data summarization is best performed on-board near the source of the data.

Solution Architecture Diagram:

BEACON TEMPERATURE

SENSOR