

Project Design Phase-I
Proposed Solution Template

Date	02 November 2023
Team ID	NM2023TMID09717
Project Name	Keyword Research Using Google Keyword Planner

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>The problem that a weather adaptive street lighting system based on IoT seeks to address is the inefficient and wasteful use of energy in traditional street lighting systems.</p> <p>In many cities, streetlights are typically set to a fixed brightness level, regardless of the weather conditions.</p>
2.	Idea / Solution description	<p>A weather-adaptive street lighting system based on IoT would be a network of intelligent streetlights that can automatically adjust their brightness levels based on real-time weather conditions.</p> <p>This system could help reduce energy consumption and light pollution while ensuring the safety of pedestrians and drivers on the roads.</p>
3.	Novelty / Uniqueness	<p>The system would be designed to automatically adjust the brightness of streetlights based on the current weather conditions.</p> <p>The system could also incorporate sensors that detect changes in weather conditions, such as rain or snow, and adjust the lighting accordingly.</p>
4.	Social Impact / Customer Satisfaction	<p>A weather adaptive street lighting system based on IoT has the potential to make a significant social impact and improve customer satisfaction in several ways.</p> <p>This would not only reduce energy consumption but also enhance visibility, making it safer for pedestrians and motorists to navigate the streets during inclement weather. As a result, the number of accidents due to poor visibility could be reduced, resulting in fewer injuries and fatalities.</p>
5.	Business Model (Revenue Model)	<p>A business model for a weather-adaptive street lighting system based on IoT could be:</p> <ul style="list-style-type: none">*Sales and installation .*Subscription-based services.*Data monetization.

		*Energy savings. *Partnerships and collaborations.
6.	Scalability of the Solution	<p>The scalability of a weather adaptive street lighting system based on IoT depends on several factors such as the number of streetlights that need to be deployed, the geographical area to be covered, the data transmission infrastructure available, and the power requirements of the system.</p> <p>Additionally, it is important to consider the power requirements of the system and ensure that the system can operate efficiently on a range of power sources, including solar power and battery backup.</p>