

Basic Details of the Team and Problem Statement

Ministry/Organization Name/Student Innovation:

Ministry of Housing and Urban Affairs

PS Code:

SIH1512

Problem Statement Title:

Centralized Monitoring System for Street Light Fault Detection and Location Tracking

Team Name:

Wireless Warriors

Team Leader Name:

ALDRIN G

Institute Code (AISHE):

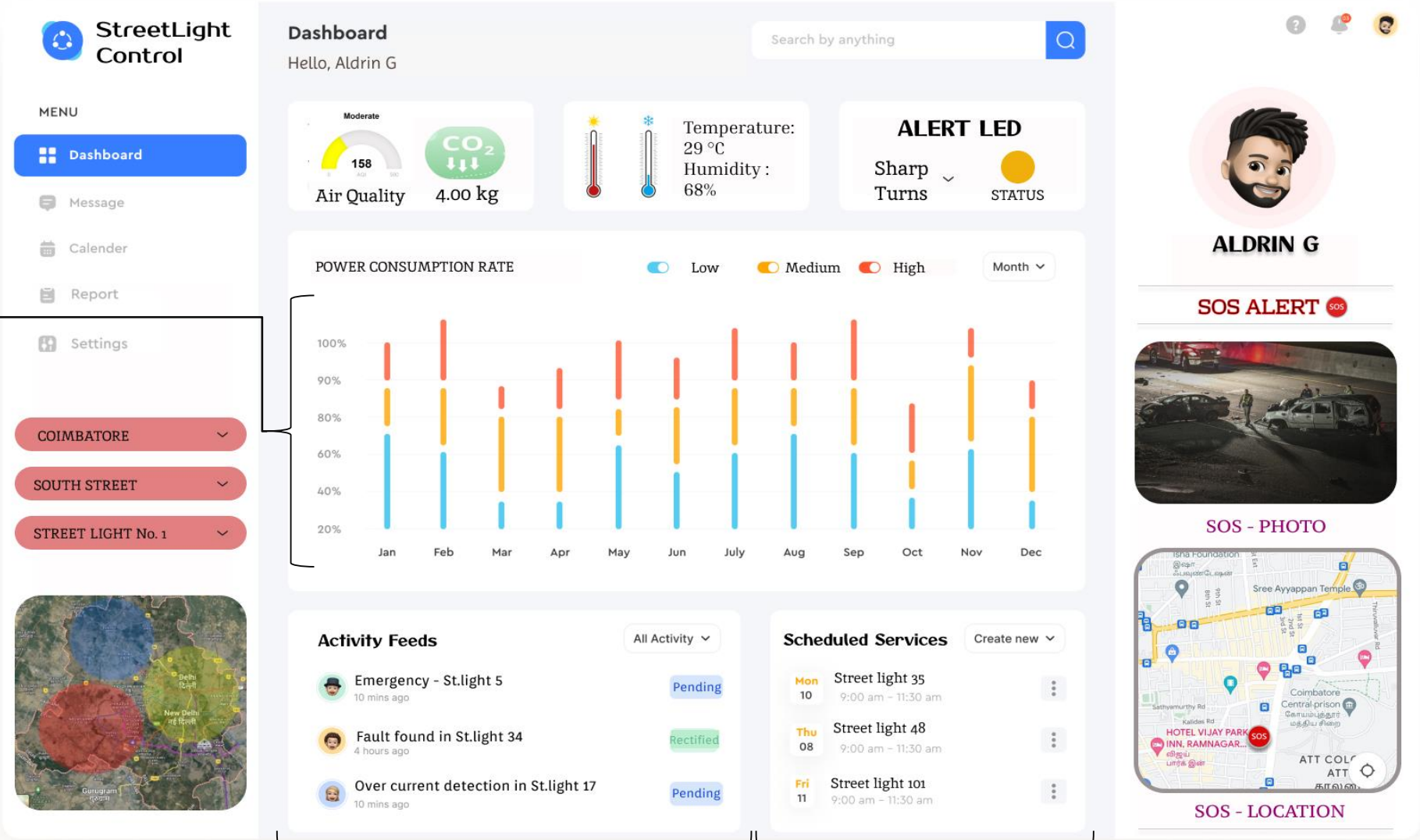
U-0460

Institute Name:

KARUNYA INSTITUTE OF TECHNOLOGY AND SCIENCES

Theme Name: SMART AUTOMATION

UX Web Dashboard



Idea/Approach Details

Use Cases

- **Best Solution for Lighting:** In public places, Institutions and Highways
- **Energy Efficiency:** Automatically adjusts brightness for energy savings and monitors power consumption.
- **Fault Detection:** Notifies maintenance teams of bulb faults.
- **Emergency Response:** Records and shares data, photos and video during emergencies.
- **Remote Control:** Allows officials to control lights via a mobile app.
- **Traffic Management:** Indicates sharp turns and accident-prone zones.
- **Data Analytics:** Visualizes real-time data for informed decisions.
- **Renewable Energy:** Integrates solar power for green energy.

Show stopper

- **Network Reliability:** Frequent network disruptions hinder data transmission.
- **Power Supply:** Power outages without backup solutions affect system operation.
- **Sensor Accuracy and Maintenance:** Sensor malfunction leads to inaccurate data.
- **Mobile App and Cloud Services:** Service outages disrupt app functionality.
- **Security Vulnerabilities:** Vulnerabilities compromise data and system integrity.
- **Hardware Reliability:** Frequent hardware failures disrupt the system.

Team Member Details

Team Leader Name: ALDRIN G

Branch (Btech/Mtech/PhD etc): Btech

Stream (ECE, CSE etc): ECE

Year (I,II,III,IV): II

Team Member 1 Name: RAJATH M V

Branch (Btech/Mtech/PhD etc): Btech

Stream (ECE, CSE etc): ECE

Year (I,II,III,IV): II

Team Member 2 Name: SAMSON J

Branch (Btech/Mtech/PhD etc): Btech

Stream (ECE, CSE etc): ECE

Year (I,II,III,IV): II

Team Member 3 Name: SHARON ROSE J

Branch (Btech/Mtech/PhD etc): Btech

Stream (ECE, CSE etc): ECE

Year (I,II,III,IV): II

Team Member 4 Name: DANIEL DENCIL J

Branch (Btech/Mtech/PhD etc): Btech

Stream (ECE, CSE etc): ECE

Year (I,II,III,IV): II

Team Member 5 Name: ANNIE JENNITA V J

Branch (Btech/Mtech/PhD etc): Btech

Stream (ECE, CSE etc): ECE

Year (I,II,III,IV): II

Team Mentor 1 Name: Dr. H. VICTOR DU JOHN

Category (Academic/Industry): Academic

Expertise (AI/ML/Blockchain etc): IoT

Domain Experience (in years): 11

Team Mentor 2 Name: Dr. NARAIN PONRAJ. D

Category (Academic/Industry): Academic

Expertise (AI/ML/Blockchain etc): AI & ML

Domain Experience (in years): 17