

Project Design Phase-I
Proposed Solution Template

Date	06 May 2023
Team ID	NM2023TMID01579
Project Name	Weather Adaptive Street Lighting System

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The objective is to create a solution that can efficiently monitor and analyze street light condition to maintainance and improvement efforts
2.	Idea / Solution description	The Weather Adaptive Street Lighting System is an intelligent and energy-efficient lighting solution that automatically adjusts street lighting levels based on real-time weather conditions. By integrating weather sensors and advanced control algorithms, this system optimizes energy usage and ensures optimal visibility and safety on the streets.
3.	Novelty / Uniqueness	The novelty and uniqueness of the Weather Adaptive Street Lighting System lie in its ability to dynamically adjust street lighting levels based on real-time weather conditions.
4.	Social Impact / Customer Satisfaction	By dynamically adjusting lighting levels based on real-time weather conditions, the system enhances safety on the streets. It ensures that visibility is optimized during adverse weather conditions such as rain, fog, or snow, reducing the risk of accidents and promoting safer pedestrian and vehicular movement.
5.	Business Model (Revenue Model)	The company can generate revenue by selling the hardware components of the system, including weather sensors, control hubs, and lighting fixtures, to municipalities, city governments, or organizations responsible for street lighting.
6.	Scalability of the Solution	The system is built using a modular architecture, allowing for easy scalability. The hardware components, such as weather sensors, control hubs, and lighting fixtures, can be added or expanded as needed.

