Project Design Phase-II
Solution Requirements (Functional & Non-functional)

Date	03 October 2022
Team ID	PNT2022TMID35586
Project Name	TRIP BASED FUEL CONSUMPTION PREDICTION IN MODERN FLEET VEHICLES USING MACHINE LEARNING
Maximum Marks	4 Marks

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form Registration through Email
FR-2	User Confirmation	Confirmation via Email
FR-3	User Dashboard	New prediction option Tabs with history of past predictions
FR-4	Vehicle Fuel Consumption Prediction Page	Vehicle detail form Edit/Update vehicle details Prediction result and visualization

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	User friendly interface that is easy to understand and navigate.
NFR-2	**Security**	User authentication using email verification.
NFR-3	**Reliability**	Fast and accurate predictions.
NFR-4	**Performance**	Light weight ML model deployment using flask for quick and accurate predictions. Fast loading time for the webpages.
NFR-5	**Availability**	Cloud based web application deployment for 24x7 website availability
NFR-6	**Scalability**	Highly scalable since web app is deployed on IBM cloud. System hardware can be improved and purchased with increase in website traffic.