# Ideation Phase
# Brainstorm & Idea Prioritization Template

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| Date | 27 APRIL 2023 |
| Team ID | **NM2023TMID09640** |
| Project Name | **IoT Based Weather Adaptive Street Lighting System** |
| Maximum Marks | 4 Marks |

**Brainstorm & Idea Prioritization Template: IoT Based Weather Adaptive Street Lighting System**

## Step-1: Team Gathering and Problem Statements

### ADITHYA N

- What sensors and hardware components will be required to collect and transmit weather data?
- How can the system be designed to handle and process large amounts of data in real-time?
- How can the system be designed to provide accessibility and inclusivity for users with disabilities?
- What measures can be taken to reduce maintenance costs and increase system longevity?
- What type of partnerships and collaborations will be needed to ensure successful integration with other smart city technologies?

### GUGANESH RAJ S

- How can the system be designed to minimize power usage and maximize efficiency?
- How can machine learning and artificial intelligence be incorporated to improve accuracy and efficiency?
- How can user feedback be incorporated to improve the system over time?
- How can the system be designed to minimize waste and maximize sustainability?
- What type of compatibility will be required to ensure the system can be easily integrated with existing infrastructure and technology?

### DINESH KUMAR P

- What type of connectivity will be needed to ensure the system functions optimally?
- How can the data collected from sensors be analyzed to determine the optimal lighting levels?
- How can the system be designed to provide a seamless user experience for both pedestrians and drivers?
- What type of business model can be used to ensure the system remains profitable and scalable?
- How can the system be designed to be flexible and adaptable to future changes or advancements?

### MAGESH S

- What is the optimal placement of sensors and hardware components to ensure accurate data collection?
- What measures can be taken to ensure data privacy and security?
- What type of user education and training will be required to ensure effective use of the system?
- How can the system be designed to use renewable energy sources and reduce carbon footprint?
- How can the system be designed to ensure interoperability with other systems and devices?

### ARUNKUMAR M

- What type of communication protocols will be used to ensure seamless data transmission between sensors and the lighting system?
- What data visualization tools can be used to help users better understand the data collected by the system?
- How can the system be designed to incorporate user preferences and settings for personalized
- What type of end-of-life planning and disposal methods will be required to minimize environmental impact?
- What type of open standards and protocols can be used to enable easy integration and compatibility with other systems?

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**Team Leader : ADITHYA N**
**Team member : DINESH KUMAR P**
**Team member : GUGANESH RAJ S**
**Team member : MAGESH S**
**Team member : ARUNKUMAR M**

## Step-2: Brainstorm, Idea Listing and Grouping

### Hardware and Connectivity

- What sensors and hardware components will be required to collect and transmit weather data?
- How can the system be designed to minimize power usage and maximize efficiency?
- What type of connectivity will be needed to ensure the system functions optimally?

### Integration and Compatibility:

- What type of partnerships and collaborations will be needed to ensure successful integration with other smart city technologies?
- What type of open standards and protocols can be used to enable easy integration and compatibility with other systems?
- How can the system be designed to be flexible and adaptable to future changes or advancements?

### Maintenance and Sustainability

- What measures can be taken to reduce maintenance costs and increase system longevity?
- How can the system be designed to use renewable energy sources and reduce carbon footprint?

### User Experience and Interface

- How can the system be designed to provide accessibility and inclusivity for users with disabilities?
- How can the system be designed to provide a seamless user experience for both pedestrians and drivers?
- What type of user education and training will be required to ensure effective use of the system?

### Data Collection and Analysis

- How can the system be designed to handle and process large amounts of data in real-time?
- What measures can be taken to ensure data privacy and security?
- How can user feedback be incorporated to improve the system over time?

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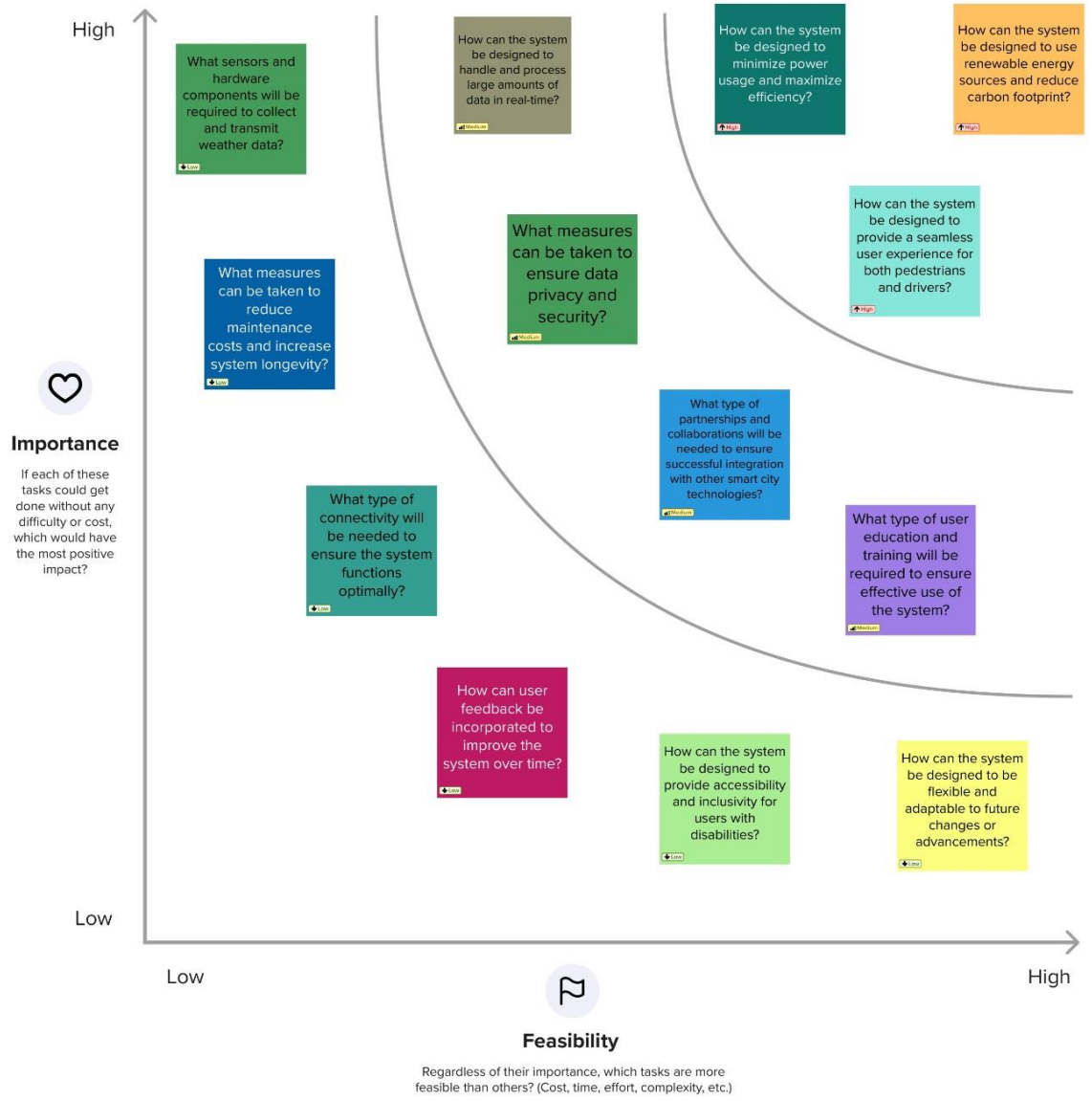
# Step-3: Idea Prioritization

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