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

Date	13 May 2023
Team ID	NM2023TMID15296
Project Name	IoT based weather adaptive street lighting system

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement	Sub Requirement
FR-1	**User Registration**	Registration through Gmail
FR-2	**User Confirmation**	Confirmation via Email/ OTP
FR-3	**Login to system**	Check credentials Check the role of access
FR-4	**Manage Modules**	Manage system admins Manage role of user Manage user permission
FR-5	**Check Details**	Temperature details Weather condition details (Rain,Snow,Hot) Wind speed details
FR-6	**Log out**	Exit

Non-functional Requirements:

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Fast response time,Easy to access Clears all the error messages Provides adequate help and support users including online services
NFR-2	Security	The system is designed to ensure the security of the data and devices in the system. The communication between the devices should be encrypted to prevent unauthorized access. The system can also be able to detect and prevent any attempts to hack or breach the system.
NFR-3	Reliability	This system is highly reliable and available at all times. The lighting system should not fail due to connectivity issues or hardware failures, and the software should be designed to handle unexpected situations such as power outages, network disruptions, and other failures.
NFR-4	Performance	It will perform at a high level with minimal delay. This system is designed to process the data generated by the connected devices efficiently and quickly, to ensure the timely and accurate operation of the lighting system.
NFR-5	Availability	Available for 24/7, and it is designed to minimize any downtime. This system have mechanisms in place to detect and correct errors quickly to ensure that the lighting system remains operational at all times**.**
NFR-6	Scalability	It handles an increasing number of connected devices and be able to scale up or down based on the number of devices, the amount of data generated, and the processing requirements.