

Ideation Phase

Empathize & Discover

Date	06 May 2023
Team ID	NM2023TMID15378
Project Name	IOT based weather adaptive street lighting system
Maximum Marks	

Empathy Map :

The empathy map for an IoT-based weather adaptive street lighting system reveals that the target users, such as city residents, urban planners, and municipal authorities, feel frustrated with the lack of efficient and responsive street lighting during changing weather conditions. They experience inconvenience and safety concerns due to inadequate visibility caused by improper lighting adjustments. They desire a solution that addresses their need for enhanced safety and convenience by automatically adjusting street lighting based on real-time weather conditions. They hope for a system that intuitively adapts lighting levels, ensuring optimal visibility and security during various weather events. By understanding their concerns, desires, and expectations, designers can develop an empathetic IoT-based weather adaptive street lighting system that aligns with the users' needs and enhances their overall experience.

Example:

The screenshot displays a Mural board titled "Untitled mural" used for an Empathy Map. The board is divided into four quadrants, each with a specific focus:

- Who are we empathizing with:** Local residents. Understanding the needs and preferences of the people living in the area where the street lighting system will be implemented is crucial. Factors such as their daily routines, safety concerns, and expectations for outdoor lighting can help inform the design and functionality of the system.
- What do they think, feel, say, and do:** Improved Safety. The weather adaptive feature ensures that streetlights are appropriately bright during challenging weather conditions. For instance, during heavy rain or fog, the system will increase the lighting intensity to improve visibility for drivers and pedestrians, enhancing safety on the streets.
- What do they need to know:** Adaptive Lighting Control. Develop an intelligent system that can sense and respond to weather conditions. Use sensors to monitor the weather and adjust the lighting intensity accordingly. The system should be able to learn from user feedback and adjust its behavior over time.
- What do they need to do:** The system should be able to learn from user feedback and adjust its behavior over time. The system should be able to learn from user feedback and adjust its behavior over time.

The canvas also includes a central diagram showing the relationship between "Who", "What", and "Why". The diagram is a flowchart with "Who" at the top, "What" in the middle, and "Why" at the bottom. Arrows indicate the flow of information and relationships between these elements.

Reference:

<https://app.mural.co/invitation/mural/iot3389/1684152228661?sender=u464acbb4d7c178d464e00232&key=ac451916-1653-4b65-8237-9564a951283e>

