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

Date	03 October 2022
Team ID	PNT2022TMIDxxxxxx
Project Name	Project - xxx
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	LCD Display	An LCD display minimum size of 80" x 100" (inches-
		Nominal size to current static board)
FR-2	Weather API	Update the weather through the OpenweatherMap
FR-3	Cloud connection	An proper network & cloud connection to the IOT
		device should provided from IBM cloud to obtain the
		information we designed.
FR-4	Cloud services	Requires some extra cloud services such as IBM Watson
		cloud platform ,nodeRed and an Web UI.
FR-5	Standard operators	This system should have the operators to perform this
		whole system maintenance
FR-6	IOT	An IOT Device should adaptive to change the default
		sign if any information received from the cloud.

## **Non-functional Requirements:**

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	The signs boards should be easier to implement & empathizable.
NFR-2	Security	All this functions are related to Roads & transport department and so standard procedures are required.
NFR-3	Reliability	Signs are updated by only realtime & less probability of technical errors.
NFR-4	Performance	Start-up time should be very low (<10 sec)& easily recoverable after abrupt interruption
NFR-5	Availability	Capable of display information for the whole time
NFR-6	Scalability	Able to implement all over the place & must suitable to all kind of road condition